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Love as a protective buffer against existential anxiety

Miłość jako bufor chroniący przed lękiem egzystencjalnym

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Abstract Introduction and objective: This study attempts to provide insights into the relationship between love and existential anxiety among adult Poles. It has been frequently pointed out in the literature that love is crucial for human well-being and quality of life. Positive relationships, closeness, and love can have a protective effect against existential emptiness. Based on the literature, existential anxiety is thought to be inversely related to passion, intimacy, and commitment in love. Materials and methods: A sample of 274 adult participants from the general population (142 women and 132 men) was examined. The mean age of the subjects was 33.45 (standard deviation, *SD* = 15.89). The subjects completed two questionnaires, one focused on love (Triangular Love Scale by Sternberg), and the other one on existential anxiety (Existential Anxiety Questionnaire by Weems and associates). **Results:** The results of multiple regressions analyses indicate that passion and intimacy are significant predictors of existential anxiety, while commitment in love is not related to existential fear. Higher intimacy and passion levels are associated with lower existential anxiety. **Conclusions:** Our results provide evidence for the importance of love, close relationships, intimacy, and passion in the process of alleviating existential anxiety. Happy persons, who create positive bonds with others, perceive their lives as valuable, and meaningful. They do not feel lonely and they do not experience intense existential anxiety. Closeness and positive feelings thus seem to have a protective effect against an "existential vacuum". Our research can guide therapists working with patients who suffer existential anxiety.

Keywords: ommitment, existential anxiety, intimacy, love, passion

Wprowadzenie i cel: Niniejsze badanie ma na celu ukazanie związków pomiędzy miłością i lękiem egzystencjalnym wśród Streszczenie dorosłych Polaków. W piśmiennictwie wskazuje się na istotny wpływ miłości na dobrostan i jakość życia człowieka. Pozytywne relacje, bliskość i miłość mogą mieć znaczenie ochronne przed poczuciem pustki egzystencjalnej. Można założyć na podstawie literatury przedmiotu - że niepokój egzystencjalny jest negatywnie powiązany z namiętnością, intymnością i zaangażowaniem w miłości. Materiał i metody: Przebadano grupę 274 osób dorosłych wyłonionych z populacji ogólnej (142 kobiet i 132 mężczyzn). Średni wiek badanych wynosił 33,45 roku (odchylenie standardowe, standard deviation, SD = 15,89). Respondenci wypełniali dwa kwestionariusze: dedykowany pomiarowi doświadczenia miłości (Trójczynnikowa Skala Miłości Sternberga) i mierzący lęk egzystencjalny (Kwestionariusz Lęku Egzystencjalnego Weemsa i zespołu). Wyniki: Wielozmiennowe analizy regresji wykazały, że namiętność i intymność są istotnymi predyktorami lęku egzystencjalnego, w przeciwieństwie do zaangażowania w miłości. Wyższe wyniki w zakresie intymności i namiętności są powiązane z obniżonym lękiem egzystencjalnym. Wnioski: Uzyskane przez nas dane wskazują na znaczenie miłości, bliskich relacji, intymności i namiętności w redukowaniu niepokoju egzystencjalnego. Osoby szczęśliwe, tworzące pozytywne relacje postrzegają swoje życie jako wartościowe i mające sens. Nie czują się samotne i nie odczuwają intensywnego lęku egzystencjalnego. Bliskość i pozytywne emocje związane z miłością wydają się mieć znaczenie ochronne przed poczuciem pustki egzystencjalnej. Wyniki naszych badań mogą stanowić wskazówki dla terapeutów zajmujących się problemami egzystencjalnymi pacjentów.

Słowa kluczowe: zaangażowanie, lęk egzystencjalny, intymność, miłość, namiętność

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INTRODUCTION

ove and existential anxiety are seemingly unrelated states. Love can be intuitively linked to warmth, tenderness, and closeness. Some authors argue that it confers symbolic immortality (Mikulincer et al., 2003). Existential anxiety, on the other hand, refers to death, and non-being. It is, therefore, the opposite of immortality. These two concepts are the focus of positive existential psychology which, among its goals, aims to answer the question: "What should I do with my life?" (Wong, 2010). Within this approach, we study the relationship between the two variables. We argue that different aspects of love can predict existential anxiety.

Existential anxiety

Existential anxiety arises in connection with existential concerns. The concerns vary depending on the model adopted. Among the most common concerns, which link the most popular models of existential anxiety, one can distinguish death, meaninglessness, and guilt (van Bruggen et al., 2015). Death refers to the finiteness of human life, meaninglessness to the emptiness of existence without a purpose or value system, and guilt to the sense of not living up to one's moral principles or not fulfilling one's potential (van Bruggen et al., 2015; Tangney and Mashek, 2004; Yalom, 1980). The concept can serve as a practical therapeutic or researchrelated conceptualisation. The combination of therapy and the existential approach began with the ground-breaking study by Frankl (1985), in which the author described existential anxiety resulting from a profound misunderstanding of the meaning of life. Logotherapy has made a huge contribution to another psychotherapeutic trend, i.e. existential-phenomenological psychotherapy, which is proving effective in treating mood and anxiety disorders (Balogh et al., 2021). Existential anxiety may also be of interest in the context of treating disorders such as PTSD (Khodabux et al., 2013).

