

Spirituality as an Essential Determinant for the Good Life, its Importance Relative to Self-Determinant Psychological Needs

Dirk van Dierendonck

Published online: 19 August 2011

© The Author(s) 2011. This article is published with open access at Springerlink.com

Abstract This study focuses on the relevance of spirituality as an essential element for the Good Life. Despite spirituality's prominence in people's lives and cultures, it has been mostly neglected in psychological needs theories. This paper investigates the value of spirituality compared to that of the three basic psychological needs of self-determination theory: relatedness, competence and autonomy. In a scenario study design, participants in two samples (students and train passengers) were asked to judge a survey on the personal well-being of an imaginary person. The results show that spirituality positively contributes to the qualification of a good life, in terms of desirability and moral goodness. In addition, the crucial role of relatedness was confirmed.

Keywords Spirituality · Psychological needs · Self-determination theory · The good life

1 Introduction

The quest for the good life is as old as history. It has intrigued philosophers ever since the days of Aristotle and Plato (McMahon 2005). Although everyone aspires to lead a good life, what makes a life worth living differs from person to person (Wong 1998). A broad range of essential aspects are usually mentioned, among them are happiness, meaning, and economic success, which can be divided into two main categories, that is desirability and moral goodness (King and Napa 1998). The fulfillment of basic psychological needs have been placed as key determinants to experience the good life (Deci and Ryan 2000). They motivate behavior towards their fulfillment and will —when fulfilled—promote well-being. Need satisfaction drives much of our behavior. Not surprisingly, several authors suggested frameworks for these fundamental psychological needs. The role of spirituality as basic element for achieving the good life has, however, been underestimated not only in the past but also in today's research; it was only referred to once and then only within a

D. van Dierendonck (✉)
Rotterdam School of Management, Erasmus University, Burg Oudlaan 50, 3062 PA Rotterdam,
The Netherlands
e-mail: DvanDierendonck@rsm.nl

broader framework (Emmons 2003) in two books on human strengths and a life well-lived (Aspinwall and Staudinger 2003; Keyes and Haidt 2003). A recent handbook chapter on basic human needs (Pittman and Zeigler 2008) showed that, although spirituality is a prominent cross-cultural value (Peterson and Seligman 2004), it is not incorporated in the seven most influential theories of human needs. In a recent publication by Park and Peterson (2009) on the contribution of psychologists to achieve the good life, the spirituality concept is also absent.

This apparent lack of interest stands in sharp contrast with the important place spirituality has had in the cultures and lives of so many people. A recent study by the World Health Organization (WHOQOL SRPB Group 2006) conducted in 18 countries linked spirituality to the World Health Organization's Quality of life instrument and revealed its value for health and well-being. Similarly, Ciarrocchi et al. (2008) showed that spirituality is a better predictor of hope, optimism and pessimism than the Big 5 personality factors. Vaughan (1991) already concluded that spirituality underlies both personal impulses towards growth and healing and many creative cultural and social enterprises. He suggested that it can play an important role in establishing an integrated personality. In a project on the content of personal strivings, Emmons et al. (1998) discovered that spirituality played a very important role in the goals that people have in life. They concluded that spiritually-oriented goals influence and motivate people in the choices they make.

In view of the discrepancy between the neglected role of spirituality in human needs theories on the one hand and the empirical evidence of its relation to well-being and its growing interest in the lives of people on the other hand, this article aims to show the relevance of spirituality as an essential element for the Good Life by studying its value in addition to the three basic psychological needs of self-determination theory (Deci and Ryan 2000), being one of the most influential theories on personal motivation at present. These needs are considered as essential for psychological growth, well-being and personal flourishing. Within self-determination theory, and in contrast to the more passive orientation of most other needs theories, need satisfaction is positioned as a growth-oriented activity (for an elaborate comparison of self-determination to other needs theories, the reader is referred to Deci and Ryan 2000). Research has shown that they are indeed important determinants of the good life (Sheldon et al. 2001), more important than several other needs such as pleasure-stimulation, physical thriving and even self-actualization. It is argued that spirituality is especially relevant if moral goodness is incorporated as an essential element of the good life.

1.1 The Basic Psychological Needs Within Self-Determination Theory

Self-determination theory is about people's inherent growth tendencies and innate psychological needs that are the basis of their self-motivation, personality integration, and personal well-being (Ryan and Deci 2000). To be self-determined means to experience a sense of choice in initiating and regulating one's own actions (Deci et al. 1989). A basic need is an energizing state that, if satisfied, is conducive toward health and well-being. However, if it is not satisfied, it can contribute to pathology and ill-being (Ryan and Deci 2000). As pointed out above, Deci and Ryan (2000) distinguished three basic psychological needs, autonomy, relatedness, and competence. There is abundant scientific evidence for the relevance of these three needs in relation to self-esteem, creativity, conceptual learning, achievement (Ilies et al. 2005), daily positive mood, vitality, physical health (Sheldon and Elliot 1999), engagement, productivity, wellness (Ryan and Deci 2006), performance and well-being at work (Baard et al. 2004). Below, these three needs are described in more

detail and it is argued why spirituality is an important additional determinant of the good life.

