

Religiosity and happiness: A comparison of the happiness levels between the religious and the nonreligious

Dindarlık ve mutluluk: Dindar ve dindar olmayanların mutluluk düzeylerinin karşılaştırılması

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Abstract

Previous studies have identified a positive link between religiosity and happiness. However, this link is contentious as some studies have found no association. The present study compared the happiness levels of the religious and the nonreligious using two separate measures of happiness, the Oxford Happiness Questionnaire, and the Subjective Happiness Scale. One hundred and twenty four people (men = 43, women = 81), aged between 18 and 73 years ($M = 42.28$, $SD = 12.18$), participated in the study by completing an online survey. There were 13 participants in the 'believe in God' group, 53 participants in the 'believe in God and participate in religion' group, 17 participants in the 'agnostic' group, and 41 participants in the 'atheist' group. The results found there was no difference in happiness levels between any of the groups for both measures of happiness. These findings suggest the religious are not happier than the nonreligious. Further studies are needed to compare the happiness levels of the religious and nonreligious with a variety of samples.

Keywords: Religiosity, happiness, nonreligious, positive psychology

Özet

Önceki çalışmalar dindarlık ve mutluluk arasında pozitif bir ilişki bulmuştur. Fakat bu ilişki diğer bazı çalışmalar hiç ilişki bulamadıkları için tartışmalıdır. Bu çalışmada dindar ve dindar olmayanların mutluluk düzeyleri Oxford Mutluluk Ölçeği ve Öznel Mutluluk Ölçeklerini kullanılarak karşılaştırıldı. Yüz yirmi dört (erkek = 43, kadın = 81), 18 -73 yaşları arasında değişen ($M = 42.28$, $SD = 12.18$) kişi online anket doldurarak çalışmaya katıldı. Tanrıya inananlar grubunda 13 katılımcı, tanrıya inanan ve dini gruplara katılanlar grubunda 53 kişi, agnostik grubunda 17 kişi ve ateist grubunda 41 katılımcı bulunmaktadır. Araştırma sonuçları her iki ölçeğe göre de gruplar arasında anlamlı farklılıklar olmadığını ortaya koydu. Bu çalışmanın sonuçlarına göre dindar olanlar, dindar olmayanlara göre daha mutlu değildir. İleride yapılacak araştırmalarda, farklı örneklerde yapılacak çalışmalara ihtiyaç vardır.

Anahtar Kelimeler: Dindarlık, mutluluk, dindar olmama, pozitif psikoloji

Introduction

Religion is a global cultural phenomenon that has arguably been, and remains, one of the most powerful influences on humanity. Investigation of the factors that enhance happiness is the current focus of happiness research. Religion has been identified as a factor positively related to happiness, however, this link is contentious as research has found conflicting results (Argyle & Hills, 2000; Lewis & Cruise, 2006). Research on the nonreligious has largely been ignored, and the inconsistent findings in the literature between happiness and religiosity highlights the need for

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further research that includes the nonreligious. The present study will examine the happiness levels of the religious and the nonreligious, taking into account social support.

What we Know About the Religious and the Nonreligious

Many descriptions and definitions have been applied to religion (Banister, 2011), with belief in a supernatural being or beings often posited as the core feature (Burke, 1996; Norenzayan, 2010). Defining the religious and nonreligious is not necessarily straightforward. Some religious people believe in the existence of a God and also participate in religious practices, such as attending services in a place of worship. On the other hand, other people believe in the existence of a God without belonging to a particular faith or participating in religious services (Hunsberger & Altemeyer, 2006). In terms of the nonreligious, an agnostic is defined as someone who is uncertain or undecided about the existence of a God, while an atheist doesn't believe any form of supreme being or universal force exists (Zuckerman, 2009). These four different belief types will be examined in the present study, although other belief types are acknowledged such as a spiritual perspective that may or may not include belief in the existence of a God.

An extensive Gallup World Poll (Crabtree, 2009) of 154 nations from 2006 to 2008, found that on average, 74% of people reported that religion was important in their daily life. Other studies report that approximately 85% of people have at least some form of religious belief (Zuckerman, 2007). Historical data is not readily available on atheists and agnostics, which is not surprising given that most people have been, and are, religious. Nevertheless, data on the prevalence of the nonreligious is starting to emerge. Approximately 15% of the world's population, between 500 to 700 million people, describe themselves as nonreligious, agnostic or atheist (Zuckerman, 2007).

