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**RELATIONSHIP BETWEEN SPIRITUAL INTELLIGENCE AND
PSYCHOLOGICAL FLEXIBILITY WITHIN THE FRAMEWORK OF
ACCEPTANCE AND COMMITMENT THERAPY**

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Summary. Different researches highlight the influence of spirituality on the health and well-being of people through the concept of spiritual intelligence. In the same way, acceptance and commitment therapy works on the development of the so-called psychological flexibility of the individual, related in numerous investigations with abundant health benefits. However, there are no studies that evaluate the possible relationship between both constructs. Therefore, in this research we work with the objective of analyzing the relationship between spiritual intelligence and psychological flexibility, considering the hypothesis that there is a significant direct relationship between both variables. We followed a quantitative methodology, with a non-experimental, cross-sectional and correlational design. A sample of 166 non-clinical subjects was obtained. The instruments used are the SISRI-24 to assess spiritual intelligence and the AAQ-II for psychological flexibility. The results show no statistically significant relationship between the variables (Spearman's correlation coefficient of 0.011 with $p = 0.889$), suggesting that spiritual intelligence and cognitive flexibility are independent constructs that separately influence people's health and well-being. Nevertheless, the results are discussed and future lines of research are proposed based on the limitations encountered.

Key words: spirituality, spiritual intelligence, cognitive flexibility, acceptance and commitment therapy.

**RELACIÓN ENTRE LA INTELIGENCIA ESPIRITUAL Y LA
FLEXIBILIDAD PSICOLÓGICA EN EL MARCO DE LA TERAPIA DE
ACEPTACIÓN Y COMPROMISO**

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Resumen. Diferentes investigaciones ponen de manifiesto la influencia de la espiritualidad en la salud y el bienestar de las personas a través del concepto de inteligencia espiritual. Del mismo modo, desde la terapia de aceptación y compromiso se trabaja en el desarrollo de la denominada flexibilidad psicológica del individuo, relacionada en numerosas investigaciones con abundantes beneficios para la salud. Sin embargo, no se encuentran estudios que evalúen la posible relación entre ambos constructos. Por ello, en esta investigación se trabaja con el objetivo de analizar la relación entre la inteligencia espiritual y la flexibilidad psicológica, considerando la hipótesis de que existe una relación directa significativa entre ambas variables. Se sigue una metodología cuantitativa, con diseño no experimental, transversal y de tipo correlacional. Se obtiene una muestra de 166 sujetos no clínicos. Los instrumentos utilizados son el SISRI-24 para evaluar la inteligencia espiritual y el AAQ-II para la flexibilidad psicológica. Los resultados no muestran relación estadísticamente significativa entre las variables (coeficiente de correlación de Spearman de 0,011 con $p = 0,889$), lo que sugiere que la inteligencia espiritual y la flexibilidad cognitiva son constructos independientes que influyen por separado sobre la salud y bienestar de las personas. No obstante, se discuten los resultados proponiendo futuras líneas de investigación en base a las limitaciones encontradas.

Palabras clave: espiritualidad, inteligencia espiritual, flexibilidad cognitiva, terapia de aceptación y compromiso.

Introduction

Spirituality and spiritual intelligence

Defining spirituality is complex. There is still debate in the scientific community about the delimitation of this dimension of the human being. However, the concept has been used since ancient times. In the Bible, Paul of Tarsus, in his letter to the Colossians, prays for spiritual intelligence.

Maslow (1943) proposes "self-realization" as a spiritual state from which creativity emanates and in which the subject is happy, tolerant, capable of generating purpose and wisdom, placing him at the top of his pyramid of human needs.

On the other hand, the neurologist and survivor of several Nazi concentration camps, Victor Frankl, speaks of a spiritual unconscious as the center of morality and deep beliefs that endow the individual with the ability to adapt through the search for meaning in suffering (Frankl, 1966).

Millman (1995) speaks of Spiritual Intelligence and identifies it as the primitive intelligence of the Universe that is behind every aspect of human existence.

At the end of the 20th century, Howard Gardner developed his famous theory of the seven multiple intelligences. Later, he suggests the existence of an existential intelligence, and describes it as the capacity to situate oneself in relation to more extreme aspects of the cosmos -the infinite and the infinitesimal-, and the related capacity to question certain existential characteristics of the human being, such as the meaning of life and death, the final destiny of the physical world and the psychological world, as well as the capacity to feel certain experiences such as a deep love or to be absorbed before a work of art (Gardner, 2001).

Emmons (2000, 2003) asks if there is a spiritual intelligence and defines it as an intelligence that implies a series of skills and strengths in the person to achieve their purposes and solve their problems, which endows it with an important adaptive value and a great utility for daily life.

The authors Zohar y Marshall (2001) differentiate Spiritual Intelligence from Emotional Intelligence and define it as an innate ability to extract meaning by reframing and contextualizing experience. These authors established some characteristics of IES: the capacity to face and use pain or suffering, the capacity to be inspired by visions and values, and the capacity to be flexible, among others.

For their part, King and DeCicco (2009), after conducting an extensive review on the subject, propose a model of spiritual intelligence based on four components or factors: existential critical thinking "ECP", understood as the capacity to critically analyze meaning, purpose and other existential or metaphysical questions such as reality, the universe, space, time or death; the production of personal meaning "PSP" or the capacity to construct meaning and personal value in all physical and mental experiences, including the capacity to create and master a life purpose; transcendental consciousness "TC", which implies the capacity to perceive transcendent dimensions of the self, others and the physical world during the normal state of consciousness or wakefulness; and expansion of the conscious state "EEC", defined as the capacity to enter spiritual states of consciousness when the person wants to, transcending the waking state and entering higher or spiritual states of consciousness.

Spiritual intelligence and religiosity

For years, in the world of academia and psychological research, the terms spirituality and religiosity have been assumed to be homologous (Zinnbauer et al., 1997). However, there is a great deal of research and theoretical positions that attempt to delimit and conceptualize both terms, establishing important differences between them.

From the theoretical position of Zohar y Marshall (2001), it is urged to differentiate both concepts, alluding to the fact that a religious person does not necessarily have to have high levels of spirituality. This statement implies the differentiation of a spiritual dimension of human beings with respect to their attitudes, beliefs or religious practices.

The perspective assumed in this study revolves around a concept of personal, subjective spirituality, of connection with the immaterial and the transcendental. Thus, it is in line with Fuentes (2019), where it is concluded that religiosity refers to the institutional beliefs and practices of a religious organization, and spirituality is understood as a dimension that incorporates questions about the meaning and sense of life, purpose, values and connection with the immaterial, which may or may not include religious beliefs. In addition, it can be seen how the concept of IES brings together the construct of spirituality through the definition of its components, which may or may not be associated with religious persons.

Spiritual intelligence and brain

Over the years, neuroscience has provided a wealth of information on the organization and function of the various brain structures. Thanks to the development and improvement of techniques such as neuroimaging and magnetoencephalography, it has been possible to investigate the neural correlates of various psychological phenomena. Thus, neuroscience has been able to approach the study of spirituality as a mental phenomenon from the conviction that all human experience takes place in the brain (Pérez, 2016).

Singer's work changes the way of understanding brain neuronal organization, proving the existence of a unifying process that acts throughout the brain through what he calls *unifying and synchronous neural oscillations*, which allows giving meaning to human experience (Singer, 1999).