1.1.1 Autonomy

According to Deci and Ryan (2000), autonomy is a key element of self-determination theory. “Autonomy refers to being the perceived origin or source of one’s own behavior” (Ryan and Deci 2004, p. 8). Moreover, it means feeling uncovered in one’s actions. Autonomy is not to be mistaken for independence. Independence means not relying on external sources or influences. However, one can act autonomously while relying on, for instance, input from others, as long as one completely endorses the action (Ryan and Deci 2004). Central for autonomous people is making one’s own decisions. Autonomy refers to being able to choose whether or not to conform to social norms (Ryff 1989). The life of an autonomous individual is rooted in personal norms, needs and values. It gives a person responsibility to initiate and regulate one’s own actions.

1.1.2 Relatedness

Having and maintaining high quality human relationships is the second basic psychological need. “Relatedness refers to feeling connected to others, to caring for and being cared for by those others, to having a sense of belongingness both with other individuals and with one’s community” (Ryan and Deci 2004, p. 7). Relatedness means feeling secure and safe in your environment, and in your relations with others. In their review, Baumeister and Leary (1995) gave abundant empirical evidence for the need to belong as a fundamental human motive. The lack of human ties is related to the deterioration of health, a diminished capacity to adjust and diminished well-being.

1.1.3 Competence

Competence means feeling capable. It “refers to feeling effective in one’s ongoing interactions with the social environment and experiencing opportunities to exercise and express one’s capacities” (Ryan and Deci 2004, p. 7). Moreover, competence is a felt sense of confidence and effectiveness in action. Perceptions of competence comprise an individual’s beliefs about what (s)he can and cannot accomplish in competence-relevant settings (Cury et al. 2006). Environmental mastery, as suggested by Ryff and Singer (1998) implies a sense of mastery, competence and trust in handling the environment. This dimension evolves over time, when somebody’s life becomes more meaningful and a deep connection with others develops (Ryff and Singer 1998). Competence, leads to more self-respect and personal growth.

1.2 Spirituality

Spirituality is usually associated with living by your inner truth to produce positive attitudes and relationships in your life (Hawley 1993). Definitions of spirituality deal with the ultimate goal in life, the experience of a transcendent dimension that gives meaning to existence, and the capacity to experience the sacred (Giacalone and Jurkiewicz 2003). Spirituality is associated with a focus on the essence of life, creativeness, spirit, mystical experiences, and new age beliefs (Zinnbauer et al. 1997; Mitroff and Denton 1999).

Spirituality signifies the inner attitude of living life directly related to the sacred. This definition is directly related to what Pargament (2002, p. 169) calls the essence of spirituality, that is “the process through which people discover, conserve and rediscover the sacred.”

Spirituality was already recognized as an important element of well-being in the 70s. Particularly, Moberg’s (1971) theorizing was instrumental in this respect. Spiritual well-being was interpreted as a lifelong pursuit and an affirmation of living life in direct connection to God, Self, the community and the environment. There is a growing body of empirical evidence that confirms the link between spirituality and wellbeing (for a review, see Van Dierendonck and Mohan 2006). Based on Moberg’s concept, Ellison (1983) developed what is probably the best known spiritual well-being scale. According to Ellison (1983), spiritual well-being can be viewed as an expression of spiritual maturity, but also as the integral experience of a person who is functioning as God intended (Ellison and Smith 1991).

Within the context of spirituality as a basic additional determinant for the good life, it is proposed to focus on spirituality as an inner resource (Van Dierendonck 2004; Van Dierendonck and Mohan 2006). This follows a view on spirituality emphasized in many aspects and definitions of spirituality. In doing so, inner resources are believed to be the inner aspects of a person that produce an individualized awareness of one’s inner self and a sense of being part of a deeper spiritual dimension (Gibson and Parker 2003). Inner spiritual resources can be instrumental in experiencing a sense of secondary control over the situation, and therewith giving a greater trust that everything will turn out for the best (Van Dierendonck et al. 2009). Incorporating spirituality strengthens the purpose in life aspect of the good life.

It is expected that spirituality will add to our understanding of the good life in two ways. First, spirituality will explain additional variance of the good life (as explicated below) in addition to that already explained by the three basic psychological needs. Second by showing that spirituality can counterbalance low levels of psychological needs. Its value as an essential determinant for the good life will be most visible when people experience their basic psychological needs as low. It is especially in times of need that people turn toward a spiritual source for extra support.

As a preliminary step for the main study, a pilot study was set up to investigate whether people distinguished spirituality as an element of their life different from the three basic psychological needs. This was an important first step given the recent discussion in the literature on the extent that religiosity and spirituality can be explained by other psychological mechanisms (Sedikides 2010). If spirituality is to be acknowledged as an additional determinant, it should clearly be experienced as a separate dimension.

1.3 The Good Life

To qualify as an essential additional determinant of the good life, spirituality should contribute variance in addition to autonomy, competence, relatedness. In this article, the operational definition of the good life builds on earlier work by Laura King and her colleagues (King and Napa 1998; King 2001; Scollon and King 2004; Twenge and King 2005). King differentiated two categories that qualify for a good life, namely desirability and moral goodness of life. Both categories are extended beyond these previous studies by also including economic success as elements of desirability, and by providing a broader operationalization of the moral goodness of life.

1.3.1 *Desirability*

Desirability is defined first of all as the extent to which one would like to have this life, in how far it reflects the good life, and relates to the quality of this life. Second, happiness is added as a criterion to judge the desirability of a life (King and Napa 1998). An important element of the good life is experiencing as much joy as possible and avoiding pain and discomfort. Kings' original studies confirmed happiness as an essential element that is characteristic for people who experience the good life.