Australia is among the nations with the highest rates of atheism, along with European nations and Scandinavia (Zuckerman, 2007). Atheism is almost non-existent (less than 1%) in certain regions of the world, such as the Middle East and many African nations, although there may be a reluctance to self-identify as nonreligious due to stigma (D'Andrea & Sprenger, 2007). Australian Census (Australian Bureau of Statistics, 2011) results revealed that nearly 4.8 million people, 22% of the population, reported 'no religion', an increase of 3.6% from 2006 to 2011. This upward trend is consistent with research that religion is declining in more economically developed countries (Diener, Tay, & Myers, 2011).

Happiness

The pursuit of happiness, or more broadly defined in the literature as subjective well-being, is something humans have strived for throughout history (Lyubomirsky & Lepper, 1999). Happiness has been defined as the frequency and degree of joy, satisfaction over a given period, and an absence of negative feelings (Argyle, Martin, & Crossland, 1989). In addition, Seligman (2002) posits that engagement and meaning are important aspects of happiness. Studies have supported the benefits of happiness, including greater physical and mental health benefits (Diener & Seligman, 2004), which provides a compelling case for its continued investigation (Lyubomirsky, King, & Diener, 2005).

Lyubomirsky, Sheldon, and Schkade (2005) developed a theoretical model, based on an analysis of happiness research, of the most important factors that explain an individual's happiness level. This model attributes approximately 50% of happiness to a genetic predisposition, termed the *happiness set point*. Somewhat surprisingly, an extensive amount of research suggests that life circumstances including age, gender and marital status, only contribute approximately 10% of the variance in happiness (Diener, 1984; Myers & Diener, 1995; Ryff, 1989; Wood, Rhodes, & Whelan, 1989). Even material wealth adds little to happiness once basic needs are met (Diener & Biswar-Diener, 2002; Inglehart, 1990, Myers, 2000), which was nicely illustrated by Brickman,

Coates, and Janoff-Bulman's (1978) study that found lottery winners were not happier over the long-term.

Accordingly, the remaining 40% of variance in happiness is attributed to intentional activities, which is indeed quite a significant amount. Consequently, this led researchers to investigate factors that may impact positively on an individual's happiness level. Despite the progress in recent years (Lyubomirsky & Layous, 2013), there is still much to learn about what intentional activities actually boost happiness, and what activities do not. Identifying factors that sustainably enhance happiness could have far reaching effects, for instance informing therapeutic models and treatments, potentially providing benefit to people suffering from depression, as well as helping people feel more fulfilled and satisfied with their lives.

There is substantial research that has found a range of psychological benefits are associated with a supportive social network (Cohen, 2004; Dulin, 2005; Koenig, George, & Titus, 2004). In particular, research has found that satisfying social relationships and social activities are important factors in the development of lasting happiness (Argyle et al., 1989; Diener & Seligman, 2004). There is also evidence that social support mediates the relationship between religiosity and subjective well-being (Diener et al., 2011). Sillick and Cathcart (2013) found that an extrinsic religious social orientation was positively associated with happiness for men, which lends support to the idea that social support received as part of religious activity contributes to increased well-being. Therefore, the impact of social support on happiness will be controlled for in the present study.

Religiosity and Happiness

Religion has been identified as one factor that may enhance happiness, as research has found a positive association between religiosity and happiness (Argyle & Hills, 2000; Francis, Jones, & Wilcox, 2000; Francis & Lester, 1997; Francis & Robbins, 2000; French & Joseph, 1999; Lewis, Maltby, & Day, 2005). However, some studies have found no association (Lewis, Lanigan, Joseph, & De Fockert, 1997; Lewis, Maltby, & Burkinshaw, 2000).

One possible explanation for these inconsistent results is the measurement of happiness, which is a contentious issue in happiness research (Lyubomirsky & Lepper, 1999). Lewis and Cruise (2006) have raised concerns that conflicting results in the literature between religiosity and happiness could be due to the way happiness has been operationalised, and suggested that the theoretical basis for this construct needs to be strengthened. In particular, studies that used the Oxford Happiness Questionnaire (OHQ), a widely used measure of happiness, and the Depression Happiness Scale, have produced inconsistent results. Kashdan (2004) claims that there may be conceptual overlap between the OHQ and other constructs, rather than a clear, precise measure of subjective well-being. Kashdan does have a strong argument, illustrated by item 13, "I don't think I look attractive", which appears on face value to be measuring self-esteem. Sillick and Cathcart (2013) suggested that studies could be conducted using other well-established measures of happiness. Therefore, the present study will attempt to clarify this matter by using two measures of happiness: the OHQ and the Subjective Happiness Scale. Perhaps the results of the analyses undertaken may be different for each measure of happiness. In any case, a comparison of the results will help inform whether the measure used to assess happiness is a significant issue.