Some of the data that help to delineate the centers of spirituality in the brain come from neurologist Ramachandran's research with patients suffering from temporal lobe epilepsy. These studies show a direct relationship between epileptic seizures in specific centers of the temporal cortex and the tendency of these subjects to experience altered states of consciousness and mystical experiences. Ramachandran himself, in another study with non-neurologically impaired subjects, identifies a *neural machinery* related to religion and spiritual events (Ramachandran y Blakeslee, 1998). Other recent research identifies that spirituality is mapped to a brain circuit located in the periaqueductal gray matter, in the brainstem region, involved in

fear conditioning, pain modulation and altruism (Ferguson et al., 2022). This research evidences the existence of what can be called the *center of spirituality* in the brain of all human beings.

On the other hand, the work of Persinger et al. (2009) on altered states of consciousness and the god module stands out, in which it is shown how through non-invasive external transcranial stimulation of the temporal lobes, complex weak electromagnetic fields can be generated that modulate and regulate neuronal activity, producing this type of experiences.

All this research identifies specific areas of the brain such as the temporal lobes, regions of the limbic system and brainstem regions, in which a series of neurological mechanisms take place that determine a type of experience characteristic of a spiritual dimension of the human being. However, as with other human abilities such as language, the neural correlate needs the social context and cultural framework with symbolic referents to generate the function (Torralba, 2010).

The importance of the spiritual dimension in health

The 1946 International Health Conference defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (Organización Mundial de la Salud, 2020, p.1). This definition reflects the need to consider factors other than biological correlates in determining a person's health. In the same vein, Engel (1977) proposes the biopsychosocial model, which aims to make the leap from a biomedical model based solely and exclusively on the biological dimension of the subject, to a model that explores other dimensions such as the psychological and social. A model that has meant extending the focus of the causal fact of the disease to more areas, where the person becomes the main actor in making decisions about his or her therapeutic process.

In recent years, the scientific community has highlighted the relevance of spirituality through the development of numerous studies that show the influence of its components on the health and well-being of human beings. It has been observed, for example, its direct relationship with quality of life and psychological well-being (Borges et al., 2021; Urchaga-Litago, Morán-Astorga, y Fínez-Silva, 2019; Salgado, 2014), or its work as a protective factor in patients undergoing dialysis treatment (Burlacu et al., 2019) and in women with breast cancer (Duche, Paredes Quispe, Gutierrez Aguilar, y Roldán Vargas, 2021), in addition to its inverse relationship with the degree of perceived stress (Bustinza y Sumarriva, 2018) and with levels of postpartum depression (Moafi, Momeni, Tayeba, Rahimi, y Hajnasiri, 2021).

Other studies confirm that knowledge of spiritual aspects contributes to a better understanding of the pathological states of the person, highlighting the need for professionals to pay attention to this dimension in health practice (Katerndahl, 2008).

The WHO at its 52nd Assembly in 1999 proposed adding the concept of *spiritual well-being* to the definition of health, but it was not finally approved (Organización Mundial de la Salud, 1999). However, the WHO itself stresses and emphasizes on numerous occasions the importance of paying attention to this dimension in clinical-healthcare practice (Saad, De Medeiros, y Mosini, 2017).

For its part, the World Psychiatric Association "WPA" stresses the importance that the spiritual dimension has acquired in the academic world, urging psychiatrists, during the exercise of their profession, to take into account all the factors that influence the patient's mental health, including spirituality (Moreira-Almeida, Sharma, van Rensburg, Verhagen, y Cook, 2016).

Acceptance and Commitment Therapy. Definition and theoretical framework

In 2004, psychologist Steven Hayes identified three generations of psychological therapies: classical or first generation behavioral therapies, which are oriented towards behavioral change through contingency management; cognitive behavioral or second

generation therapies, which incorporate cognitive and social learning components to behavioral and emotional aspects; and the new wave of therapies he calls third generation, which focus on contextual change, function over form, and acceptance versus avoidance (Hayes, 2004).

Acceptance and Commitment Therapy (ACT) is a therapy belonging to the group of so-called third generation therapies, based on radical behaviorism and developed under the relational framework theory (Barnes-Holmes, Hayes, Barnes-Holmes, y Roche, 2001).

Under the paradigm of relational frame theory, the focus is on the functional analysis of language and cognition through learned relationships and their characteristics. He proposes that verbal behavior is a generalized operant, that is, it possesses the capacity to respond to one stimulus in terms of another, depending on the subject's personal history with that or similar stimuli, and by means of arbitrarily defined properties (Navarro y Trigueros, 2021).

ACT is a contextual and functional therapy. He believes that psychological problems stem from the individual's own personal history and are related to how one has learned over time to react to thoughts and emotions.

From Cognitive Behavioral Therapy to ACT

As described in Soriano y Salas (2006), from the perspective of traditional or second generation cognitive behavioral therapy, it is considered that a person's actions are regulated by thoughts and emotions, therefore, in order to change a dysfunctional state, the discomfort and that which generates it must be controlled, directing actions towards the modification of cognitive events. However, despite its more than proven therapeutic efficacy, it remains unclear exactly why it works and in what situations it does so.

Several differentiating factors can be identified between ACT and traditional cognitive behavioral therapies. On the one hand, acceptance. In the face of intrusive, unwanted and maladaptive thoughts, traditional cognitive behavioral therapy pursues the suppression of those thoughts through different techniques such as thought stopping or cognitive restructuring, however, ACT promotes acceptance through the abandonment of attempts to change those thoughts, encouraging the patient to orient their actions towards what is important in their life (Barraca, 2012). In fact, another differentiating factor is ACT's emphasis on promoting orientation toward what is truly valuable in a person's life. Harris (2021) defines ACT as a therapy that, among its objectives, tries to make the patient carry out actions oriented to his or her personal values, encouraging him or her to ask the question: What is truly valuable to me? so that the answer motivates and guides the change.

Within the framework of this therapy, we work by observing aspects of the individual that allow us to ultimately identify the degree of psychological flexibility/inflexibility that he/she possesses. We address patterns of experiential avoidance, cognitive fusion, staying in the past/future, lack of clarity of values, the self as a concept, and inaction as triggers of inflexibility, and then intervene with work on acceptance, cognitive defusion, mindfulness, clarification of values, turning towards a self as a context and commitment to action, promoting greater psychological flexibility in the individual.

Psychological flexibility and the hexaflex model

As already mentioned, ACT considers six main components that condition the flexibility/inflexibility of the person. These six components are reflected in a model called hexaflex.

In this study, the hexaflex is presented as an organizational scheme or model of the TCA that aims to clarify and conceptualize the relationships between its components. For more information on research focusing on the basic processes involved in psychological flexibility, Luciano (2016), Törneke et al. (2016) y Villatte et al. (2016) is recommended.

Figure 1 shows the six factors that make up a pattern of psychological flexibility, while Figure 2 shows those factors that predispose to a pattern of psychological inflexibility.

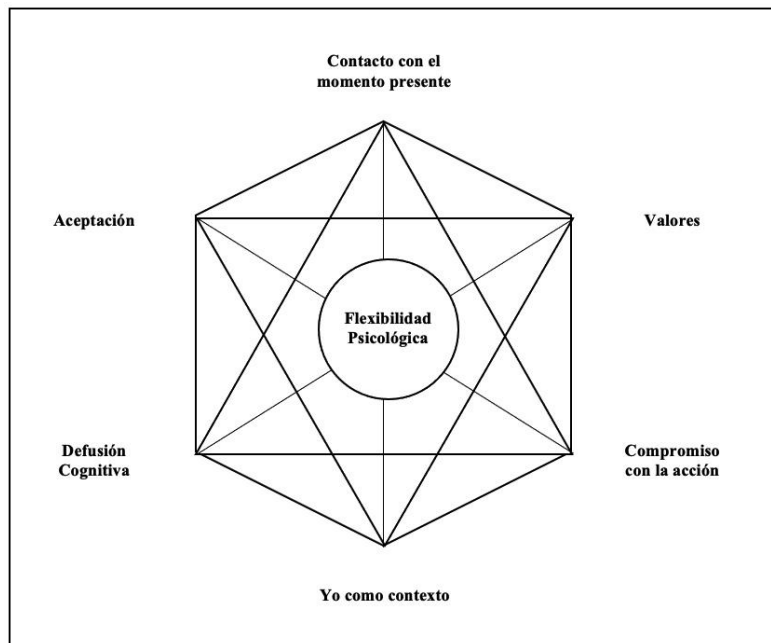


Figure 1: Hexaflex model. Factors related to Psychological Flexibility

Note. Adapted from Harris, R. (2021). *Keep it simple.* Obelisk.

