



Religiosity: Reducing Depressive Symptoms Amongst Muslim Females in the United Arab Emirates

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Abstract: Religiosity has previously been associated with greater wellbeing, as well as with lower rates of depressive disorders and less severe levels of depressive symptoms; yet, relatively few studies have explored this association in Muslim populations. This study explores the relationship between religiosity and depressive symptoms amongst female citizens of the United Arab Emirates (UAE). Using a cross-sectional correlational design, a convenience sample of college students (N = 459) completed the Religious Conviction Inventory (RCI-10), adapted to an Islamic context, along with the Beck Depression Inventory (BDI-II), both of which demonstrated good psychometric properties. As predicted, religiosity was negatively correlated with depressive symptoms, and individuals categorized as experiencing severe depressive symptoms reported lower levels of religiosity compared to their asymptomatic counterparts. These findings lend support to the idea that religiosity may be a resilience factor in the context of depression and are understood in the context of the second wave of positive psychology, called PP 2.0, which looks at positive and negative factors in individual's lives as both interact to produce positive clinical outcomes.

سبق ان ارتبط التدين والتقوى بالتمتع بحالة نفسية جيدة ، وبانخفاض معدلات الاكتئاب ومستويات أقل حدة من أعراض الاكتئاب. ومع ذلك، هناك دراسات قليلة نسبياً بحثت في هذا الترابط عند المسلمين. تركز هذه الدراسة على العلاقة بين التدين وأعراض الاكتئاب بين مواطنات دولة الإمارات العربية المتحدة . استخدمت طريقة البحث المقطعي الارتباطي لاجراء هذه الدراسة واكملت عينة من طلاب الجامعات (N = 459) مقياس القناعة الدينية (RCI-10) الذي تم تكييفه للسياق الإسلامي، مع مقياس بيك للاكتئاب (BDI-II) ومن المعروف ان كلا المقياسين يتمتعان بخصائص سيكومترية جيدة. وكما هو متوقع، ارتبط التدين سلباً مع أعراض الاكتئاب. وعلاوة على ذلك، اظهرت الدراسة علاقة بين شدة أعراض الاكتئاب عند الفئة التي تنتمي الي اقل مستوي تدين ، مقارنة بنظرائهم الذين لا يعانون من اي اعراض . هذه النتائج تدعم فكرة أن التدين قد يكون بمثابة عامل يساعد علي مقاومة الاكتئاب. أن نتائج هذه الدراسة تفهم في سياق الموجة الثانية من علم النفس الإيجابي، تدعى PP 2.0، والتي تبحث في تفاعل العوامل الإيجابية والسلبية في حياة الفرد لتقدم نتائج سريرية إيجابية.

Keywords: depression; religiosity, Muslim; Arab; Islam; positive clinical psychology

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For much of its early history, psychology as a discipline has been predominantly focused on the manifestations and origins of various forms of psychopathology. In more recent decades however a re-orientation has taken place, which has resulted in the now blossoming field of what is termed positive psychology (Seligman & Csikszentmihalyi, 2000). This domain of work covers a multitude of areas whereby research is conducted with the sole aim of improving quality of life and human functioning (Sheldon, Kashdan, & Steger, 2011), and addresses issues such as positive psychological health, subjective wellbeing, positive emotion, engagement, relationships, meaning, as well as character strengths and virtues as examples (Seligman, 2011). It has generated a now substantial body of research systematically addressing both the contributors to psychological wellbeing and the factors that both promote and develop it. Among the contributors to a positive state of mental health, or flourishing (Keyes, 2005) are good relationships, a sense of meaning and purpose, engagement, positive emotion, social acceptance and contribution, as well as a sense of coherence, all of which can be found within many of the world's major religions. As a result, attention has focused on the possible relationships between religion and its dual role as a facilitator of, and protective factor for, good mental health.

As much as traditional psychology has been criticized for its sole focus on psychopathology, positive psychology has also been criticized for its orientation towards a unipolar positive view (Held, 2004; Kashdan & Biswas-Diener, 2014; McNulty & Fincham, 2011; Wong, 2011). To correct for the near exclusive focus on the positive and to acknowledge the experiential realities in which humans live, a rebalancing of the field is underway towards a psychology that requires an equal weighting be given to both positive and negative psychological functioning (Wood & Tarrier, 2010). This new wave called Positive Psychology 2.0 (Lomas & Ivtzan, 2016; Wong, 2011), advocates for a dual-system model where both positive and negative characteristics are studied as both interact to produce clinical outcomes and where it is assumed that positive characteristics may operate as a buffer against negative life events and the onset of psychological disorder (Wood & Tarrier, 2010). This conceptualisation is therefore neither exclusively focusing on the positive nor the negative but on how the two dynamically interact.