In the present study, economic success is added as a separate indicator of desirability. This may need some more explaining. Economic success is mostly defined as an extrinsic motivator, with a relatively minor impact on the good life. King and Napa (1998) showed that money was relatively unimportant; similarly, in a study by Sheldon et al. (2001), money ended at the bottom line as a candidate for a basic psychological need. We can conclude that economic success in terms of money earned is different from the more psychologically oriented aspects like happiness and meaningfulness. Nevertheless, it should be acknowledged that, although in seeming contrast to these findings, the striving for economic success does influence choices people make in their daily lives. It certainly is among the things young people strive for (King and Broyles 1997). This should not come as a surprise given that economic success enlarges the possibility to build a comfortable life (Van Veenhoven 2000). It helps to create a livable environment that better meets human needs. Furthermore, nobody can deny that money is an instrument to fulfill the hedonic pleasures in life. Another function in term of needs is that a solid financial position can help fulfill security needs. Thus, economic success is a factor not to be neglected when evaluating the overall concept of the good life. Even the study by King and Napa (1998) showed that the estimate of a heavenly reward was highest for people who were happy, lived a meaningful life and were rich. Therefore, following the results of Scollon and King (2004), economic success in terms of the estimated financial position is added as an estimate of the desirability of life.

1.3.2 *Moral Goodness*

Moral goodness is defined as a life that exemplifies ethical and moral values and in the likelihood that—after death—a person will go to heaven. In this study, the question about leading an ethical life was added in addition to the other two that were directly based on King and Napa (1998) to broaden the aspect of living a moral and ethical life. By including a specific question on the ethical aspects of life, the aspect of virtues is stronger emphasized. It acknowledges the recent growing appeal for ethical behavior within our society.

Morality has become a greater issue with the complex challenges faced by the world today such as human rights norms, weapons of mass destruction, transnational ecological threats and the global integration of markets and communication networks (Thompson 2010). There is a growing call for leaders to act with morality and integrity, which automatically calls for a better insight into key determinants of leading a moral life. Not surprisingly, wisdom traditions grounded in spirituality and religiousness are often mentioned as providing a values framework that encourages striving for a moral good life (Day 2010). Religious and spiritual development has been related to a stronger ability to create a meaningful life, and the ability to function at higher levels of moral judgment. It should, however, be acknowledged that despite the interrelatedness of spirituality and moral goodness, they are not the same. Spirituality is defined in this paper as concerned with living according to an inner truth, an awareness of an inner spiritual dimension. Moral

goodness is concerned with behavior according to certain values. Spirituality may lead to moral behavior in certain circumstances, and not in others (Preston et al. 2010).

The ultimate question about leading a moral good life in the King and Napa (1998) study was about the final judgment, which presupposes some sense of a life after death that is related to how we behave here and now. In the Netherlands—where the present study was conducted—, belief in life after death is less strong than for example in the US. A recent survey among 1,100 Dutch showed that 40% believed in life after death, about 31% was doubtful, whereas, 29% believed there is nothing after death (Kregting and Bernts 2006). Twenty-one percent believed in heaven, only 6% in hell. It is striking how low these figures are, compared to those reported for the US (King and Napa 1998), and it will be interesting in itself to see how it works out as a criterion for moral goodness.

1.4 Present Research

In two samples, using an experimental scenario study design, participants had to judge a survey on the personal well-being of an imaginary person. The responses were manipulated to show that the fulfillment of the psychological needs of this person would be relatively low or high. A scenario study was used to combine the advantage of an experimental approach with the possibilities to study the individuals' judgments. A third-pilot study—was conducted to confirm the experimental setup with the four separate dimensions. The experimental approach eliminates the weaknesses that are common in correlational studies like the pilot study. Participants were randomly assigned to only 1 of the 16 conditions so that their judgment would be based on that particular condition only. Two samples were used, one consisting of psychology students, the other a community sample of train passengers.

2 Method

2.1 Participants

2.1.1 *Sample 1*

Participants were 367 psychology students at the University of Amsterdam (113 men, 254 women). Their mean age was 21.5 years ($SD = 3.6$).

2.1.2 *Sample 2*

Participants were 393 train passengers that were randomly approached (190 men and 203 women). Twenty-eight percent had finished high school as their highest finished educational level; 72% had at least some level of academic education. Their mean age was 34 years ($SD = 14.8$).

2.2 Materials and Procedure

2.2.1 *Experimental Design*

The materials for this study were directly based on those used by King and Napa (1998) and by Twenge and King (2005). Participants were given a short 1-page questionnaire that

presumably had been filled out by somebody about his or her personal well-being. This questionnaire started with two questions where the imaginary person could have filled in a name and employer. Both were left empty. Next, the highest followed education had to be filled in: primary school, secondary school, university. University was marked in all conditions. No information on age or gender was given. The scenario itself consisted of a short measure of 12 items that measured the four different dimensions.

Participants were randomly assigned to conditions in a 2 (high vs. low autonomy) \times 2 (high vs. low competence) \times 2 (high vs. low relatedness) \times 2 (high vs. low spirituality) between-subjects design. The experimental setup was to have each participant read one of the 16 scenarios and answer the questions that followed. There were three items for each dimension. The basic psychological needs items were taken from the psychological needs scale by Sheldon et al. (2001). For autonomy these items were: “My choices are based on my true interests and values”, “I am free to do things my own way” and “That my choices expressed my ‘true self.’” For competence these items were: “I am successfully completing difficult tasks and projects”, “I am capable at what I do”, and “I am taking on and mastering hard challenges”. For relatedness these items were: “I have a sense of contact with people who care for me, and whom I care for”, “I feel close and connected with other people who are important to me”, and “I feel a strong sense of intimacy with the people I spent time with”. For spirituality, items were based on the inner resources scale of Van Dierendonck (2004), slightly modified to fit the aim of this study: “I experience a spiritual dimension that gives me strength and love.”, “I can go to a spiritual dimension within myself for advice.”, and “My spirituality gives me a sense of satisfaction.” The rater-scale ranged from 1 (*totally disagree*) to 5 (*totally agree*). The items were rated 2, 2, 1 for the low conditions and 5, 4, 5 for the high conditions. For all conditions, the same person filled in one questionnaire by hand, which then was photocopied.

