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Effect of Protective Psychological Factors on Life Satisfaction among Acne Patients

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ABSTRACT

The present study examines the effect of protective psychological factors on life satisfaction among acne patients. The study was based on a cross-sectional survey research design. Participants comprised acne patients (N = 300) that include both male patients (n = 150, 50%) and female patients (n = 150, 50%) from different hospitals, clinics, colleges, and universities of Hazara Division. Data were collected by using a purposive sampling technique. Four standardized instruments with good psychometric properties and reliability were used to measure protective psychological factors (optimism, positive efficacy expectancies, self-compassion) and life satisfaction. Pearson correlation, multiple regression analysis, t-test, one-way ANOVA, and post–hoc analysis are applied to analyze data. The findings of the study revealed that protective psychological factors positively predicted life satisfaction. Findings also revealed demographic differences on study variables. The study is an important addition to the existing body of knowledge. The results of the study will be a good reference for clinicians to understand the situation of acne patients and help them accordingly.

Introduction

Acne is a chronic sebaceous gland inflammation that most commonly affects people between the ages of 15 and 24. About 64% of adults in their 20s and 43% of those in their 30s say they've had acne their entire adult lives (Bhatte & Williams, 2013). 80–90% of people are predicted to experience acne by the age of 21 (Chilicka et al, 2017). Diverse nations and cultural groups have differing rates of adult and adolescent acne (Bagatin et al., 2014). According to Bhate and Williams, 85% of teens in the US have acne (Bhate & Williams, 2013). In Turkey, the general prevalence rate for youngsters between the ages of 13 and 19 was 60.7%. (Aksu et al., 2012).

According to a study on acne including Malaysian medical students, the frequency of acne was 68.1% (Muthupalaniappen et al., 2014). Another society-based research on Chinese young people and adults discovered that 33.7% of females between the ages of 15 and 19 got acne (Shen et al., 2012). According to Okoro et al., 71.7% of female junior-grade school students in South-West Nigeria between the ages of 15 and 19 had acne (Okoo et al., 2016). El-hamd et al., (2017) stated that 60% of woman junior-grade school students in Egypt had acne. Most of the earlier research we looked at indicated that teenage girls had a high prevalence of acne. The average age of patients seeking treatment for adult acne is about 24 years old, and 10% of patients visiting doctors are between the ages of 35 and 44(McConnell et al. 1998). Particularly among ethnic groups with white skin types, adult acne has been more common over the previous 15-20 years, with women experiencing it more frequently than males at all ages after adolescence greater than 20 years (Collier & Harper 2008).

Protective psychological characteristics are prone to group together; for instance, it has been demonstrated that self-compassion predicts other positive psychological traits including optimism, helpful impact, and bliss (Neff, et al., 2007). This is constant along Broaden and Build assumption of Positive Emotions, which suggests that protecting psychological factors might improve a person's choice of adaptive beliefs, behaviors, and interests. This aids in the development of personal coping mechanisms on the social, psychological, and physical levels (Fredrickson, 2014).

Protective Psychological Factors

Protective variables are personal and ecological features related to optimistic growth as well as adjustment in the face of dangerous circumstances and social settings (Lopez et al., 2019). Protective factors can work in a variety of ways. One of several protective elements is optimism. These factors can lessen the possibility of misfortune, promote the good performance or lessen the negative effects of difficulty on physical condition and welfare (Grych et al., 2015).

What Is Optimism?

According to Carver et al., (2010), optimism is a temper that facilitates between the person’s outer environment and just how he or she recognizes. Optimism is linked with elevated levels of self-perception, self-regard, self-effectiveness, and assertiveness in further revisions (Cadoche et al., 2007; Garrido et al., 2000; León et al., 2009).

In individuals with diabetes, multiple sclerosis, and arthritis as well as those undergoing bone marrow transplantation and cardiac patients, Optimism has been correlated to improve health effects in studies (Fitzgerald, et al., 1989).

Optimism and Health

Theoretically, optimism has emerged as a crucial element in studies of positive and healthy psychology that seek to explain how people cope with difficult circumstances. In individuals with diabetes, multiple sclerosis, and arthritis as well as those undergoing bone marrow transplantation and cardiac patients, Optimism has been correlated to improve health effects in studies (Fitzgerald, et al., 1989). Optimism in the context of family caregiving has been the subject of a few studies, primarily among parents of disabled children (Greenberg et al., 2004) and hospitalized children (McIntos, et al., 2004; LaMontagne, et al., 2003). These studies all emphasized the value of optimism in managing stress and improving health outcomes.

