MIND-BODY MEDICINE

Yoga meets positive psychology: Examining the integration of hedonic (gratitude) and eudaimonic (meaning) wellbeing in relation to the extent of yoga practice

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KEYWORDS
Yoga practice; Positive psychology; Meaning; Gratitude

Summary The present study aims to explore the existence of a relationship between the extent of yoga practice and two dimensions of psychological wellbeing: meaning in life and gratitude. Both of the variables are positive psychology constructs; there is theoretical affinity and empirical evidence that they are related to overall psychological wellbeing. One hundred and twenty four participants aged 18 years and above, with yoga experience ranging from none to over six years, responded to a number of scales. The extent of yoga practice was measured by the number of years during which individuals practiced yoga at least two times a week. Participants responded to the following scales: MLQ (Meaning in Life Questionnaire) and GQ-6 (Gratitude Questionnaire). This study hypothesised that the number of years practicing yoga would be positively correlated to the score obtained on the aforementioned scales. Positive correlations were identified between the extent of yoga practice and meaning in life and gratitude. Important implications regarding the contribution of yoga to both hedonic and Eudaimonic happiness are discussed.

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Introduction

Yoga and overall psychological wellbeing

Yoga, which has its roots 5000 years ago in India (De-Michelis, 2005), has gone through several phases throughout the ages, emphasising different aspects such as finding ultimate reality, individual and societal
psychological enhancement, and learning how to isolate the past, the present, and future. Yoga is increasingly practiced in the West as a way of cultivating aspects of overall psychological wellbeing, which constitutes a focal interest in positive psychology (Singleton, 2010). Wellbeing functions as a general term encompassing optimal functioning, self-actualisation, and flourishing; it refers to both the desirable condition of our existence and the end state of our quest (Ivtzan et al., 2013; Wong, 2011).

In general, modern yoga encapsulates many yoga principles which allow one to accept change in life; this includes elements such as: Yama (moral code), Niyama (self-discipline), Asanas (postures or poses), Pranayama (mindfulness of breathing), Pratyahara (detachment from senses), Dharana (concentration), Dhyanna (meditation or positive, mindful focus on the present), Savasana (state of rest) and Samadhi (ecstasy) (Bhavanani, 2011; Iyengar, 2000). Some of those elements are related to concepts that have received theoretical and research attention in positive psychology. For example Yama and Niyama are characterised by self-control, self-discipline and self-awareness and could be viewed as related to the positive psychology concept of flow, i.e., of being entirely engaged and involved in the moment. Although in flow one loses the sense of oneself, the individual remains fully aware of the moment and maintains great levels of control in order to accomplish a task (Csikszentmihalyi, 2008). Although Gannon and Life (2002) claim that contemporary yoga attempts to join the modern world without destroying the ancient teachings of experiencing union with the divine self, others disagree. Singleton (2010), for example, suggests that modern yoga is not so much influenced by the original Indian tradition but rather by Indian nationalism, European bodybuilding, and the women’s gymnastics movement in Europe and America. As a result, according to Singleton (2010), yoga practice in the West is primarily limited to postural yoga (Asanas) even though that has never been the primary feature of Indian yoga.

During yoga practice, individuals are able to increase awareness and attention and are led to a mindful and meditative state (Germer et al., 2005; Hart et al., in press; Murphy and Donovan, 1997; Walsh, 1999). Yoga has been reported to lead to an increase in empathy (Walsh, 2001) and to connect awareness with higher levels of compassion, gratitude, and respect toward both human and nonhuman relationships, ideas and beliefs (Radford, 2000). Similarly to positive psychology, there is a focus on attempting to increase mindfulness while enhancing wellbeing and awareness of self and environment, along with disciplining the mind and emotions (Levine, 2000).

It was this close relationship identified between the aims and initial reports of findings on the commonalities between yoga and positive psychology that lead to the idea of further exploring this relationship by focussing on two specific aspects of overall psychological wellbeing: meaning in life and gratitude.

**Specific aspects of overall psychological wellbeing**

According to Straume and Vittersø (2012), overall psychological wellbeing is thought to consist of both hedonic and eudaimonic aspects. Eudaimonic aspects focus on concepts such as purpose in life, growth, and meaning, while hedonia, which is based upon SWB (Subjective Wellbeing), consists of satisfaction in life and high positive affect combined with low negative affect. To examine both aspects of wellbeing, the current study attempted to tackle one eudaimonic based wellbeing variable (meaning) and one hedonic based wellbeing variable (gratitude).