2.2.2 Pilot Study

A pilot study was set up to confirm that the 4-D in the experimental setup are indeed experienced as different dimensions. Participants were 405 third-year undergraduate business administration students at the Erasmus University Rotterdam. Their mean age was 21.0 years ($SD = 1.5$); 64% men and 36% women. They participated with the research for extra course credit. As part of a larger research project, they filled out a 12 item scale with the same items as those described in the above experimental design; that is, three items for each dimension. They had to indicate to what extent each element was part of their life.

To test whether spirituality was experienced as a dimension separate from the autonomy, competence and relatedness, a confirmatory factor-analysis using Mplus 6.0 (Muthen and Muthen 2010) was performed. A 4-D model was tested with each of the items loading on their own latent dimension, and allowing for cross-loading among the dimensions. This 4-D model had an excellent fit ($\chi^2 = 122.033$, $df = 48$, $CFI = .95$, $TLI = .94$, $SRMR = .04$), confirming the presupposition that spirituality—operationalized as an inner resource—is experienced as a dimension different from autonomy, competence, and relatedness. Additional confirmation that the spirituality dimension was clearly different from the three psychological needs dimensions came from the relative low correlations between the latent constructs. Spirituality was correlated .28 to autonomy, .08 to competence, and .33 to relatedness. These results allow us to proceed with testing the hypothesized relations of these 4-D to the good life.

2.2.3 Desirability

For desirability, four questions were asked. The first two questions were: “How much would you like to have this life?”, “How much do you think this person is leading ‘the good life?’”, rated on a scale from 1 (*not all*) to 5 (*extremely much*). The third question was “How high do you rate the quality of life of this person?” to be answered on a scale from 1 (*very low*) to 10 (*very high*) (King and Napa 1998). The fourth was an estimate of their affective well-being: “How happy do you think this person is?” rated from 1 (*not at all*) to 10 (*very much*). These four items were combined into one overall desirability score (after normalization to account for the different rating scales). The internal consistency of this scale was good in both samples (.85 and .81, respectively).

Economic success was estimated with one question “How strong do you estimate the financial position of this person?” rated from 1 (*very weak*) to 10 (*very strong*).

2.2.4 Moral Goodness

For moral goodness, again following King and Napa (1998), participants rated the morality of life on a scale from 1 (*not at all*) to 5 (*very much*) with two questions: “How ethical do you estimate this person is?” and “How good and moral is this person?” These two items were averaged into one moral goodness score, with good internal consistency scores (.70 and .66, respectively). Finally, participants gave their estimate to the last rating: “Many religions and philosophies include the idea of a ‘final judgment.’ If there is such a thing as life after death, circle the number that best represents your guess as to what this person would experience”, rated from 1 (*punishment “hell”*) to 10 (*reward “heaven”*).

2.2.5 Control Questions

Finally, two measures were added. First, to be able to control for the importance of spirituality in a participants life, one had to indicate the importance in life of spirituality on a scale ranging from 1 (*not at all*) and 5 (*very important*). The last questions were from Fordyce’s (1988) happiness measure which includes a 10-point happiness/unhappiness scale and a question asking for the time spent in ‘happy’, ‘unhappy’, and ‘neutral’ moods. One overall happiness score was calculated according to Fordyce’s guidelines. In this way, the participants’ general level of well-being could be controlled for.

3 Results

Table 1 shows the means, standard deviations and correlations of the dependent variables of both samples. The correlations between the overall desirability and moral goodness measures were moderately strong in both samples; all the other correlations were low to non-existent. This confirms the 4-D structure of the dependent measures.

The influence of the psychological needs on the desirability of life was tested with four multiple regression equations with the dependent measures. The independent variables were added in four steps. (1) Both control variables on the importance of spirituality on one’s life and on one’s current level of happiness; (2) the three basic needs from self-determination theory; (3) spirituality; (4) the three interaction terms of spirituality with autonomy, competence, and relatedness.

Table 1 Mean, SD and correlations of dependent measures

	Sample 1		Sample 2		1	2	3	4
	M	SD	M	SD				
1. Desirability	.00	.87	.00	.83		.29	.52	.30
2. Economic success	5.89	2.21	5.91	2.38	.21		-.01	.08
3. Moral goodness	3.11	.86	2.92	.94	.48	-.02		.36
4. Final judgment	6.32	1.95	6.01	2.29	.30	-.01	.44	

Sample 1 is depicted below diagonal and sample 2 above diagonal

3.1 Sample 1

The multiple regression analyses showed significant additional explained variance for almost all models on the dependent variables. Table 2 gives the beta coefficients for the best fitting significant models. The first step, with both control variables together was not significant in the four regressions. This confirms the effectiveness of the experimental design and the randomization of participants over the conditions. As expected, model 2 with the basic psychological needs, added significant variance in all four cases. The main effect of spirituality—added in model 3—also contributed significantly in all four regression equations. This is a confirmation of its relevance in addition to the three basic