The Dispositional Theory of Optimism

Charles Carver and Michael Scheier coined the terms "dispositional positivity" and "dispositional negativity." They argued that positive traits improve the possibility of pleasant things occurring to us. According to the hypothesis of dispositional optimism: optimism results in satisfying results whereas pessimism produces stressful results and greater discontent (Scheier et al., 2001).

Optimistic outcome expectations, defined as " the propensity to think that things will generally go well for one" (Scheier & Carver, 1985), may influence symptom reporting by concentrating on positive aspects, even when someone faces a severe life event, such as a serious illness (Scheier & Carver, 1987).

Positive Efficacy Expectancies

According to self-efficacy theory, self-efficacy expectancy is an acceptance of one's aptitude to effectively do a behavior. Many authors argue that cognitive variables, particularly expectancy, have an impact on performance (Kelly, 1963; Rotter, 1954; Ellis, 1963; Dulaney, 1968; Bandura, 1969; Estes, 1972; Beck, 1976).

A rising corpus of research, on the other hand, is looking into how protective psychological characteristics including apparent self-efficacy, adaptive handling, hopefulness, and other power-built attributes lead to better diabetes self-care and glucose management (de Ridder et al., 2004; Yi-Frazier et al., 2012). Self-efficacy and positive efficacy expectations are clear by Bandura's social cognitive concept as beliefs in one's capability toward performing specific activities or beliefs in one's capacity to cope with general life challenges (Bandura, 1988; Schwarzer & Warner, 2013).

Self-Efficacy Theory

Corresponding to the self-efficacy notion, all procedures of psychological transformation are facilitated by variations in the person's wisdom of special command or efficacy (Bandura, 1977). This theory contends that a person's expectation of performance and consequence can be separated into binary distinct expectancies: a probability of success, which is the trust that a particular action either be or not result in a particular consequence, and a self-efficacy expectancy, which is the idea that person can or cannot accomplish the essential behaviors.

Self-compassion and optimism are examples of protective psychological characteristics (Carver & Scheier, 2014; Svendsen et al., 2016), but they are also flexible, as intervention studies have revealed. (Fournier et al., 2002; Fris et al., 2016; Massey et al., 2019).

Self-Compassion

Self-compassion means treating oneself similarly when you are going through a difficult moment, failing, or noticing anything about yourself that you loathe. Instead of stiffening your upper lip and disregarding your pain, you take a minute to ponder and ask personally, "This is tough just today," and how can I relieve and support me currently?

Compassion for any has been connected to improved psychological health outcomes such as lesser depression level, minor worry about self-evaluation, less introspection, small negative distress, and advanced life satisfaction (Neff, 2003; Leary et al., 2007). A correlational study found that self-

compassion stayed associated with a wide range of emotive well-being measures (Neff et al., 2007), including pleasant feelings and optimism, as well as greater ambition and inquisitiveness. Self-compassion has recently been presented as a significant strategy for enhancing feeling and goodness, and it has been integrated into treatment establishment (Gilbert & Irons, 2005; Neff, 2003).

According to research, self-compassion is combined with numerous positive psychological qualities. People who have higher degrees of trait self-compassion, for example, are cheerier than individuals who have lesser amounts (Hollis-Walker & Colosimo, 2011; Neff et al., 2007; Shapira & Mongrain, 2010; Smeets et al., 2014). They are also more positive, thankful, and please in general (Breen et al., 2010; Neff et al., 2007).

Self-compassion encourages well-being by making people feel appreciated, linked, and emotionally peaceful when they face problems and adversity (Gilbert, 2005). Self-compassion assists a person in modifying maladaptive forms of ideas and conduct (Neff, 2003a).

Life Satisfaction

Diener (1948) found three main signs of a satisfying life: life satisfaction, positive impact, and negative impact. According to Veenhoven (1993), life satisfaction is a measure of how an individual responds to the overall quality of life.

Diener et al. (1999) defined life satisfaction as a desire to affect change in one's life concerning one's past/future and the opinions of others about one's life. Life contentment results from a little gap between one's desires and accomplishments. (Diener et al., 2003).

Jussi Suikkanen's (2011), life satisfaction theory is fascinating: an individual is glad when "a new knowledgeable and reasonable proposed description of herself" finds that her life fulfills her perfect life strategy. The basic version of this theory has a major fault in that it assumes when someone feels like their life is going according to their ideal life plan, they are pleased.