A prime example of this interplay can be seen in the domains of depression and religion. Whereas research on depression has traditionally focused on the negative events which contribute to the onset of depression, this alternative perspective focuses on the factors that may foster resilience to the world's most common psychological disorder. The role of religion has often been overlooked in this context not only due to the growing secularisation of Western countries where most research on this issue has taken place, but also because the bulk of positive psychology research has stemmed from the West and much of its findings have been uncritically used in non-Western cultures and promoted as ideals to which healthy communities and individuals should strive (Lambert, Pasha-Zaidi, Passmore, & York Al-Karam, 2015; Wong, 2013). Nonetheless, more recently, a small but growing interest from the field of positive psychology into the wellbeing benefits of religion and spirituality has been observed (Barton & Miller, 2015; Falb & Pargament,



2014; Rye, Wade, Fleri, & Kidwell, 2013). Thus, the study reported here represents an attempt to determine the role of religion as a positive factor in the context of depression, findings which can be useful in the development of a second-wave indigenous positive psychology in the region.

Religiosity

The term 'religiosity' is variously defined, with most definitions encompassing: (1) a sense of belonging to a particular denomination or creed, (2) the personal importance of religion/spirituality to the individual, and (3) the level of commitment to praxis, for example attendance at communal worship or observing mandatory fasts (Miller et al., 2012). The majority of studies exploring religiosity have focused on Judaeo-Christian denominations within western societies. Using widely varying definitions and measures of religiosity, the overarching conclusion drawn within this literature is that religiosity tends to be associated with better mental health status. A review by Dew et al. (2008), focusing on adolescent mental health, examined 115 relevant articles and reported that in 92% cases religiosity was significantly associated with better mental health status. In another review of the religiosity-mental health literature, this time including adults, 139 studies were examined. This more broadly focused review also reported an association between improved mental health status and religiosity in the great majority of studies (Larson et al., 1992). More specifically, in the context of depression, a meta-analysis of 147 independent studies, including a total of 98,975 participants, found a statistically significant inverse relationship between religiosity and depression (Smith, Poll, & McCullough, 2003) suggesting that higher levels of religiosity, particularly in the context of recent stressful life events, operated as a protective factor against the onset of depressive symptomatology.

Such correlational studies however, are limited in their ability to draw conclusions about the causal or temporal nature of the relationship between mental health and religiosity. To better understand such dynamics there is a need for prospective longitudinal studies. Miller et al. (2012) recently published the first prospective longitudinal study to explore the relationship between religiosity and depression in adults. This study followed 114 participants over a 10-year period. Participants were split into two groups based on family history of depression. One group comprised individuals whose parents had no prior history of psychiatric illness, while the other group were the adult offspring of parents who had experienced a major depressive episode; these latter individuals were deemed the high-risk group. This study took measures of religiosity and major depression at two points in time. One of the study's hypotheses was that religiosity would have a protective effect against depression over a 10-year period. The findings confirmed this hypothesis, particularly amongst individuals in the high-risk group. Overall, those participants reporting high personal importance of religion/spirituality (religiosity) had one quarter the risk of developing a major depressive episode over the 10-year period. More striking still, the more religious individuals within the high-risk group had only one-tenth the risk of depressive onset or recurrence compared with less religious individuals in high-risk group (Miller et al., 2012).

Despite various methodological approaches to investigating the relationship between religion and mental health (Abu-Raiya, Pargament & Krause, 2016), the general consensus is that religion can operate as a protective factor against the onset or maintenance of psychopathology



particularly affective disorders. However, the majority of research in this area has involved Christian participants, which may have limited generalizability to non-Christian populations such as Muslims. Comparatively little research has involved Muslim participants but of the research that does, it appears that high self-reported religiosity is a protective factor against internalizing psychopathology such as depression (Gulamhussein & Eaton, 2015).