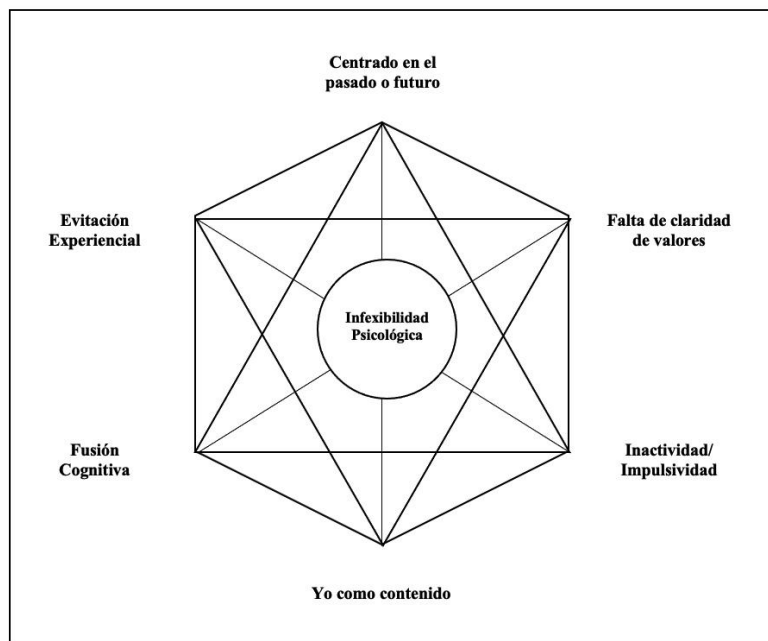


Figure 2: Hexaflex model. Factors related to Psychological Inflexibility

Note. Adapted from Harris, R. (2021). *Keep it simple.* Obelisk.

Hayes (2021) defines each component through a series of turns that must be made in order to abandon inflexibility and achieve psychological flexibility:

- **Defusion:** consists of ceasing to assume as true everything that our thoughts dictate. It is carried out by limiting ourselves to being aware that we are thinking, without merging or getting stuck to those thoughts and taking distance from them.
- **The self as context:** it consists of leaving aside the conceptualized self that tells us what we are and who others are in relation to us, and leads us to defend our history without questioning anything, to opt for a self that takes perspective and shows us that we are more than what we tell ourselves we are.
- **Acceptance:** it consists of ceasing to avoid what we do not want to experience, giving way to open-mindedness and curiosity. When we avoid certain thoughts and emotions we are immersing ourselves in a spiral of avoidance that prevents us from living the life we want to live. Acceptance allows unpleasant thoughts and emotions to follow us on our path so that we do not stop living according to our purposes.
- **The present moment:** it consists of moving away from an attention directed towards the past or the future, and turning towards the now. Sometimes, we remain anchored to thoughts in the form of worries about past events or future uncertainties and fears, which prevent us from connecting with what really matters to us and is useful to us now.
- **Values:** it consists of moving away from objectives imposed by society and turning towards the purposes and valuable aspects chosen by the person. Personal growth and our purposes cannot be fulfilled if there are objectives imposed by others. Values are different and chosen by each individual, they provide motivation and give meaning to who we are and what we do.
- **Action:** it consists of moving on to committed action, leaving behind inaction and avoidant persistence. It assumes that the person focuses on the process of change step by step without thinking about radical changes in the short term.

ACT seeks to develop a person's Psychological Flexibility "PF", understood as the ability to feel and think with open-mindedness, learning not to avoid pain and suffering, in order to live with meaning and purpose (Hayes, 2021).

Effectiveness of ACT

There is abundant research showing the efficacy of ACT. On the one hand, Ruiz (2010) highlights the existence of a pattern of experiential avoidance in a large number of psychopathological disorders.

Other research has demonstrated the efficacy and usefulness of ACT for a wide and diverse number of problems and pathologies: in patients with chronic pain (Veehof, Trompetter, Bohlmeijer, y Schreurs, 2016), spinal cord injury (Fernández, 2016); for the treatment of depression and anxiety disorders (Twohig y Levin, 2017); in the treatment of obsessive compulsive disorder (Philip y Cherian, 2021; Shabani et al., 2019; Thompson et al., 2021; Twohig et al., 2015; Twohig et al., 2018); in psychotic disorders (Yıldız, 2020a); for the psychological treatment of cancer patients (González-Fernández y Fernández-Rodríguez, 2019); for the treatment of psychological difficulties in adults with autism and/or intellectual disability (Byrne y O'Mahony, 2020); in the treatment of insomnia (Paulos-Guarnieri, Linares, y El Rafihi-Ferreira, 2022); in alcohol use disorder (Thekiso et al., 2015); and to improve long-term adherence to physical activity and lifestyle changes (Manchón, Quiles, León, y López-Roig, 2020; Yıldız, 2020b), among others.

In addition, promising results have been obtained regarding its online application for various pathologies such as chronic pain (van de Graaf, Trompetter, Smeets, y Mols, 2021) and the reduction of experiential avoidance and depressive symptoms in adolescents (Keinonen, Puolakanaho, Lappalainen, Lappalainen, y Kiuru, 2021).

It can be seen in the literature reviewed for this study that spirituality is a dimension of the human being with a very important weight in the health, quality of life and well-being of people. Different organizations propose that their healthcare professionals should attend to this part of human reality in order to understand problems and adapt treatments under a more holistic perspective, recommendations that psychologists should not overlook.

One of the most relevant aspects of the theoretical approach of this study consists of thinking that the components reflected in the concept of IES can be related to the psychological flexibility factors worked on in ACT. Existential critical thinking, understood as the search for meaning and purpose, and the production of personal meaning, understood as the capacity to extract value from physical and mental experiences, seem a priori to be capacities that can be part of the search for and identification of values and acceptance, which are, in turn, central components in ACT. On the other hand, it is not considered daring to think that the capacity to perceive transcendental dimensions of the self, as a defining aspect of transcendental consciousness, may be part of the process of turning towards a self as a context that Hayes (2021) itself calls "becoming aware of the spiritual or transcendent self" (p. 33). In addition, at a deeper level, technically more complex and beyond the most common ACT interventions in health practice, the expansion of the conscious state can be understood as a way of transcending the waking state characteristic of traditional meditation. It should not be forgotten that ACT has strong connections with meditation and one of the essential characteristics of mindfulness, called flexible attention, allows the subject to focus awareness. In Hayes (2021)'s own words, "However you want to cultivate your spiritual well-being, ACT skills will help you in the endeavor" (p. 379).

Therefore, this study, which explores the direct relationship between IES, as a concept that delimits the spiritual dimension of the human being, and PF as a concept whose components predispose to greater psychological well-being, is justified.