According to research, people with disabilities and inferior health have minor life satisfaction than healthy controls (Gana et al., 2013; Rogowska et al., 2020). According to Zonash et al., (2019), University students with acne vulgaris are less satisfied with their lives than their counterparts who do not have acne.

According to a previous study, happiness in relationships and self-esteem both directly and indirectly predicted optimism (Leung, et al., 2005). Another conclusion was that self-efficacy predicted life satisfaction considerably in young adults. Similar results are found when this conclusion is compared to the literature, and a superior level of self-efficacy is what defines mental well-being. (Magaletta & Oliver, 1999) and psychosocial harmony (Cutler, 2005), as well as the association between optimism and constructive thinking, and life happiness (Caprara & Steca, 2006). Self-compassion has been linked to decrease levels of depression, self-assessing anxiety, ruminating to a lesser extent, fewer levels of adverse effects, and greater levels of life satisfaction (Neff, 2003; Leary et al., 2007). Self-compassion, which is referred to as one's overall cognitive appraisals of one's life, is seen to be beneficial in raising life satisfaction, according to a significant body of research (Diener et al., 1985). According to correlational findings, self-compassion is linked to life satisfaction. (Young et al., 2016).

Self-compassion and optimism are examples of protective psychological characteristics (Carver & Scheier, 2014; Svendsen et al., 2016), but they are also flexible, as intervention studies have revealed. (Fournier et al., 2002; Fris et al., 2016; Massey et al., 2019). These interferences remain common in protecting psychological elements such as self-compassion among general teenage and young adult populations (Neff & McGehee, 2010; Bluth & Eisenlohr-Moul, 2017) and gratitude, (Klibert et al., 2019) positive rumination, as well as the combination of various protective psychological characteristics, has been found to promote wellbeing, resilience, and self-efficacy. The impact of protective psychological aspects on enhanced health consequences is evident (Aspinwall & Tedeschi, 2010). Self-compassion, for example, remained proven to forecast additional good psychological characteristics like optimism, pleasant effect, and pleasure (Neff et al., 2007). This is consistent with the Extend and Build Theory of Happy Emotions, which states that protective psychological factors can extend one's range of adaptive ideas, behaviors, and attention, hence assisting in the development of physical, psychological, and social coping strategies (Fredrickson, 2014).

Procedure

This research was carried out under the University of Haripur's Research Committee's and the APA Declaration's ethical criteria. For collecting research data, official approval was obtained from the research departments of the relevant hospitals, clinics, colleges, and universities. The researcher individually gathered data from the subjects in the Hazara division. Before the questionnaire was given out, participants received informed consent and were notified of the study's objective. The questionnaire was made available to gather information on the participants' optimism, positive efficacy expectations, self-compassion and life satisfaction. Strict secrecy was established, and every effort was made to make the questionnaire and evaluations as comfortable as possible for the participants. After data collection, a debriefing explaining the study's nature was given to the participants. The outcome was then analyzed.

Research Instruments

Optimism

A revised life orientation test (Lot-R) (Scheier, et al., 1994) was used to evaluate optimism. Using ten LOT-R reports, the respondent's optimistic and negative future expectations are evaluated. Three of these questions evaluate optimism (eg "I usually expect the best in uncertain times"), three evaluate pessimism (eg "I rarely count on the positive things that happen to me") and the remaining four act as filler (eg "easy to relax"). Using a 5-point Likert scale differs from "strongly disagreement" (0) to "strongly agrees" (4), participants notice their consent to each item. The overall score of optimism is calculated by adding questions that evaluate optimism and pessimism (and reversal of the negative wording) while eliminating filler items. Reliability was evaluated by the calculation of Cronbach's alpha 0.76 revealing an acceptable level of internal consistency. The score from 0 to 40 shows greater optimism. Cronbach's alpha current study was 0.71.

Positive efficacy expectancies

A generalized scale of self -sufficiency was used to assess positive expectations (Schwarzer R, Jerusalem, 1995). This measures include ten items of its own report that test views on managing problems that can develop in many areas of operation (for example, "when I'm confronted with difficulty, I can generally find several solutions"). Each item is assessed on a 4-point Likert scale from "not true at all" (1) to "precisely true" (4) and the overall score ranges from 10 to 40. A

higher score means that the respondent is more confident in their ability to solve stress (ie more positive expectations). The scale is sufficiently reliable and valid (Ridder, et al., 2004; Fournier, et al., 2002). Cronbach's alpha ranges from 76 to.90 indicate internal reliability for GSE. Cronbach's alpha current study was 0.72.