Table 2 Multiple regression analysis, sample 1

	Desirability	Economic success	Moral goodness	Final judgment
Model R ² change				
1	.00	.01	.00	.01
2	.47***	.47***	.14***	.05***
3	.02***	.01*	.13***	.14***
4	.01*	.00	.02*	.03**
Model 1 (control variables)				
Happiness	-.01	.08*	.04	.08
Importance spirituality	.11**	.04	.00	.02
Model 2				
Autonomy	.36***	.12***	.23***	-.14*
Competence	.26***	.68***	-.05	-.07
Relatedness	.66***	-.04	.42***	.22**
Model 3				
Spirituality	.30***	-.09*	.49***	.15*
Model 4				
Autonomy × spirituality	-.05		-.22**	.24**
Competence × spirituality	-.07		.10	.18*
Relatedness × spirituality	-.16*		-.10	-.02
R ² _{adj}	.49	.48	.28	.21

Standardized beta coefficients for final model are depicted

*** $P < .001$

** $P < .01$

* $P < .05$

needs. Additionally, the model including the three interactions of spirituality also added significant variance on three of the four elements of the good life.

The autonomy condition showed significant mean differences on desirability of life, economic success and moral goodness. The competence condition positively influenced the desirability of life and the estimated economic success. Relatedness influenced the desirability of life and the moral goodness. Spirituality was the only condition that was related to all four outcome measures, most strongly to moral goodness and to the final judgment. In all conditions, except one, higher levels of autonomy, competence, relatedness and spirituality were related to higher outcome levels. The exception was that a higher level of spirituality was related to a lower estimate of economic success.

Figures 1, 2 and 3 provide a deeper insight into the influence of spirituality by depicting the significant interactions. Figure 1 shows that a lack of spirituality combined with being low on relatedness makes a life even less desirable. Figure 2 shows a similar influence but now for autonomy. A lack of spirituality combined with being low on autonomy is related to low moral goodness. For final judgment, the interaction shows that combining high levels of spirituality with high levels of either autonomy or competence (or both) strengthens one's estimated changes of getting into heaven.

The results of sample 1 support the fundamental value of relatedness, competence and autonomy as basic psychological needs for the good life. Furthermore, spirituality turns out to be a feasible determinant of the good life in addition to these basic psychological needs, given

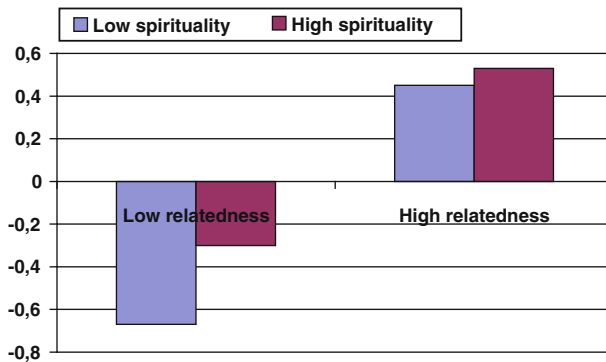


Fig. 1 Desirability, sample 1

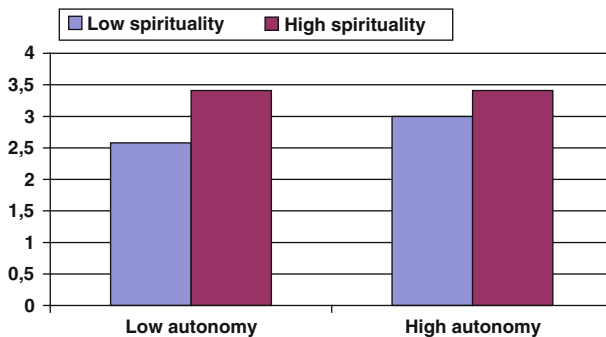


Fig. 2 Moral goodness, sample 1

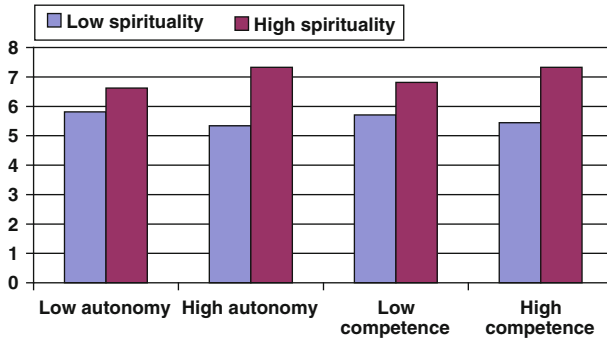


Fig. 3 Final judgment, sample 1

that it is related to all four aspects, both in terms of adding explained variance and in influencing the relation between autonomy, competence and relatedness to having a good life.

