

The role of perceived social support in the relationships between self-esteem and posttraumatic growth in participants living with psychophysiological skin disorders

By

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DECLARATION

I, Shannon Hawker, declare that this dissertation hereby submitted by me for the Magister Artium degree (Clinical Psychology) at the University of the Free State is my own independent work and has not previously been submitted by me to another university/faculty. I furthermore cede copyright of this dissertation in favour of the University of the Free State.



03 October 2022

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Date

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ABSTRACT

Psychophysiological skin disorders affect a large number of people and are associated with a heavy burden of disease worldwide. It was reported that at least 30% of patients with skin disorders have significant psychological co-morbidities. Many studies only focus on the pathological aspects of these skin ailments, as well as the impact of psychological distress and poor mental health. However, it remains imperative to establish factors that enable these patients to develop their personal strength, to increase their self-esteem, and to receive adequate support. Thus, the aim of this study was to expand on this body of research by investigating the relationship between self-esteem and posttraumatic growth, as well as whether perceived social support moderates or mediates the relationship between self-esteem and posttraumatic growth in participants living with psychophysiological skin disorders.

A sample of 100 participants aged between 18 and 60 years, who met one of the four types of psychophysiological skin disorders that this study included namely, Atopic Dermatitis, Psoriasis, Pruritus, and Alopecia were obtained from a hospital in Bloemfontein, Free State. Participants were selected using a non-probability, convenience sampling method. For the purpose of this study, a quantitative, non-experimental and correlational research design was utilised.

The Statistical Package of the Social Sciences (SPSS) version 28 was employed to analyse the results of the study. In particular, the Pearson product-moment correlation coefficients and multiple hierarchical regression analyses were performed to investigate the research objectives respectively. Results indicated that there is indeed a significant positive relationship between self-esteem and posttraumatic growth, with coefficients indicating a moderate to large effect size. Emotional-informational support, as an aspect of perceived social support, acts as a moderator between self-esteem and posttraumatic growth. Further, tangible support as an aspect of perceived social support did not moderate/mediate the relationship between self-esteem and posttraumatic growth.

The current study's findings emphasise the implication of distinguishing between the emotional-informational and tangible dimensions of perceived social support in aiding increased self-esteem and posttraumatic growth amongst participants living with psychophysiological skin disorders.

Keywords: Perceived social support, emotional-informational support, tangible support self-esteem, posttraumatic growth, psychophysiological skin disorders.

INTRODUCTION

The role of perceived social support in the relationships between self-esteem and posttraumatic growth in participants living with psychophysiological skin disorders

Psychophysiological skin disorders such as Psoriasis, Eczema, Alopecia, and Acne, are recognised as disorders significantly influenced by stress (Folks & Warnock, 2001; Koo & Lebwohl, 2001; Papadopoulos et al., 1998). These skin ailments vary from one another but are all associated with substantial burdens (Koo & Lee, 2001; Walker & Puder, 2019). Significantly, they unfavourably affect patients' quality of life and can induce posttraumatic distress (Shen et al., 2020; Van Der Donk et al., 1994; Zhai et al., 2014). In addition, people with these disorders may experience low self-esteem, loss of efficiency and personal strength, problematic interpersonal relationships, and stigmatisation (Nevitt & Hutchinson, 1996; Picardi & Abeni, 2001; Picardi et al., 2005; Ahmed et al., 2013; Sharma et al., 2018). At least 30% of patients with skin disorders have significant psychological co-morbidities (Picardi & Abeni, 2001). However, the possibilities for mitigating psychological stressors and identifying post-trauma growth or intervention are often ignored in this population because many skin disorders are dismissed as insignificant and of minor cosmetic consequence (Kantor, 2021).

Previous studies focused extensively on the pathological aspects of psychophysiological disorders concerning self-esteem, perceived social support, and skin research in general (Ahmed et al., 2013; Lyakhovitsky et al., 2017; Sharma et al., 2018). The addition of positive psychology perspectives to treatment modalities for these patients, and their feasibility, have been essentially ignored in the context of psychophysiological skin patients (Ghosh & Deb, 2017; Koblenzer, 2005). Subsequently,