This is an important area for focus especially given the region's present and historic commitment to Islam. The Gulf (Gulf Cooperation Council) region is home to Islam's two holiest sites at Mecca and Medina. Furthermore, Islam is widely practised within the region as is evidenced by the widespread attendance at communal prayers, and the availability and use of prayer facilities within most public institutions: universities, workplaces, schools, shopping malls and even petrol stations. This idea of a region characterised by relatively high levels of religiosity is also supported by cross-cultural research. One comparative cross-cultural study exploring religiosity amongst similarly aged Kuwaiti and US university students, found that the Kuwaiti students achieved significantly higher scores on various measures of intrinsic religiosity (Abdel-Khalek & Lester, 2009). Furthermore, in a bid to develop the local psychology landscape, it has been suggested by some authors (e.g., Abdel-Khalek & Eid, 2011) that religion be considered as a feature in the understanding of how societies and the individuals in them deal with distress as well as create good mental health. Thus, religion can be considered an important factor in understanding how individuals deal with depression in particular.

Of the handful of studies undertaken in the Gulf region to explore the relationship between religiosity and mental health, the findings suggest a positive association - higher religiosity associated with better mental health status. One Saudi study (Abdel-Khalek & Eid, 2011) assessed depressive symptoms, subjective well-being and religiosity within a school-age sample of 7,211 Saudi children (8-11 years). As hypothesized, a positive relationship between subjective well-being and religiosity was observed, as well as the expected inverse relationship between religiosity and depressive symptoms. A similar study amongst 6,339 school-age Kuwaitis looked at the same variables and, like the Saudi study, also reported religiosity to be positively related to subjective well-being and inversely related to depressive symptoms (Abdel-Khalek & Eid, 2011). Again, looking at a sample of 444 adults in the Kuwaiti workforce, the same pattern of findings is also reported (Abdel-Khalek, 2008). Whereas these previous studies have focused on high school students or workforce professionals, the present study aims to explore the relationship between religiosity and depressive symptoms amongst a sample of Emirati females attending university in Abu Dhabi, the capital city of the United Arab Emirates (UAE).

Method

Participants

Participants were an opportunity sample of Emirati females ($N = 459$), with a mean age of 20.13 ($SD = 2.35$). All participants were undergraduate students taking a variety of courses at Zayed University in the city of Abu Dhabi in the United Arab Emirates (UAE). The all-female sample is a consequence of the institution's historic - female only - single-gender policy. A



separate male campus has opened in recent years; however, the number of males attending is still too small to enable meaningful gender comparisons in the context of the present study.

Measures

Both measures were translated into Arabic and back-translated by Masters-level faculty within the university's Arabic language department, with additional input from a bilingual consultant psychiatrist and a religious scholar. Measures were presented to participants in dual language form, with items in English and Arabic alongside each other. Presentation in dual language form was deemed necessary within the present population, due to a known variability in language dominance (English/Arabic). The language of tuition at the university is English.

Beck Depression Inventory -II (BDI-II) (Beck, Steer, & Brown, 1996). This 21-item self-report inventory assesses the severity and intensity of depressive symptoms. Each item reflects either a cognitive or somatic-affective symptom of depression; items are rated from 0 to 3, with higher scores reflecting heightened symptom severity. Amongst North American college students and hospital outpatients, the BDI-II was found to have high internal consistency, the coefficient alphas were .93 and .92 respectively (Beck et al., 1996). Subsequent studies of the BDI-II's psychometric properties report favorably on the instrument's reliability and validity in various contexts spanning several nations (Al-Musawi, 2001; Osman, Kopper, Barrios, Gutierrez, & Bagge, 2004; Sprinkle et al., 2002; Thomas & Altareb, 2012). In the present study the internal reliability for the BDI-II was $\alpha = .84$.

Religious Commitment Inventory-10 (Worthington, McCullough, Berry, & Ripley, 2003). The Religious Commitment Inventory - 10 (RCI-10) is a 10-item measure of religious commitment designed for use across faith groups. The scale has two related subscales, intrapersonal and interpersonal religious commitment. Respective intra and inter personal items include: 'I spend time trying to grow in understanding of my faith' and 'Religious beliefs influence all my dealings in life'. Responses to these items are scored on a 5-point gradient scale, with a score of 1 anchored to: 'Not at all true of me' and a score of 5 anchored to: 'Totally true of me'.