If a positive correlation between the variables is confirmed, we obtain proof of the influence of spirituality on the individual's PF, which should motivate the creation and elaboration of an assessment and intervention system more adjusted and adapted to each individual, where the spiritual dimension plays an essential role. In addition, it can be assumed that those patients who present higher levels of spirituality during the assessment, present better adaptation and response in the short term to a therapy based on the ACT model.

The main objective of this study is to analyze the relationship between HEI and VET in the general population. In addition, the following specific objectives are proposed: to analyze the relationship between the four factors of the IES and VET, and to check if there are significant differences in the variables under study according to sex, type of belief and age of the participants. The main hypothesis is that spiritual intelligence has a significant direct positive relationship with psychological flexibility.

Método

Design

This research follows the quantitative and non-experimental methodology of the correlational method, using an ex post facto, single-group, cross-sectional design.

Participants

A non-probabilistic convenience sampling was used to select the participants. The following inclusion criteria were taken into account: to be of legal age, to participate voluntarily in the study and to accept the information and informed consent forms. The following were considered exclusion criteria: having been diagnosed with a mental disorder, being undergoing

psychological treatment at the time the questionnaire was completed, and not completing the questionnaire in its entirety.

The questionnaire was completed by a total of 204 subjects, of whom 29 had been diagnosed with a mental disorder and 9 were undergoing psychological treatment at the time the questionnaire was completed.

Finally, a sample of 166 subjects was selected for data analysis, with a total of 49 men (29.5%) and 117 women (70.5%). Age variability ranged from 18 to 74 years, with a mean of 44 years and a standard deviation of 14. Regarding the type of belief of the participants, 25.9% considered themselves believers, 35.5% agnostic and 38.6% atheist.

Instruments and variables

The variables used in this study are Spiritual Intelligence "IES" and Psychological Flexibility "FP".

The Spiritual Intelligence Self-Report Inventory "SISRI-24". This instrument has been developed by King y DeCicco (2009) and evaluates the degree of IES through 24 items, using a 5-point Likert-type scale where 0="Not at all", 1="Not very true", 2="Somewhat true", 3="Very true" and 4="Totally true". The items are distributed in four subscales according to the four factors of IES established in the model proposed by the authors: existential critical thinking "ECP", 7 items (1, 3, 5, 9, 13, 17 and 21); production of personal meaning "PSP", 5 items (7, 11, 15, 19 and 23); transcendental consciousness "TC", 7 items (2, 6*, 10, 14, 14, 18, 20 and 22), item 6 is reverse coded; and expansion of the conscious state "EEC", 5 items (4, 8, 12, 16 and 24). The sum of the scores varies in a range from 0 to 96, with a low score being considered between 0 and 32 points, medium between 33 and 55 points, and high between 56 and 96 points. A directly proportional relationship is established between the result and the level of spiritual intelligence. The four factors show a moderate relationship with the criteria suggested by Gardner in 1983 for the consideration of independent intelligence and coefficients of .78, .78, .87 and .91 for PCE, PSP, CT and EEC respectively. In its original version, the sample obtained an alpha of .92, which represents an appropriate level of internal reliability (Clark y Watson, 1995). The version translated into Spanish and subjected to the Cronbach's alpha confidence analysis shows good internal consistency with $\alpha = .852$ (Bustanza y Sumarriva, 2018).

Acceptance and Action Questionnaire "AAQ-II". This instrument has been developed by Bond et al. (2011) and provides a measure of psychological flexibility/inflexibility. It consists of 7 items, evaluated by means of a 7-point Likert-type scale: 1="Never true", 2="Very rarely true", 3="Rarely true", 4="Sometimes true"; 5="Frequently true", 6="Almost always true" and 7="Always true". The sum of the scores varies in a range from 7 to 49 points, with a low score being considered between 7 and 15 points, medium between 16 and 23 points, high between 24 and 36 points, and very high between 37 and 49 points. An inversely proportional relationship is established between the result and the level of PF. Therefore, the lower the score obtained, the higher the PF. Scores between 24 and 28 points are considered as limits beyond which there is a psychological inflexibility characteristic of pathological symptoms such as depression or anxiety (Hayes, 2022). We use the translation and adaptation to the Spanish population or Acceptance Questionnaire Action II, carried out by Luciano y Ruiz (2009). It allows to identify the degree of experiential avoidance and the capacity to remain in the present moment and act towards what is really valuable for the person. It shows a confidence $\alpha = .88$, confirming it to be a reliable and valid measure of general experiential avoidance and psychological rigidity (Ruiz et al., 2013).

To obtain sociodemographic data, a survey was administered to assess the following variables: age, sex, diagnosis of mental disorder, current psychological treatment and type of belief.

Procedure

Before starting the study, the proposal is sent to the Ethics Committee of the European University of the Atlantic, which approves the research to be carried out. A questionnaire was developed on the Google Forms platform divided into five parts: the information sheet, the informed consent, the sociodemographic questionnaire, the Spiritual Intelligence Self-Report "SISRI-24" and the Action Acceptance Questionnaire "AAQ-II". Subsequently, it is administered via the internet, through different platforms such as WhatsApp, Facebook, Instagram and email, following the snowball method and with the aim of reaching as many subjects as possible. It is only possible to complete the questionnaire if the information sheet and the informed consent form are accepted. The time required to perform the test is free and self-administered, with an estimated duration of 10 to 15 minutes. The data are coded in a spreadsheet for further analysis. No personal information of participating subjects is stored.

Data analysis

A descriptive analysis of the variables was performed to determine the sociodemographic characteristics of the sample.

To analyze the differences between men and women in the variables IES, PCE, PSP, CT, EEC and IP, the analysis of means in independent samples was performed using Student's t-test. Cohen's *d* is used to calculate the effect size, considering a *d* value between 0.2 and 0.4 small; between 0.4 and 0.8 medium; and greater than 0.8 large (Lenhard y Lenhard, 2017).

For the analysis of the differences in the mean scores of the variables according to the type of belief of the subject and the age group, the ANOVA statistic is applied. Subsequently, the differences found in the three groups of the type of belief variable: believers, agnostics and atheists; and in the three groups of the age variable: from 18 to 36 years old, from 37 to 55 and from 56 to 74 years old, are analyzed with respect to the mean scores obtained in the different variables, using Tukey's post hoc test.

Finally, to evaluate the relationship between the IES and its four factors, and the PI, the Spearman correlation analysis was carried out, considering a $p < 0.05$ statistically significant and with a confidence level of 95%.

Results

The scores obtained in the main study variables indicate that the mean in IES is 45.96 ± 19 points, placing it at a medium level, while for PI a mean of 20.84 ± 7.95 points is obtained, placing it at a medium level of psychological inflexibility.

Table 1 shows the means obtained in PI, IES and its components, in relation to the sex of the participants.

Table 1

Mean scores by sex in the different observed variables

	Sex	N	Media	Desv. Deviation
Psychological inflexibility	Man	49	18,96	7,243
	Woman	117	21,63	8,137
Existential critical thinking	Man	49	12,53	6,649
	Woman	117	13,59	6,452
Production of personal meaning	Man	49	13,04	4,495
	Woman	117	12,67	4,228
Transcendental consciousness	Man	49	11,20	7,159
	Woman	117	13,47	5,769
Expansion of the conscious state	Man	49	6,61	5,408
	Woman	117	7,32	5,215

Spiritual intelligence	Man	49	43,39	19,859
	Woman	117	47,04	18,617

Note. IP: Psychological inflexibility; PCE: Existential critical thinking; PSP: Production of personal meaning; CT: Transcendental consciousness; EEC: Expansion of the conscious state; IES: Spiritual intelligence.