an abundance of literature reports has been generated that show the benefit of having perceived social support and high self-esteem, which undoubtedly play a role in developing positive psychological changes after trauma (Tedeschi & Calhoun, 1996; 2004; Thompson & Kent, 2001; Walker & Papadopoulos, 2005). In exploring psychosocial effects, Teoh and Rose (2001) reported that perceived social support was low in the psychophysiological population and found that anxiety, social difficulties, and low self-esteem were significant contributing factors. Studies that focused on positive psychological outcomes were conducted mainly amongst patients with chronic pain and physical disability to determine the feasibility of positive psychological outcomes (Müller et al., 2016; Ghosh & Deb, 2017). Gosh and Deb (2017) realised that positive psychology perspectives were largely ignored amongst patients with skin conditions. Hence, the current study aims to examine the role of perceived social support on the relationship between self-esteem and posttraumatic growth among participants with particular psychophysiological skin disorders.

Literature Review

Overarching Theoretical Frameworks

- Positive Psychology

Positive psychology has been defined as the “scientific study of human strengths and values” (Sheldon & King, 2001). It is concerned with developing knowledge of the processes and factors that allow individuals to flourish. The philosophical approach of positive psychology underpins this study because it makes important contribution to understanding responses following adverse events (Brooks, 2018). Traditionally, clinical psychology was dominated by a rigid ‘illness ideology’ that was concerned with distress and dysfunction in the form of psychopathology (Cowen & Kilmer, 2002; Maddux, 2008). Psychological disorders were therefore viewed as the individual’s burden, rather than their interactions within the social environment (Maddux & Lopez, 2015). A further consequence of this focused on only alleviating distress, at the expense of promoting positive wellbeing (Maddux, 2008).

In contrast to the illness ideology, the positive psychological perspective is more flexible and inclusive. It is concerned with everyday problems that affect many people, as well as more ‘extreme’ psychopathology which affects a smaller proportion of the population (Csikszentmihalyi & Seligman, 2000; Magyar-Moe et al., 2015). Therefore, positive psychology recognises the role of the social, cultural, and environmental factors in aetiological difficulties (Maddux & Lopez, 2015; Seligman & Csikszentmihalyi, 2014). In relation to this study and looking at the wider positive psychological context, the goal of researchers is to emphasise the potential for positive as well as negative change, and challenge assumptions that any distress is somehow reflective of pathology (Calhoun & Tedeschi, 2014).

- The Functional-Descriptive Model (FDM)

The Functional-Descriptive model (FDM) which was introduced by Tedeschi and Calhoun (1996) and subsequently revised (Calhoun et al., 2010; Tedeschi & Calhoun, 2004), was the first theory that outlined the psychological processes responsible for posttraumatic growth (PTG). This model presents the argument that adverse experiences perceived to be sufficiently profound can destroy existing views about the self and the world (Calhoun et al., 2010; Tedeschi et al., 2018). This can trigger automatic and intrusive rumination processes which may be distressing, but ultimately lead to more deliberate attempts to consider the meaning behind the experience (Brooks, 2018). This deliberate form of rumination can promote the search for meaning (Calhoun et al., 2010). However, individual differences may predispose some people to more growth than others. Tedeschi and Calhoun (2004) suggest that the transition from intrusive to deliberate forms of rumination is aided by socio-cultural factors, such as social support and coping.

FDM focuses on five factors that identify positive changes that take place during PTG. These changes are named as: "perception of self, improved interpersonal relationships, altered life philosophy, changes in religion and spirituality, and new directions in life" (Calhoun et al., 2010; Linley & Joseph, 2004, p.11; Tedeschi & Calhoun, 1996). Such positive changes can underpin a whole new way of living that embraces the central tenets of positive psychology, specifically, the experience of positive emotion, the finding of purpose and meaning, a higher capacity of coping, and building strengths and virtues (Juczyński & Ogińska-Bulik, 2012; Seligman, 2012; Taku & Britton, 2018).

Psychophysiological Skin Disorders

Psychophysiological skin disorders are diseases of the skin known to be precipitated, or exacerbated, by stress (Kantor, 2021; Koo & Lee, 2003; Walker & Papadopoulos, 2005). Moreover, they are classically described as associated with emotional and psychological states of the patient (Shen et al., 2020; Koo & Lebwohl, 2001). Jafferany (2007) explains that they are more than an affliction of the skin; they also affect the mind of individuals and their families. They typically give rise to vicious scratching cycles that can lead to increased inflammation with subsequent pruritus, and sometimes excoriation and infection, simultaneously affecting psychological functioning (Jafferany, 2007). Despite the differences in explaining psychophysiological skin disorders, the common consensus is that they are exacerbated by emotional stress and/or anxiety in a significant number of cases (Jafferany, 2007; Kantor, 2021; Koo & Lee, 2003).