Explorations of the RCI-10's psychometric properties have demonstrated excellent internal reliability ($\alpha = .93$) and good test-retest reliability, at three weeks ($r = .87$) and five months ($r = .84$). The scale was described as being particularly useful for assessing religious commitment in Christians, although there is less support for its use in other religions (Worthington et al., 2003). Several minor modifications were made to the scale in the present study to improve face validity in the context of using it to assess Muslims. The third author of this paper, a religious scholar, made these minor modifications. Full details of the modified scale are available from the corresponding author. The scale's internal reliability in the present study was acceptable; $\alpha = .86$ and $\alpha = .82$ and $.69$ for intra and inter subscales respectively.

Procedure

In line with the institution's human subjects research ethics committee directives, all participants gave informed consent. Participants completed the surveys online during class time;



the RCI was completed first followed by the BDI. Data collection was anonymous, and participants were given an email address (that of the second author of this paper) to contact should they wish to discuss their results.

Plan for data analyses

A bivariate correlational matrix was used to explore the relationships between depressive symptoms and the RCI-10 and its sub-scales. Independent samples T-tests were used to examine differences in RCI-10 scores (dependent variable) between participants categorized as experiencing either mild or severe depressive symptoms (grouping variable).

Results

Correlational analysis

As hypothesized, bivariate correlational matrices revealed a significant negative relationship between depressive symptom scores and RCI-10 scores. Overall RCI-10 scores were negatively correlated with BDI-II scores ($r = -.11, p < .05$). The intrapersonal subscale ($r = -.12, p < .05$) and interpersonal subscales ($r = -.06, p < .05$) were negatively correlated with BDI-II scores (see Table 1).

Table 1

Pearson Product Moment Correlations Correlations Between BDI-II Scores with RCI-10

Measures	1	2	3	4
1. BDI (Total)	-	-	-	-.11*
2. BDI (Intrapersonal)	-	-	-	-.12*
3. BDI (Interpersonal)	-	-	-	-.06*
4. RCI-10	-	-	-	-

Note. * = $p < .05$.

Severe depressive symptoms vs. mild depressive symptoms

The mean RCI-10 scores for individuals categorized as experiencing severe depressive symptoms (BDI-II scores $> 29, N = 19$) was 33.94 ($SD = 9.44$), while those categorized as experiencing only zero to mild depressive symptoms (BDI-II scores $< 14, N = 169$) had mean RCI-10 scores of 38.84 ($SD = 6.79$). These differences were statistically significant; $t(20.15) = 2.19, p < .05$. Similarly, those with severe depressive symptoms had lower RCI-10 intrapersonal scores ($M = 21.26, SD = 5.89$) than individuals with zero to mild depressive symptoms ($M = 24.29, SD = 4.24$); these differences were statistically significant $t(20.15) = 2.18, p < .05$, with a small effect size ($d = .24$). A similar pattern of results was also observed for the interpersonal subscale of the RCI-10. Those experiencing severe levels of depressive symptoms reported lower scores on this subscale ($M = 12.68, SD = 4.28$), than those experiencing only mild depressive symptoms ($M =$



14.55, $SD = 3.31$); these differences, were also statistically significant $t(186) = p < .05$, with a medium effect size ($d = .48$) (See Table 2).

Table 2

RCI-10 Means for High and Mild Depressive Symptomology

	BDI-II		<i>t</i>	<i>df</i>
	High Total Score	Low Total Score		
RCI-10	33.94 (9.44)	38.84 (6.79)	20.15	
	High	Low		
	Intrapersonal Scale	Intrapersonal Scale	20.15	
	21.26 (5.89)	24.29 (4.24)		
	Interpersonal Scale	Interpersonal Scale	18.6	
	12.68 (4.28)	14.55 (3.31)		

Note. * = $p < .05$. Standard Deviations appear in parentheses below means.