Research findings have offered support for the claim that physical exercise contributes to the promotion of mental health and wellbeing (Penedo and Dahn, 2005). However, the relationship between psychological benefits and physical exercise appears to be complex, and the primary mechanisms remain poorly understood (Scully et al., 1998). It appears reasonable to hypothesise that engaging in practices such as yoga, which are not limited to physical exercise but are embedded in a spiritual system (Singleton, 2010), will have a positive relationship with overall psychological wellbeing. Spirituality is strongly related to eudaimonic wellbeing and is considered one of its most significant dimensions. Spirituality has been shown to promote psychological wellbeing (Ivtzan et al., 2011), and therefore it naturally follows that a spiritual practice such as yoga, which combines the physical and theoretical aspects of the spiritual practice, would also be beneficial to wellbeing. Meaning is considered a central building block in spiritual experience (Wong, 2012) and, therefore, as spirituality is strongly linked to yoga, and meaning is so central to spirituality, meaning has been a natural choice for the examination of eudaimonia in yoga.

Frankl (1965) claimed that life is deeply meaningful and that every individual has a specific purpose in this life, reflecting his or her personal values. Emmons (2003) and Ryff and Singer (1998) have argued that a meaningful life is a purposeful one which is goal oriented and enhances personal growth. Purpose in life is a goal-centered approach that provides one with meaning (Reker et al., 1987). Purpose works as a guide that organises one’s life, and a purposeful life allows positive transformation (McKnight and Kashdan, 2009). Meaning has several sources, the combination of which is unique for each individual (Wong, 1998); some scholars argue that one’s source of meaning stems from action and involvement in activities such as work, giving, and receiving love (Frankl, 1963), while others claim that meaning is derived from close relationships, spirituality, and nature (Emmons, 2003; Fegg et al., 2007). Baumeister and Vohs (2002) claim that finding meaning works like a puzzle of connections in our minds. The pieces of this puzzle are the self, external world, and balance these can strike (Heine et al., 2006). Those elements of self, others, and the universe are dimensions addressed by yoga. As Eggleston (2009) has succinctly stated, “yoga is the recognition of the divine within the self, outside of the self, and the connection between the self and others outside the self” (p.11). Therefore, it appears that research findings showing that regular practice of yoga is related to an increase of meaning in life and wellbeing (Stebbins, 2003; Heo, 2007), should be understood within this context.

Following that, it is hypothesised that a positive correlation exists between extent of yoga practice and the presence of meaning in one’s life. This hypothesis is also
based on the connection between yoga’s aim to facilitate an encounter with one’s true self. Schlegel et al. (2009) suggested that access to the true self (finding personal values and self-awareness) is an important contributor to wellbeing as well as a significant source of meaning. These questions concerning meaning and true self are at the heart of the eudaimonic experience and therefore this hypothesis represents the examination of the relationship between eudaimonic wellbeing and yoga.

Indications of the existence a relationship between yoga and hedonic wellbeing have emerged from a number of studies (e.g., Daunbennier and Hirschman, 2006; Jadhav and Havalappanavar, 2009). Research findings have revealed that yoga-based interventions may be of value in cultivating subjective wellbeing in young adults. In addition, Impett et al. (2006) found that more frequent yoga practice was associated with increased positive affect and satisfaction in life, as well as decreased negative affect. Gard et al. (2012) also found that participation in a four month residential yoga-based program significantly predicted increases in quality of life, mindfulness, and self-compassion, along with decreases in perceived stress; Sharma et al. (2008) found that individuals who participated in a ten day yoga intervention showed significant improvement in SWB compared to controls. Additional evidence for the presence of a relationship between yoga and SWB can be considered in the findings of Gholcheh and Smith (2004), who reported that yoga improved participants’ levels of joy and energy, arguably indicators of enhanced SWB. Finally, Brazier et al. (2006), who examined stress treatment in an HIV positive population, found that yoga was significantly correlated with positive affect, life satisfaction, and psychological wellbeing. In view of all the above findings we expect to find a positive correlation between the extent of yoga practice among participants and their reported levels of gratitude.

The concept examined by the present study, representing the hedonic aspect of wellbeing, is gratitude. Watkins et al. (2009) define gratitude as an emotion one experiences when recognising that something good has happened to oneself and that someone else is largely responsible for this. The concept has been conceived as dependent on individuals’ capacity to empathise with others (Lazarus and Lazarus, 1994) and is viewed as a moderately pleasant emotion (Mayer et al., 1991).

