

ΠΑΝΤΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΚΟΙΝΩΝΙΚΩΝ ΚΑΙ ΠΟΛΙΤΙΚΩΝ ΕΠΙΣΤΗΜΩΝ

PANTEION UNIVERSITY OF SOCIAL AND POLITICAL SCIENCES



SCHOOL OF SOCIAL SCIENCES

DEPARTMENT OF PSYCHOLOGY

POST-GRADUATE STUDIES PROGRAM

“PSYCHOLOGY”

SPECIALITY: IDENTITIES AND INTERPERSONAL RELATIONSHIPS

ATTACHMENT AND CHARACTER: A COMPARATIVE ANALYSIS IN THE CONTEXT OF
CLOSE RELATIONSHIPS

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MASTER’S THESIS

September 2023

Τριμελής Επιτροπή

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Περίληψη

Οι διαπροσωπικές σχέσεις αποτελούν αναπόσπαστο κομμάτι της ζωής και καθοριστικό παράγοντα ανάπτυξης, με ερευνητικά αποδεδειγμένες ωφέλιμες επιδράσεις σε σωματικό, πνευματικό και ψυχολογικό επίπεδο. Ωστόσο, δεν είναι λίγα τα άτομα τα οποία αντιμετωπίζουν δυσκολίες στη σύναψη σχέσεων, με αντιπροσωπευτικότερο, ενδεχομένως, κομμάτι του πληθυσμού τα άτομα με ανασφαλές ύφος δεσμού. Η παρούσα μελέτη ερευνά τις διαπροσωπικές σχέσεις από το πρίσμα της θετικής ψυχολογίας, επιχειρώντας να εντοπίσει τα θετικά στοιχεία του χαρακτήρα που εισέρχονται ως διαμεσολαβητικοί παράγοντες στη σχέση μεταξύ ανασφαλούς ύφους δεσμού και μιας σειράς σχεσιακών εκβάσεων, όπως η δέσμευση, η ικανοποίηση, το πάθος, η οικειότητα και η συνολική προσλαμβανόμενη ποιότητα της σχέσης, και τα οποία θα μπορούσαν να αποτελέσουν τη βάση για στοχευμένες παρεμβάσεις με σκοπό τη βελτίωση των διαπροσωπικών σχέσεων. Στα αποτελέσματα παρουσιάζονται τα θετικά στοιχεία του χαρακτήρα που βρέθηκαν να διαμεσολαβούν τις παραπάνω σχέσεις, καθώς και διαφορές φύλου και σεξουαλικού προσανατολισμού.

Λέξεις-κλειδιά: διαπροσωπικές σχέσεις, θετική ψυχολογία, θετικά στοιχεία του χαρακτήρα, δέσμευση, ικανοποίηση

Abstract

Personal relationships are an integral part of life and an essential component of development, with well documented beneficial effects on physical, mental and psychological level. However, not few people encounter difficulties in forming relationships, insecurely attached persons being a most representative such population. The present study seeks to examine personal relationships through a positive psychology viewpoint, attempting to reveal the character strengths which play a mediating role between insecure attachment and a series of relational outcomes, such as commitment, satisfaction, passion, intimacy and perceived relationship quality, which could offer a basis for targeted interventions aiming at improving personal relationships. Results present character strengths shown as mediators as well as sex and sexual orientation differences.

Key-words: personal relationships, positive psychology, character strengths, commitment, satisfaction

Introduction

It is a basic human need to form and maintain personal relationships (Baumeister & Leary, 1994; Ryan & Deci, 2017). Close relationships are a key factor in fulfilling an innate desire to connect and feel loved (Furman & Schaffer, 2003). The beneficial effect of positive relationships on personality development (Arnett, 2000; Collins, 2003), psychology and physiology (e.g., Cohen & Wills, 1985) and mental and physical health (e.g., Loving & Slatcher, 2013) has been well documented. Conversely, the impact of toxic or negative relationships is immense (e.g., Eisenberger et al., 2003; Williams, 2007). Such influence is cross-cultural and universal (Fletcher, 2002).

Research has shown that for some individuals it is more difficult to exist in a relationship and to obtain satisfaction than for others. Some differences have been related to age, gender, and ethnicity (e.g., Dolan et al., 2008; Proctor et al., 2009). Adult attachment style has systematically been found to be highly associated with relational outcomes and to account for individual differences in relational outcomes (e.g. Mikulincer & Shaver, 2007). Similarly, individual differences have been associated with dispositional factors, such as negative and positive affectivity (e.g., Clark et al., 1994) rejection sensitivity (e.g., Downey et al., 1999) and personality (e.g., Dyrenforth et al., 2010; Luo, et al., 2008; Robins et al., 2000). In fact, it has often been suggested that couple processes may be affected by the partners' character (Fife, 2015; Gottman 1995; Gottman 1999; Knapp, 2015). A growing body of literature has focused on examining relations between qualities of character and relationship variables and outcomes (e.g., Goddard et al., 2016; Wagner et al., 2021). Although the main focus of literature has been on the factors which distress relationships, recently there has been a shift of this focus to the elements that make relationships succeed and thrive (e.g., Boiman-Meshita & Littman-Ovadia, 2020; Kashdan et al., 2018). The aim of this paper is to examine the role of positive character traits in relationship commitment and satisfaction. In addition, the interaction of those traits with attachment style will be studied, in order to highlight factors which facilitate commitment and satisfaction and which could, potentially,

indicate areas in which interventions could prove beneficial in attenuating the effects of problematic attachment patterns and in promoting optimum relationship processes.

Adult attachment

The concept of adult attachment is rooted in the work of psychoanalyst John Bowlby and his collaborator Mary Ainsworth (e.g., Ainsworth, 1979; Bowlby, 1953, 1969, 1973, 1988; Bartholomew & Horowitz, 1991; Bartholomew & Shaver, 1998; Mikulincer & Shaver, 2007). The theory of attachment combines psychoanalysis, ethology, developmental psychology and cognitive psychology and has been tested and elaborated in thousands of studies since its inception (Mikulincer & Shaver, 2003). According to it, human babies are predisposed to bind themselves emotionally to their primary caregiver (*attachment figure*), a predisposition which manifests itself in a number of *attachment behaviors*, i.e., a set of instinctive, goal-directed responses, which enhance an offspring's chances of survival. The caregiver's reactions to those attachment behaviors result in the infant's internalization of such interaction, in the form of *attachment working models*, i. e., a system of mental representations of the self (whether one is able or deserves to receive care and support), others (whether they are available to respond to one's needs) and the world (whether it is a safe place). Available and responsive attachment figures promote a sense of security, connectedness and confidence in proximity-seeking. Unavailable and unresponsive attachment figures create a sense of insecurity and lack of confidence in the self and others, in which case an infant develops strategies characterized by avoidance and anxiety rather than proximity-seeking. In short, a person's *attachment style* is a chronically accessible, systematic pattern of relational emotions, representations, expectations and behaviors, which operates automatically and unconsciously and which is modeled upon the person's attachment history.

An initial typology by Ainsworth (Ainsworth et al., 1978) proposed 3 attachment styles in infancy: *secure*, *anxious* and *avoidant*. A conceptualization of adult attachment style by Hazan and Shaver (1978) proposed a model of 3 attachment styles as identified by Ainsworth and colleagues in

infants: *secure*, *anxious-ambivalent* and *avoidant*. Subsequent studies (e.g., Bartholomew & Horowitz, 1991; Brennan, et al., 1998) proposed a conceptualization of adult attachment based on 2 dimensions, avoidance and anxiety, but also considering the positive and negative view of the self and others, resulting in 4 categories: *secure*, *preoccupied*, *dismissing* and *fearful* attachment. Individuals with a secure attachment style have positive views of themselves and others and are low on anxiety and avoidance. They are able to form close relationships, trust others and feel comfortable with intimacy. Those with a preoccupied attachment style have a positive view of others but a negative one of themselves. They are overly dependent on their partners, tend to rely on them for validation and may frequently experience intense emotional reactions to perceived threats of abandonment or rejection in a relational context. This attachment style is similar to the anxious-ambivalent attachment style. Dismissing attachment style, similar to the avoidant, describes people with a positive view of themselves and a negative view of others. They prioritize independence and self-reliance over closeness, in an effort to avoid emotional engagement. Fearful individuals are characterized by negative views both of self and others, along with a fear of rejection. Those individuals may desire emotional and relational closeness but are likely to experience fear in pursuing them because they have difficulty trusting others.

Positive relationships

The emergence of Positive Psychology has claimed focus to a series of positive concepts in the last two decades. Recent research has looked beyond problem-based predictors, shifting the attention from pathology to include positive variable processes. Positive relationships have been foregrounded and extensively researched into, and are now considered one of the five pillars of well-being (Seligman, 2011). Yet, despite the expanding literature and a multitude of research findings, positive relationships remain a field still largely general and undefined, which is reflected in the lack of a specific definition. Rather, they seem to be used as an umbrella term, with the qualifier '*positive*' applying potentially and equally to their functions, characteristics, outcomes,

effects, even the way they are perceived and engaged into by people in a Pollyanna way of thinking. In general, positive relationships are synonymous to close, important, supportive or meaningful relationships (Mitskidou et al., 2021). Studies so far have mainly focused on their outcomes, examining their connection with a series of variables such as happiness, well-being, physical and mental health etc, and less on specifying their components or the characteristics of the partners which constitute positive relationships. To date, the list of benefits of positive relationships is literally endless on physical, mental and psychological level (e.g., Collins et al., 1993; Cohen, 2004; Lakey & Cronin, 2008; Lin et al., 1986; Thoits, 1995). All theories about well-being identify positive relationships as a core element and not as a simple cause of it (Keyes, 2002; Hone et al., 2014; Ryff, 2014). It has been argued that positive relationships are the most important factor of well-being and life satisfaction (Reis & Gable, 2003; Waldinger, 2015). According to Seligman (2010), people are motivated to seek out and maintain positive relationships even when it brings none of the other elements of well-being. Shedding light on the personality traits which promote positive relationships would implicate practical and clinical benefits. Clients' requests for more positive relating would be more accurately and adequately responded to in counseling and psychotherapy if there were better knowledge of the pillars that compose positive relationships. Similarly, interventions aiming at utilizing the beneficial effects of positive relationships could be more successfully designed under such knowledge.