More recently researchers have argued for the need to assess and understand the health and well-being of atheists in recognition of their emergence as a genuine socio-cultural group (Whitley, 2010). Hill and Hood (1999) reported that there were over 100 measures of religiosity, yet examination of the opposing belief systems to theism, atheism and agnosticism, has largely been ignored. Zuckerman (2009) reviewed the literature and concluded that religious people fared better than the nonreligious in terms of well-being and life satisfaction. On that basis, there is a compelling case that the nonreligious have lower happiness levels, if direct comparisons were

made. However, the majority of the studies were limited to the religious rather than a comparative assessment of the religious and nonreligious, therefore it is difficult to draw conclusions. Zuckerman highlighted inconsistencies in the literature, for example, international comparisons demonstrated that nations with higher levels of the nonreligious reported the highest levels of happiness (Beit-Hallahmi, 2009).

While there is some research on the nonreligious, on the whole it is evident there is a lack of data, particularly in the context of increasing numbers of atheists and agnostics. Horning, Davis, Stirrat, and Cornwell (2010) claim that many previous studies indicating religious people were higher in well-being have made comparisons between individuals self-identified as high or low in religiosity, and did not include the nonreligious. This approach is limited as it does not actually make comparisons between the religious and the nonreligious, and does not provide any new data on the well-being of atheists and agnostics. In recognition of this gap, Horning et al. (2010) compared life satisfaction, an aspect of happiness, between the religious, agnostics, and atheists, and found no significant difference. The study used a sample of older adults, aged over 55, and the researchers concluded that further research was needed to compare the religious and the nonreligious in terms of overall health outcomes.

Likewise, a comparison of happiness levels between the religious and the nonreligious could have important implications for research that attempts to identify happiness boosting factors. If religious people are happier than atheists and agnostics, then what are the functions that religion provides to people, and can these functions be found from other means? On the other hand, what if the nonreligious are happier and overall have greater well-being than religious people? If there is no difference, then further studies could instead focus on examining other intentional activities that may influence happiness levels.

Previous studies have identified a positive link between religiosity and happiness, although this link is tenuous because of inconsistent findings, which may be linked to the measurement of happiness. There is limited research on the health outcomes of atheists and agnostics, and very few studies have compared happiness levels between the religious and the nonreligious. Therefore, the present study will investigate whether there is a difference in happiness levels between religious people and non-religious people, taking into account the impact of social support.

Method

Participants

One hundred and twenty four people participated in a study to investigate happiness levels among the religious and the non-religious. A convenience sample was used as the recruitment method and participation in the study was voluntary. Participants ranged in age from 18 to 73 years ($M = 42.28$, $SD = 12.18$). Forty three participants were men (34.7%) and 81 were women (65.3%). There were 13 participants in the 'believe in God' group, 53 participants in the 'believe in God and participate in religion' group, 17 participants in the 'agnostic' group, and 41 participants in the 'atheist' group. A power analysis using G*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007) indicated that the group sizes were sufficient to conduct the analyses.

Measures

Religiosity Questions: Participants were asked to select 'yes' or 'no' to a number of questions about their belief in a God: "I believe in the existence of a God" (if yes) "Are you currently affiliated with a religious group or organisation? This may include attending church or a mosque for example"; "I am uncertain or unsure about the existence of a God"; "I do not believe in the existence of a God".

Oxford Happiness Questionnaire (OHQ): The Oxford Happiness Questionnaire (Hills & Argyle, 2002) comprises 29 items used to measure global aspects of personal happiness. Each item is rated on a 6-point scale ranging from (1) *strongly disagree* to (6) *strongly agree*, and higher scores indicate higher levels of happiness. The scale range is 29-174. Examples of items include “I feel that life is very rewarding” (item 3), “Life is good” (item 9), and “I often experience joy and elation” (item 22). Hills and Argyle (2002) found that the OHQ demonstrated excellent internal reliability consistency of $\alpha = .91$. Strong correlations of $r = .61$ to $.90$ with a variety of cognitive and trait measures associated with well-being, such as life satisfaction and life regard, demonstrates good construct validity. The present study found excellent internal reliability consistency of $\alpha = .93$.