Sternberg's triangular theory of love and its contemporary validation

One of the main theories explaining the state of love is the theory proposed by Robert J. Sternberg (1986). The concept involves the breakdown of love into three components: intimacy, passion, and commitment. The factors are assumed to be linked to one another and to have a temporal dimension. The cited theory, despite being proposed decades ago, can still be empirically useful. Contemporary works analysing the psychometric properties of questionnaires constructed on the basis of the theory almost unequivocally indicate high psychometric properties of the scales (Kowal et al., 2023).

The theory is particularly useful in the context of explaining satisfaction with relationships. In the paper by De Andrade et al. (2015), the variables of intimacy, passion, and commitment were identified as significant predictors of relationship satisfaction among women, while the commitment variable was not significant for men. This general conclusion was sustained by Mônego and Teodoro (2011), who found that all of the theory's components had a positive effect on satisfaction.

Existential anxiety and love

The literature on the subject, despite its scarcity, seems to suggest the existence of a relationship between existential anxiety and the state of love. Individuals experiencing existential anxiety may actively seek personal meaning in another person. While the external world may not provide a sense of meaning, the presence of a partner could serve as a guarantee of it (Djikic and Oatley, 2004). Close relationships can furthermore serve as a buffer against the terror of death, and maintaining these relationships provides a symbolic shield (Mikulincer et al., 2003).

That observation is also empirically verified in another study. An experiment in which subjects were tasked with assessing the attractiveness of partners under conditions of activating thoughts of mortality (and without activating thoughts of death), confirmed the hypothesis of close relationships as a buffer against death anxiety (Śmieja et al., 2006). However, love appears to be an effective anxiety buffer only when the cultural dimension of romance, rather than reproduction, is emphasised (Hoppe et al., 2018). Love may prove to be a state worthy of attention in critical

events. In a study by Gonzaga et al. (2001), when a relationship was threatened, experiencing and showing love correlated with commitment-reinforcing processes. Some studies also highlight the need to strengthen close relationships in the aftermath of a disaster (Rehnsfeldt and Arman, 2012).

AIM OF THE STUDY

To our knowledge, the relationship between love as defined in Sternberg's concept and existential anxiety had not been examined previously. Therefore, our objective was to examine this relationship. We assumed that the love components, such as passion, intimacy, and commitment, would predict existential anxiety. We also hypothesised that higher passion, intimacy, and commitment levels would be associated with lower existential anxiety among adults.

MATERIALS AND METHODS

Participants

A total of 274 participants aged 18-65 years (142 women and 132 men) took part in the study. Most of the participants were in early and middle adulthood (mean age = 33.45, standard deviation, SD = 15.89). The respondents completed the questionnaires after giving their | 319

Descript						
	Min.	Max.	М	SD	Skewness	Kurtosis
Passion	12	84	61.99	17.52	-0.95	0.27
Intimacy	12	84	68.00	16.01	-1.11	1.19
Commitment	12	84	68.24	14.01	-1.15	1.19
Existential anxiety	3	90	33.01	16.82	1.05	0.46
Age	18	65	33.45	15.89	0.95	-0.11
Duration of relationship	1	40	21.15	16.92	0.51	-0.96
M – means; SD – standard deviation. *** $p < 0.001$.						

Tab.	1.	Descri	ptive	statistics	
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Predictors	В	SE	Beta	t	р	R	R ²	F
Passion	-0.118	0.041	-0.297	-2.860	0.005**	0.54	0.29	5.94***
Sex	3.347	1.455	0.241	2.300	0.024*			
Place of residence	-3.032	1.645	-0.186	-1.843	0.069			
Marital status	-0.236	2.131	-0.013	-0.111	0.912			
Duration of relationship	0.110	0.047	0.267	2.330	0.023*			
SE – standard error. * <i>p</i> < 0.05; ** <i>p</i> < 0.01; *** <i>p</i> < 0.001							·	

Tab. 2. Multiple regression analysis for passion as the main predictor of existential anxiety (N = 274)

consent to participate in the study. A majority of the participants were in a relationship (81.2%), and 18.9% were single (including widowed or divorced). Educational attainment ranged from secondary (32.2%) to higher education (67.8%). Most respondents live in rural areas (76.3%), while 23.8% reside in towns or cities. The mean duration of the relationship was 21.15 years (SD = 16.92).