The adverse effects people with psychophysiological skin disorders often relate to are challenges with appearance. The skin is the body's most visible and largest organ, and outside appearance influences how a person perceives oneself and equally how this person is perceived by other people (Fox et al., 2007; Sharma et al., 2018). In addition, the quality of the skin may be significant in terms of coping in social situations, receiving social support, adaptation to fulfilled roles, fulfilling social and professional requirements, and personal needs (Miniszewska, 2015; Shen et al., 2020; Walker & Papadopoulos, 2005). As a result, patients with psychophysiological skin disorders often experience low self-esteem and limited perceived social support, that leads to impeding growth from such a challenging disorder.

Posttraumatic Growth

PTG refers to positive psychological changes that develop due to attempts to cope with the consequences of highly challenging life circumstances (Tedeschi & Calhoun, 1996; 2004; Tedeschi et al., 2018). Similarly, other studies have described PTG as the experience of positive adjustment resulting from how a person responds and rebuilds following a life-altering event (Kashdan & Kane, 2011). A significant drawback amongst PTG studies is that their authors tend to equate PTG implicitly or explicitly with resilience (Westphal & Bonanno, 2007). Tedeschi and Calhoun (2006) distinguish the two concepts, emphasising that development following trauma results from transformation, which means cognitive rebuilding. Resiliency assumes an ability to move forward with life after adversity, whereas PTG involves a movement beyond pre-trauma levels of adaptation (Ogińska-Bulik & Kobylarczyk, 2016; Westphal & Bonanno, 2007).

Evidently, qualitative studies have revealed themes of personal growth after living with chronic pain conditions, the process of grief, and severe physical trauma (Collins et al., 2014; Tallman & Hoffman, 2017). One study of Swedish women with fibromyalgia, or chronic fatigue syndrome, described positive aspects of their illness experience, including increased self-respect, integrity, and an enhanced sense of what is essential in life (Asbring, 2001). Thus, the development of PTG can lead to a “sense of wisdom and greater satisfaction” (Jayawickreme & Blackie, 2014).

While PTG increases personal strength, when considered within the psychophysiological skin population, it is limiting. By itself, traditional psychology's approach to transformative change is a problem-oriented one, because it is assumed that distress is the problem and that change means avoiding, or fixing the problem, to maintain baseline well-being (Shuwiekh et al., 2018). Thus, positive psychology perspectives are

often ignored, reflecting the relative lack of importance attached to the psychological growth of those with skin disorders (Evers et al., 2005; Kanji, 2019; Walker & Papadopoulos, 2005). Due to the health benefits of PTG (Sztonyk & Formella, 2020; Zhai et al., 2014), clinicians working with this population could benefit by understanding how to foster PTG to ensure a holistic approach. A critical study that addressed PTG within the psychophysiological population was conducted by Zhai et al. (2014). The study found that similar to other populations dealing with trauma and adversity, these patients reported PTG (Zhai et al., 2014). The changes people experience is also dependent on their own predictors of self-esteem; previous literature supports a positive association between self-esteem and PTG (Taku & Britton, 2018).

Self-esteem

Self-esteem is one of the most widely studied constructs in the social and behavioural sciences; in fact, self-esteem is defined by research in various ways. For instance, it is a subjective state of feeling, formed by the individual's realistic evaluation of himself or herself (Sharma et al., 2018); a personal psychological characteristic relating to self-judgment based on one's values (Alesi et al., 2012), and an awareness of one's emotional evaluation of one's self-worth (Schunk, 1985). Significantly, self-esteem is also one of the most controversial constructs. Persistent debate surrounds nearly all aspects of self-esteem, including whether it is more trait- or state-like, if it is causally related to important life outcomes, and whether it is distinct from constructs such as depression or narcissism (Donnellan et al., 2011, as cited in Chamorro-Premuzic et al., 2015). The most common definition of self-esteem is Rosenberg's global self-esteem: 'the individual's positive or negative attitude toward the self as a totality', which is further defined as the value of the sense of worth an individual subjectively perceives about themselves (Rosenberg, 1989; Rosenberg, et.al., 1995). From this perspective, it is irrelevant how a person's self-esteem

is compared to a particular validity criterion (Donnellan et al., 2011, as cited in Chamorro-Premuzic et al., 2015).