It is found that women score significantly higher in psychological inflexibility and transcendental awareness (Table 2), in both cases with a small effect size ($d = 0.34$ and $d = 0.36$ respectively), with no significant differences between men and women in PCE, PSP, EEC and global IES.

Table 2
Student's t-tests for independent samples

	t	Sig.
Psychological inflexibility	-1,992	,048*
Existential critical thinking	-,956	,340
Production of personal meaning	,510	,610
Transcendental consciousness	-2,145	,033*
Expansion of the conscious state	-,785	,434
Spiritual intelligence	-1,131	,260

Note. * $p < 0.05$

In Table 3, it can be observed that believers, agnostics and atheists do not behave in the same way in PCE, PSP, CT, EEC and global IES.

Table 3
ANOVA test and means obtained according to type of belief

		F	Sig.	Type of belief	N	Media	Desv. Deviation
IP	Between groups	,507	0,603	Believer	3	20,28	9,176
				Agnostic	59	21,68	6,986
				Atea	64	20,45	7,982
				Total	166	20,84	7,957
PCE	Between groups	,442	,001	Believer	43	16,28	6,970
				Agnostic	59	12,97	6,023
				Atea	4	11,55	5,989
				Total	66	13,28	6,508
PSP	Between groups	,358	,006	Believer	3	14,53	3,628
				Agnostic	9	12,44	4,248
				Atea	4	11,91	4,475
				Total	66	12,78	4,299
CT	Between groups	,721	,002	Believer	3	15,42	5,700
				Agnostic	9	12,81	5,749
				Atea	4	11,03	6,573
				Total	66	12,80	6,276
EEC	Between groups	,015	,001	Believer	3	9,35	5,794
				Agnostic	9	,12	4,892
				Atea	4	5,59	4,740
				Total	66	7,11	5,266
IES	Between groups	,493	,000	Believer	3	55,58	19,465
				Agnostic	9	45,34	17,145
				Atea	4	40,08	18,003
				Total	66	45,96	19,005

Note. IP: Psychological inflexibility; PCE: Existential critical thinking; PSP: Production of personal meaning; CT: Transcendental consciousness; EEC: Expansion of the conscious state; IES: Spiritual intelligence.

Table 4 shows that believers score significantly higher than agnostics and atheists in existential critical thinking and production of personal meaning. On the other hand, atheists scored significantly lower in transcendental consciousness than believers, and no significant differences were found with respect to agnostics in this variable. Believers obtain higher significant mean scores on conscious state expansion than atheists. In addition, believers score significantly higher on global spiritual intelligence than agnostics and atheists. Finally, no significant differences in psychological inflexibility were found according to the type of belief of the subjects.

Table 4
Tukey's post hoc test

	(I) Belief	(J) Belief	Difference of means (I-J)	Sig.
Psychological inflexibility	Believer	Agnostic	-1,399	,657
		Atea	-,174	,993
Existential critical thinking	Believer	Agnostic	3,313*	,025
		Atea	4,732*	,001
Production of personal meaning	Believer	Agnostic	2,094*	,036
		Atea	2,629*	,005
Transcendental consciousness	Atea	Believer	-4,387*	,001
		Agnostic	-1,782	,237
Expansion of the conscious state	Believer	Agnostic	2,230	,076
		Atea	3,755*	,001
Spiritual intelligence	Believer	Agnostic	10,242*	,015
		Atea	15,503*	,000

Note. * p < 0.05

Regarding the differences in the mean scores of the variables analyzed (IP, IES, PCE, PSP, CT and EEC) according to age group, the data show no significant differences between the groups (Table 5).

Table 5
ANOVA test and averages obtained according to age range

		F	Sig.	Age range	N	Media	Desv. Deviation
IP	Between groups	,738	,480	18 - 36 years old	1	21,55	7,839
				37 - 55 years old	6	19,72	7,982
				56 - 74 years	9	20,88	8,144
				Total	66	20,84	7,957
PCE	Between groups	,419	,658	18 - 36 years old	1	13,17	5,841
				37 - 55 years old	6	13,98	6,898
				56 - 74 years	9	12,78	7,107
				Total	66	13,28	6,508
PSP	Between groups	,801	,451	18 - 36 years old	1	12,54	4,201
				37 - 55 years old	6	12,46	4,188
				56 - 74 years	9	13,43	4,551
				Total	66	12,78	4,299
CT	Between groups	1,038	,356	18 - 36 years old	1	13,13	6,113
				37 - 55 years old	6	13,43	5,988

				56 - 74 years	9	11,73	6,751
				Total	66	12,80	6,276
EEC	Between groups	1,275	,282	18 - 36 years old	1	6,59	4,877
				37 - 55 years old	6	6,85	5,672
				56 - 74 years	9	8,10	5,386
				Total	66	7,11	5,266
IES	Between groups	,065	,937	18 - 36 years old	1	45,42	17,409
				37 - 55 years old	6	46,72	19,974
				56 - 74 years	9	46,04	20,606
				Total	66	45,96	19,005

Note. IP: Psychological inflexibility; PCE: Existential critical thinking; PSP: Production of personal meaning; CT: Transcendental consciousness; EEC: Expansion of the conscious state; IES: Spiritual intelligence.

Before studying the relationship between the IES and its four factors and the PI, the Kolmogorov-Smirnov normality test was performed to observe the dispersion of the data (Table 6).

Table 6
Kolmogorov-Smirnov normality test

	Statistician	Sig.
Spiritual Intelligence in SISRI-24	,048	,200
Psychological Inflexibility in AAQ-II	,090	,002

As can be seen, only the IES has a normal distribution; therefore, to analyze the relationship between the variables, the Spearman correlation coefficient is used for non-parametric tests, the results of which can be seen in Table 7.

Table 7
Spearman correlation analysis

			IES	PCE	PSP	CT	EEC
Spearman's Rho	IP	Correlation coefficient	,011	,064	-,088	-,034	,064
		Sig. (bilateral)	,889	,414	,258	,663	,415
		N	166	166	166	166	166

Note. IP: Psychological inflexibility; PCE: Existential critical thinking; PSP: Production of personal meaning; CT: Transcendental consciousness; EEC: Expansion of the conscious state; IES: Spiritual intelligence.

According to the data obtained, no correlation was found between spiritual intelligence and psychological inflexibility (Spearman correlation coefficient of 0.011 with $p = 0.889$). Nor are significant results obtained when looking at the correlation between the four components of spiritual intelligence and psychological inflexibility.

Discussion

The main objective of this study is to analyze the relationship between spiritual intelligence and psychological flexibility. The main hypothesis proposes that spiritual intelligence has a significant positive direct relationship with psychological flexibility; however, this should be discarded since no statistically significant correlation was found

between the variables. In addition, the tests applied to study the correlation between the four factors of IES and PI did not reveal a significant relationship either.

Although the research consulted for the elaboration of the theoretical framework of this study shows the influence of spirituality on the health and quality of life of people (Borges et al., 2021), and there is a notable number of studies that relate the construct of psychological inflexibility and the pattern of experiential avoidance with different mental disorders (Patrón-Espinosa, 2013; Ruiz, 2010), it is complex to provide empirical evidence that relates both variables beyond a strong theoretical connection between the terms. It is possible that this is due to the difficulty in the delimitation, unification and theoretical definition of the spiritual dimension, which to this day is still anchored in a profound debate. Another reason could be found in the psychological flexibility construct itself as measured by the AAQ-II, which seems to raise doubts about its validity. Dwelling on this fact, at Rochefort et al., (2018), it is shown how the AAQ-II actually assesses aspects of negative affect such as depression, anxiety and stress, rather than a higher order construct such as psychological inflexibility. Other studies such as that of Tyndall et al., (2019) highlight that some tests such as the BEAQ "Brief Experiential Avoidance Questionnaire" could be a better alternative for the assessment of psychological inflexibility and experiential avoidance. Therefore, assuming the perspective of these authors, in reality this study would be evaluating the relationship between spiritual intelligence and negative affect, which would take us away from our main objective. Furthermore, this would imply that the results obtained in this study, in reality, would be showing no correlation between spiritual intelligence and negative affect, which would go against the findings of a large number of studies (Borges et al., 2021; Bustinza y Sumarriva, 2018; Moafi et al., 2021; Urchaga-Litago et al., 2019) and would be extremely risky to state, without having prepared a specific study for this purpose.