Self-compassion

The form of a scale of self-compass (SCS-SF) (Raes et al., 2012) was used to assess the self-recruitment. This measure contains 12 items that evaluate how often respondents are sympathetic in themselves (when something becomes painful, I try to look at the situation). Items are evaluated on a 5-point scale, with 1 "almost never" and 5 is "almost always" (5). Within 12 items there are six sub -scales: self -confidence, self -confidence, common humanity, isolation, mindfulness and excessive identification. Inverting responses to negative items of the partial scale was obtained by the overall average of the total score of self -confidence (self -government, isolation and excessive identification). The scale has a point range of 12 to 60. Higher results mean an advanced level of self -confidence. This scale is reliable and legitimate and has a good correlation with the original form of 26 items. The scale reliability was 0.87. Cronbach's alpha current study was 0.74.

Life satisfaction

Diener, et al. (1985) developed a 5-item scale to evaluate a person's general cognitive evaluations of life satisfaction (not a rate of either positive or negative impact). To measure life satisfaction, this scale was employed. It has no reverse coding and consists of 5 items. Participants rate their agreement or disagreement with each of the five statements on a 7-point scale from 7 strongly agree to 1 strongly disagree. However, scoring should be continuous (5 Extremely Dissatisfied to 35 Extremely Satisfied), with the sum of the points for each item. The SWLS has been shown to have excellent internal consistency and moderate temporal stability with Cronbach's alpha of 0.87 and 2-month test-retest reliability of 0.82, according to Diener and his fellows. The current study's Cronbach's alpha was 0.75.

Participants

In the present study, a sample of acne patients (N = 300) with ages ranging from 16 to 30 years (M = 1.60, SD = .49) was collected from different hospitals, colleges, and universities of the Hazara Division. 150 males and 150 females were included. Data was gathered using a technique known as purposive sampling.

Analysis

The data were analyzed by SPSS using frequency, t-test, ANOVA, correlation and regression.

Results and Discussion

The recent research intended to study the effect of protective psychological factors on life satisfaction among acne patients. SPSS 20 was used for data analysis. Initially, frequencies and percentages were used to determine the demographic features. The alpha reliability coefficient and descriptive statistics were calculated. Pearson Correlation was computed to examine the relationship between variables. The impact of protective psychological factors on life satisfaction was investigated using multiple regression analysis. Finally, mean differences across demographic parameters were examined using One Way ANOVA and an independent sample t-test.

Table 1: ***Frequency and percentage of demographic variables (N=300)***

Variables	***F***	**%**
Age		
Adolescents	119	39.7
Young Adults	181	60.3
Treatment		
Under Treatment	102	34.0
Completed Treatment	132	44.0
Not Taking Treatment	66	22.0
Gender		
Male	150	50.0
Female	150	50.0
Education		
Intermediate	83	27.7
Graduate	145	48.3
Post Graduate	72	24.0
Socioeconomic Status		
Lower Class	25	8.3
Middle Class	229	76.3
Upper Class	26	15.3
Family System		
Nuclear	165	55.0
Joint	135	45.0
Marital Status		
Married	22	7.3
Un Married	278	92.7
Food Pattern		
Junk Food	160	53.3
Healthy Food	140	46.7

Table 1 shows the frequency and percentage of all demographics of applicants. Participants belonging to young adults have a larger number (F = 181, 60.3%) compared to adolescent participants (F = 118, 39.7%). Participants who have completed the treatment of acne (F = 132, 44%) are in the numerical case greater, as equal to the coating (F = 102, 34%) and the treatment participants (F = 66, 22%). Male participants (f = 150, 50%) and women's participants (F = 150, 50%) are the same. Participants of graduates (F = 145, 48.3%) have a higher number compared to intermediate (F = 83, 27.7%) and participants in postgraduate studies (F = 72, 24%). Participants belonging to the middle class (F = 229, 76.3%) are more in the picture, as equal to the higher class (f = 26, 15.3%) and the lower class (F = 25, 8.3%). Participants belonging to the nuclear family system (F = 165, 55 %) are higher in the numerical state compared to the common family system (F = 135, 45 %). Unmarried (F = 278, 92.7%) are larger than married (F = 22, 7.3%). Participants who like unhealthy food (F = 160, 53.3%) have a higher number compared to participants who like healthy food (F = 140, 46.7%).