Studies have primarily pointed out predictors of self-esteem (Taku & Britton, 2018). Typically, having a higher level of self-esteem as a baseline serves as a protective factor (Tedeschi & Calhoun, 1996; 2004; Thompson & Kent, 2001; Walker & Papadopoulos, 2005). Individuals who have high self-esteem are equipped with inner resources such as identifying positive evaluations about the self, and a high sense of efficacy to cope with adversity (Carver & Scheier, 2001; Giannopoulou et al., 2006; Joseph et al., 2012; Linley & Joseph, 2004). According to Rosenberg (1989), a high self-esteem emerges from an individual's feelings of worthiness, thus thinking well of themselves; conversely, low self-esteem creates the feeling of self-rejection and self-disapproval.

Low self-esteem can reduce the quality of a person's life in many different ways, not the least of which is constant self-criticism, leading to persistent feelings of sadness, depression, anxiety, anger, shame or guilt (Orth & Robins, 2014). It can also lead to relationship problems, doubting abilities or avoiding challenges. Thus, a person with low self-esteem finds it hard to cope with a challenging life event because they already believe themselves to be 'hopeless' (Orth & Robins, 2014). Ginsburg and Link (1989) identified five dimensions that contribute to low self-esteem: 1) anticipation of rejection, 2) feelings of being flawed, 3) sensitivity to the attitudes of others, 4) guilt and shame, and 5) secretiveness. These dimensions can be caused from many factors such as poor treatment from a partner, financial trouble, and even from an ongoing medical condition like a psychophysiological skin disorder.

Consequently, people living with psychophysiological skin disorders experience adverse effects on their self-esteem, especially pertaining to undesirable psychological

changes and coping mechanisms (Ahmed et al., 2013; Nevitt & Hutchinson, 1996; Picardi et al., 2005; Thompson & Kent, 2001; Verhoeven et al., 2008). People with skin problems feel embarrassment and distress due to the fact that their affliction is visible to others, which further impairs their self-esteem (Fox et al., 2007; Ginsburg & Link, 1989; Reddy et al., 2017; Walker & Papadopoulos, 2005). They have also suffered immense neglect and stigmatisation by friends, family members, and even healthcare professionals (Bewley, 2017; Shah, 2018; Thompson & Kent, 2001; Walker & Papadopoulos, 2005; Zaidi et al., 2019). Specifically, this stigmatisation reinforces the feelings of shame (Fox et al., 2007; Kantor, 2021). It is therefore crucial to investigate whether people with psychophysiological disorders can reach higher self-esteem, that is linked to social evaluation and perceived social support (Cobb, 1976; Thompson & Kent, 2001).

Perceived Social Support

Perceived social support refers to the adequacy of a social connection, specifically how an individual evaluates the relationship (Eagle et al., 2019). This contrasts with general social support, which is the experience of being cared about and loved by others present in one's life, without necessarily questioning its adequacy (Yasin & Dzulkifli, 2010). Because perceived social support has been hampered by vague definitions, this contrast is significant, (Procidano & Smith, 1997). As such, Sarason et al. (1990) defined it as a sense of acceptance, whereas others have demonstrated that general, support-related cognitive schemas predict more specific support perceptions (Lakey & Cassady, 1990; Lakey & Dickinson, 1994). Therefore, with the help of academic enrichment, attention to the assumptions reflected in assessment approaches, and increased specificity regarding contexts in which support perceptions arise, has revolutionised how perceived social support is contemporarily defined.

Studies have suggested that perceived social support is a critical determinant of efficient coping with trauma and resultant positive changes (Ogińska-Bulik, 2013). However, perceived social support is complex because it plays an intervening variable between an individual's personal characteristics and the process of developing positive posttraumatic changes (Ogińska-Bulik, 2013; Sztonyk & Formella, 2020). Studies investigating perceived social support primarily focus on tangible support and emotional-informational support (Beutel et al., 2017; Zimet et al., 1988). Tangible support refers to providing financial assistance, material goods, or services such as preparing meals if one cannot do it themselves (Beutel et al., 2017). Emotional-informational support refers to giving guidance, the availability to share sad and pleasant events, and obtain support when faced with stress (Beutel et al., 2017; Evers et al., 2005; Zimet et al., 1988). Many studies have revealed that the perceived support that family members and friends provide may protect people from developing psychological distress (Cohen & Wills, 1985; Evers et al., 2005; Poudel et al., 2015).