Research tools

- 1. A demographic questionnaire focused on several characteristics such as age, sex (male, female), education level (primary, secondary, university), residence (country, town, city), marital status (single, in relationship), and duration of relationship (in years).
- Existential Anxiety Questionnaire by C.F. Weems, N.M. Costa, C. Dehon, and S.L. Berman (2004) measuring existential anxiety which refers to the feeling of fear of death, loneliness, and emptiness. The questionnaire contains 13 statements related to opinions on the world and human life. The psychometric properties of these measures are good; reliability is appropriate, with Cronbach's α equal to 0.71 (Weems et al., 2004).
- 3. Triangular Love Scale (TLS) by R. Sternberg (1997). Based on this questionnaire, three components of love were defined: Intimacy, Passion, and Commitment. The questionnaire consists of 36 items divided into three parts, each containing 12 questions and each measuring a different component. Consecutive items of the questionnaire are presented in the form of affirmative sentences describing the respondent's own beliefs and feelings towards their partner. These items each are rated on a seven-point scale, from "definitely no" to "definitely yes"; a higher number marked by the

respondent reflects his/her greater agreement with the given statement. The general score in each part is the sum of all the points acquired for the constituent items. The psychometric properties of the TLS are very good (Sorokowski et al., 2021; Sternberg, 1997). The reliability of this scale in the present study was estimated by Cronbach's α measures – Cronbach's α for the subscales: Passion = 0.87, Intimacy = 0.88, Commitment = 0.82.

All the subjects gave their informed consent before participating in the study in accordance with the Helsinki Declaration. The study received a positive opinion from the research ethics committee at Maria Curie-Skłodowska University in Lublin (Resolution No.: 6/2021).

It was assumed that three multiple regressions would be conducted to examine the relationship between the variables of interest. Demographic variables such as sex, residence, and marital status were additionally included in the model, however, the interpretation is focused on the main variables, i.e. the components of love.

RESULTS

The descriptive statistics are presented in Tab. 1. The distribution of variables does not differ from normal.

To explain how love components are associated with existential anxiety, three multiple regression analyses were performed. The dependent variable was existential anxiety, and the independent variables were passion, age, sex (male, female), duration of relationships (in years), place of residence (country, city), and marital status (in relationship, single). Separate analyses, including the same demographic variables, were conducted for intimacy and next for commitment. The analyses were calculated separately because the three components of love (independent variables) are

Predictors	В	SE	Beta	t	р	R	R ²	F
Intimacy	-0.134	0.045	-0.307	-2.997	0.004**	0.55	0.30	6.12***
Sex	3.359	1.444	0.242	2.327	0.023*			
Place of residence	-3.179	1.634	-0.195	-1.946	0.055			
Marital status	-0.350	2.114	-0.020	-0.166	0.869			
Duration of relationship	0.106	0.047	0.258	2.255	0.027*			
SE – standard error. * <i>p</i> < 0.05; ** <i>p</i> < 0.01; *** <i>p</i> < 0.	001.				·			

Tab. 3. Multiple regression analysis with intimacy as the main predictor of existential anxiety (N = 274)

Predictors	В	SE	Beta	t	р	R	R ²	F
Commitment	-0.089	0.052	-0.178	-1.717	0.090	0.49	0.24	4.59***
Sex	4.203	1.460	0.302	2.880	0.005**			
Place of residence	-3.578	1.699	-0.219	-2.106	0.039*			
Marital status	-1.147	2.257	-0.064	-0.508	0.613			
Duration of relationship	0.118	0.049	0.285	2.415	0.018*			
SE – standard error. * <i>p</i> < 0.05; ** <i>p</i> < 0.01; *** <i>p</i> < 0.0	001.							

Tab. 4. Multiple regression analysis with commitment as the main predictor of existential anxiety (N = 274)

inter-correlated. Furthermore, age was not included in the multiple regressions due to the strong significant inter-correlation between age and duration of relationship. Moreover, age does not correlate with any component of love.

Multiple regression analysis including passion, sex, place of residence, marital status, and duration of relationship showed that a model of the independent variables explained about 29% of the variance of existential anxiety. The variables including sex, marital status, and place of residence were coded in dummy coding. In each case, collinearity was checked with the use of VIF tests, and all regression requirements were met. Durbin–Watson statistics was 1.90, which denotes the lack of autocorrelation in the residuals. Significant predictors (inversely) of high existential anxiety were found to be passion in love, male sex, and duration of relationship. Marital status and place of residence are not significant predictors of existential anxiety (Tab. 2). Higher passion is associated with lower existential anxiety, and longer duration of relationship is associated with higher existential anxiety.