Character strengths

In 1999, a group of researchers, including Donald Clifton, Mihaly Csikszentmihalyi, Ed Diener, Kathleen Hall Jamieson, Robert Nozick, Daniel Robinson, Martin Seligman and George Vaillant attempted to create a thorough list of character strengths (Park & Peterson, 2009). Peterson and Seligman (2004) extended this initial work to a worldwide study of traits, using as a framework Allport's, Eysenck's and Cattell's theories of personality, McCrae and Costa's Five-Factor Model of personality, the Cawley Virtues of personality, the Schwartz Theory of Basic Human Values and

Maslow's Theory of Self-actualization (Macdonald et al., 2008). Following a study of texts from all philosophical and religious movements, a selection of the virtues found common in all prominent religious traditions was made, notably Confucianism, Taoism, Hinduism, Judaism, Buddhism, Islamism and Christianity (Dahlsgaard et al., 2005). Peterson and Seligman (2004) came to identify 24 character strengths, assigned to 6 broader core virtues. which are universally valued across cultures and religions, a classification known as Values In Action (VIA). The classification signifies a cornerstone of positive psychology, aimed at studying what makes life worth living (Seligman & Csikszentmihalyi, 2000). The strengths are conceptualized as traits that are relatively stable across time and context and they enable individuals to achieve optimal psychological functioning or flourishing. Relative stability means that traits are shown to a similar degree across situations, but there is also variability between different contexts.

VIA virtues are core aspects of human excellence. They are universal, have moral value and are believed to be biologically-evolutionary based, which means that they prevailed over others through the process of natural selection. The fact that they are deemed innate follows that they can be developed and strengthened over time. Character strengths are the components of the virtues, they are the more specific psychological processes or mechanisms that define the virtues. The classification of character strengths is, in essence, a handbook of healthy human functions and is the positive psychology counterpart to the Diagnostic and Statistical Manual of Mental Disorders – DSM (Σταλίκας & Μυτσκίδου, 2011).

Peterson and Seligman (2004) went on to create a psychometric tool based on this classification. Values in Action – Inventory of Strengths (VIA-IS) describes areas of optimum human functioning, which do not represent categories but a continuum. Each person receives a different score and the instrument, in fact, examines individual differences. Identifying and cultivating one's *signature strengths* (strengths that are most typical of an individual), can lead to greater happiness, resilience and well-being, and may provide a route to a psychological fulfillment (Seligman et al., 2005).

The VIA classification of virtues and character strengths is described as follows (Park & Peterson, 2009):

1. Wisdom and Knowledge: the virtue of mind

- creativity: originality in thought and behavior
- curiosity: interest in experience
- open-mindedness (or judgment): carefully examining things from all aspects impartially
- love of learning: love of mastering new skills and knowledge
- perspective: providing wise counsel to others and approaching life in a meaningful way

2. Courage: the virtue of soul

- honesty: speaking the truth, authenticity and integrity
- bravery: not withdrawing from threat, difficulty or challenge
- persistence: completing one's undertakings
- zest: approaching life with enthusiasm and excitement

3. Humanity: the interpersonal virtue

- kindness: being good to others
- love: valuing close relations with others, sharing and caring
- social intelligence: awareness of others' motives and feelings

4. Justice: the social virtue

- fairness: treating people with justice
- leadership: organizing group activities towards successful achievement
- teamwork: working well in a team

5. Temperance: the intrapersonal virtue

- forgiveness: forgiving those who have done harm
- modesty: being unassuming in the estimation of one's abilities or achievements
- prudence: care and thought about one's choices, not assuming risk without reason
- self-regulation: regulation of one's behavior and feelings

6. Transcendence: the spiritual virtue

- appreciation of beauty and excellence: appreciating and admiring beauty and excellence
- gratitude: awareness of and thankfulness for good things that happen
- hope: expectation for good things to happen
- humor: appreciating laughing and joking and making people laugh
- religiousness (or spirituality): beliefs about a higher purpose and meaning in life

This particular division of virtues and character strengths has been theoretically grounded, however, examination of the factorial structure of the VIA-IS by researchers has consistently yielded 3-5 factors (Brdar & Kashdan, 2010; Littman-Ovadia & Lavy, 2012; Macdonald et al. 2008; McGrath, 2014; Singh & Chousbisa, 2010). McGrath's (2015) study is the most comprehensive. Utilizing factor analysis and collecting data from four samples of a total of over a million subjects, McGrath proposes a 3-factor model of character strengths: *caring*, which includes strengths associated with emotional and interpersonal qualities, such as, kindness, love and gratitude; *self-control*, which includes strengths associated with regulation and ability in achieving goals, such as self-regulation, prudence and modesty; and *inquisitiveness*, which includes strengths such as curiosity, love of learning, hope etc, reflecting intellectual qualities, inquiry and innovation. Brdar and Kashdan (2010) propose a 4-factor model assigning character strengths to *Interpersonal Strengths*, *Fortitude*, *Vitality* and *Cautiousness*.

Another differentiation from the original division is proposed by Peterson (2006). According to it, character strengths lie along two dimensions in a circumplex model, with an x-axis depicting strengths focused on the *self* (e.g., curiosity) versus strengths focused on *others* (e.g., forgiveness); and a y-axis depicting strengths associated with emotional expression, the *strengths of the heart* (e.g., zest) versus strengths associated with intellectual restraint, the *strengths of the mind* (e.g., prudence). The current study utilizes the original classification as the aim is to examine all 24 character strengths separately in order to obtain a detailed profiling of the attachment styles and the relational variables studied here and not to use any kind of grouping which, although would limit the number of statistical analyses, would offer a less analytical picture of the particular variables.

Research overview

Over the past several decades, a considerable body of research has extensively researched attachment style and has systematically linked it to relationship satisfaction & commitment. Early evidence (e.g., Gottman & Levenson, 1988; Keelan et al., 1998; Kobak & Hazan, 1991; Pistole, 1989) suggested that insecure attachment style was associated with higher levels of dissatisfaction and poorer adjustment whereas secure individuals reported higher levels of satisfaction and commitment in their romantic relationships. Findings comparing relationship length of the different attachment styles were not always consistent (e.g., Feeney & Noller, 1990; Hazan & Shaver, 1987; Senchak & Leonard, 1992). These findings have been replicated in numerous studies since then. It is now common knowledge that insecure attachment style consistently predicts poorer outcomes in romantic relationships and that there is a positive relationship between secure attachment style and romantic relationship commitment and satisfaction universally (e.g., Dastras & Panah Ali, 2022; Freeman et al., 2023; Mikulincer & Shaver, 2012; Šlosáriková, 2021).

A vast amount of research has also examined character strengths. With reference to individual differences, it has been found that women tend to report higher levels of appreciation of beauty and excellence, love, kindness and gratitude whereas men report higher levels of bravery and

creativity (Heintz, et al., 2019; Lopez et al., 2018). Married individuals have been shown to report forgiveness more often compared to single individuals (Lopez et al., 2018). When it comes to age differences, younger people report the character strengths of creativity, teamwork, zest, modesty, persistence and humor more often while older adults tend to report judgment, perspective, leadership, forgiveness and spirituality (Lopez et al., 2018; Park & Peterson, 2009). Individuals of lower education level report higher levels of love for learning (Lopez et al., 2018). Pezirkianidis et al. (2020) examined the conceptual framework of character strengths in the Greek cultural context and found that Greek women report higher levels of fairness, appreciation of beauty and excellence, gratitude and love of learning whereas Greek men report higher levels of creativity, bravery, curiosity, humor, self-regulation and humor. As for age differences, they found that adults aged 45 to 54 years old report higher levels of interpersonal strengths whereas young adults aged 18 to 25 report the lowest levels of these strengths. Age differences concerning the strengths of intellect showed that Greek adults aged 18 to 34 report higher levels of perspective while those aged 35 to 44 report the lowest levels.

Research in character strengths has primarily focused on their relationship with positive variables. In this respect, one of the most important findings, which has been shown repeatedly in multiple studies globally, is the close link between wellbeing and character strengths, and specifically, hope, zest, curiosity, love and gratitude (e.g., Brdar & Kashdan, 2010; Hausler et al., 2017; Park et al., 2004; Peterson et al., 2007; Shimai et al., 2006). The use of character strengths has, also, been found to lead to an increased feeling of meaning in life (Littman-Ovadia & Steger, 2010). Moreover, one of the most consistent findings has been the association between character strengths and happiness (Peterson et al., 2007). The character strengths consistently related to life satisfaction are gratitude, hope, zest, curiosity, and most importantly, love (Park & Peterson, 2006; Park et al., 2004).

In an interpersonal context, according to the PERMA model (Seligman, 2012), using character strengths leads to better relationships. Character strengths have been examined in

conjunction with a variety of relational variables. A series of studies found that curiosity is positively related to relational closeness and that only curious people feel close to partners during intimate and small-talk conversations (McKnight et al., 2011). Another study of 422 couples revealed that character strengths, enacted as marital virtues, and more specifically as other-centeredness and generosity in the relationship (namely forgiveness, fairness, acceptance, appreciation and sacrifice) predict relationship adjustment (Veldorale-Brogan et al., 2010). Humility, kindness and positivity have, also, been found to correlate significantly with marital satisfaction (Goddard et al., 2016). Another study of 177 married couples revealed that self-control, caring and inquisitiveness were related to marital quality (Boiman-Meshita & Littman-Ovadia 2020). High levels of those same character strengths, caring, inquisitiveness and self-control were also found to be especially desirable for long-term mating, with the variable of self-control having the largest effect (Brown et al., 2020). A study in married couples ranging in age and years of marriage found a positive relationship of all 24 character strengths to marital satisfaction (Guo et al., 2015). A review of 66 studies of same-sex relationships also revealed the positive outcomes of character strengths for same-sex couples (Rostosky & Riggle, 2017). Kashdan et al. (2018) examined the perceived character strengths of one's relationship partner and found that higher recognition and appreciation of the partner's character strengths was a significant predictor of greater relationship commitment, intimacy, satisfaction, investment and self-expansion. Yet, the most interesting conclusion of this study was that these findings were not explained by the Big Five personality traits, a finding which illustrates the unique contribution of character strengths to close relationships.