According to Lakey and Orehek (2011), people need continuing personal relationships for psychological well-being. Relationships provide opportunities for everyday ordinary social interactions and shared activities, and primarily through these routine interactions and exchanges, recipients regulate their affect, actions, and thoughts. Social interactions that successfully regulate affect assist to affirm perceived social support and psychological well-being (Rodriguez et al., 2019). Thus, the observed main effects between perceived social support and mental health can reflect these routine, ordinary social interactions.

People living with psychophysiological skin disorders typically perceive having limited social support because their disorder is often associated with contagion

(Kleinman, 1988; Walker & Papadopoulos, 2005; Shah, 2018). Perceptions have also shown that visibility of a skin disfigurement prevents others from approaching (Basavaraj et al., 2010; Thompson & Kent, 2001; Walker & Papadopoulos, 2005). These stilted reactions of others typically result in spirals of aversive emotional responses and social avoidance (Cash & Smolak, 2011; Thompson & Kent, 2001). Based on the aforementioned, the following research problem and objectives were formulated (below).

Research Aims and Objectives

The aim of the study was to investigate the role of perceived social support in the relationship between self-esteem and posttraumatic growth in participants living with psychophysiological skin disorders. In helping to achieve the aim, the following research objectives were identified:

Research Objective 1

To investigate whether a significant relationship exists between self-esteem and posttraumatic growth in participants living with psychophysiological skin disorders.

Research Objective 2

To investigate if perceived social support mediate/moderate the relationship between self-esteem and posttraumatic growth in participants living with psychophysiological skin disorders.

The research design and methodology will be discussed in the next paragraph.

Research Design and Methodology

In order to address the above research objectives, a quantitative approach with a non-experimental and correlational research design was utilised (Stangor, 2015). A quantitative research method is a scientific approach that permits statistical, systematic and objective collection of data (Stangor, 2015). It allows for a study using a large sample group whereby results can be generalised and used to make predictions (Brent & Kraska, 2010). Non-experimental research does not control, manipulate or interfere with the variables of the study (Brent & Kraska, 2010; Fouche & De Vos, 2009; Gravetter & Forzano 2003). A cross-sectional design was utilised to determine the strength and direction of the relationships between two or more variables (Stangor, 2011).

Participants and sampling procedure

A sample of 100 participants with psychophysiological skin disorders, namely, Psoriasis, Atopic Dermatitis, Alopecia and Pruritus were recruited. All participants were screened and diagnosed by a designated dermatologist employed at a hospital in Bloemfontein, Free State. Specifically, after their visit by the dermatologist, the participants were introduced to the study and if interested, were sent to the researcher's office to participate. Thus, participants were selected using a non-probability, convenience sampling method. This indicated that participants were not selected randomly from a population, but were selected based on convenient access, diagnosis, as well as availability (Maree & Pietersen, 2010). Inclusion criteria were all participants aged between 18 and 60 years, diagnosed with psychophysiological skin disorders within the past six (6) to seventy-two (72) months. Participants younger than 18 years and older than 60 were excluded from the study, and those diagnosed with other skin disorders such as pathophysiological disorders. The participants further comprised of all genders and all races.

Ethical Consideration and Data collection

Permission to collect the data was granted by the Ethics Committee of the Faculty of Humanities (GHREC), the Health Sciences Research Ethics Committee at the University of the Free State (UFS-HSD2020/1880/2004), and the Department of Health, Free State.

Permission was also granted by the Dermatology department at one of the Bloemfontein hospitals, specifically by Dr Makhakhe. The written informed consent of participants was obtained before the commencement of data collection. Other ethical principles considered included confidentiality, anonymity, voluntary participation, and withdrawal, as well as justice and non-maleficence (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979).

Letters explaining the study, including the risks thereof, were distributed to all participants. Data were collected using standardised questionnaires administered to participants at the hospital during clinic days. They were also given the opportunity to ask questions related to the intended research. According to the Health Professions Council of South Africa (HPCSA, 2016), participating in a research study is voluntary. Participants were informed that they have the right to withdraw from the study at any time. Once they agreed to take part in the study, participants were asked to provide written consent.