Another possibility suggests that spiritual intelligence and cognitive flexibility are, in fact, independent constructs that each separately affect people's health and well-being.

In the analysis of sex differences in PI, IES and its four components, no statistically significant differences were found between men and women in overall IES, PCE, PSP and EEC. However, women score significantly higher than men on psychological inflexibility and transcendental awareness. These data coincide with those found in other studies, where women obtain a higher mean PI than men (Landi, Pakenham, Boccolini, Grandi, y Tossani, 2020). However, the effect size found in this study was small ($d = 0.34$), which invites us to interpret these data with caution, taking into account other previous studies where no significant differences were found between men and women in this variable (Valiente-Barroso, Sáiz-Obeso, Valiente-Barroso, Lombráña-Ruiz, y Martínez-Vicente, 2020). Regarding the transcendental awareness factor, in contrast to the results obtained in other studies where no significant differences are found with respect to sex (Parra y Ribilla, 2020), the data suggest a greater tendency of women to perceive transcendental dimensions of the self, others and the physical world during the normal state of consciousness or wakefulness. However, the effect size should be considered small ($d = 0.36$), so further research is recommended to clarify these results.

Regarding the possible differences in the degree of PI, IES and its four components, depending on the type of belief, it is important to bear in mind that the results cannot be interpreted beyond a purely descriptive view, since the terms to which each type of belief refers have not been specified and conceptually delimited. Nevertheless, the results may invite us to think that behind a person who calls himself a believer, agnostic or atheist, there are characteristics that predispose or enable him to obtain a better performance in various key aspects in the spiritual dimension of the human being, such as existential critical thinking, the production of personal meaning, transcendental consciousness, expansion of the conscious state and global spiritual intelligence.

Finally, considering the differences in the scores of the variables studied according to age group, the results do not show statistical significance that would suggest that age is a relevant factor associated with significant changes in PI and IES levels.

In addition to the above considerations, there are a number of limitations present in this study. On the one hand, those derived from the research design itself and the use of a cross-sectional methodology, which does not allow for the analysis of responses at various points in time and can lead to bias in the selection of participants, resulting in a sample that is not very representative of the population. In this regard, the difference in the number of women over the total number of men in the sample should be considered. On the other hand, those derived from the use of self-applied instruments, especially the SISRI-24, which is a psychometric test that has not been specifically validated in the Spanish population and may present language and concepts that are not very accessible to most people, which may generate biases in the information obtained. Finally, it should not be forgotten that the validation of the AAQ-II test (Ruiz et al., 2013) uses a sample of university students and professors from the same region of Spain, which can generate problems in its validity, as the sample is not sufficiently representative of the general population.

Although the results obtained do not reflect a correlation between spiritual intelligence and psychological flexibility, we believe it is appropriate to highlight the practical implications derived from the theoretical framework and the reflections provided in this research. The aim is to highlight the need to address the spiritual dimension of the human being in healthcare practice, so that during assessment and intervention the following are taken into account: the person's capacity to critically analyze the purpose or meaning of the most transcendental or existential aspects of his/her life; his/her capacity to extract personal meaning from physical and mental experiences; and his/her capacity to live according to a purpose. For this purpose, the framework of ACT is presented as a therapy that provides a series of tools open to explore and develop the spiritual dimension, by working with the identification and clarification of values, the acceptance of life situations together with the emotions and thoughts that derive from them, the full attention towards a present moment that can go beyond the physical and the material, and the conception of the subject as an active agent of change. In this way, it is possible to find people who respond better and faster to a therapy based on traditional ACT, and others who benefit from an ACT with components oriented to the development of the spiritual dimension.

It is hoped that this study will serve as a basis for future research that, having overcome the limitations encountered, will attempt to determine the relationship between spiritual intelligence and psychological flexibility. To this end, a scale that measures the spiritual dimension must be configured and validated on the basis of clear and well-defined concepts that are accessible to the general population. In addition, the relationship between spirituality and levels of value orientation, acceptance and experiential avoidance can be studied.

Conclusions

This research aims to highlight the importance of the spiritual dimension and psychological flexibility in people's health and well-being, providing a first approach to the study of their correlation. According to the results obtained, it is concluded that spiritual intelligence and its components: existential critical thinking, production of personal meaning, transcendental awareness and expansion of the conscious state, are not related to psychological flexibility. Despite the abundant research that proves the influence of spirituality and psychological flexibility on people's health and well-being, the empirical results provided by the different instruments used in this study show two variables that directly influence health and well-being, however, they seem to do so independently.

Greater specificity is needed in the definition of the variables involved and in the psychometric techniques used for their measurement. However, since no previous research has been conducted, the results and conclusions of this study should be understood as a descriptive approach that will serve as a basis for the development of further research on the subject.

Bibliography

- Barnes-Holmes, Y., Hayes, S. C., Barnes-Holmes, D., & Roche, B. (2001). Relational frame theory: a post-Skinnerian account of human language and cognition. *Advances in Child Development and Behavior*, 28, 101-138. 10.1016/s0065-2407(02)80063-5
- Barraca, J. (2012). ¿Aceptación o control mental? Terapias de aceptación y mindfulness frente a las técnicas cognitivo-conductuales para la eliminación de pensamientos intrusos. *Análisis y Modificación de Conducta*, 37, 155-156. 10.33776/amc.v37i155-156.1317
- Bond, F., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., Waltz, T., & Zettle, R. D. (2011). Preliminary Psychometric Properties of the Acceptance and Action Questionnaire–II: A Revised Measure of Psychological Inflexibility and Experiential Avoidance. *Behavior Therapy*, 42(4), 676-688. 10.1016/j.beth.2011.03.007
- Borges, C. C., Dos Santos, P. R., Alves, P. M., Borges, R. C. M., Lucchetti, G., Barbosa, M. A., Porto, C. C., & Fernandes, M. R. (2021). Association between spirituality/religiousness and quality of life among healthy adults: a systematic review. *Health and Quality of Life Outcomes*, 19(1), 246. 10.1186/s12955-021-01878-7
- Burlacu, A., Artene, B., Nistor, I., Buju, S., Jugrin, D., Mavrichi, I., & Covic, A. (2019). Religiosity, spirituality and quality of life of dialysis patients: a systematic review. *International Urology and Nephrology*, 51, 1-12. 10.1007/s11255-019-02129-x
- Bustanza, L. y Sumarriva, N. (2018). Relación entre inteligencia espiritual y estrés percibido en estudiantes de pregrado: estudio preliminar. *Revista Peruana de Medicina Integrativa*, 2, 841. 10.26722/rpmi.2017.24.72