Table 2. *Psychometric properties of study variables (N=300)*

Variables	*M*	*SD*	Cronbach's α	Range	Skewness	Kurtosis
Optimism Scale	21.88	5.87	.71	10 – 33	.51	.42

PEES	29.08	5.01	.72	14 – 40	.30	.21
SSC	34.81	7.95	.74	12 – 52	1.38	1.13
Life Satisfaction Scale	23.76	6.12	.75	7 – 35	-.74	-.04

Table 2 shows the psychometric properties of the scale used in a recent study. The Cronbach scale of optimism, a scale of positive scope of efficiency expectations, and the Selfompassion scale were 0.71, 0.72 and 0.74 (> 0.70), indicating a satisfactory internal consistency. Cronbach's scale and the scale of life satisfaction was 0.75 (> 0.70), indicating an acceptable internal stability.

Table 3: ***Pearson correlation among study variables***

Variables	1	2	3	4
1. Optimism	-	.18***	.19***	.22***
2. Positive Efficacy Expectancies		-	.13***	.26***
3. Self-Compassion			-	.21***
4. Life Satisfaction				-
5.Protective Psychological Factors				.23***

****p*<.001

Table 3 revealed that optimism has a significant positive relationship with positive effectiveness (R = 0.18, p <0.001) and self -confidence (r = 0.19, p <0.001) and life satisfaction (R = 0.22, p <0.001). Positive expectations of effectiveness have a significant positive association with compassion (r = 0.13, p <0.001) and life satisfaction (R = 0.26, p <0.001). Self-compassion has a significant positive correlation with life satisfaction (r = 0.21, p <0.001). The overall results of protective psychological factors have a significant positive relationship with life satisfaction (R = 0.23, p <0.001).

Table 4: ***Mean, Standard Deviation, and t-Values for Joint and Nuclear Family System Patients on Study Variables (N=300)***

	Patients from Joint Family (*n*=135)		**Patients from Nuclear Family (*n*=165)**					**95 % CI**	
Variables	***M***	***SD***	***M***	***SD***	***t* (298)**	***p***	**Cohen's *d***	**LL**	**UL**
Optimism	22.42	5.50	21.42	6.25	2.76	.01	0.17	.14	2.53
PEE	29.73	5.15	28.55	4.83	2.04	.04	0.27	2.31	.04
SC	35.21	7.25	34.48	8.48	.79	.43	0.09	2.54	1.08

Note: PE=Positive Efficacy Expectancies, SC=Self-Compassion

Table 4 shows an average, standard deviation and T values for patients with joint and nuclear family system about optimism, positive expectations of efficacy plus self -confidence. The results indicate significant average differences in optimism with T (298) = 2.76, p <0.05. The finding shows that the patient from the common family system (M = 22,42, p <0.05) significantly scored optimism compared to patients from a nuclear family system (M = 21,42, p <0.05). Cohen's value was 0.17 (<0.50), which means a small effect size. The results indicate significant average

differences in the positive efficiency length with t (298) = 2.04, p <0.05. These findings show that patients from a common family system (M = 29,73, p <0.05) significantly achieved a higher evaluation of positive expectations of effectiveness compared to patients from a nuclear family system (M = 28,55, p <0.05). Cohen's value was 0.27 (<0.50), indicating a small effect size. The result revealed an insignificant average difference in the self -polish with t (298) = 0.79, p> 0.05. The Cohen's D was 0.09 (<0.50), which specifies a small effect size.

Table 5: ***Regression Coefficient of Protective Psychological Factors on Life Satisfaction***

					95% *CI*
Variables	***B***	***SE***	***t***	***P***	**LL , UL**
Constant	21.02	2.90	7.24	.000	[15.31, 26.74]
Protective Psychological Factors	.09	.03	2.78	.006	[.03, .15]

Note. CI = Confidence Interval, R^2=0,16, *F*=28.37

Table 5 illustrates the influence of protective psychological factors on life satisfaction in acne patients. The value of R2 0.16 revealed that predictors clarified 16% scattering in the result variables with F (2, 297) = 28.37, p <0.001. The finding revealed that protective psychological factors positively expect life satisfaction (β = 0.15, p <0.01).