Each participant's anonymity was respected throughout the process by ensuring that no personal information, such as their name and surname, were placed on the questionnaires. Questionnaires were made available in booklet form and were verbally administered to participants in their own home language if there was a need (Sesotho, Afrikaans and English). The questionnaires took approximately ten minutes to complete. The researcher/research assistant were available to answer and clarify any questions from the participants. Participants were informed that any identifiable information would be held in the strictest

confidence and that hard copies of their answers would be stored by the researcher for a period of five years, in a locked cupboard/filing cabinet in the Department of Psychology for future academic purposes. Additionally, participants were informed that electronic information is stored on a password-protected computer and encrypted word document files. Finally, the basic ethical principles that are particularly relevant to the ethics of research involving human participants : the principles of respect of persons, beneficence and justice were dutifully upheld (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979) In this regard, participants entered into the research study voluntarily and with adequate information. The study was conducted with the intention to ensure that there will not be any physical, social, psychological, or economic harm caused to the participants. Efforts were also made to secure participants' wellbeing as they were informed that counselling and support services were available for participants who experienced any emotional distress during the study at either Gateway Mental Health Clinic or Pelonomi Academic Hospital, both in Bloemfontein, and within reasonable proximity to the site of the study. This would be via the casualty/outpatient Department with a referral (see Appendix H). Finally, Allan (2015) explains that the ethical principle of justice pertains to treating participants fairly, objectively and without bias. This was achieved by ensuring that all potential participants had an equal chance of being chosen to participate in the study.

Characteristics of sample

The 100 participants were heterogenous, comprising of all genders and ethnic groups. With the exception of age and how long they have been diagnosed, all other biographical variables were measured on the nominal scale. The average age of the total study group was 39.9 years with a standard deviation of 12.5 years. Their ages range from 18 to 60 years. The

average number of months that they were diagnosed was 39.7 (3 years and 3 months) with a standard deviation of 18.9 months. Information on the distribution of the 100 participants regarding the four variables that were measured on the nominal scale are presented in Table 1.

Table 1

Frequency distribution of biographical variables

Biographical variables	N	%
Gender:		
Male	39	39.0
Female	61	61.0
Ethnicity:		
African/Black	72	72.0
Coloured	4	4.0
Indian	1	1.0
White	23	23.0
Home language:		
English	13	13.0
Afrikaans	17	17.0
isiXhosa	12	12.0
isiZulu	1	1.0
SeSotho	52	52.0
Tshivenda	1	1.0
Setswana	4	4.0
Type of skin disorder		
Atopic Dermatitis	34	34.0
Psoriasis	25	25.0
Alopecia (Clinical sign)	12	12.0
Pruritus (Clinical sign)	29	29.0

Of the total group 61% consisted of female while 39% were male. With regard to ethnicity, African/Black was the predominant ethnic group at 72%, followed by White at 23%, Coloured at 4%, and Indian comprised 1% of the study population.

Furthermore, the majority of the population's home language was Sesotho (52%), Afrikaans (17%), and English (13%). In addition, the psychophysiological skin

conditions were reported in terms of occurrence: Atopic Dermatitis (34%), followed by Pruritis (29%), Psoriasis (25%), and Alopecia (12%). It is important to note that these disorders were reviewed independently from pruritis because pruritis i.e., itching, can be a symptom of the other skin disorders mentioned.

Measuring instruments

The measuring instruments used to measure the variables (above) will now be discussed.

The Posttraumatic Growth Inventory (PTGI) (Tedeschi & Calhoun, 1996) was used to measure the participants' positive outcomes after the experience of a traumatic event. It consisted of 21 items with on a six-point Likert- type scale, ranging from 0 ("No change as a result of my crisis") to 5 ("I experienced a great change as a result of my crisis"). Lower scores indicated minor changes, with higher scores indicating a greater degree of change in the experience of positive growth. It also utilises five factors namely, new possibilities, relating to others, personal strength, spiritual change, and appreciation of life (Tedeschi & Calhoun, 1996). The PTGI demonstrated good psychometric properties, with the Cronbach's alpha suggesting an internal consistency of .67 to .85 depending on the population and the traumatic event (Tedeschi & Calhoun, 2006). In a South African study, the Cronbach's alpha was .95 suggesting that the PTGI is suitable in the South African context (Walker-Williams et al., 2012).