- Byrne, G., & O'Mahony, T. (2020). Acceptance and commitment therapy (ACT) for adults with intellectual disabilities and/or autism spectrum conditions (ASC): A systematic review". *Journal of Contextual Behavioral Science*, 18, 247-255.
10.1016/j.jcbs.2020.10.001
- Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7(3), 309-319. 10.1037/1040-3590.7.3.309
- Duche, A. B. D., Paredes Quispe, F. M., Gutierrez Aguilar, O. A. y Roldán Vargas, K. L. (2021). Religiosidad y espiritualidad en mujeres con cáncer de mama: revisión integrativa de la literatura. *Centro Sur*, 5(2), 22-37.
<https://dialnet.unirioja.es/servlet/articulo?codigo=8064421>
- Emmons, R. A. (2000). Is Spirituality an Intelligence? Motivation, Cognition, and the Psychology of Ultimate Concern. *The International Journal for the Psychology of Religion*, 10(1), 3-26. 10.1207/S15327582IJPR1001_2
- Emmons, R. A. (2003). *The Psychology of Ultimate Concerns: Motivation and Spirituality in Personality*. Guilford Press.
- Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science (New York, N.Y.)*, 196(4286), 129-136. 10.1126/science.847460
- Ferguson, M. A., Schaper, F., Cohen, A., Siddiqi, S., Merrill, S. M., Nielsen, J. A., Grafman, J., Urgesi, C., Fabbro, F., & Fox, M. D. (2022). A Neural Circuit for Spirituality and Religiosity Derived From Patients With Brain Lesions. *Biological Psychiatry*, 91(4), 380-388. 10.1016/j.biopsych.2021.06.016
- Fernández, C. (2016). Intervenciones enfermeras en el proceso de aceptación y compromiso con la vida ante una lesión medular adquirida: revisión de la literatura. *Revista Científica de la Sociedad Española de Enfermería Neurológica*, 43, 8-16.
10.1016/j.sedene.2015.11.002

- Frankl, V. (1966). Logotherapy and existential analysis. A review. *American Journal of Psychotherapy*, 20(2), 252-260. 10.1176/appi.psychotherapy.1966.20.2.252
- Fuentes, L. del C. (2019). La Religiosidad y la Espiritualidad ¿Son conceptos teóricos independientes? *Revista de Psicología*, 14(28), 109-119.
<https://erevistas.uca.edu.ar/index.php/RPSI/article/view/1742>
- Gardner, H. (2001). *La inteligencia reformulada. Las inteligencias múltiples en el siglo XXI*. Paidós Ibérica.
- González-Fernández, S., & Fernández-Rodríguez, C. (2019). Acceptance and Commitment Therapy in Cancer: Review of Applications and Findings. *Behavioral Medicine*, 45(3), 255-269. 10.1080/08964289.2018.1452713
- Harris, R. (2021). *Hazlo simple*. Obelisco.
- Hayes, S. (2021). *Una mente liberada: La guía esencial de la terapia de aceptación y compromiso (ACT)*. Planeta.
- Hayes, S. (2022). *The Acceptance and Action Questionnaire (AAQ-2)*.
<https://stevenchayes.com/wp-content/uploads/2019/08/The-Acceptance-and-Action-Questionnaire>.
- Hayes, S. C. (2004). Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behavior Therapy*, 35(4), 639-665. 10.1016/S0005-7894(04)80013-3
- Katerndahl, D. A. (2008). Impact of Spiritual Symptoms and Their Interactions on Health Services and Life Satisfaction. *The Annals of Family Medicine*, 6(5), 412-420. 10.1370/afm.886
- Keinonen, K., Puolakanaho, A., Lappalainen, P., Lappalainen, R., & Kiuru, N. (2021). Developmental trajectories of experiential avoidance and depressive symptoms and association to health behaviors among adolescents during brief guided online

- acceptance and commitment therapy. *Journal of Contextual Behavioral Science*, 22, 24-31. 10.1016/j.jcbs.2021.08.002
- King, D., & DeCicco, T. (2009). A Viable Model and Self-Report Measure of Spiritual Intelligence. *International Journal of Transpersonal Studies*, 28(1). 10.24972/ijts.2009.28.1.68
- Landi, G., Pakenham, K. I., Boccolini, G., Grandi, S., & Tossani, E. (2020). Health Anxiety and Mental Health Outcome During COVID-19 Lockdown in Italy: The Mediating and Moderating Roles of Psychological Flexibility. *Frontiers in Psychology*, 11. <https://www.frontiersin.org/article/10.3389/fpsyg.2020.02195>
- Lenhard, W., & Lenhard, A. (2017). Computation of Effect Sizes. 10.13140/RG.2.2.17823.92329
- Luciano, C. (2016). Evolución de ACT. *Análisis y modificación de conducta*, 42(165–166), 3-14. <https://dialnet.unirioja.es/servlet/articulo?codigo=5521292>
- Luciano, C., Ruiz, F. y Luciano, C. (2009). Eficacia de la terapia de aceptación y compromiso (ACT) en la mejora del rendimiento ajedrecístico de jóvenes promesas. *Psicothema*, 21(3), 347-352.
- Manchón, J., Quiles, M. J., León, E. M., & López-Roig, S. (2020). Acceptance and Commitment Therapy on physical activity: A systematic review. *Journal of Contextual Behavioral Science*, 17, 135-143. 10.1016/j.jcbs.2020.07.008
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(3), 370–396.
- Millman, D. (1995). *The Laws of Spirit: Simple, Powerful Truths for Making Life Work*. H. J. Kramer.
- Moafi, F., Momeni, M., Tayeba, M., Rahimi, S., & Hajnasiri, H. (2021). Spiritual Intelligence and Post-abortion Depression: A Coping Strategy. *Journal of Religion and Health*, 60(1), 326-334. 10.1007/s10943-018-0705-0

- Moreira-Almeida, A., Sharma, A., van Rensburg, B. J., Verhagen, P. J., & Cook, C. C. H. (2016). WPA Position Statement on Spirituality and Religion in Psychiatry. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)*, *15*(1), 87-88. 10.1002/wps.20304
- Navarro, N. y Trigueros, R. (2021). Generación de estigma hacia la esquizofrenia en estudiantes universitarios desde la teoría del marco relacional: una réplica experimental. *Behavioral Psychology/Psicología Conductual*, *29*, 73-93. 10.51668/bp.8321104s
- Organización Mundial de la Salud. (1999). 52a Asamblea Mundial de la Salud (p. 309). <https://apps.who.int/iris/handle/10665/258944>
- Organización Mundial de la Salud. (2020). *Constitución de la Organización Mundial de la Salud. Documentos básicos*. (49th ed.). https://apps.who.int/gb/bd/pdf_files/BD_49th-sp.pdf#page=7
- Parra, A. y Ribilla, N. (2020). Relación entre inteligencia espiritual y satisfacción existencial con la experiencia paranormal. *Persona*, 101-116. 10.26439/persona2020.n023(2).4854
- Patrón-Espinosa, F. de J. (2013). La evitación experiencial como dimensión funcional de los trastornos de depresión, ansiedad y psicóticos. *Journal of Behavior, Health & Social Issues*, *5*(1), 85-95. 10.5460/jbhsi.v5.1.38728
- Paulos-Guarnieri, L., Linares, I. M. P., & El Rafihi-Ferreira, R. (2022). Evidence and characteristics of Acceptance and Commitment Therapy (ACT)-based interventions for insomnia: A systematic review of randomized and non-randomized trials. *Journal of Contextual Behavioral Science*, *23*, 1-14. 10.1016/j.jcbs.2021.11.001