Discussion

Similar to previous studies in other cultural and religious contexts (Dew et al., 2008; Larson et al., 1992; Smith et al., 2003), the present study found an association between religiosity and lower levels of depressive symptoms. Participants in the present study who were categorized as experiencing severe levels of depressive symptoms also reported significantly lower levels of religiosity on the RCI-10 compared to their asymptomatic counter-parts. The same pattern of findings was also observed for both of the RCI's subscales. It is noteworthy that all of the effect sizes were small to medium, that being the case, religiosity is at best a fairly modest predictor of depressive symptoms in the present population. Further, such correlational findings are open to multiple interpretations (perhaps being depressed reduces levels of religious commitment) and we cannot conclude on the basis of this study that religiosity prevents or reduces depressive symptoms. However, there are prospective longitudinal studies undertaken in other nations suggesting strongly that this relationship between religiosity and depressive symptoms is causal and that it is indeed religiosity that reduces the likelihood of depressive episodes (Miller et al., 2012).

If there is such a causal link, then what is the mechanism through which religion might exert its apparently protective factor? The ideas proposed to explain this relationship span the full bio-psycho-social spectrum. A recent review, for example, proposes that spiritual practice may be associated with physical changes in the brain and increases in the neurotransmitter serotonin (Newberg, 2011), which contributes to subjective wellbeing. This suggests that such practices appear related to positive biochemical changes in certain individuals which may operate as a precursor to subjective wellbeing. Similarly, there have been speculations from the perspective of



behavioural genetics suggesting that certain dual-duty genes might simultaneously confer resilience against depression whilst also contributing, in some way, to the development of heightened religious sentiments or indeed an increased propensity towards a search for spirituality (Smith et al., 2003). From the perspective of developmental psychology, the association has been explained in terms of negative parental relationships and other similarly distressing early life events that might both disincline an individual towards religion and simultaneously constitute a vulnerability to depression (Hunsberger, 1980; Haefel, & Grigorenko, 2007).

From the social perspective, arguments include the potential prophylactic properties associated with the congregational aspects of religious practice, such as increased social support and a regular calendar of social events. Even congregational worship will, as a by-product, provide increased opportunity for social interaction. Individuals involved in religion have been reported to have more social contacts and more civic engagements than those who are not (Putnam, 2000; Pew Research Centre, 2016). Certainly, Islam is a highly congregational religion. For Sunni Muslims (the vast majority of UAE nationals), the congregational Friday prayer is mandatory for males unless one is ill or travelling. Praying Islam's five daily prayers, congregationally at the mosque, is also strongly encouraged for men; females too, regularly engage in these communal acts of worship. Further, there are many other Islamic recommendations that indirectly increase social contact, such as visiting the ill, hosting/attending communal feasts and attending congregational funerals.

At a higher level, an alternative mechanism may well be the beneficial effect of religion in deriving a personal sense of meaning in life. According to some psychological traditions, beginning most notably with the work of Viktor Frankl (Frankl, 1992), developing a positive personal meaning of life brings with it several positive psychological functions including positive psychological affect (Hicks et al., 2010), satisfaction in life and general psychological well-being (Zika & Chamerlain, 1995). A number of authors have suggested that the relationship between religion and meaning in life is attributable to the fact that religious commitment fosters a coherent set of goals that provide meaning and purpose (Pargament, 1997; Park, 2005; Wong, 1998). Meaning in life correlates with several indices of subjective well-being such as physical health, academic outcomes, occupational adjustment and longevity (Shin & Steger, 2014). Though few in number, those studies do suggest an interplay between mental health, religion and meaning in life (Galek et al., 2015).

Another psychosocial explanation for the relationship between depression and religiosity is the lower rate of alcohol and substance abuse reported by religious individuals. National surveys repeatedly report high rates of co-morbidity between depression and substance-related disorders (Moreira-Almeida, Neto, & Koenig, 2006); one interpretation of this relationship is that substance abuse represents a risk factor for the development of depression. By following religious proscriptions against drug use, individuals arguably also reduce their risk of developing depression. Islam, of course, has a total prohibition on the consumption of alcohol and by extension, other intoxicating psychoactive substances. Previous studies show lower rates of alcoholism amongst Muslims, even in comparison to the followers of other religious traditions (Ghandour, Karam, & Maalouf, 2009), and although the prevalence of substance-related disorders appears to be



increasing, substance use and abuse in the UAE is still relatively low although under-reporting due to legal implications and social stigma are suspected (AlMarri & Oei, 2008).