Subjective Happiness Scale (SHS): The Subjective Happiness Scale (Lyubomirsky & Lepper, 1999) is a 4-item scale of global subjective happiness. Two items ask respondents to characterise themselves on a 7-point scale using both absolute ratings and ratings relative to peers, “Compared to most of my peers, I consider myself” (1) *less happy* or (4) *more happy*. The other two items offer brief descriptions of happy and unhappy individuals and ask respondents the extent to which each characterisation describes them. The scale range is 4-28 and higher scores indicate greater levels of subjective happiness. The SHS has been validated in 14 studies across a range of cross-cultural samples and the findings indicate excellent psychometric properties (Lyubomirsky & Lepper, 1999). The SHS has high internal consistency that is stable across samples. Test-retest and self-peer correlations have suggested good to excellent reliability, and studies of convergent and discriminant validity have confirmed the use of this scale to measure the construct of subjective happiness. The present study found excellent internal reliability consistency of $\alpha = .90$.

Multidimensional Scale of Perceived Social Support (MSPSS): The Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988) is a 12-item scale that measures perceived social support from family, friends, and a significant other. Participants completing the MSPSS are asked to indicate their agreement with items on a 7-point scale, ranging from (1) *very strongly disagree* to (7) *very strongly agree*. Examples of items include “My friends really try to help me” (item 6), and “I can talk about my problems with my family” (item 8). The scale range is 12-84 and higher scores indicate greater levels of perceived social support. Adequate psychometric properties have been found with the MSPSS (Canty-Mitchell & Zimet, 2000). The present study found excellent internal reliability consistency of $\alpha = .91$.

Procedure

A combination of convenience and purposive sampling was used to recruit participants from the general population. The principal researcher emailed information about the study with a link to the online survey to a network of professional colleagues, requesting that they distribute the survey to anyone interested in participating. An email was also sent to the Atheist Foundation of Australia President with information about the study and a request to invite members to participate in the online survey. Recruiting from this group ensured there were sufficient numbers of atheists to conduct the analyses.

Participants completed the anonymous online survey comprised of 45 questions from the three scales in their own time, following the instructions provided. The survey also included a question about belief in the existence of a God, and those that identified as believing in a God were asked whether they were affiliated with a religious group or organisation. Demographic data was collected on participants’ age and gender. Estimated time to complete the survey was 10-20 minutes. The Qualtrics web-based survey program was used to collect the data.

Statistics

Descriptive statistics were undertaken for the study variables. The OHQ and the SHS were both used to measure happiness separately. Two one way between groups analysis of covariance (ANCOVA) were conducted to compare the happiness levels between the four groups. One ANCOVA used scores from the SHS as the dependent variable, while the other ANCOVA used scores from the OHQ as the dependent variable. Social support was assessed as a covariate.

Results

Two 1 x 4 between groups analysis of covariance (ANCOVA) were conducted to investigate the impact of belief in the existence of a God on happiness levels. Group membership was based on self-identification. Social support was included in the analyses as a covariate. Two measures were used to measure the dependent variable (happiness) and separate ANCOVA analyses were run. Cases with missing data were eliminated from analyses using pair-wise deletion. All participants provided their age and gender.

Table 1. Descriptive statistics among the study variables for the believe in god group ($n = 13$), the believe in god and participate group ($n = 53$), the agnostic group ($n = 17$), and the atheist group ($n = 41$).

Variable	Mean	95% CI	SD
Happiness – OHQ			
Believe in God	123.08	[110.88, 135.28]	20.19
Believe in God and Participate	127.45	[122.39,132.52]	18.38
Agnostic	125.75	[116.86, 134.64]	16.69
Atheist	122.93	[116.19, 129.66]	21.05
Total	125.28	[121.84, 28.71]	19.17
Happiness – SHS			
Believe in God	20.71	[17.07, 23.39]	5.23
Believe in God and Participate	20.82	[19.50, 22.14]	4.65
Agnostic	20.25	[18.36, 22.14]	3.55
Atheist	20.94	[19.26, 22.63]	4.98
Total	20.71	[19.86, 21.57]	4.64
Social Support			
Believe in God	69.62	[62.79, 76.44]	11.30
Believe in God and Participate	74.26	[72.07, 76.45]	7.95
Agnostic	68.41	[61.89, 74.93]	12.68
Atheist	65.22	[60.43, 70.01]	15.16
Total	69.98	[67.80, 72.17]	12.27

Note. $N = 124$. OHQ = Oxford Happiness Questionnaire. SHS = Subjective Happiness Scale. CI = confidence interval.