3.2 Sample 2

The statistical analysis was the same as in study 1. Table 3 gives the beta coefficients for the best fitting significant models. As in study 1, the first step with both control variables

Table 3 Multiple regression analysis, sample 2

	Desirability	Economic success	Moral goodness	Final judgment
Model R ² change				
1	.00	.01	.00	.00
2	.40***	.33***	.15***	.05***
3	.01	.01*	.03***	.15***
4	.02*	.00	.02*	.01
Model 1 (control variables)				
Happiness	-.02	.04	.01	-.04
Importance spirituality	-.05	.02	.02	-.02
Model 2				
Autonomy	.42***	.17***	.10	.07
Competence	.30***	.55***	.11	.03
Relatedness	.47***	.02	.40***	.22***
Model 3				
Spirituality	.23***	-.09*	.31***	.39***
Model 4				
Autonomy × spirituality	-.04		.02	
Competence × spirituality	-.20**		-.24***	
Relatedness × spirituality	-.03		-.02	
R ² _{adj}	.40	.33	.18	.19

Standardized beta coefficients for final model are depicted

*** *P* < .001

** *P* < .01

* *P* < .05

together was not significant in the four regressions. As expected, model 2 with the basic psychological needs, added significant variance in all four cases. The main effect of spirituality—added in model 3—also contributed significantly in three regression equations. This is a confirmation of its relevance in addition to the three basic needs. Surprisingly, the main effect of spirituality did not add significant variance on desirability. However, the model with the interactions of spirituality added significant variance on desirability and on moral goodness (see Figs. 4, 5).

The interaction pattern between competence and spirituality on desirability was similar to interaction with relatedness in sample 1. Figure 4 shows that a lack of spirituality combined with being low on competence makes a life less desirable than lacking either of them alone. Similarly, for moral goodness, spirituality has its strongest influence if competence is low. In that condition, lacking spirituality is related to the lowest levels of moral goodness, whereas on the other hand having spirituality is related to the highest levels of moral goodness. In conditions of high competence, the level of spirituality has limited influence.

Overall, the results of sample 2 are in line with the results of sample 1. They indicate that relatedness, competence and autonomy are basic psychological needs for the good life. In addition, people who have a higher level of spirituality in their life are expected to have a better life. Even though it may economically be not so successful, they lead a moral good

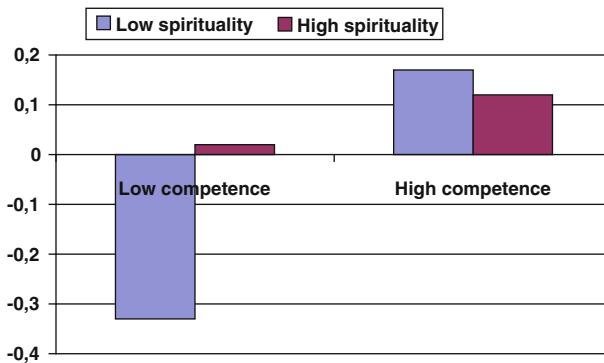


Fig. 4 Desirability, sample 2

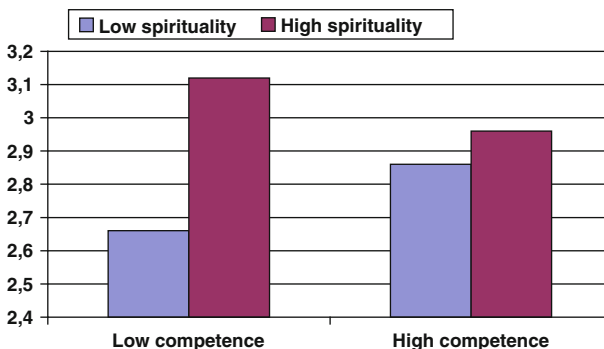


Fig. 5 Moral goodness, sample 2

life and have a higher chance of getting into heaven. Intriguing is that in this sample, the influence of spirituality was strongest among people who were low on competence.

4 Discussion

This study addressed the question of spirituality as a determinant of the good life in addition to the basic psychological needs from self-determination theory. The results of the pilot study and of both samples in the main study support the hypothesis that indeed spirituality may be essential in this respect and bring about a fuller insight into what it takes to achieve the good life. The overall results showed that spirituality may provide an extra psychological dimension for people to live the good life, both in terms of desirability and moral goodness. In a review article on the psychology of religion, Emmons and Paloutzian (2003) already concluded that the study of religion and spirituality was becoming more popular and important. The present study puts spirituality on the agenda for future studies into psychological needs in particular and the good life in general.

The most important contribution of this paper is fourfold. First, it appears that spirituality can be linked to the good life. People who have strong inner spiritual resources are perceived as leading a desirable and a moral good life. The results of the pilot study also confirm that people distinguish their sense of spirituality from the three basic psychological needs. This shows that spirituality cannot be reduced to these dimensions. It is a dimension of life that warrants separate study.

The results presented here make clear that the full value of spirituality may not lie in its direct relation to affective happiness as such—which has been shown to be only weakly correlated (Snoep 2008)—but should be related to the broader concept of eudaemonic well-being. Especially, the attention given here to spirituality's contribution to leading a moral good life is an important contribution. These results extend the recent review by Ryff and Singer (2008) that placed meaningfulness and self-actualization as central criteria of the good life, but neglect to include spirituality in their 6-D model of eudaemonic well-being. Similarly, a recent discussion in *The Journal of Positive Psychology* on the distinction between hedonic and eudaemonic well-being (Kashdan et al. 2008; Waterman 2008) neglected to discuss the possible role of spirituality within eudaemonic well-being. It seems that especially the field of positive psychology could profit from its inclusion in future studies. We need to know more on the conditions under which having or lacking spirituality becomes essential.

The results from the scenario studies in this paper confirm the results of a construct validity study into Ryff's 6-D measure of psychological well-being (Van Dierendonck 2004). In the latter study, factor analysis showed that spirituality could be differentiated as a separate dimension. The pilot-study reported in the method section in the present study confirms that spirituality when operationalized as an inner resource cannot be reduced to the three basic psychological needs of self-determination theory. It also dovetails the recent results of Wills (2009) who showed that satisfaction with spirituality and religiosity was significantly related to personal well-being. By defining spirituality in terms of inner resources, not having any specific spiritual or religious connotation, it has become something that can be enhanced, as shown in the study by Van Dierendonck et al. (2005). In that study into the effectiveness of an intervention program for burnout grounded in transpersonal psychology, the strongest impact of the program was on the inner resources of the participants.