In addition to religious prohibitions on drug use exerting a possible protective factor, there are arguments that the broader content and teachings within certain religious traditions actively promote mental health, and arguably exert a protective influence through the attitudes they promote. There is a high degree of overlap and resonance between the content of some religious discourse and secular psychological therapies. This has occasionally led to the development of 'spiritually modified cognitive therapy' (Hodge, 2006). Such modified therapies draw on religious narratives and traditions to help clients reconsider their current depressive dysfunctional beliefs (i.e., "Allah does not burden a soul beyond that it can bear", Surah Baqarah, verse 286) and perhaps identify and adopt more helpful ones - a process known as cognitive restructuring in psychotherapeutic parlance (Thomas & Ashraf, 2011).

On the flip side and from a positive perspective, religion may also confer an appreciative and grateful outlook (Wood, Froh, & Geraghty, 2010), as well as forgiveness (Maltby et al., 2008), each of which has been identified as contributing to greater wellbeing and may be mechanisms responsible for the decrease in depression observed in this study. Finally, religiosity may operate as a buffer to the effects of modernization and individualisation, a feature of a current changing UAE society, and which leads to a loss of meaning in life through declining rates of religious observance as countries become more industrialized and modern (Diener, Tay, & Myers, 2011; Oishi & Diener, 2009).

Conclusions

The present study establishes the association between depressive symptoms and religiosity in the context of young Emirati Females, all of who were Arab, Muslim and citizens of the UAE. Although the female only focus of the present study restricts a broader generalization, it is nonetheless important to focus on females in that they are generally found to have a higher prevalence for depressive illness in the UAE (Abou-Saleh, Ghubash, & Daradkeh, 2001) and internationally (King et al., 2008). Future studies should be extended to include males and look at broader community samples. Similarly, longitudinal studies are required to further explore the potential preventative nature of religiosity in the context of depression and perhaps other forms of psychopathology like anxiety. Finally, future studies should also include subjective wellbeing scales to determine whether and by how much a sense of religiosity adds to wellbeing and not only removes ill-being or psychopathology. However, the results reported here lend support to the protective factor played by religious commitment in the context of affective disorders. Specifically, religious commitment appears to operate as a resilience factor off-setting the onset of depressive symptomology. In conclusion, the study reported here resonates with, and lends support to, the concept of a positive clinical psychology as advocated by Wood and Tarrier (2010) which promotes a reduced emphasis on the examination of simple linear relationships surrounding psychopathology in favour of a richer contextual analysis of the interaction between psychopathology and protective factors. Such a contextual analysis by definition requires a focus



on cultural factors and a tailoring of psychology in order to better serve the local population. Such an agenda represents the second wave of positive psychology.

References

- Abdel-Khalek, A. M., & Lester, D. (2009). Religiosity and death anxiety: No association in Kuwait. *Psychological Reports, 104*(3), 770-772.
- Abou-Saleh, M. T., Ghubash, R., & Daradkeh, T. K. (2001). Al Ain Community Psychiatric Survey. I. Prevalence and socio-demographic correlates. *Social Psychiatry and Psychiatric Epidemiology, 36*, 20-28.
- Abu-Raiya, H., Pargament, K. I., & Krause, N. (2016). Religion as problem, religion as solution: Religious buffers of the links between religious/spiritual struggles and well-being/mental health. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care & Rehabilitation, 25*(5), 1265-1274.
- AlMarri, T. S. K., & Oei, T. P. S. (2008). Alcohol and substance use in the Arabian Gulf region: A review. *International Journal of Psychology, 1*(12), 1-12.
- Al-Musawi, N. M. (2001). Psychometric properties of the Beck Depression Inventory-II with university students in Bahrain. *Journal of Personality Assessment, 3*(77), 568-579.
- Barton, Y. A., & Miller, L. (2015). Spirituality and positive psychology go hand in hand: An investigation of multiple empirically derived profiles and related protective benefits. *Journal of Religion and Health, 54*(3), 829-843.
- Beck, A. T., Steer, R. A., & Brown, G. (1996). *BDI-II Manual*. San Antonio, USA: Harcourt Brace & Company.
- Dew, R. E., Daniel, S. S., Armstrong, T. D., Goldston, D. B., Triplett, M. F., & Koenig, H. G. (2008). Religion/spirituality and adolescent psychiatric symptoms: A review. *Child Psychiatry and Human Development, 39*, 381-398.
- Diener, E., Tay, L., & Myers, D. G. (2011). The religion paradox: If religion makes people happy, why are so many dropping out? *Journal of Personality and Social Psychology, 101*(6), 1278-1290.
- Falb, M. D., & Pargament, K. I. (2014). Religion, spirituality, and positive psychology: Strengthening well-being. In J. T. Pedrotti & L. M. Edwards (Eds.), *Perspectives on the intersection of multiculturalism and positive psychology* (pp. 143-157). The Netherlands: Springer.
- Galek, K., Flannelly, K. J., Ellison, C. G., Sifton, N. R., & Jankowski, K. B. (2015). Religion, meaning and purpose, and mental health. *Psychology of Religion and Spirituality, 7*(1), 1-12.
- Ghandour, L. A., Karam, E. G., & Maalouf, W. E. (2009). Lifetime alcohol use, abuse and dependence among university students in Lebanon: Exploring the role of religiosity in different religious faiths. *Addiction, 104*, 940-948.
- Gulamhusein, Q., & Eaton, N. R. (2015). Hijab, religiosity, and psychological wellbeing of Muslim women in the United States. *Journal of Muslim Mental Health, 9*(2), 25-40.