As a positive emotion, gratitude contributes to the building of lasting and beneficial resources for the individual in accordance with the principles of Frederickson’s (1998, 2001) “broaden and build” theory. Following this theory, positive emotions undo the adverse effects of negative ones while extending cognitive functioning through more creative, flexible, or efficient patterns of thinking. With the passage of time, the broadening possibilities of positive emotions builds a range of positive resources, which could help individuals become healthier, more socially integrated, and more resilient individuals. Having conducted a review of research findings on gratitude and wellbeing, as well as their theoretical integration, Wood et al. (2010) concluded that the significant link between gratitude and wellbeing, which appears to be unique and causal, may work through “broaden and build” principles. The suggested potential of gratitude to build personal resources is forming the link to SWB, which is defined as “a person’s cognitive and affective evaluations of his or her life” (Diener et al., 2002, p.63).

There has been a marked increase in research interest around gratitude in the last few years, with findings revealing that gratitude seems to be connected to a number of benefits. Thus, moderate to strong relationships have been reported with emotional wellbeing and SWB (McCullough et al., 2002; Watkins et al., 2003; Watkins, 2004). In a study conducted among Iranian college students (Naser and Hojatollah, 2011), gratitude was found to be positively correlated with SWB as well as all factors of psychological wellbeing touched upon by Ryff’s Psychological Wellbeing Scales (Ryff, 1989). Additionally, gratitude accounted for significant additional variance in life satisfaction, after controlling for personality factors, supporting the notion that gratitude has a unique relationship with wellbeing. Findings from empirical research have indicated that gratitude can improve wellbeing both directly, as a causal agent of wellbeing, and indirectly, as a means of buffering against negative states and emotions experienced due to bereavement or depression (Nelson, 2009). Watkins et al. (2009) have suggested a cognitive explanation for the claim that gratitude may have a positive effect on SWB. They propose that this may be related to positive memories becoming more accessible, as gratitude has been reported to be associated with a positive memory bias. The enhancement of positive emotions and life satisfaction indicate the significant contribution of gratitude to SWB and, therefore, to hedonic wellbeing. This fact does not negate the idea that gratitude could, directly or indirectly, strengthen eudaimonic happiness; it simply means that the body of literature indicates a greater influence of gratitude on hedonic rather than eudaimonic wellbeing.

In addition to earlier correlational studies, findings from experimental studies that included gratitude manipulations, such as writing gratitude letters, also suggest that gratitude may actually lead to higher levels of psychological wellbeing (Watkins et al., 2003; Emmons and McCullough, 2003; Seligman et al., 2005). In an experimental study examining the positive emotional outcomes of gratitude inductions, it was found that a gratitude condition that contained mindfulness components was highly effective in boosting immediate positive affect and lowering negative affect (Mcintosh, 2008). Concluding her review of empirical evidence showing the power of gratitude in enhancing wellbeing, Nelson (2009) emphasises that it is time to shift attention from analysing and removing negative states and to instead focus on strengthening positive states; this suggests that a “build what’s strong” perspective may supplement the traditional “fix what’s wrong” approach (p. 46).

As yoga is not a mere series of exercises but is embedded in a philosophical and spiritual approach, it is expected that there will be a connection between yoga and dispositional gratitude as the latter has been shown to have strong associations with intrinsic spiritual beliefs and mindfulness (McCullough et al., 2002). Yoga is based on a philosophy that encompasses gratitude as can be seen in the very language used, which reflects an appreciation of the bliss of birth and life (e.g., Chidvilasana, 1996). The incitement to practice gratitude can also be seen in yoga writings; for
et al. (2008) found that participants in their research
assumed to take place through meditation practice. Schure
another connection between yoga and gratitude may be
(Radford, 2000). Gratitude makes one’s mind more aware
tude, solidarity, openness of the heart and compassion
(p.113). Among yoga practitioners, praying includes grati-
even an uneventful or ‘bad’ day is filled with precious gifts”
practitioners to “Count your blessings and you’ll find that
hypothesised that those individuals who have extended
experience with yoga practice will tend to report higher
tance of themselves and others and that they consequently
experienced increased gratitude for what they had instead
focussing on what they lacked. In view of the above, it is
hypothesised that those individuals who have extended
experience with yoga practice will tend to report higher
levels of gratitude, thereby showing a relationship between
yoga and hedonic wellbeing.