A general observation about the research of character strengths is that it is mainly focused on wellbeing and life satisfaction and it has produced a large amount of empirical evidence in this field. With regard to relationship variables, however, the research of character strengths is also considerable but it seems that studies examining the association of character strengths with

relationship satisfaction are scarce and, when it comes to relationship commitment, which is defined as the intention to persist in a relationship (Rusbult et al., 2011), they are almost nonexistent.

On the other hand, research which examines character strengths in attachment styles is by far exhaustive. Peterson & Park (2007), report that individuals with a secure attachment style scored higher on most character strengths in their study, in contrast to fearful individuals who consistently scored lower. The largest effect sizes were for love, hope and zest. Lavy & Littman-Ovadia (2011) also found that most strengths were negatively associated with both avoidant and anxious attachment styles. Moreover, the relationship between avoidance and lower life satisfaction was fully mediated by love, zest, gratitude and hope whereas anxiety life satisfaction was partially mediated by hope, curiosity and perspective. In another study (Zhang et al., 2017), both attachment avoidance and attachment anxiety were found to correlate negatively with dispositional gratitude. The relationship between avoidance and gratitude was indirectly mediated by perceived social support and self-esteem while in the case of anxiety the mediation was both direct and indirect, through self-esteem. No study so far seems to have examined the combined effect of character strengths and attachment style on relationship satisfaction and commitment.

The present study

In light of what has been discussed so far, it is evident that, despite the empirical evidence, it is not yet possible to draw a solid conclusion about character qualities and relationship outcomes. Research into the positive traits that differentiate securely from insecurely attached individuals needs to be extended to a series of relational variables such as commitment, satisfaction and passion. This information will expand knowledge of what traits can be reinforced through interventions or therapy so that people can enjoy better relationships. It is now a fact that studying only what is pathological or negative in insecurely attached individuals will not suffice in order to promote healthier, more positive relationships. The current study attempts to answer the following research questions:

1. Are there any sex differences in character strengths in the Greek population, and if yes, in which ones?
2. Are there any differences between heterosexual and non-heterosexual populations with reference to character strengths and, if yes,, which are those differences?
3. Which character strengths mediate the relationship between attachment style and commitment, satisfaction, passion, intimacy and overall relationship quality?

Method

Participants and procedure

The data were collected from a sample of Greek-speaking adults. The questionnaire was presented in electronic form and was promoted mainly through online social networks from May 2023 to July 2023 using convenience and network sampling. The initial number of participants was $N = 626$. 25 responses were removed because the participants reported never having had a relationship and also because of inconsistencies in the responses about relationship status and duration, resulting in a sample of $N = 601$. 138 (23%) participants were male, 459 (76,4%) were female and 4 participants reported “other”. Ages ranged from 16 to 73 years ($M = 38.4$, $S.D. = 12.57$). 62% of participants reported Athens as their place of residence. 446 participants (74,2%) reported an exclusively heterosexual orientation and 155 (25,8%) a non-exclusively heterosexual one. Demographics are presented in Table 1 and marital status information in Table 2. Completion required approximately 10 minutes and it was anonymous, however participants were informed that they could optionally fill in their email and be informed about the results of the research once it was completed. They were offered no other reward. The research is in compliance with the Helsinki Declaration and the Nuremberg Code and was approved by the Panteion University Research Ethics Committee.

Table 1: Demographics

Sex	Men		Women	
	<i>n</i>	%	<i>n</i>	%
Residence				
Athens	104	75.4%	269	58.6%
Thessaloniki	5	3.6%	36	7.8%
City	21	15.2%	117	25.5%
Village	4	2.9%	18	3.9%
Abroad	4	2.9%	19	4.1%
Income				
Up to €500	28	20.3%	96	20.9%
€501-€1000	38	27.5%	149	32.5%
€1001-€1500	41	29.7%	122	26.6%
€1501-€2000	11	8.0%	42	9.2%
€2001 and more	20	14.5%	50	10.9%
Education				
No education	0	0.0%	0	0.0%
Elementary school	0	0.0%	1	0.2%
Junior high school	4	2.9%	8	1.7%
High school	30	21.7%	79	17.2%
Vocational school	5	3.6%	27	5.9%
University	59	42.8%	171	37.3%
Post-graduate studies	37	26.6%	165	35.9%
PhD	3	2.2%	8	1.7%

Table 2: Marital status information

	Men			Women		
	<i>n</i>	%	<i>M</i>	<i>n</i>	%	<i>M</i>
Marital Status						
Single	41	29.7%		89	19.4%	
Married	27	19.6%		173	37.7%	
Divorced	12	8.7%		38	8.3%	
Widowed	0	0.0%		4	0.9%	
Registered Partnership	2	1.4%		7	1.5%	
In a relationship	49	35.5%		138	30.1%	
In a free relationship	7	5.1%		10	2.2%	
Relationship duration (months)			60			104
Number of Relationships			5			4

Note. *M* = Mean

Measures

The self-report questionnaire that was administered to the participants contained the following measures:

Demographics. Demographic information included sex, age, education level, monthly income, marital and occupational status as well as relationship length, number of friends, family origin and fidelity status. There were also 3 questions regarding sexual behavior, attitude and identity.

Sexual Orientation. The Kinsey Scale (Kinsey et al., 1948) was used to determine sexual orientation. It consists of 7 items ranging from 0 (*Exclusively heterosexual*) to 6 (*Exclusively homosexual*).

Attachment style. The Experience in Close Relationship Scale-Short Form - ECR-S (Brennan et al., 1998; Wei et al., 2007) was used to measure adult attachment style. It is a 12-item self-report

questionnaire with 2 subscales: Avoidance subscale comprises 6 items (e.g., “*I try to avoid getting too close to my partner*”) and Anxiety comprises 6 items (e.g., “*I worry that romantic partners won’t care about me as much as I care about them*”). The short version possesses a stable factor structure and acceptable internal consistency (coefficient alphas have been found to range from .77 to .86 for the Anxiety subscale and from .78 to .88 for the Avoidance subscale); test-retest reliability ($r = .82$ for Anxiety and $.89$ for Avoidance, respectively); and construct validity (provided by the positive association with similar concepts), and it retains psychometric properties similar to those of the original. Answers are rated on a 7-point Likert scale ranging from 1 (=“*Strongly disagree*”) to 7 (“*Strongly agree*”). For the purposes of the study, the scale was translated into Greek. The forward-backward translation procedure (Brislin, 1980; Tsang et al., 2017) was employed. The original English questionnaire was translated to Greek by a bilingual researcher and the resulting Greek version was, subsequently, translated back into English by another translator, independently and with no knowledge of the original English version. Any semantic and cultural misunderstandings in translation were resolved by a third bilingual researcher with knowledge in the domain of the Psychology of Interpersonal Relationships. The Greek version was then administered to ten subjects who were asked to select anything difficult to comprehend. At this final stage no comprehension difficulties were identified. In the study’s sample, the subscales demonstrated good internal consistency (Cronbach’s alphas were found .785 and .763 for anxiety and avoidance, respectively).

Character strengths. The Character Strengths Rating Form-CSRF (Ruch et al., 2014) was used to measure character strengths. The scale comprises 24 items about character strengths (e.g., *Grateful people are aware of and thankful for the good things that happen to them. Others describe them as being grateful, because they always take time to express thanks*). Answers are rated on a 9-point Likert scale ranging from 1 (= *not like me at all*) to 9 (= *absolutely like me*). Ruch et al. (2014) have reported a convergence ranging from $r = .41$ to $r = .77$ with the 240 VIA-IS. The instrument was

translated and administered in Greek. In the present study, Cronbach's alpha demonstrates a good reliability level ($\alpha = .871$).

Relationship Quality Assessment. The Perceived Relationship Quality Component Scale-PRQC (Fletcher et al., 2000) was used to assess the relationship variables of the study. It consists of 6 components (satisfaction, commitment, intimacy, trust, passion and love) with 18 items, 3 for each of the mentioned variables (e.g., *How much do you trust your partner?*). Answers are rated on a 7-point scale (1 = *not at all*, 7= *extremely*). The instrument has exhibited good psychometric properties in a number of studies (Fletcher et al., 2000; Relvas et al., 2023). It was translated and administered in Greek. In the current study, the reliability of the scale was found excellent ($\alpha = .960$).

Data analysis

Data analysis was performed with SPSS version 29.0. Initially, scales were reversed where necessary, means and standard deviations were extracted and Cronbach's alpha values were calculated, with the results mentioned previously. Tables 3, 4 and 5 present information about the variables included in the research. Normality tests, histograms and indices were examined to check that the data were normally distributed. Kolmogorov-Smirnov and Shapiro-Wilk tests indicated that the data violate normality. However, skewness fell within the acceptable range of ± 2 (George & Mallery, 2019) and kurtosis between -7 to $+7$ (Bryne, 2010; Hair et al., 2010), which indicated an acceptable deviation from normality and a normal distribution of scores. Therefore, parametric tests were performed. For the first and second research questions, a series of independent-samples t-test analyses were conducted to determine differences with reference to sex and sexual orientation. For the third research question, mediation analysis tests were conducted to examine which character strengths play a mediating role in the relationship between attachment style and commitment, satisfaction, passion, intimacy and PRQC. Statistical significance level was set to 0.05.