Secondly, this study supports once again the crucial position of relatedness. Interestingly, although all three of the original basic psychological needs of self-determination

theory were related to the desirability of life—thus confirming their central position according to self-determination theory, relatedness influenced desirability and moral goodness most strongly. Relatedness appears to be the most important psychological need; it is a general need. This confirms its essential value for people (Baumeister and Leary 1995). Interpersonal relations are necessary for a good life; this was already part of all major perspectives on the positive well-lived life from Aristotle to Erikson and Maslow (Ryff and Singer 2008). Relatedness seems a universal key psychological need that crosses cultural boundaries.

In a review of positive health, Ryff and Singer (1998) mentioned leading a life of purpose and high quality connections to others as core features. Positive self-regard and mastery were placed secondary. Purpose in life and meaningfulness are often related to spirituality. As such, the results here seem to dovetail the theoretical perspective of Ryff and Singer.

The third contribution is that competence is perceived a necessary need for economic success. Remarkable are the results that competence is unrelated to a moral good life and to final judgment. However, in sample 2 the influence of spirituality was strongest in conditions of low competence. In view of the present global crisis in the financial sector, this is quite understandable. It seems that people question the ethical behavior of a person who might be very competent, yet lacks the inner values that are associated with strong spiritual inner resources.

The results of this study are in line with those of other studies. Naturally, it is not without limitations. By using a scenario study, the results reflect more the perception of the respondents rather than their actual experience. Yet it offers the possibility of using two different samples, which works out positive for the generalizability, and allows for the experimental set-up. The between-subjects design is a strength given that common-method variance, which is problematic for cross-sectional studies, is not an issue. Also, scenario experiments generally score relatively well on mundane realism. However, even within an experimental design, it cannot be excluded that having inner resources and experiencing a good life are reciprocally related, as is indicated in the study of Saraglou et al. (2008), which showed in two experiments that eliciting positive emotions encourages feelings of spirituality.

In conclusion, this study has uncovered spirituality as a factor of importance within the context of basic psychological needs. Spirituality has both added value for leading the good life and influences the impact of these needs. It seems that there are now compelling theoretical reasons, backed up by a growing number of empirical studies for more attention to spirituality within future empirical studies into the good life.

Open Access This article is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Aspinwall, L. G., & Staudinger, U. M. (2003). *A psychology of human strengths. Fundamental questions and future directions for a positive psychology*. Washington, DC: APA.
- Baard, P. P., Dec, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, *34*, 2045–2068.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529.

- Ciarrocchi, J. W., Dy-Liacco, G. S., & Deneke, E. (2008). Gods or rituals? Relational faith, spiritual discontent, and religious practices as predictors of hope and optimism. *The Journal of Positive Psychology, 3*, 120–136.
- Cury, F., Elliot, A. J., Da Fonseca, D., & Moller, A. C. (2006). The social-cognitive model of achievement motivation and the 2 × 2 achievement goal framework. *Journal of Personality and Social Psychology, 90*, 666–679.
- Day, J. M. (2010). Religion, spirituality, and positive psychology in adulthood: A developmental view. *Journal of Adult Development, 17*, 215–229.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination theory. *Psychological Inquiry, 11*, 227–268.
- Deci, E. L., Connell, J.-P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology, 74*, 580–590.
- Ellison, C. W. (1983). Spiritual well-being: Conceptualization and measurement. *Journal of Psychology and Theology, 11*, 330–340.
- Ellison, C. W., & Smith, J. (1991). Towards an integrative measure of health and well-being. *Journal of Psychology and Theology, 19*, 35–48.
- Emmons, R. A. (2003). Personal goals, life meaning, and virtue: Wellsprings of a positive life. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 105–128). Washington, DC: APA.
- Emmons, R. A., & Paloutzian, R. F. (2003). The psychology of religion. *Annual Review of Psychology, 54*, 377–402.
- Emmons, R. A., Cheung, C., & Thehrani, K. (1998). Assessing spirituality through personal goals: Implications for research on religion and well-being. *Social Indicators Research, 45*, 391–422.
- Fordyce, M. W. (1988). A review of research on the happiness measures: A sixty second index of happiness and mental health. *Social Indicators Research, 20*, 355–381.
- Giacalone, R. A., & Jurkiewicz, C. L. (2003). *Handbook of workplace spirituality and organizational performance*. New York: M. E. Sharpe.
- Gibson, L. M. R., & Parker, V. (2003). Inner resources as predictors of psychological well-being in middle-income African American breast cancer survivors. *Cancer Control, 10*, 52–59.
- Hawley, J. (1993). *Reawaking the spirit in work: The power of dharmic management*. San Francisco: Berrett-Koehler.
- Ilies, R., Morgeson, F. P., & Nahrgang, J. D. (2005). Authentic leadership and eudaemonic well-being: Understanding leader-follower outcomes. *The Leadership Quarterly, 16*, 373–394.
- Kashdan, T. B., Biswas-Diener, R., & King, L. A. (2008). Reconsidering happiness: The costs of distinguishing between hedonics and eudaemonia. *The Journal of Positive Psychology, 3*, 219–233.
- Keyes, C. L. M., & Haidt, J. (2003). *Flourishing: Positive psychology and the life well-lived*. Washington, DC: APA.
- King, L. (2001). The hard road to the good life: The happy, mature person. *Journal of Humanistic Psychology, 41*, 51–72.
- King, L. A., & Broyles, S. J. (1997). Wishes, gender, personality and well-being. *Journal of Personality, 65*, 49–76.
- King, L. A., & Napa, C. K. (1998). What makes a life good? *Journal of Personality and Social Psychology, 75*, 156–165.
- Kregting, J., & Bernts, T. (2006). Geloof in leven na de dood [belief in life after death]. Downloaded July 27, 2009. <http://www.ru.nl/aspx/download.aspx?File=/contents/pages/465606/notitiegelooflevennadedood.pdf>.
- McMahon, D. (2005). *Happiness: A history*. New York: Atlantic Monthly Press.
- Mitroff, I. I., & Denton, E. A. (1999). *A spiritual audit of corporate America*. San Francisco: Jossey-Bass Publishers.
- Moberg, D. O. (1971). *Spiritual well-being: Background and issues*. Washington, DC: White House Conference of Aging.
- Muthén, L. K., & Muthén, B. O. (1998–2010). *MPlus user's guide* (6th ed.). Los Angeles: Muthén and Muthén.
- Pargament, K. I. (2002). The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Psychological Inquiry, 13*, 168–181.
- Park, N., & Peterson, C. (2009). Achieving and sustaining a good life. *Perspectives on Psychological Science, 4*, 422–428.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues. A handbook and classification*. Oxford: Oxford University Press.