Prior to analysis assumption testing of normality was conducted and checks on the data were performed. Missing values analysis found that data was missing completely at random and the amount was at acceptable levels. A visual inspection of the histograms, box plots, and Q-Q plots

for each group across the variables indicated that the data was approximately normally distributed. Examination of z scores for the variables found that outliers were within an acceptable range. Shapiro-Wilk results revealed violations of the assumption of normality for several groups, however this was considered acceptable as Tabachnick and Fidell (2007) argue that these tests are known to be sensitive, and ANCOVA is robust to moderate violations of normality. Overall the data were considered approximately normal. Descriptive statistics for the study variables are presented in Table 1.

The study variables were analysed using Pearson’s product-moment correlation coefficient. The correlations are presented at Table 2. Scores on the Oxford Happiness Questionnaire and the Subjective Happiness Scale were strongly correlated, $r = .82, p < .01$. Social support was significantly correlated to both measures of happiness, which is the ideal relationship between a covariate and the dependent variable to conduct ANCOVA (Pallant, 2011).

Table 2. Intercorrelations between the study variables ($N = 124$)

Variables	1	2	3
Happiness (QHJ)	1	.82**	.53**
Happiness (SHS)		1	.38**
Social Support			1

* $p < .05$. ** $p < .01$.

Analysis of Covariance - Oxford Happiness Questionnaire

Assumption testing for ANCOVA was performed prior to analysis. Examination of the scatterplots indicated a linear relationship between the covariate (perceived social support) and the dependent variable (happiness) for each of the groups. The assumption of homogeneity of regression slopes was not violated, $F(3,114) = 1.33, p = .27$, indicating there was no interaction between the covariate and the dependent variable. The Levene’s test was not significant, $F(3,118) = .46, p = .71$, indicating the assumption of homogeneity of variance was met. One case from the agnostic group and one case from the atheist group with missing data were not included in the analysis based on pair-wise exclusion.

The results of the ANCOVA revealed there was no overall significant difference in happiness (OHQ) levels for the four groups after controlling for social support, $F(3,117) = .40, p = .75$, partial $\eta^2 = .01$. There was a significant result between the dependent variable and the covariate, $F(1,117) = 44.80, p < .001$, partial $\eta^2 = .28$, while controlling for belief type. The adjusted means for the ANCOVA with happiness measured by the Oxford Happiness Questionnaire are presented in Table 3.

Table 3. Adjusted means for the ANCOVA with happiness measured by the oxford happiness questionnaire for the believe in god and participate group, the believe in god group, the agnostic group and the atheist group.

Variable	Adjusted Mean	95% CI	SE	N
Happiness – OHQ				
Believe in God	123.61	114.56, 132.66	4.57	13
Believe in God and Participate	123.85	119.24, 128.54	2.33	53
Agnostic	125.55	117.39, 133.71	4.12	16
Atheist	127.61	122.27, 132.95	2.70	40

Note. CI = confidence interval. OHQ = Oxford Happiness Questionnaire. $N = 122$

Analysis of Covariance - Subjective Happiness Scale

Assumption testing for ANCOVA was conducted prior to analysis. Examination of the scatterplots indicated a linear relationship between the covariate and the dependent variable for each of the groups. The assumption of homogeneity of regression slopes was not violated, $F(3,107) = .94, p = .43$, indicating there was no interaction between the covariate and the dependent variable. The Levene's test was not significant, $F(3,111) = .40, p = .75$, indicating the assumption of homogeneity of variance was met. Three cases from the believe in God and participate group, one case from the agnostic group, and five cases from the atheist group with missing data were not included in the analysis based on pair-wise exclusion.

The results of the ANCOVA revealed there was no overall significant difference in happiness (SHS) levels for the four groups after controlling for social support, $F(3,110) = .86, p = .46$, partial $\eta^2 = .02$. There was a significant result between the dependent variable and the covariate, $F(1,110) = 20.92, p < .001$, partial $\eta^2 = .16$, while controlling for belief type. The adjusted means for the ANCOVA with happiness measured by the Subjective Happiness Scale are presented in Table 4.