Table 3: ECRS-S descriptives

	Minimum	Maximum	<i>M</i>	<i>S.D.</i>	Skewness	Kurtosis
Anxiety	6	40	22.66	7.32	.108	-.599
Avoidance	6	38	16.07	6.65	.544	-.370

Note. *N* = 601

Table 4: Character Strengths descriptives

	Minimum	Maximum	<i>M</i>	<i>S.D.</i>	Skewness	Kurtosis
Creativity	1	9	6.89	1.84	-1.113	.796
Curiosity	1	9	7.02	1.93	-1.063	.596
Judgment	1	9	7.70	1.49	-1.820	4.037
Love for learning	1	9	7.78	1.53	-1.811	3.880
Perspective	1	9	7.05	1.63	-1.062	1.388
Bravery	1	9	6.93	1.98	-1.047	.419
Persistence	1	9	7.43	1.79	-1.404	1.542
Honesty	1	9	7.75	1.52	-1.639	2.850
Zest	1	9	6.57	2.01	-.799	-.092
Love	1	9	7.84	1.68	-1.903	3.649
Kindness	1	9	7.94	1.33	-1.767	3.994
SI	1	9	7.54	1.64	-1.587	2.493
Teamwork	1	9	6.92	2.03	-1.071	.374
Fairness	1	9	7.00	1.82	-1.065	.639
Leadership	1	9	6.40	2.16	-.747	-.304
Forgiveness	1	9	6.88	1.96	-.953	.266
Modesty	1	9	7.05	1.86	-1.040	.521
Prudence	1	9	6.72	2.02	-.887	-.016
Self-regulation	1	9	5.94	2.27	-.443	-.898
ABE	1	9	6.99	1.86	-1.049	.798
Gratitude	1	9	7.26	1.69	-1.199	1.174
Hope	1	9	6.79	2.13	-1.080	.392
Humor	1	9	7.59	1.67	-1.532	2.180
Religiousness	1	9	5	2.82	-.104	-1.399

Note *N* = 601, SI = Social Intelligence, ABE = Appreciation of Beauty and Excellence

Table 5: PRQC descriptives

	Minimum	Maximum	<i>M</i>	<i>S.D.</i>	Skewness	Kurtosis
Satisfaction	1	7	4.89	1.58	-.805	-.076
Commitment	1	7	5.71	6.65	-1.343	1.530
Intimacy	1	7	5.41	1.44	-1.149	.946
Trust	1	7	5.42	1.56	-1.114	.424
Passion	1	7	4.65	1.61	-.664	-.310
Love	1	7	5.68	1.39	-1.404	1.737
PRQC	1	7	5.29	1.24	-1.108	1.043

Note. *N* = 601, PRQC = Perceived Relationship Quality Component

Results

T-test analyses

In order to examine sex and sexual orientation differences with reference to character strengths, anxiety, avoidance and PRQC factors,, a series of t-tests were conducted.

Sex differences. Initially, independent-samples t- tests were performed to evaluate whether men and women differed in levels of relational avoidance and anxiety. Results showed statistically significant differences only in avoidance, with men ($M = 17.41$, $S.D. = 6.811$) reporting greater levels of relational avoidance than women ($M = 15.68$, $S.D. = 6.549$), $t = 2.686$, $df = 595$, $p = .007$, two-tailed.. T-test analyses into PRQC and its 6 factors revealed statistically significant sex differences only in passion, with men ($M = 4.910$, $S.D. = 1.453$) reporting higher levels of passion than women ($M = 4.570$, $S.D. = 1.653$), $t = 2.174$, $df = 595$, $p = .030$, two-tailed. T-tests exploring sex differences in character strengths revealed statistically significant results in 6 out of 24, with women scoring higher than men in all of them. Specifically, women ($M = 7.52$, $S.D. = 1.746$) scored higher than men ($M = 7.17$, $S.D. = 1.897$) in Persistence, $t = -2.059$, $df = 595$, $p = .040$, two-tailed. Women ($M = 7.84$, $S.D. = 1.497$) also scored higher than men ($M = 7.45$, $S.D. = 1.576$) in Honesty,

$t = -2.632$, $df = 595$, $p = .009$, two-tailed. Moreover, women ($M = 7.98$, $S.D. = 1.557$) scored higher than men ($M = 7.41$, $S.D. = 1.901$) in Love, $t = -3.590$, $df = 595$, $p < .001$, two-tailed. Women ($M = 8.06$, $S.D. = 1.230$) reported higher levels than men ($M = 7.54$, $S.D. = 1.576$) in Kindness, $t = -4.069$, $df = 595$, $p < .001$, two-tailed. In Social Intelligence, women ($M = 7.64$, $S.D. = 1.612$) also scored higher compared to men ($M = 7.18$, $S.D. = 1.772$), $t = -2.875$, $df = 595$, $p = .004$, two-tailed. Lastly, women ($M = 5.16$, $S.D. = 2.753$) scored higher than men ($M = 4.56$, $S.D. = 2.994$) in Religiousness, $t = -2.211$, $df = 595$, $p = .027$, two-tailed. Table 6 summarizes results for t-tests exploring sex differences.

Table 6: Results of t-tests examining sex differences

Variables	Men		Women		t	p	Cohen's d
	M	SD	M	SD			
Avoidance	17.41	6.811	15.68	6.549	2.686	.007	.261
Passion	4.910	1.453	4.570	1.653	2.174	.030	.211
Persistence	7.17	1.897	7.52	1.746	-2.059	.040	.200
Honesty	7.45	1.576	7.84	1.497	-2.632	.009	.256
Love	7.41	1.901	7.98	1.557	-3.590	<.001	.349
Kindness	7.54	1.576	8.06	1.230	-4.069	<.001	.395
Social Intelligence	7.18	1.722	7.64	1.612	-2.875	.004	.279
Religiousness	4.56	2.994	5.16	2.753	-2.211	.027	.215

Note. n (men) = 138, n (women) = 459

Sexual orientation differences. A series of independent-samples t-tests were also performed to examine potential differences between exclusively and non-exclusively heterosexual groups in attachment style, PRQC and its factors, and character strengths. With reference to the relational variables, anxiety, avoidance and PRQC and its 6 factors, no statistically significant differences were found between the two groups. With reference to character strengths, results showed statistically significant differences between the 2 groups in 12 out of 24 character strengths.

Specifically, the non-exclusively heterosexual group scored higher in Curiosity, $t = -3.233$, $df = 599$, $p = .001$, two-tailed, and in Open-mindedness/Judgment, $t = -2.189$, $df = 599$, $p = .029$, two-tailed. The exclusively heterosexual group scored higher in Bravery, $t = 2.139$, $df = 599$, $p = .002$, two-tailed; in Persistence, $t = 2.752$, $df = 599$, $p = .006$, two-tailed; in Honesty, $t = 3.377$, $df = 599$, $p < .001$, two-tailed; in Love, $t = 3.044$, $df = 599$, $p = .002$, two-tailed; in Teamwork, $t = 2.916$, $df = 599$, $p = .004$, two-tailed; in Fairness, $t = 2.313$, $df = 599$, $p = .021$, two-tailed; in Modesty, $t = 2.544$, $df = 599$, $p = .011$, two-tailed; in Prudence, $t = 2.448$, $df = 599$, $p = .015$, two-tailed; in Hope, $t = 3.252$, $df = 599$, $p = .001$, two-tailed; and in Religiousness, $t = 4.001$, $df = 599$, $p < .001$, two-tailed. Table 7 summarizes results for t-tests exploring sexual orientation differences.

Table 7: Results of t-tests examining sexual orientation differences

	E.H.		N.E.H.		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Curiosity	6.87	1.972	7.45	1.740	-3.233	.001	.301
O.M. /Judgement	7.63	1.545	7.93	1.305	-2.189	.029	.204
Bravery	7.08	1.906	6.50	2.139	3.146	.002	.293
Persistence	7.55	1.730	7.09	1.949	2.752	.006	.257
Honesty	7.87	1.423	7.40	1.727	3.377	<.001	.315
Love	7.96	1.599	7.48	1.853	3.044	.002	.284
Teamwork	7.06	1.945	6.51	2.243	2.916	.004	.272
Fairness	7.10	1.788	6.71	1.886	2.313	.021	.216
Modesty	7.17	1.775	6.73	2.055	2.544	.011	.237
Prudence	6.84	1.957	6.38	2.178	2.448	.015	.228
Hope	6.95	2.033	6.31	2.332	3.252	.001	.303
Religiousness	5.27	2.773	4.23	2.842	4.001	<.001	.373

Note. E.H. = Exclusively Heterosexual, N.E.H. = Non-Exclusively Heterosexual, n (E.H.) = 446, n (N.E.H.) = 155, O.M. = Open-mindedness

Mediation analysis

A series of mediation analysis tests were performed in order to examine if, and which, character strengths mediate the relationship of anxiety and avoidance with commitment, satisfaction, passion, intimacy and PRQC. Thus, the following 10 relationships were examined for mediators.

Anxiety - Commitment. Results showed that 4 character strengths played a statistically significant mediating role between anxiety and commitment. The total effect was statistically significant, $\beta = -.0283$, $t = -3.8533$, $p > .001$. For Honesty, there was a statistically significant indirect effect, $\beta = -.0033$, BCa CI $[-.0072, -.0003]$, with an effect size of .12, which means that the relationship between Anxiety and Commitment operates indirectly through Honesty by 12%. Fairness also had a statistically significant indirect effect, $\beta = -.0031$, BCa CI $[-.0065, -.0004]$, and an effect size of .11. Gratitude was statistically significant as a mediator as well, $\beta = -.0029$, BCa CI $[-.0065, -.0004]$, with an effect size of .10. Hope was the fourth mediator in the relationship between anxiety and commitment, $\beta = -.0024$, BCa CI $[-.0054, -.0003]$, with an effect size of .08. Table 8 summarizes statistically significant mediation results for the relationship between anxiety and commitment.