- Pittman, T. S., & Zeigler, K. R. (2008). Basic human needs. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (pp. 473–489). New York: Guilford Press.
- Preston, J. L., Ritter, R. S., & Hernandez, J. I. (2010). Principles of religious prosociality: A review and reformulation. *Social and Personality Compass*, 4(8), 574–590.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78.
- Ryan, R. M., & Deci, E. L. (2004). An overview of self-determination theory: An organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3–33). Rochester, NY: The University of Rochester Press.
- Ryan, R. M., & Deci, E. L. (2006). Self-regulation and the problem of human autonomy: Does psychology need choice, self-determination, and will? *Journal of Personality*, 74, 1557–1586.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069–1081.
- Ryff, C. D., & Singer, B. H. (1998). Contours of positive human health. *Psychological Inquiry*, 9, 1–18.
- Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaemonic approach to psychological well-being. *Journal of Happiness Studies*, 9, 13–39.
- Saraglou, V., Buxant, C., & Tilquin, J. (2008). Positive emotions as leading to religion and spirituality. *The Journal of Positive Psychology*, 3, 165–173.
- Scollon, C. N., & King, L. A. (2004). Is the good life the easy life? *Social Indicators Research*, 68, 127–162.
- Sedikides, C. (2010). Why does religiosity persist? *Personality and Social Psychology Review*, 14, 3–6.
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76, 482–497.
- Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological needs. *Journal of Personality and Social Psychology*, 80, 325–339.
- Snoep, L. (2008). Religiousness and happiness in three nations: A research note. *Journal of Happiness Studies*, 9, 207–211.
- Thompson, L. J. (2010). The global moral compass for business leaders. *Journal of Business Ethics*, 93, 15–32.
- Twenge, J. M., & King, L. A. (2005). A good life is a personal life: Relationship fulfillment in judgments of life quality. *Journal of Research in Personality*, 39, 336–353.
- Van Dierendonck, D. (2004). The construct validity of Ryff's scales of psychological well-being and its extension with spiritual well-being. *Personality and Individual Differences*, 36, 629–643.
- Van Dierendonck, D., & Mohan, K. (2006). Some thoughts on spirituality and eudaemonic well-being. *Mental Health, Religion and Culture*, 9, 227–238.
- Van Dierendonck, D., Garssen, B., & Visser, A. (2005). Burnout prevention through personal growth. *International Journal of Stress Management*, 12, 62–77.
- Van Dierendonck, D., Rodriguez-Carvajal, R., Moreno-Jimenez, B., & Dijkstra, M. T. M. (2009). Goal integration and well-being: Self-regulation through inner resources in The Netherlands and Spain. *Journal of Cross-Cultural Psychology*, 40, 746–760.
- Vaughan, F. (1991). Spiritual issues in psychotherapy. *The Journal of Transpersonal Psychology*, 23, 105–119.
- Veenhoven, R. (2000). The four qualities of life. Measuring concepts and measures of the good life. *Journal of Happiness Studies*, 1, 1–39.
- Waterman, A. S. (2008). Reconsidering happiness: A eudaemonist's perspective. *The Journal of Positive Psychology*, 3, 234–252.
- WHOQOL SRPB Group. (2006). A cross-cultural study of spirituality, religion and personal beliefs as components of quality of life. *Social Science and Medicine*, 62, 1486–1497.
- Wills, E. (2009). Spirituality and subjective well-being: Evidence for a new domain in the personal well-being index. *Journal of Happiness Studies*, 10, 49–69.
- Wong, P. T. (1998). Implicit theories of meaningful life and the development of the personal meaning profile. In P. T. Wong (Ed.), *The human quest for meaning* (pp. 111–140). Mahwah, NJ: Lawrence Erlbaum Associates.
- Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E. M., Belavich, T. G., et al. (1997). Religion and spirituality: Unfuzzifying the fuzzy. *Journal for the Scientific Study of Religion*, 36, 549–564.