- Haefffel, G. J., & Grigorenko, E. L. (2007). Cognitive vulnerability to depression: Exploring risk and resilience. *Child and Adolescent Psychiatric Clinics of North America*, 16(2), 435-448.
- Held, B. S. (2004). The negative side of positive psychology. *Journal of Humanistic Psychology*, 44(1), 9-46.
- Hicks, J. A., Cicero, D. C., Trent, J., Burton, C. M., & King, L. A. (2010). Positive affect, intuition, and feelings of meaning. *Journal of Personality and Social Psychology*, 98, 967-979.
- Hodge, D. R. (2006). Spiritually modified cognitive therapy: A review of the literature. *Social Work*, 51(2), 157-166.
- Hunsberger, B. (1980). A reexamination of the antecedents of apostasy. *Review of Religious Research*, 21, 158-170.
- Kashdan, T. B. & Biswas-Diener, R. (2014). *The upside of your dark side: Why being your whole self-not just your "good" self-drives success and fulfillment*. New York, USA: Hudson Street Press.
- Keyes, C. L. M. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology*, 73, 539-548.
- King, M., Nazareth, I., Levy, G., Walker, C., Morris, R., Weich, S., & Bello'n-Saamenõ, J. A. (2008). Prevalence of common mental disorders in general practice attendees across Europe. *British Journal of Psychiatry*, 192, 362-7.
- Lambert, L., Pasha-Zaidi, N., Passmore, H.-A., & York Al-Karam, C. (2015). Developing an indigenous positive psychology in the United Arab Emirates. *Middle East Journal of Positive Psychology*, 1(1), 1-23.
- Larson, D. B., Sherrill, K. A., Lyons, J. S., Craigie, F. C., Thielman, S. B., Greenwold, M. A., & Larson, S. S. (1992). Associations between dimensions of religious commitment and mental health. *American Journal of Psychiatry*, 149, 557-559.
- Lomas, T., & Ivtzan, I. (2016). Second wave positive psychology: Exploring the positive-negative dialectics of wellbeing. *Journal of Happiness Studies*, 17(4), 1753-1768.
- Maltby, J., Macaskill, A., & Gillett, R. (2007). The cognitive nature of forgiveness: Using cognitive strategies of primary appraisal and coping to describe the process of forgiving. *Journal of Clinical Psychology*, 63(6), 555-566.
- McNulty, J. K., & Fincham, F. D. (2011). Beyond positive psychology? Toward a contextual view of psychological processes and well-being. *American Psychologist*, 67(2), 101-110.
- Miller, L., Wickramaratne, P., Gameraoff, M. J., Sage, M., Tenke, C. E., & Weissman, M. M. (2012). Religiosity and major depression in adults at high risk: A ten-year prospective study. *The American Journal of Psychiatry*, 169(1), 89-94.
- Moreira-Almeida, A., Neto, F. L., & Koenig, H. G. (2006). Religiousness and mental health: A review. *Revista Brasileira de Psiquiatria*, 28, 242-50.
- Newberg, A. (2011). Transformation of brain structure and spiritual experience. In L. Miller (Ed.), *Handbook of Psychology and Spirituality* (pp. 161-178). New York, USA: Oxford University Press.