Table 8: Mediation Analysis for the relationship between anxiety and commitment

Variable	Total effects			Direct effects			Indirect effects		95% CI	
	EST	SE	p	EST	SE	p	EST	SE	BootLL	BootUL
Honesty	-.0283	.0073	.0001	-.0250	.0073	.0006	-.0033	.0018	-.0072	-.0003
Fairness	-.0283	.0073	.0001	-.0253	.0074	.0007	-.0031	.0016	-.0065	-.0004
Gratitude	-.0283	.0073	.0001	-.0255	.0073	.0006	-.0029	.0016	-.0065	-.0004
Hope	-.0283	.0073	.0001	-.0259	.0074	.0005	-.0024	.0013	-.0054	-.0003

Note EST - Estimate, SE = Standard Error, CI = Confidence Interval

Avoidance - Commitment. Results of the analysis showed that for the relationship between avoidance and anxiety there was a statistically significant total effect, $\beta = -.1007$, $t = -14.2044$, $p < .001$ and 6 mediators: Honesty, $\beta = -.0036$, BCa CI $[-.0075, -.0007]$, with an effect size of .04; Zest, $\beta = -.0023$, BCa CI $[-.0053, -.003]$, with an effect size of .02; Love, $\beta = -.0076$, BCa CI $[-.0142, -.0021]$, and an effect size of .08; Kindness, $\beta = -.0033$, BCa CI $[-.0068, -.0008]$, and an effect size of .03; Social intelligence, $\beta = -.0029$, BCa CI $[-.0064, -.0005]$, with an effect size estimated at .03; and Forgiveness, $\beta = -.0037$, BCa CI $[-.0077, -.0009]$, and an effect size of .04. Table 9 summarizes the results.

Table 9: Mediation Analysis for the relationship between avoidance and commitment

Variable	Total effects			Direct effects			Indirect effects		95% CI	
	EST	SE	p	EST	SE	p	EST	SE	BootLL	BootUL
Honesty	-.1007	.0071	<.001	-.0970	.0072	<.001	-.0036	.0017	-.0075	-.0007
Zest	-.1007	.0071	<.001	-.0984	.0071	<.001	-.0023	.0013	-.0053	-.0003
Love	-.1007	.0071	<.001	-.0931	.0075	<.001	-.0076	.0031	-.0142	-.0021
Kindness	-.1007	.0071	<.001	-.0973	.0071	<.001	-.0033	.0016	-.0068	-.0008
S.I.	-.1007	.0071	<.001	-.0978	.0071	<.001	-.0029	.0015	-.0064	-.0005
Forgiveness	-.1007	.0071	<.001	-.0969	.0071	<.001	-.0037	.0017	-.0077	-.0009

Note EST - Estimate, SE = Standard Error, CI = Confidence Interval, SI = Social Intelligence

Anxiety - Satisfaction

Mediation results for the relationship between anxiety and satisfaction revealed a statistically significant total effect, $\beta = -.0709$, $t = 8.4955$, $p < .001$, and 3 character strengths with a mediating role: Self-regulation, $\beta = -.0040$, BCa CI $[-.0084, -.0005]$, with an effect size of .06; Gratitude, $\beta = -.0026$, BCa CI $[-.0060, -.0003]$, and an effect size of .04; and Hope, $\beta = -.0042$, BCa CI $[-.0083, -.0011]$, with an effect size of .06. Table 10 summarizes the results.

Table 10: Mediation Analysis for the relationship between anxiety and satisfaction

Variable	Total effects			Direct effects			Indirect effects		95% CI	
	EST	SE	p	EST	SE	p	EST	SE	BootLL	BootUL
S.R.	-.0709	.0083	<.001	-.0669	.0085	<.001	-.0040	.0020	-.0084	-.0005
Gratitude	-.0709	.0083	<.001	-.0682	.0084	<.001	-.0026	.0015	-.0060	-.0043
Hope	-.0709	.0083	<.001	-.0667	.0083	<.001	-.0042	.0019	-.0083	-.0011

Note EST - Estimate, SE = Standard Error, CI = Confidence Interval, SR = Self-regulation

Avoidance - Satisfaction

Mediation analysis revealed only 1 mediator in the relationship between avoidance and satisfaction.

There was a statistically significant total effect, $\beta = -.1271$, $t = 15.4403$, $p < .001$, and an indirect effect for Hope, $\beta = -.0173$, BCa CI [-.0335, -.0045] and an effect size of .03. Results are summarized in Table 11.

Table 11: Mediation Analysis for the relationship between avoidance and satisfaction

Variable	Total effects			Direct effects			Indirect effects		95% CI	
	EST	SE	p	EST	SE	p	EST	SE	BootLL	BootUL
Hope	-.1271	.0082	<.001	-.1230	.0082	<.001	-.0041	.0018	-.0080	-.0011

Note EST - Estimate, SE = Standard Error, CI = Confidence Interval, SI = Social Intelligence

Anxiety - Passion. For the relationship between anxiety and passion, results showed a statistically significant total effect ($\beta = -.0232$, $t = -2.5848$, $p = .010$, and an indirect effect for 5 character strengths: Curiosity, $\beta = -.0025$, BCa CI [-.0059, -.0003] and an effect size of .11; Honesty, $\beta = -.0029$, BCa CI [-.0062, -.0002] and an effect size of .13; Self-regulation, $\beta = -.0062$, BCa CI [-.0116, -.0020] and an effect size of .27; Gratitude, $\beta = -.0024$, BCa CI [-.0055, -.0001] and an effect size of .10; and Hope, $\beta = -.0031$, BCa CI [-.0065, -.0005] and an effect size of .13. Results are summarized in Table 12.

Table 12: Mediation Analysis for the relationship between anxiety and passion

Variable	Total effects			Direct effects			Indirect effects		95% CI	
	EST	SE	p	EST	SE	p	EST	SE	BootLL	BootUL
Curiosity	-.0232	.0090	.010	-.0206	.0090	.0216	-.0025	.0015	-.0059	-.0003
Honesty	-.0232	.0090	.010	-.0203	.0089	.0238	-.0029	.0015	-.0062	-.0002
SR	-.0232	.0090	.010	-.0169	.0091	.0626	-.0062	.0024	-.0116	-.0020
Gratitude	-.0232	.0090	.010	-.0208	.0090	.0213	-.0024	.0014	-.0055	-.0001
Hope	-.0232	.0090	.010	-.0201	.0090	.0258	-.0031	.0016	-.0065	-.0005

Note EST - Estimate, SE = Standard Error, CI = Confidence Interval, SR = Self-regulation

Avoidance - Passion. For this relationship, there was a statistically significant total effect ($\beta = -.0754$, $t = -7.9956$, $p < .001$ and an indirect effect for Honesty, $\beta = -.0036$, BCa CI $[-.0078, -.0002]$ and an effect size of .05; Zest, $\beta = -.0031$, BCa CI $[-.0067, -.0003]$ and an effect size of .04; Teamwork, $\beta = -.0046$, BCa CI $[-.0098, -.0008]$ and an effect size of .06; Hope, $\beta = -.0028$, BCa CI $[-.0065, -.0001]$ and an effect size of .04; and Humor, $\beta = -.0045$, BCa CI $[-.0087, -.0012]$ and an effect size of .06;. Results are summarized in Table 13.

Table 13: Mediation Analysis for the relationship between avoidance and passion

Variable	Total effects			Direct effects			Indirect effects		95% CI	
	EST	SE	p	EST	SE	p	EST	SE	BootLL	BootUL
Honesty	-.0754	.0094	< .001	-.0718	.0096	< .001	-.0036	.0020	-.0078	-.0002
Zest	-.0754	.0094	< .001	-.0724	.0095	< .001	.0031	.0016	-.0067	-.0003
Teamwork	-.0754	.0094	< .001	-.0708	.0095	< .001	-.0046	.0023	-.0098	-.0008
Hope	-.0754	.0094	< .001	-.0726	.0095	< .001	-.0028	.0017	-.0065	-.0001
Humor	-.0754	.0094	< .001	-.0710	.0095	< .001	-.0045	.0019	-.0087	-.0012

Note EST - Estimate, SE = Standard Error, CI = Confidence Interval

Anxiety - Intimacy. The relationship between anxiety and intimacy was found to be mediated by 7 character strengths. Results revealed a statistically significant total effect ($\beta = -.0558$, $t = -7.1891$, $p < .001$ and an indirect effect for Curiosity, $\beta = -.0024$, BCa CI $[-.0056, -.0003]$, and an effect size of .04; Love of learning, $\beta = -.0018$, BCa CI $[-.0044, -.0002]$, and an effect size of .03; Honesty, $\beta = -.0029$, BCa CI $[-.0065, -.0002]$, and an effect size of .05; Fairness, $\beta = -.0034$, BCa CI $[-.0072, -.0005]$, and an effect size of .06; Self-regulation, $\beta = -.0043$, BCa CI $[-.0085, -.0009]$, and an effect size of .08; Gratitude, $\beta = -.0028$, BCa CI $[-.0060, -.0005]$, and an effect size of .05; and Hope, $\beta = -.0023$, BCa CI $[-.0052, -.0003]$, and an effect size of .04. Results are summarized in Table 14.

Table 14: Mediation Analysis for the relationship between anxiety and intimacy

Variable	Total effects			Direct effects			Indirect effects		95% CI	
	EST	SE	p	EST	SE	p	EST	SE	BootLL	BootUL
Curiosity	-.0558	.0078	< .001	-.0534	.0078	< .001	-.0024	.0014	-.0356	-.0003
LL	-.0558	.0078	< .001	-.0540	.0078	< .001	-.0018	.0011	-.0044	-.0002
Honesty	-.0558	.0078	< .001	-.0529	.0077	< .001	-.0029	.0016	-.0065	-.0002
Fairness	-.0558	.0078	< .001	-.0523	.0078	< .001	-.0034	.0017	-.0072	-.0005
SR	-.0558	.0078	< .001	-.0515	.0079	< .001	-.0043	.0019	-.0085	-.0009
Gratitude	-.0558	.0078	< .001	-.0530	.0078	< .001	-.0028	.0015	-.0060	-.0005
Hope	-.0558	.0078	< .001	-.0535	.0078	< .001	-.0023	.0013	-.0052	-.0003

Note EST - Estimate, SE = Standard Error, CI = Confidence Interval, LL = Love of learning, SR = Self-regulation

Avoidance - Intimacy. This relationship was found to be mediated by 3 character strengths. Results revealed a statistically significant total effect ($\beta = -.1322$, $t = -18.6689$, $p < .001$ and an indirect effect for Love, $\beta = -.0060$, BCa CI $[-.0116, -.0006]$, and an effect size of .05; Social intelligence, $\beta = -.0027$, BCa CI $[-.0059, -.0004]$, and an effect size of .02; and Fairness, $\beta = -.0020$, BCa CI $[-.0048, -.0002]$, and an effect size of .02. Results are summarized in Table 15.