- Pérez, M. C. (2016). Inteligencia Espiritual. Conceptualización y cartografía psicológica. *International Journal of Developmental and Educational Psychology. Revista INFAD de Psicología.*, 2(1), 63. 10.17060/ijodaep.2016.n1.v2.294
- Persinger, M., Saroka, K., Koren, S., & St-Pierre, L. (2009). The Electromagnetic Induction of Mystical and Altered States within the Laboratory. *Journal of Consciousness Exploration & Research*, 1(7), 808-830.
- Philip, J., & Cherian, V. (2021). Acceptance and commitment therapy in the treatment of Obsessive-Compulsive Disorder: A systematic review. *Journal of Obsessive-Compulsive and Related Disorders*, 28(100603). 10.1016/j.jocrd.2020.100603
- Ramachandran, V. S., & Blakeslee, S. (1998). *Phantoms in the brain: probing the mysteries of the human mind*. William Morrow.
- Rocheffort, C., Baldwin, A. S., & Chmielewski, M. (2018). Experiential Avoidance: An Examination of the Construct Validity of the AAQ-II and MEAQ. *Behavior Therapy*, 49(3), 435-449. 10.1016/j.beth.2017.08.008
- Ruiz, F. (2010). A review of Acceptance and Commitment Therapy (ACT) empirical evidence: Correlational, experimental psychopathology, component and outcome studies. *International Journal of Psychology and Psychological Therapy*, 10, 125-162.
- Ruiz, F. J., Langer Herrera, Á. I., & Luciano, C. (2013). Measuring experiential avoidance and psychological inflexibility: The Spanish version of the Acceptance and Action Questionnaire-II. *Psicothema*, 25(1), 123-129. 10.7334/psicothema2011.239
- Saad, M., De Medeiros, R., & Mosini, A. C. (2017). Are We Ready for a True Biopsychosocial-Spiritual Model? The Many Meanings of “Spiritual”. *Medicines*, 4(4), 79. 10.3390/medicines4040079

- Salgado, A. C. (2014). Revisión de estudios empíricos sobre el impacto de la religión, religiosidad y espiritualidad como factores protectores. *Propósitos y Representaciones*, 2(1), 121-159. 10.20511/pyr2014.v2n1.55
- Shabani, M. J., Mohsenabadi, H., Omid, A., Lee, E. B., Twohig, M. P., Ahmadvand, A., & Zanjani, Z. (2019). An Iranian study of group acceptance and commitment therapy versus group cognitive behavioral therapy for adolescents with obsessive-compulsive disorder on an optimal dose of selective serotonin reuptake inhibitors. *Journal of Obsessive-Compulsive and Related Disorders*, 22, 100440. 10.1016/j.jocrd.2019.04.003
- Singer, W. (1999). Neurobiology: Striving for coherence. *Nature*, 397(6718), 391-393. 10.1038/17021
- Soriano, M. C. L. y Salas, S. V. (2006). La Terapia de Aceptación y Compromiso (ACT): fundamentos, características y evidencia. *Papeles del psicólogo*, 27(2), 79-91. <https://dialnet.unirioja.es/servlet/articulo?codigo=2009007>
- Thekiso, T. B., Murphy, P., Milnes, J., Lambe, K., Curtin, A., & Farren, C. K. (2015). Acceptance and Commitment Therapy in the Treatment of Alcohol Use Disorder and Comorbid Affective Disorder: A Pilot Matched Control Trial. *Behavior Therapy*, 46(6), 717-728. 10.1016/j.beth.2015.05.005
- Thompson, B. L., Twohig, M. P., & Luoma, J. B. (2021). Psychological flexibility as shared process of change in acceptance and commitment therapy and exposure and response prevention for obsessive-compulsive disorder: A single case design study. *Behavior Therapy*, 52(2), 286-297. 10.1016/j.beth.2020.04.011
- Törneke, N., Luciano, C., Barnes-Holmes, Y., & Bond, F. W. (2016). RFT for clinical practice : three core strategies in understanding and treating human suffering. In *The*

Wiley handbook of contextual behavioral science (pp. 254–272). Wiley-Blackwell.

<http://hdl.handle.net/1854/LU-8510023>

Torralba, F. (2010). *Inteligencia Espiritual*. Plataforma.

Twohig, M. P., Abramowitz, J. S., Smith, B. M., Fabricant, L. E., Jacoby, R. J., Morrison, K.

L., Bluett, E. J., Reumn L., Blakey, S. M., & Ledermann, T. (2018). Adding acceptance and commitment therapy to exposure and response prevention for obsessive-compulsive disorder: A randomized controlled trial. *Behaviour Research and Therapy*, 108, 1-9. 10.1016/j.brat.2018.06.005

Twohig, M. P., & Levin, M. E. (2017). Acceptance and Commitment Therapy as a Treatment for Anxiety and Depression: A Review. *The Psychiatric Clinics of North America*, 40(4), 751-770. 10.1016/j.psc.2017.08.009

Twohig, M., Vilardaga, J. P., Levin, M. E., & Hayes, S. (2015). Changes in psychological flexibility during acceptance and commitment therapy for obsessive compulsive disorder. *Journal of Contextual Behavioral Science*, 4(3), 196-202. 10.1016/J.JCBS.2015.07.001

Tyndall, I., Waldeck, D., Pancani, L., Whelan, R., Roche, B., & Dawson, D. L. (2019). The Acceptance and Action Questionnaire-II (AAQ-II) as a measure of experiential avoidance: Concerns over discriminant validity. *Journal of Contextual Behavioral Science*, 12, 278-284. 10.1016/j.jcbs.2018.09.005

Urchaga-Litago, J. D., Morán-Astorga, C. y Fínez-Silva, M. J. (2019). La religiosidad como fortaleza humana. *Revista INFAD de Psicología. International Journal of Developmental and Educational Psychology.*, 1(1), 309-316. 10.17060/ijodaep.2019.n1.v1.1429

Valiente-Barroso, C., Sáiz-Obeso, J., Valiente-Barroso, B., Lombraña-Ruiz, R. y Martínez-Vicente, M. (2020). Inflexibilidad psicológica gestionada por profesionales sanitarios

- durante el estado de alarma vinculado al COVID-19. *Apuntes de psicología*, 38(3), 149-158. <https://www.apuntesdepsicologia.es/index.php/revista/article/view/821>
- van de Graaf, D. L., Trompetter, H. R., Smeets, T., & Mols, F. (2021). Online Acceptance and Commitment Therapy (ACT) interventions for chronic pain: A systematic literature review. *Internet Interventions*, 26, 100465. 10.1016/j.invent.2021.100465
- Veehof, M. M., Trompetter, H. R., Bohlmeijer, E. T., & Schreurs, K. M. G. (2016). Acceptance- and mindfulness-based interventions for the treatment of chronic pain: a meta-analytic review. *Cognitive Behaviour Therapy*, 45(1), 5-31. 10.1080/16506073.2015.1098724
- Villatte, M., Villatte, J., & Hayes, S. (2016). *Mastering the Clinical Conversation: Language as Intervention*. Guilford Press.
- Yıldız, E. (2020a). The effects of acceptance and commitment therapy in psychosis treatment: A systematic review of randomized controlled trials. *Perspectives in Psychiatric Care*, 56(1), 149-167. 10.1111/ppc.12396
- Yıldız, E. (2020b). The effects of acceptance and commitment therapy on lifestyle and behavioral changes: A systematic review of randomized controlled trials. *Perspectives in Psychiatric Care*, 56(3), 657-690. 10.1111/ppc.12482
- Zinnbauer, B., Pargament, K., Cole, B., Rye, M., Butter, E., Belavich, T., Hipp, K. M., Scott, A., & Kadar, J. (1997). Religion and spirituality: Unfuzzifying the fuzzy. *Journal for the Scientific Study of Religion*, 36(4), 549-564. 10.2307/1387689
- Zohar, D. y Marshall, I. (2001). *Inteligencia espiritual*. Plaza y Janés Editores S.A.

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