- Oishi, S., Diener, E., Lucas, R. E., & Suh, E. M. (2009). Cross-cultural variations in predictors of life satisfaction: Perspectives from needs and values. In E. Diener & E. Diener (Eds.), *Social Indicators Research Series. Culture and well-being: The collected works of Ed Diener* (vol. 38; pp. 109-127). New York, USA: Springer.
- Osman, A., Kopper, B. A., Barrios, F., Gutierrez, P. M., & Bagge, C. L. (2004). Reliability and validity of the Beck Depression Inventory-II with adolescent psychiatric inpatients. *Psychological Assessment, 16*(2), 120-132.
- Pew Research Center (2016, April 12). *Religion in everyday life*. Pew Research Center. Retrieved from <http://www.pewforum.org/2016/04/12/religion-in-everyday-life/>
- Putnam, R. D. (2000). *Bowling alone*. New York, USA: Simon & Schuster.
- Rye, M. S., Wade, N. G., Fleri, A. M., & Kidwell, J. E. M. (2013). The role of religion and spirituality in positive psychology interventions. In K. Pargament (Ed.-in-Chief), A. Mahoney, & E. Shafranske (Assoc. Eds.), *APA handbooks in psychology: APA handbook of psychology, religion, and spirituality: Vol 2* (pp. 481-508). Washington, USA: American Psychological Association.
- Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York, USA: Free Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5-14.
- Sheldon, K. M., Kashdan, T. B., & Steger, M. F. (Eds.). (2011). *Designing positive psychology: Taking stock and moving forward*. New York, USA: Oxford.
- Shiah, Y., Chang, F., Chiang, S., Lin, I., & Tam, W. C. (2015). Religion and health: Anxiety, religiosity, meaning of life and mental health. *Journal of Religion and Health, 54*(1), 35-45.
- Shin, J. Y., & Steger, M. F. (2014). Promoting meaning and purpose in life. In A. C. Parks, S. M. Schueller, A. C. Parks, & S. O. Schueller (Eds.), *The Wiley Blackwell handbook of positive psychological interventions* (pp. 90-110). London, UK: Wiley-Blackwell.
- Smith, T. B., Poll, J., & McCullough, M. E. (2003). Religiousness and depression: Evidence for a main effect and the moderating influence of stressful life events. *Psychological Bulletin, 29*(4), 614-636.
- Sprinkle, S. D., Lurie, D., Insko, S. L., Atkinson, G., Jones, G. L., Logan, A. R., & Bissada, N. N. (2002). Criterion validity, severity cut scores, and test-retest reliability of the Beck Depression Inventory-II in a university counseling center sample. *Journal of Counseling Psychology, 49*(3), 381-385.
- Thomas, J., & Altareb, B. (2012). Cognitive vulnerability to depression: An exploration of dysfunctional attitudes and response styles to dysphoric mood in UAE nationals. *Psychology and Psychotherapy: Theory, Research and Practice, 85*(1), 117-121.
- Thomas, J., & Ashraf, S. (2011). Exploring the Islamic tradition to inform and improve cognitive therapy for depression. *Mental Health, Religion & Culture, 14*(2), 183-190.
- Wong, P. T. P. (2011). Positive psychology 2.0: Towards a balanced interactive model of the good life. *Canadian Psychology, 52*(2), 69-81.



- Wong, P. T. P. (2013). Positive psychology. In K. Keith (Ed.), *Encyclopedia of cross-cultural psychology* (pp. 1021-1026). Oxford, UK: Wiley Blackwell.
- Wood, A. M., Froh, J. J., & Geraghty, A. A. (2010). Gratitude and well-being: A review and theoretical integration. *Clinical Psychology Review, 30*(7), 890-905.
- Wood, A. M., & Tarrrier, N. (2010). Positive clinical psychology: A new vision and strategy for integrated research and practice. *Clinical Psychology Review, 30*(7), 819-829.
- Worthington, E. L., McCullough, M. E., Berry, J. T., & Ripley, J. S. (2003). The Religious Commitment Inventory—10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology, 50*(1), 84-96.
- Zika, S., & Chamberlain, K. (1992). On the relation between meaning in life and psychological well-being. *British Journal of Psychology, 83*, 133-145.