Table 15: Mediation Analysis for the relationship between avoidance and intimacy

Variable	Total effects			Direct effects			Indirect effects		95% CI	
	EST	SE	p	EST	SE	p	EST	SE	BootLL	BootUL
Love	-.0754	.0094	<.001	-.0718	.0096	<.001	-.0148	.0081	-.0323	-.0006
SI	-.0754	.0094	<.001	-.0724	.0095	<.001	.0126	.0068	-.0275	-.0013
Fairness	-.0754	.0094	<.001	-.0710	.0095	<.001	-.0184	.0078	-.0356	-.0052

Note EST - Estimate, SE = Standard Error, CI = Confidence Interval, SI = Social Intelligence

Anxiety - PRQC. For the relationship between anxiety and the overall quality of the relationship, results revealed a statistically significant total effect ($\beta = -.0471$, $t = -7.0512$, $p < .001$ and an indirect effect for Curiosity, $\beta = -.0016$, BCa CI [-.0038, -.0001], with an effect size of .03; Honesty, $\beta = -.0021$, BCa CI [-.0045 -.0002], with an effect size of .04; Fairness, $\beta = -.0029$, BCa CI [-.0061, -.0006], with an effect size of .06; Self-regulation, $\beta = -.0040$, BCa CI [-.0077, -.0012 with an effect size of .08; Gratitude, $\beta = -.0023$, BCa CI [-.0049, -.0004], with an effect size of .05; and Hope, $\beta = -.0028$, BCa CI [-.0059, -.0006], with an effect size of .06. Results are summarized in Table 16.

Table 16: Mediation Analysis for the relationship between anxiety and PRQC

Variable	Total effects			Direct effects			Indirect effects		95% CI	
	EST	SE	p	EST	SE	p	EST	SE	BootLL	BootUL
Curiosity	-.0471	.0067	<.001	-.0455	.0067	<.001	-.0016	.0010	-.0038	-.0001
Honesty	-.0471	.0067	<.001	-.0450	.0067	<.001	-.0021	.0011	-.0045	-.0002
Fairness	-.0471	.0067	<.001	-.0442	.0067	<.001	-.0029	.0014	-.0061	-.0006
SR	-.0471	.0067	<.001	-.0431	.0068	<.001	-.0040	.0017	-.0077	-.0012
Gratitude	-.0471	.0067	<.001	-.0448	.0067	<.001	-.0023	.0012	-.0049	-.0004
Hope	-.0471	.0067	<.001	-.0443	.0067	<.001	-.0028	.0013	-.0059	-.0006

Note EST - Estimate, SE = Standard Error, CI = Confidence Interval. SR = Self-regulation

Avoidance - PRQC. Finally, the relationship between avoidance and overall quality of the relationship was found to have a statistically significant total effect ($\beta = -.1113$, $t = -18.0807$, p

<.001 and to be mediated by 4 character strengths: Social intelligence, $\beta = -.0022$, BCa CI [-.0046, -.0004] and an effect size of .02; Gratitude, $\beta = -.0016$, BCa CI [-.0039, -.0001], with an effect size of .01; Hope, $\beta = -.0022$, BCa CI [-.0047, -.0003], with an effect size of .02; and Humor, $\beta = -.0022$, BCa CI [-.0050, -.0003], with an effect size of .02. Results are summarized in Table 17.

Table 17:: Mediation Analysis for the relationship between avoidance and PRQC

Variable	Total effects			Direct effects			Indirect effects		95% CI	
	EST	SE	p	EST	SE	p	EST	SE	BootLL	BootUL
SI	-.1113	.0062	<.001	-.1091	.0062	<.001	-.0022	.0011	-.0046	-.0004
Gratitude	-.1113	.0062	<.001	-.1097	.0062	<.001	-.0016	.0010	-.0039	-.0001
Hope	-.1113	.0062	<.001	-.1091	.0062	<.001	-.0022	.0011	-.0047	-.0003
Humor	-.1113	.0062	<.001	-.1091	.0062	<.001	-.0022	.0012	-.0050	-.0003

Note EST - Estimate, SE = Standard Error, CI = Confidence Interval, SI = Social Intelligence

Discussion

This study attempted to examine attachment style from a Positive Psychology perspective. Specifically, 3 areas and their relationship were explored: relational anxiety and avoidance; perceived relationship quality and 4 of its factors, namely commitment, satisfaction, passion and intimacy; and character strengths. An initial analysis into the sample, which consisted of 601 participants, revealed higher levels of relational avoidance in men compared to women, a finding consistently found in research literature. Of the 5 relational variables, that is to say PRQC and its factors, only passion was found to be significantly different between men and women, with men reporting higher levels of it. With reference to character strengths, women scored higher levels of Persistence, Honesty, Love, Kindness, Social Intelligence and Religiousness. This finding does not contradict previous findings, according to which men and women share similar levels of character strengths except for Love, Kindness, Appreciation of beauty and excellence, and Gratitude (Heintz et al, 2019) and that also women's character strengths ratings are slightly superior to men (Linley et

al., 2007). Comparisons of the same variables between heterosexual and non-heterosexual participants showed no differences in levels of relational anxiety and avoidance or PRQC and its factors. However, there were differences between the two groups in character strengths. The non-heterosexual group exhibited higher levels of Curiosity and Open-Mindedness/ Judgment whereas the heterosexual group rated higher on Bravery, Persistence, Honesty, Love, Teamwork, Fairness, Modesty, Prudence, Hope and Religiousness. Research has mostly focused on in-group exploration of character strengths based on certain criteria, such as well-being, and not on heterosexual versus non-heterosexual comparisons (e.g., Rostosky & Riggle, 2017; Vaughan & Rodriguez, 2014).

The study mainly focused on identifying the character strengths which mediate the relationship of attachment style, that is anxiety and avoidance, with PRQC factors, which has not been researched so far. 10 relationships in total were examined for mediators. The relationship between anxiety and commitment was found to be mediated by 4 character strengths: Honesty, Fairness, Gratitude and Hope. The relationship between anxiety and satisfaction was mediated by Self-regulation, Gratitude and Hope. For the relationship between anxiety and passion, there were 5 mediators: Curiosity, Honesty, Self-regulation, Gratitude and Hope. 7 character strengths were found to mediate the relationship between anxiety and intimacy: Curiosity, Love of learning, Honesty, Fairness, Self-regulation, Gratitude and Hope. Lastly for anxiety, Curiosity, Honesty, Fairness, Self-regulation, Gratitude and Hope were found to mediate its relationship with PRQC. Overall, of the 24 character strengths, only 7 were found to mediate the relationship between anxiety and the 5 PRQC variables. It is interesting that Gratitude and Hope appear as mediators in all 5 relationships examined. Honesty and Self-regulation appear in 4 out of 5 relationships, Curiosity and Fairness appear in 3, and only Love of learning appears in 1. This could mean that some character strengths may be especially central to those relationship processes and outcomes associated with anxiety. On the other hand, with reference to avoidance, its relationship with commitment was found to be mediated by 6 mediators: Honesty, Zest, Love, Kindness, Social

Intelligence and Forgiveness. Hope was the only mediator for the relationship between avoidance and satisfaction. The relationship between avoidance and passion was mediated by Honesty, Zest, Teamwork, Hope and Humor. Love, Social Intelligence and Fairness mediated the relationship of avoidance with intimacy. And lastly, 4 character strengths were found to mediate the relationship between avoidance and PRQC: Social Intelligence, Gratitude, Hope and Humor. Overall in the case of avoidance, there were 11 character strengths as mediators. Of these 11, Social Intelligence and Hope were found to mediate 3 out of 5 relationships, while 4 mediators appeared in 2 relationships and 5 mediators appeared in only 1 relationship. It seems that, unlike anxiety, avoidance does not have a few most prominent character strengths as mediators but character strengths tend to be more specific to each relationship. This could imply that avoidance is more complex than anxiety with reference to the mediation of character strengths. Still, Hope appears again as a character strength with a central mediating role, as in the case of anxiety. The fact that Hope was found to mediate all anxiety relationships and almost all avoidance relationships with the PRQC variables examined might be a very important finding of the present research.

These findings can have implications on a clinical level. Interventions in enhancing the ability to form close relationships may target specific character strengths in order to help clients with such requests. In addition, they contribute to the understanding of attachment style and the knowledge of how to work with insecure individuals. The findings also contribute to expanding knowledge of how and to what extent character is implicated in choices and processes related to personal relationships.

Although the current study presents some preliminary findings, its limitations should be considered. It is a study based on a self-referential questionnaire, subject to a series of biases including self-serving or self-elevating biases, lack of self-knowledge or scoring answers according to social desirability. Also, a very short form of a character strengths scale was used (CSRF), because the longer forms available would have required a lot of completion time with the risk of random answers, a high drop-out rate, completion by participants with certain characteristics – thus

a more homogeneous sample – or even difficulty reaching the sample required. Although CSRF has acceptable validity and reliability, it remains an instrument with 1 question per character strength. Finally, another possible limitation could be the fact that the sample consists mainly of female participants (76,4%). This does not pose a problem for external validity, since the sample amounted to 601 participants, but should nevertheless be considered. Future research may address those limitations. It may also examine the results of interventions based on these findings and verify the results of the study on an experimental level contributing, in this way, significantly to the study of personal relationships and positive psychology.