Table 4. Adjusted means for the ANCOVA with happiness measured by the subjective happiness scale (shs) for the believe in god group, the believe in god and participate group, the agnostic group, and the atheist group.

Variable	Mean	95% CI	SE	N
Happiness – SHS				
Believe in God	20.42	18.04, 22.79	1.20	13
Believe in God and Participate	20.21	18.97, 21.45	.63	50
Agnostic	20.29	18.15, 22.43	1.08	16
Atheist	21.71	20.24, 23.17	.74	36

Note. CI = confidence interval. SHS = Subjective Happiness Scale. $N = 115$.

Discussion

The present study found that there was no significant difference in happiness levels between the believe in God group, the believe in God and participate in religion group, the agnostic group, and the atheist group, after controlling for social support. The results lend support to previous research in the literature that found no association in the relationship between religiosity and happiness (Lewis et al., 1997; Lewis, Maltby, & Burkinshaw, 2000), and suggest that the theoretical framework of religiosity being positively associated with well-being constructs may not be as clear as previously thought. The findings also provide support for the study conducted by Horning et al. (2010) that found no difference in life satisfaction between the religious and the nonreligious among a sample of older adults.

The results of the study were consistent when happiness was measured separately by the Oxford Happiness Questionnaire (OHQ) and the Subjective Happiness Scale (SHS). Also, the OHQ and the SHS were significantly positively correlated ($r = .82$), indicating excellent construct validity. Therefore, the findings do not support claims by Lewis and Cruise (2006) that the operationalisation of happiness may have contributed to inconsistent results in the literature for the relationship between religiosity and happiness. Furthermore, Kashdan's (2004) theory that the OHQ is not a valid measure of happiness, and should not be used in happiness research, was also not supported.

The results indicate that there was a significant relationship between happiness and the covariate, social support, after the effect of belief in God was controlled for. Social support explained 28% of the variance in happiness when measured by the OHQ, and 16% of the variance in happiness when measured by the SHS, indicating a stronger relationship between the OHQ and social support. In addition, both happiness measures were positively correlated with social support, with a large correlation between OHQ and social support, and a medium correlation between the SHS and social support. These findings are consistent with previous research that has found social support is important for well-being, and in particular, that satisfying social relationships and social activity are important factors in the development of lasting happiness (Argyle et al., 1989; Cohen, 2004; Diener & Seligman, 2004).

A possible explanation for the findings that the groups did not differ on happiness may be due to the sample used in the present study, as the type of population sampled has been raised as a possible factor for inconsistent results in the literature between religiosity and happiness (Lewis & Cruise, 2006; Sillick & Cathcart, 2013; Trede, 2006). The mean age for the present study was 42 and there were more women than men. Perhaps replication studies with older or younger samples and an even distribution of gender might produce different results. Much of the research on the relationship between religiosity and happiness has been conducted using Christian protestant samples in the United States, where there is a high level of religiosity compared to similar economically developed nations (Hill & Hood, 1999). Possibly the most significant aspect of the sample in the present study is that it originated from Australia. International data on the prevalence of the religious and the nonreligious indicates a large range across nations (Crabtree, 2009; Zuckerman, 2007), and it is plausible that different cultures have a unique set of religious characteristics that has a varying degree of influence on happiness levels. Also, while data on the participants' religious faith was not collected, most of the religious participants in the present study were sourced from Christian groups, which limits the generalisability of the results.

The findings of the present study suggest that consideration needs to be given to the possibility that religious people do not have higher happiness levels than the nonreligious; that is, religion does not add to a person's happiness. Perhaps previous research that found a link between religion and well-being is outdated, or the link was tenuous in the first place. The present study supports Horner et al.'s (2010) findings that life satisfaction was not different between the religious and the nonreligious, but clearly more studies with a variety of samples are needed before conclusions can be drawn.

The findings of the present study indicate that social support was significantly related to happiness and this relationship should be investigated further. Furthermore, the findings suggest that social support is a better indicator of happiness than religious status. Social support can be obtained from a number of sources independently of a religious participation and a belief in God, and it may be that people in contemporary societies seek social support from a variety of places. Arguably support received in an intimate personal relationship is different to support received from friends, the community, or groups such as religious congregations and atheist foundations, however, these different types of social support were not explored in the present study.