The present study
The present study aims to expand upon earlier research and
explore the existence of a relationship between the extent
of yoga practice and two concepts in positive psychology,
one hedonic and one eudaimonic, which are considered to
indicate overall psychological wellbeing. More specifically,
it is hypothesised that there will be a positive correlation
between regular yoga practice, measured by years of
practicing at least twice a week, and participants’ self-
reported standing on meaning in life and gratitude as
measured by the appropriate scales.

Method
Participants
A total of 124 participants responded to the scales. The
sample was made up of 34 men and 90 women, whose ages
ranged from 18 to 61 with a mean age of 40.65 years
(SD = 12.85). Eighteen was the minimum age required for
participating. Additionally, those who practiced yoga had
to practice regularly, using the same criterion as Eggleston
(2009), i.e., at least twice a week. The final sample was
composed of 42 persons reporting that they had no expe-
rience with yoga and 82 who practiced yoga regularly for
between one and six or more years. More specifically, 39%
practiced yoga for up to one year, 23% for two years, and
38% for more than two years.

Data collection and measures
In addition to their experience with yoga practice, partic-
ipants responded to the following scales:

a. Meaning in Life was assessed by the “presence of
meaning” subscale of the Meaning in Life Question-
naire (MLQ; Steger et al., 2006), which includes five
Likert-type statements about the presence of meaning
(e.g., “I understand my life’s meaning,” “my life has a
clear sense of purpose”) with scores from 1 to 7. The
Cronbach’s alpha for our sample was found to be
$\alpha = .851$. The scale is scored by summing responses on
each item.

b. Gratitude was assessed by the Gratitude Questionnaire-Six Item Form (GQ-6; McCullough et al.,
2002), which consists of six Likert type statements
measuring the experience of gratitude (e.g., “I have so
much in life to be thankful for”) with scores from 1 to 7.
The Cronbach’s alpha for our sample was found to be
$\alpha = .705$. The scale is scored by summing responses on
each item.

Procedure
The questionnaires in this study were distributed both on-
line (35% of the participants) and as a hard copy (65% of the
participants). They were given for distribution to the di-
rectors of yoga centres in the UK who contacted all yoga
practitioners in their centre. Participants chosen for the
study were those who completed the questionnaires pro-
vided by the yoga centres. Data was collected in April 2013.
The centres were all in London and offered a variety of
yoga classes involving different schools of yoga. Participant
categories were broken down by years of yoga experience
according to categories adopted by Delle-Fave and
Massimini (2004). The sample of 42 persons reporting that
they had no experience with yoga was made out of in-
dividuals arriving for their first session.

Results
Based on these statistics, results indicated that there is a
correlation ($r = .253$) between the experience of yoga
and levels of gratitude; this is supported by the signifi-
cance level of .005 on a 2-tailed test. In addition, a cor-
relation ($r = .211$) was found between the experience of
yoga and levels of meaning, which is supported by the signifi-
cance level of .01 on a 2-tailed test. Both hypoth-
eses are supported by this data, indicating that the
experience of yoga is indeed associated with gratitude
and meaning. It is also important to notice that no cor-
relation has been found between gratitude and meaning,
indicating that they are, indeed, different constructs
(Tables 1 and 2).

Discussion
With respect to the hypothesis examining the relationship
between meaning in life and yoga practice, findings are in
agreement with those of Stebbins (2003) and Heo (2007),

### Table 1

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
<td>124</td>
<td>0–6</td>
<td>1.58</td>
<td>1.56</td>
</tr>
<tr>
<td>Gratitude</td>
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<td>21–36</td>
<td>30.81</td>
<td>3.61</td>
</tr>
<tr>
<td>Meaning</td>
<td>124</td>
<td>12–30</td>
<td>22.63</td>
<td>4.27</td>
</tr>
</tbody>
</table>
who reported an increase in individuals’ meaning in life as a result of yoga practice. The more individuals in the present sample practiced yoga regularly, the higher their reported meaning in life was found to be. Yoga is concerned with existential issues, such as spirituality, which encourage a person to search for meaning. When practicing yoga, practitioners are expected to set their own goals involving, for example, self-control, self-discipline and self-awareness; these concepts characterise Yama and Niyama. Assuming that a goal-oriented and purposeful life is tantamount to a meaningful life, as Frankl (1963) suggests, it could be argued that this disciplined goal setting mediates meaning. As Baumeister and Voh (2002) argue, meaning in life is the connection of the pieces of a puzzle (namely self, others, and the union of both) in one’s mind. Yoga, which means union, facilitates this piecing together of the spiritual, emotional, and nature-related dimensions which give rise to meaning (Emmons, 2003), ushering the way to engaging with one’s self.