References

- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: Assessed in the strange situation and at home*. Erlbaum
- Ainsworth, M. S. (1979). Infant–mother attachment. *American Psychologist*, 34(10), 932–937.
- Anjum, W., & Batool, I. (2018). Translation and cross language validation of Passionate Love Scale among adults in Lahore. *Pakistan. Interpersona: An International Journal on Personal Relationships*, 11(2), 188–206. doi:10.5964/ijpr.v11i2.230.
- Arnett, J. J. (2000). Emerging adulthood. A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469–480.
<http://dx.doi.org/10.1037/0003-066X.55.5.469>.
- Baumeister, R. F., & Leary, M. R. (1994). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.
doi:10.1037/0033-2909.117.3.497.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61, 226–244.
- Bartholomew, K., & Shaver, P. R. (1998). Methods of assessing adult attachment: Do they converge? In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 25–45). Guilford Press.
- Boiman-Meshita, M., & Littman-Ovadia, H. (2020). The marital version of three good things: A mixed- method study. *Journal of Positive Psychology*.
<https://doi.org/10.1080/17439760.2020.1716046>.
- Bowlby, J. (1953). Some pathological processes set in train by early mother–child separation. *Journal of Mental Science*, 99, 265–272.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. Basic Books.
- Bowlby, J. (1973). Affectional bonds: Their nature and origin. In R. S. Weiss (Ed.), *Loneliness: The experience of emotional and social isolation* (pp. 38–52). MIT Press
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. Routledge.
- Brdar, I., & Kashdan, T. B. (2010). Character strengths and well-being in Croatia: An empirical investigation of structure and correlates. *Journal of Research in Personality*, 44(1), 151–154. <https://doi.org/10.1016/j.jrp.2009.12.001>.

- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). Guilford Press.
- Brislin, R.W. (1980) Translation and content analysis of oral and written material. In: Triandis, H.C. and Berry, J. W., Eds., *Handbook of cross-cultural psychology: Methodology*, Allyn and Bacon, Boston, 389-444.
- Brown, M., Westrich, B., Bates, F., Twibell, A., & McGrath, R. E. (2020). Preliminary evidence for virtue as a cue to long-term mate value. *Personality and Individual Differences*, 167, Article 110249. <https://doi.org/10.1016/j.paid.2020.110249>.
- Byrne, B. M. (2010). Structural Equation Modeling with Amos: Basic Concepts, Applications, and Programming. Taylor and Francis Group.
- Clark, L. A., Watson, D., & Mineka, S. (1994). Temperament, personality, and the mood and anxiety disorders. *Journal of Abnormal Psychology*, 103, 103–116.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357. doi:10.1037/0033-2909.98.2.310.
- Cohen, S. (2004). Social relationships and health. *American Psychologist*, 59, 676-684.
- Collins, N. L., Dunkel-Schetter, C., Lobel, M., & Scrimshaw, S. C. M. (1993). Social support in pregnancy: Psychosocial correlates of birth outcomes and postpartum depression. *Journal of Personality and Social Psychology*, 65, 1243-1258.
- Collins, W. A. (2003). More than myth: The developmental significance of romantic relationships during adolescence. *Journal of Research on Adolescence*, 13, 1-24. <http://dx.doi.org/10.1111/1532-7795.1301001>.
- Dahlsgaard, K., Peterson, C., & Seligman, M. E. P. (2005). Shared virtue: The convergence of valued human strengths across culture and history. *Review of General Psychology*, 9(3), 203-213. doi: 10.1037/1089-2680.9.3.203.
- Dastras, M. & Panah Ali, A. (2022). Investigating the relationship between attachment styles and marital commitment with marital satisfaction among married people in Shanin Den City. *Journal of Positive Psychology*, 6(4), 11195-11206.
- Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29, 94–122.

- Downey, G., Bonica, C., & Rincon, C. (1999). Rejection sensitivity and adolescent romantic relationships. In W. Furman, B. B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 148–174). Cambridge University Press.
- Dyrenforth, P. S., Kashy, D. A., Donnellan, M. B., & Lucas, R. E. (2010). Predicting relationship and life satisfaction from personality in nationally representative samples from three countries: The relative importance of actor, partner, and similarity effects. *Journal of Personality and Social Psychology*, 99(4), 690–702. <https://doi.org/10.1037/a0020385>.
- Eisenberger, N. I., Leieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, 302, 290–292. doi:10.1126/science.1089134.
- Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, 58(2), 281–291. <https://doi.org/10.1037/0022-3514.58.2.281>.
- Fife, S. T. (2015). Martin Buber’s philosophy of dialogue and implications for qualitative family research. *Journal of Family Theory & Review*, 7, 208–224. doi: 10.1111/jftr.12087.
- Fletcher, G. J. O., Simpson, J. A., & Thomas, G. (2000). The measurement of Perceived Relationship Quality Components: A confirmatory factor analytic approach. *Personality and Social Psychology Bulletin*, 26, 340–355.
- Fletcher, G. (2002). *The new science of intimate relationships*. Blackwell Publishing.
- Freeman, H., Simons, J., & Benson, N. F. (2023). Romantic Duration, Relationship Quality, and Attachment Insecurity among Dating Couples. *International journal of environmental research and public health*, 20(1), 856. <https://doi.org/10.3390/ijerph20010856>.
- Furman, W., & Schaffer, L. (2003). The role of romantic relationships in adolescent development. In P. Florsheim (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications*. Lawrence Erlbaum Associates Publishers.
- George, D., & Mallery, P. (2019). *IBM SPSS Statistics 26 Step by Step: A Simple Guide and Reference* (16th ed.). Routledge. <https://doi.org/10.4324/9780429056765>
- Goddard, H. W., Olson, J. R., Galovan, A. M., Schramm, D. G., & Marshall, J. P. (2016). Qualities of character that predict marital well-being. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, 65(3), 424–438. <https://doi.org/10.1111/fare.12195>.
- Gottman, J. M. (1995). *Why marriages succeed or fail: And how you can make yours last*. Simon and Schuster.
- Gottman, J. M. (1999). *The marriage clinic: A scientifically based marital therapy*. Norton.

- Gottman, J. M. (2011). *The science of trust*. Norton.
- Gottman, J. M., & Levenson, R. W. (1988). The social psychophysiology of marriage. In P. Noller & M. A. Fitzpatrick (Eds.), *Perspectives on marital interaction* (pp. 182–200). Multilingual Matters.
- Guo, J., Wang, Y., & Liu, X. Y. (2015). Relation between marital satisfaction and character strengths in young people. *Chinese Mental Health Journal*, 29(5), 383-38.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010) *Multivariate Data Analysis*. Pearson.
- Hausler, M., Strecker, C., Huber, A., Brenner, M., Höge, T., & Höfer, S. (2017). Distinguishing relational aspects of character strengths with subjective and psychological well-being. *Frontiers in Psychology*, 8, 1159. doi: 10.3389/fpsyg.2017.01159.
- Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511-524.
- Heintz, S., Kramm, C., & Ruch, W. (2019). "A meta-analysis of gender differences in character strengths and age, nation, and measure as moderators": Corrigendum. *The Journal of Positive Psychology*, 14(1), i. <https://doi.org/10.1080/17439760.2017.1414297>.
- Hone, L., Jarden, A., Schofield, G., & Duncan, S. (2014). Measuring flourishing: The impact of operational definitions on the prevalence of high levels of wellbeing. *International Journal of Wellbeing*, 4(1), 62-90.
- Kashdan, T. B., Blalock, D. V., Young, K. C., Machell, K. A., Monfort, S. S., McKnight, P. E., & Ferrisizidis, P. (2018). Personality strengths in romantic relationships: Measuring perceptions of benefits and costs and their impact on personal and relational well-being. *Psychological Assessment*, 30(2), 241–258. <https://doi.org/10.1037/pas0000464>.
- Keelan, J. P. R., Dion, K. K., & Dion, K. L. (1998). Attachment style and relationship satisfaction: Test of a self-disclosure explanation. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement*, 30(1), 24–35. <https://doi.org/10.1037/h0087055>.
- Keyes, C. L. M. (2002). The Mental Health Continuum: From Languishing to Flourishing in Life. *Journal of Health and Social Behavior*, 43, 207-222. <https://doi.org/10.2307/3090197>.
- Kinsey, A., Pomeroy, W., & Martin, C. (1948). *Sexual Behavior in the Human Male*. Saunders.

- Knapp, S. J. (2015). The ethical phenomenology of Emmanuel Levinas: Drawing on phenomenology to explore the central features of family life. *Journal of Family Theory & Review*, 7, 225–241. doi: 10.1111/jftr.12091.
- Kobak, R. R., & Hazan, C. (1991). Attachment in marriage: Effects of security and accuracy of working models. *Journal of Personality and Social Psychology*, 60(6), 861–869. <https://doi.org/10.1037/0022-3514.60.6.861>
- Lahey, B., & Cronin, A. (2008). Low social support and major depression: Research, theory and methodological issues. In K. S. Dobson & D. J. A. Dozois (Eds.), *Risk factors in depression* (pp. 385-408). Elsevier/Academic Press.
- Lavy, S., & Littman-Ovadia, H. (2011). All you need is love? Strengths mediate the negative associations between attachment orientations and life satisfaction. *Personality and Individual Differences*, 50(7), 1050–1055. <https://doi.org/10.1016/j.paid.2011.01.023>.
- Lin, N., Dean, A., & Ensel, W. M. (1986). *Social support, life events, and depression*. Academic Press.
- Linley, P., Maltby, J., Wood, A., Joseph, S., Harrington, S., Peterson, C., Park, N., & Seligman, M. (2007). Character strengths in the United Kingdom: The VIA inventory of strengths. *Personality and Individual Differences*, 43(2), 341-351. <https://doi.org/10.1016/j.paid.2006.12.004>.
- Littman-Ovadia, H., & Lavy, S. (2012). Character strengths in Israel. *European Journal of Psychological Assessment*, 28(1), 41–50. <https://doi.org/10.1027/1015-5759/a000089>.
- Littman-Ovadia, H., & Steger, M. (2010). Character strengths and well-being among volunteers and employees: Toward an integrative model. *The Journal of Positive Psychology*, 5(6), 419-430. doi: 10.1080/17439760.2010.516765.
- Lopez, S. J., Pedrotti, J. T., & Snyder, C. R. (2018). *Positive psychology: The scientific and practical explorations of human strengths*. Sage Publications.
- Loving, T. J., & Slatcher, R. B. (2013). Romantic relationships and health. In J. A. Simpson & L. Campbell (Eds.), *The Oxford handbook of close relationships* (pp. 617-637). Oxford University Press.
- Luo, S., Chen, H., Yue, G., Zhang, G., Zhaoyang, R., & Xu, D. (2008). Predicting marital satisfaction from self, partner, and couple characteristics: Is it me, you, or us? *Journal of Personality*, 76(5), 1231–1266. <https://doi.org/10.1111/j.1467-6494.2008.00520.x>.