Table 6: ***Regression Coefficient of Optimism, Positive Efficacy Expectancies and Self-Compassion on Life Satisfaction***

					95% *CI*
Variables	***B***	***SE***	***t***	***p***	**LL , UL**
Constant	11.49	2.79	4.125	.000	[6.01, 16.98]
Optimism	.14	.06	3.64	.001	[.15, .32]
Positive Efficacy Expectancies	.29	.07	4.17	.000	[.15, .42]
Self-Compassion	.15	.04	3.21	.001	[.05, .22]

Note. CI = Confidence Interval, R^2=0,10, *F*=11.05

Table 6 illustrates the effect of optimism, positive expectations of efficacy and self -confidence in life satisfaction in acne patients. The R2 0.10 value revealed that the predictors described 10% of the dispersion in the result variable S F (3, 296) = 11.05, p <0.001. The discoveries have revealed that optimism significantly predicts life satisfaction (β = 0.14, p <0.01) and the positive expectation of efficacy has a significant positive predictor of life satisfaction (β = 0.23, p <0.001) also a significant positive predictor of life satisfaction (β = 0.18, p <0.01).

Table 7: ***Mean Comparison of Married and Unmarried Patients on Protective Psychological Factors (N=300)***

	Married (*n*=22)		**Un-Married (*n*=278)**					**95% CI**	
Variables	***M***	***SD***	***M***	***SD***	***t*(298)**	***P***	**Cohen's *d***	**LL**	**UL**
Optimism	19.00	6.69	22.11	5.76	2.40	.017	-0.40	5.64	.60
PEE	28.91	6.11	29.09	4.92	.16	.871	-0.03	2.36	2.01
SC	34.72	8.13	35.91	5.23	.67	.500	-0.17	2.28	4.66

Note. PEE=Positive Efficacy Expectancies, SC=Self-Compassion

Table 7 shows an average, standard deviation and t-evaluations for marital and unmarried patients on optimism, positive expectations of efficacy and selfompassion. The results specify significant average deviations in optimism with T (298) = 2.40, p <0.05. The results show those unmarried patients (M = 22,11, p <0.05) significantly scored on optimism compared to married patients (M = 19.00, p <0.05). The Cohen D was -0.40 (<0.50), which indicates a small size of the effect. The finding revealed an insignificant average difference in positive expectations of efficacy with T (298) = 0.16, p> 0.05. Cohen's value was -0.03 (<0.50), which indicates the low effect size. The finding revealed an insignificant average difference in the self -polish with t (298) = 0.67, p> 0.05. Cohen's value was -0.17 (<0.50), which indicates the low effect size.

Table 8: *Mean, Standard Deviation and One–Way Analysis of Variance in Optimism, Positive Efficacy Expectancies and Self-Compassion across Treatment (N=300)*

	Under Treatment (*n* = 102)		**Completed Treatment (*n*= 132)**		**Not Taking Treatment (*n* = 66)**				
Variables	***M***	***SD***	***M***	***SD***	***M***	***SD***	***F* (2, 297)**	**η^2**	**Post–Hoc**
Optimism	22.25	6.50	21.36	5.78	22.33	4.95	.91	0.01	1>2<3
PEE	29.48	5.03	29.53	4.81	29.09	5.33	1.27	0.01	1<2<3
SC	35.81	6.07	34.01	9.27	34.85	7.57	1.49	0.01	1>2<3

Note: PEE=Positive Efficacy Expectancies, SC=Self-Compassion

Table 8 illustrates the average standard deviation and F-values for optimism, positive expectations of efficacy and self-confidence across treatment. The results indicate insignificant average differences between optimism treatment f (2 297) = 0.91, p> 0.05. The finding revealed that patients who are treated and do not use treatment have achieved optimism assessment compared to completed therapeutic patients. The value of η2 was 0.01 (<0.20), which showed a small size of the effect. The comparison of post-hoc specified insignificant average differences between the group between each group and the other two groups. The results showed insignificant average differences in treatment with positive expectations of efficacy F (2 297) = 1.27, p> 0.05. The value of η2 was 0.01 (<. 20), which showed a small size. Results determined by insignificant average differences between treatments in self -confidence F (2 297) = 1.49, p> 0.05. The results were revealed that patients who are under treatment scored high in self -confidence compared to patients who do not use treatment and completing therapeutic patients. The η2 value was 0.01 (<0.20) that specified the low effect size. The comparison of post-hoc has shown insignificant average differences between the group between each group and the other two groups.

Conclusion

Contemporary analysis was carried out to explore the effect of protective psychological factors on life satisfaction in acne patients. The study revealed that protective psychological factors are positively correlated with life satisfaction among acne patients. Patients from a common family system score about optimism, positive expectations of efficacy and self -confidence compared to patients with nuclear family system. The study found that protective psychological factors positively predict life satisfaction with acne. Similarly, unmarried patients scored on protective factors than married patients. The results show less difference in protective psychological factors, patients who have completed treatment and who do not use treatment, and patients with lack of treatment**.**

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