Such results indicate that yoga practice goes hand in hand with extended experience of meaning in an individual’s life. This is an important realization as we consider questions that could be raised regarding the way yoga is being practiced in the West. Regarding the argument between Gannon and Life (2002), who maintain that contemporary yoga still incorporates the original potent spiritual influence, and Singleton (2010), who points toward qualitative methods used, giving readers an additional valuable perspective which might be more sensitive to individual differences. This finding is in line with our hypothesis based on the fact that yoga practice encapsulates gratitude in its prayers and the language used (Chidvilasananda, 1996; Radford, 2000). It is also in agreement with Schure et al.’s (2008) empirical findings that the yogan technique of meditation enhanced feelings of gratitude.

Present findings appear to echo Nelson’s (2009) conclusion following a thorough critical review article about the status of data-based knowledge on the effects of gratitude. She concludes that there is compelling evidence pointing to the significance of gratitude as a contributing factor to personal growth and relational wellbeing as well as its indirect role in enabling individuals to cope and grow through diverse adverse situations. Nevertheless, she adds, “while there are some causally and many associational links between gratitude and wellbeing in these areas, there is little direct evidence of particular psychological interventions which have promoted such wellbeing” (Nelson, 2009, p. 47). We propose that yoga may be a tool mediating such an intervention to the benefit of individual wellbeing. Furthermore, similarly to the use of gratitude letters used in research (e.g., by Emmons and McCullough, 2003), yoga may be used as a complementary tool or vehicle either triggering emotion or cultivating the disposition of gratitude through training in ways that could eventually enhance overall psychological wellbeing.

Wong (2011) suggests that positive psychology’s interests today largely revolve around the distinction between happiness and a meaning orientation, or what Ryan and Huta (2009) call a hedonic motivation; this is linked to positive emotions and eudaimonic motivation, which is linked to meaning and purpose in life. These two orientations constitute two distinct mindsets that can lead to different predictions with respect to individuals’ core values, life directions and choices, eventual interests, lifestyles, personal characteristics, and ultimately wellbeing. What we find in our results is an indication that both dimensions of these mindsets are being strengthened as one’s yoga practice experience increases. Our data points to an association between yoga and gratitude, which implies an association with the hedonic experience; therefore, yoga practitioners consistently show higher levels of satisfaction with life as well as greater positive affect (e.g., Daubenmier and Hirschman, 2006). However, our data also shows an association with meaning which reflects an association with the eudaimonic experience; therefore, yoga practitioners consistently show higher levels of spirituality and connection to true self (e.g., Gannon and Life, 2002).

In order to address and clarify the complexities of the relationship between yoga practice and overall psychological wellbeing, it would be desirable for future research to employ a mixed methods approach so that the information yielded by the quantitative measures will be complemented with knowledge acquired through interviews and observations which explore people’s actual experiences. For example, Schure et al.’s (2008) study has an abundance of insightful descriptive information based on qualitative methods used, giving readers an additional valuable perspective which might be more sensitive to individual differences. This is important as it has been argued that yoga and meditation are practices that benefit each individual in different and unique ways. In addition, when it comes to future research, this paper has chosen to focus on positive psychology, and yet other aspects of psychology, such as personal differences and neuropsychology, are unexplored territory when it comes to yoga research. Future

### Table 2

<table>
<thead>
<tr>
<th>Experience</th>
<th>Gratitude</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson correlation</td>
<td>.253**</td>
<td>1</td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>Pearson correlation</td>
<td>.211**</td>
<td>.053</td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.01</td>
<td>.556</td>
</tr>
</tbody>
</table>

*Correlation is significant at the .05 level (2-tailed).
**Correlation is significant at the .01 level (2-tailed).
research could explore these topics in relation to yoga. Other potential avenues of research include an exploration of the relationship between yoga and a variety of other wellbeing variables such as gratitude, flow, curiosity, passion, resilience, and personal-growth.

Earlier researchers argued that a balanced approach to psychological wellbeing should not be limited to the hedonic SWB but should include the eudaimonic aspects of meaning and purpose in life (King and Napa, 1998; McGregor and Little, 1998). This paper suggests that the extent of an individual’s practice of yoga involves a relationship with both the hedonic and the eudaimonic aspects of wellbeing and, therefore, should reflect the holistic benefits of wellbeing experienced by those who practice yoga.

References


Yoga meets positive psychology