Multiple regression analysis including intimacy and several variables explains about 30% of the variance of existential anxiety. Durbin–Watson statistics (1.93) show the lack of autocorrelation in the residuals. Significant predictors of existential anxiety include intimacy, male sex, and duration of relationship (Tab. 3). Higher intimacy is associated with lower existential anxiety, and longer duration of relationship between partners is associated with increased existential anxiety.

Multiple regression analysis including commitment, sex, residence, marital status, and duration of relationship as independent variables shows that the model fits well and explains about 24% of the variance of existential anxiety. Durbin–Watson statistics (1.91) show the lack of autocorrelation in the residuals. Significant predictors of existential anxiety include male sex, duration of relationship, and place of residence. Commitment is not a significant predictor of existential anxiety (Tab. 4). Living in the country is associated with lower existential anxiety than living in a town or city. Longer duration of relationship is associated with higher existential anxiety.

DISCUSSION AND CONCLUSIONS

In the discussion, our emphasis is on the main predictors of existential anxiety, i.e. the aspects of love. The results obtained in the study group show that important predictors of existential anxiety include passion and intimacy of love, but not commitment. Existential anxiety is a kind of spiritual terror, fear, and instability that can be decreased by love. Love/affirmation is the basis of human existence, a personal commitment to the fulfilment of the meaning of life through closeness (Peterson and Steen, 2002).

Our results are in line with other published findings on well-being, and terror management theory (TMT) documents that a close relationship with another person makes life meaningful (Peters, 2019). Research on widowed and divorced people revealed significant associations between love and well-being, showing that love increases well-being (Czabała, 1994). It was found that the quality of life decreased after the loss of a loved one (Clark et al., 2008). It was also showed that well-being was more valuable for people than money, and that the most important correlate of positive emotions was close relationships (Diener and Oishi, 2005). Reis and Gable (2003) concluded that positive relationships were among the most important sources of happiness. That is why close relationships play important emotional, instrumental, and informative functions (Denissen et al., 2008).

People need each other. Research inspired by terror management theory shows that close relationships play an

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existential role in coping with anxiety and consciousness of own death (Mikulincer et al., 2003). The authors of TMT proposed two mechanisms that can be used as buffers in situations of increased consciousness of death; willingness of positive self-esteem and worldviews (Solomon et al., 1991). Israeli scientists conducted many laboratory studies which confirmed that, except two mentioned, the third buffer can be close relationships. Looking at the importance of relationships from different theoretical perspectives, needs such as intimacy, affiliation, being together, and attachment are strictly related to survival motivation. These needs can help individuals cope with death anxiety (Wisman and Koole, 2003).

Intimacy is defined as closeness, and attachment joins relationships and manifests as physical as well as emotional closeness (Sternberg, 1997; Sternberg and Weis, 2006). The participants were asked to fill out a questionnaire about intimacy in relationships. It was found that the people who were in the situation of stimulation of death anxiety had higher scores in intimacy compared to those in the neutral situation. Additionally, in the situation of increased death anxiety they prefer to stay with someone else (it has been explained as their affiliation need is higher) (Wisman and Koole, 2003).

When elucidating the relationship between existential anxiety and passion, it appears that one can draw on the observations made by Hoppe et al. (2018), who emphasised the importance of cultural love in buffering the fear of death compared to love in the reproductive aspect.

Commitment is a multifaceted psychological construct. It is related to a sense of loyalty, conscious decision, fidelity, and moral obligation (Kowal et al. 2023; Sternberg and Weis, 2006). Although commitment was also empirically found to be strongly linked to investment in a relationship (Rusbult et al., 2011), our results did not confirm that commitment predicted existential anxiety. Perhaps it is due to the experience of existential anxiety, associated, among others, with difficulty in decision-making (Miller and Rottinghaus, 2014), weakens the sense of engagement and its beneficial impact in the form of stabilising romantic attachment (Stanley et al., 2010).

Love can be a protective/therapeutic buffer against existential anxiety. Specifically, two components of love, namely passion and intimacy, play a pivotal role in this context. Our study fills a gap by examining the relationship between different aspects of love and existential anxiety. The presented results indicate that there is a possibility of predicting existential anxiety based on passion and intimacy. These findings reinforce the therapeutic value of love in coping with existential fear. Considering the relations between love relationships and well-being, love could be also equated with a psychosocial resource (Sleeth, 2010). Understanding the dynamics of love can help in the application of therapy, for example in patchwork families (Miętkiewicz and Kałaczyńska-Miętkiewicz, 2023) and in couple therapy (Migerode and Hooghe, 2012).

Conflict of interest

The authors declared no potential conflicts of interest with respect to the authorship and/or publication of this article.

Author contributions

Original concept of study: BG, AK. Collection, recording and/or compilation of data: AK. Analysis and interpretation of data: BG, AK. Writing of manuscript: BG, AK. Critical review of manuscript: AK. Final approval of manuscript: BG.

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