- Macdonald, C., Bore, M., & Munro, D. (2008). Values in action scale and the Big 5: An empirical indication of structure. *Journal of Research in Personality*, 42(4), 787-799. doi: <https://doi.org/10.1016/j.jrp.2007.10.003>.
- McGrath, R. E. (2014). Scale-and item-level factor analyses of the VIA Inventory of Strengths. *Assessment*, 21(1), 4–14. <https://doi.org/10.1177/1073191112450612>.
- McGrath, R. E. (2015). Integrating psychological and cultural perspectives on virtue: The hierarchical structure of character strengths. *Journal of Positive Psychology*, 10(5), 407–424. <https://doi.org/10.1080/17439760.2014.994222>.
- McKnight, P.E., Fincham, F.D., & Rose, P. (2011). When curiosity breeds intimacy: Taking advantage of intimacy opportunities and transforming boring conversations. *Journal of Personality*, 79, 1369-1401.
- Mikulincer, M., & Shaver, P. R. (2003). The Attachment Behavioral System in Adulthood: Activation, Psychodynamics, and Interpersonal Processes. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, (Vol. 35, pp. 53–152). Elsevier Academic Press. [https://doi.org/10.1016/S0065-2601\(03\)01002-5](https://doi.org/10.1016/S0065-2601(03)01002-5)
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. Guilford Press.
- Mikulincer, M., & Shaver, P. R. (2012). Adult attachment orientations and relationship processes. *Journal of Family Theory & Review*, 4(4), 259–274. <https://doi.org/10.1111/j.1756-2589.2012.00142.x>.
- Mitskidou, P. , Mertika, A., Pezirkianidis, C. and Stalikas, A. (2021) Positive Relationships Questionnaire (PRQ): A Pilot Study. *Psychology*, 12, 1039-1057. doi: 10.4236/psych.2021.127062.
- Park, N., & Peterson, C. (2006). Moral competence and character strengths among adolescents: The development and validation of the Values in Action Inventory of Strengths for Youth. *Journal of Adolescence*, 29, 891-905.
- Park, N., & Peterson, C. (2009). Character Strengths: Research and Practice. *Journal of College and Character*, 10(4). doi:10.2202/1940-1639.1042.
- Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology*, 23(5), 603-619. doi: 10.1521/jscp.23.5.603.50748.
- Peterson, C. (2006). *A primer in positive psychology*. Oxford University Press.

- Peterson, C., & Park, N. (2007). Attachment security and its Benefits in context. *Psychological Inquiry*, 18(3), 172–176. <https://doi.org/10.1080/10478400701512752>.
- Peterson, C., Ruch, W., Beermann, U., Park, N., Seligman, M. E. P. (2007). Strengths of character, orientations to happiness, and life satisfaction. *The Journal of Positive Psychology*, 2(3), 149-156. doi: 10.1080/17439760701228938.
- Peterson, C., & Seligman, M. (2004). *Character strengths and virtues: A handbook and classification*. Oxford University Press.
- Pezirkianidis, C., Karakasidou, E., Stalikas, A., Moraitou, D., & Charalambous, V. (2020). Character strengths and virtues in the Greek cultural context. *Psychology: the Journal of the Hellenic Psychological Society*, 25(1), 35-54.
- Pistole, M. C. (1989). Attachment in adult romantic relationships: Style of conflict resolution and relationship satisfaction. *Journal of Social and Personal Relationships*, 6(4), 505–512. <https://doi.org/10.1177/0265407589064008>.
- Proctor, C. L., Linley, P. A., & Maltby, J. (2009). Youth life satisfaction: A review of the literature. *Journal of Happiness Studies*, 10, 583–630.
- Reis, H. T., & Gable, S. L. (2003). Toward a positive psychology of relationships. In C. L. M. Keyes & J. Haidt (eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 129-159). American Psychological Association.
- Relvas, A.P., Lacomba-Trejo, L., Portugal, A. Chiarolanza. C., Major, S., Rosa, C., Sotero, L. & Randall, A.K. (2023). YES, WE COPE: Dyadic Coping as a Mediator Between Perceived Relationship Quality and Emotional Representation of COVID-19. *Cognitive Therapy and Research*. <https://doi.org/10.1007/s10608-023-10379-4>.
- Robins, R. W., Caspi, A., & Moffitt, T. E. (2000). Two personalities, one relationship: Both partners' personality traits shape the quality of their relationship. *Journal of Personality and Social Psychology*, 79(2), 251–259. <https://doi.org/10.1037/0022-3514.79.2.251>.
- Rostosky, S. S., & Riggle, E. D. B. (2017). Same-sex couple relationship strengths: A review and synthesis of the empirical literature (2000–2016). *Psychology of Sexual Orientation and Gender Diversity*, Np. DOI: <http://dx.doi.org/10.1037/sgd0000216>.
- Ruch, W., Martínez-Martí, M. L., Proyer, R. T., & Harzer, C. (2014). The Character Strengths Rating Form (CSRF): Development and initial assessment of a 24-item rating scale to assess character strengths. *Personality and Individual Differences*, 68, 53–58. doi:10.1016/j.paid.2014.03.042.

- Rusbult, C. E., Agnew, C., & Arriaga, X. (2011). *The investment model of commitment processes*. Department of Psychological Sciences Faculty Publications. Paper 26. <http://docs.lib.purdue.edu/psychpubs/26>.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications.
- Ryff, C. D. (2014). Psychological Well-Being Revisited: Advances in the Science and Practice of Eudaimonia. *Psychotherapy and Psychosomatics*, 83, 10-28. <https://doi.org/10.1159/000353263>.
- Seligman, M. (2010). *Positive Psychology & Positive Interventions*. The University of Michigan October 7, 2010.
- Seligman, M. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Free Press.
- Seligman, M. E. P. (2012). *Flourish: A visionary new understanding of happiness and well-being*. Simon and Schuster.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: an introduction. *American Psychologist*, 55, 5–14. doi: 10.1037/0003-066X.55.1.5.
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60, 410-421.
- Senchak, M., & Leonard, K. E. (1992). Attachment Styles and Marital Adjustment among Newlywed Couples. *Journal of Social and Personal Relationships*, 9(1), 51–64. doi:10.1177/0265407592091003.
- Shimai, S., Otake, K., Park, N., Peterson, C., & Seligman, M. (2006). Convergence of character strengths in American and Japanese young adults. *Journal of Happiness Studies*, 7(3), 311-322. doi: 10.1007/s10902-005-3647-7.
- Singh, K., & Choubisa, R. (2010). Empirical validation of values in action-inventory of strengths (VIA-IS) in Indian context. *Psychological Studies*, 55(2), 151–158. <https://doi.org/10.1007/s12646-010-0015-4>.
- Šlosáriková, M. (2021). Vzťahová väzba v dospelosti, intimita, Závazok, vášeň v súvislosti s partnerskou Spokojnosťou [Adult attachment, intimacy, commitment, passion in relation to satisfaction in couple relationship]. *Československá Psychologie: Časopis Pro Psychologickou Teorii a Praxi*, 65(3), 300–308. <https://doi.org/10.51561/cspsych.65.3.300>.

- Thoits, P. A. (1995). Stress, coping and social support processes: Where are we? What next? *Journal of Health and Social Behavior*, 36(Suppl. 1), 53–79.
- Tsang, S., Royse, C. F., & Terkawi, A. S. (2017). Guidelines for developing, translating, and validating a questionnaire in perioperative and pain medicine. *Saudi journal of anaesthesia*, 11(Suppl 1), 80-89. https://doi.org/10.4103/sja.SJA_203_17.
- Vaughan, M. D., & Rodriguez, E. M. (2014). LGBT strengths: Incorporating positive psychology into theory, research, training, and practice. *Psychology of Sexual Orientation and Gender Diversity*, 1(4), 325-334.
- Veldorale-Brogan, A., Bradford, K., & Vail A. (2010). Marital virtues and their relationship to individual functioning, communication, and relationship adjustment. *Journal of Positive Psychology*, 5(4), 281-293.
- Wagner, L., Pindeus, L., & Ruch, W. (2021). Character strengths in the life domains of work, education, leisure, and relationships, and their associations with flourishing. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2021.597534>.
- Waldinger, R. (2015). *What makes a good life? Lessons from the longest study on happiness* [Video file]. Retrieved from <http://www.ted.com>.
- Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The experiences in Close Relationship Scale (ECR)-Short Form: Reliability, validity, and factor structure. *Journal of Personality Assessment*, 88, 187-204.
- Williams, K. D. (2007). Ostracism: The kiss of social death. *Social and Personality Psychology Compass*, 1, 236–247. doi:10.1111/j.1751-9004.2007.00004.x.
- Zhang, L., Zhang, S., Yang, Y., & Li, C. (2017). Attachment orientations and dispositional gratitude: The mediating roles of perceived social support and self-esteem. *Personality and Individual Differences*, 114, 193–197. <https://doi.org/10.1016/j.paid.2017.04.006>.
- Σταλίκας, Α., & Μυτσκίδου, Π. (2011). *Εισαγωγή στη θετική ψυχολογία*. Τόπος.