Implications

The present study is important as it provides a direct comparison between the religious and the nonreligious, the latter being an under researched social-cultural group. Although the results need to be replicated and validated, the findings suggest the theory that religion and broad well-being constructs are positively associated needs further investigation. More research is needed to gain a clearer understanding of contemporary religiosity, as the trend in the more developed countries of declining religious involvement suggests that religiosity has been in a state of substantial change for the past two decades (Diener et al., 2011; Zuckerman, 2009). Conversely, the growing trend of

an increase in the nonreligious means this under researched cultural group needs more attention from researchers. Identifying the factors that may be contributing to these changes could be informative. Furthermore, understanding what religion means from a contemporary perspective needs exploration, which should include consideration of the growing interest in people describing themselves as spiritual, but not religious (Pargament, 1999).

In terms of the future direction of the happiness theoretical model, research could focus efforts on identifying other intentional activities that may enhance happiness, such as social support. Understanding the constructs that boost happiness is important for individuals and societies, as it could potentially contribute to a reduction in depression rates. With that in mind, there is also relevance for the therapeutic context, as it would be helpful for therapists to have an understanding of activities that assist their clients to enhance happiness levels. Dealing with God concepts and religion in a therapeutic context is known to be a difficult issue (D'Andrea & Sprenger, 2007; Meissener, 2009), and an increased understanding of the way in which the nonreligious find meaning and make sense of their lives would be useful.

The findings indicate that the measurement of happiness, a contentious issue among well-being and religiosity researchers (Lewis & Cruise, 2006; Lyubomirsky & Lepper, 1999), is not necessarily a significant factor in the inconsistent results in the literature. Nevertheless, it would be worthwhile for researchers to develop a single authoritative measure of happiness that has cross-cultural validity. Such a measure, if developed and widely used, would provide increased validity and a more robust comparison of results across happiness studies. The findings support previous research that indicates social support is an important factor in happiness, and more studies with these variables are needed to further develop the theoretical model of happiness (Lyubomirsky & Layous, 2013; Lyubomirsky, Sheldon, & Schkade, 2005).

Limitations

The present study contains several limitations that should be considered in evaluating the results. There was a potential for social desirability effects whereby participants may have intentionally rated themselves higher in happiness levels and social support. Further, although participants were not informed that the study was comparing happiness levels between the religious and the nonreligious, there is a risk that participants formulated a hypothesis about the purpose of the study and this may have influenced their scores.

The use of a convenience sample may limit the generalisability of the results. In particular, the recruitment method that combined participants from the general population and also from an atheist foundation and a religious group was not ideal. In addition, the uneven group sizes in the study (ranging from 13 to 51) is a limitation, and while ANCOVA is robust to such issues, it is acknowledged that this issue could have increased the possibility of a type 2 error.

Future Research

Future research would benefit from using self-report measures in combination with an experimental design, such as, behavioural measures, periodic assessments of happiness by participants, and peer ratings. Longitudinal studies could provide information regarding causality and potential changes in happiness across developmental stages. Further studies could control for other factors that may be influencing happiness, such as educational attainment, personality, current life circumstances, and socio-economic status. Difficult life circumstances could also be explored, as research indicates that nations with greater hardship in life circumstances have higher rates of religiosity (Diener, et al., 2011), and the more developed nations have higher happiness levels (Beit-Hallahmi, 2009).

Qualitative research could provide a more in-depth understanding about the religious and the nonreligious and the relationships with happiness from a contemporary perspective, particularly as

religiosity is often a complex, personal, and sensitive topic (Hood, Hill, & Spilka, 2009). The present study could be extended by comparing happiness levels between a variety of religious faiths and the nonreligious, and also people that consider themselves *spiritual* but not religious. Studies investigating the relationships between other well-being constructs and the nonreligious is needed to develop a body of evidence on this growing cohort.

In summary, the present study extends previous research on the relationship between religiosity and happiness by comparing happiness levels between the religious and the nonreligious. The results found there was no difference in happiness levels between any of the groups, after controlling for social support, and using two different measures of happiness. The findings are important as they suggest the religious are not happier than the nonreligious; that is, religion does not appear to add to a person's happiness. There was a significant positive relationship between social support and happiness, which suggests that perhaps social support is a better indicator of happiness than religion. Further studies are needed to examine the happiness levels of the religious and nonreligious with a variety of samples. Future directions for research on happiness should explore other intentional activities that may boost happiness, including social support.

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