The Brief Social Support Scale (Beutel et al, 2017) was used to determine the participants' perceived social support based on the amount of tangible, emotional and informational support available. It consisted of six items and two subscales (tangible and emotional- informational support; three items each) on a four-point Likert-type scale ranging from 1 ("never") to 4 ("always"). Lower scores indicated negative perceived support, and higher scores indicated positive perceived support. It demonstrated good psychometric properties, with Cronbach's alpha suggesting a strong internal consistency: "emotional-

informational support” $\alpha = .87$; “tangible support” $\alpha = .86$; “overall” $\alpha = .86$ (Beutel et al., 2017, p.9).

The Rosenberg Self-esteem Scale (RSES) (Rosenberg, 1965) was used to assess the participants’ level of self-esteem based on perception of worth. It consisted of 10 items on a four-point Likert-type scale ranging from 1 (“strongly disagree”) to 4 (“strongly agree”). Total scores ranged from 10 to 40, with lower scores representing lower self-esteem. It demonstrated good psychometric properties, with Cronbach’s alpha suggesting a strong internal consistency ranging between .77 and .88 (Rosenberg, 1965). In an African study, Cronbach’s alpha was .63 for the RSES, which is generally considered good (Oladipo & Kalule-Sabiti, 2014).

The reliability coefficients of the respective measuring instruments were calculated using Cronbach's α coefficients and the Omega coefficient. This is displayed in Table 2.

Table 2
Reliability of Measuring Instruments and Subscales

Measurement scale	α -coefficient	Omega-coefficient
Posttraumatic Growth		
Factor 1: Relating to Others	.913	.915
Factor 2: New possibilities	.892	.894
Factor 3: Personal Strength	.865	.869
Factor 4: Spiritual Change	.656	.656
Factor 5: Appreciation of Life	.855	.855
Self-esteem	.827	.835
Perceived Social Support		
Tangible	.933	.935
Emotional-informational	0.883	.887

Reliability coefficients of 0.7 or higher is deemed acceptable in studies within the social sciences context (Lance et al. 2006). From Table 2 it is clear that except for Spiritual Change, all the scales had acceptable reliability indices and that they can be used in the analyses that will follow.

Data analysis procedure

The Statistical Package of the Social Sciences (SPSS) version 28 (IBM Corp, 2017) was employed to analyse the results of the study. The Pearson product-moment correlations coefficients were used to investigate the first research objective. Multiple hierarchical regression analyses were performed to investigate the second research objective, specifically the possible role that perceived social support may play in the relationship between self-esteem and post-traumatic growth in participants living with psychophysiological skin disorders. The possible role referred to is whether perceived social support mediates or moderates the relationship. A mediator variable is identified by the degree to which it manages to explain the relationship between the predictor (independent) and the criterion variable (dependent). In other words, mediation refers to the situation where the relationship between the predictor variable and the criterion variable can be explained by their relationship to a third variable (the mediator). A moderator variable also influences the direction and/or strength of the relationship between the predictor and criterion variables (Baron & Kenny, 1986; Field, 2013; Gelman & Hill, 2006).

To determine whether the intervening variable(s) appear as a mediator or moderator in the relationship between the independent and dependent variables, different steps are performed in the hierarchical regression procedure. In the first step, the analysis of single variables is handled. One of the psychological well-being variables is firstly added to the

regression equation to determine its unique contribution. During step two, both the independent and intervening variables (self-esteem variable and one of the perceived social support scales) are added to the equation. In this way, each of the predictor variables' significant proportional contribution to the prediction of the criterion variable (one of the post-traumatic growth scales, eg personal growth) is determined. In the third step, the product is examined between the independent variable (self-esteem) and perceived social support (each scale separately), in the prediction of post-traumatic growth (each scale separately).

When dealing with the product between two variables, it is important to avoid multicollinearity (Howell, 2013). For this purpose, the variance scores of the relevant variables were first calculated and then the product was calculated between the two sets of variance scores. By following this procedure, you can make the following deductions:

- If the calculated Beta coefficient of the independent variable (self-esteem) produces a significant Beta-coefficient in step 1, but a negligible coefficient in step 2 (when one of the perceived social support scales, e.g., tangible support, is added) it can be concluded that tangible support indeed mediates the relationship between self-esteem and post-traumatic growth (e.g., personal growth).
- If the calculated beta coefficient of the product term (step 3, in this case, between self-esteem and tangible support) is significant, it can be deduced that there is a significant interaction, which is then indicative of a moderator effect (Howell, 2013).

Both the 1% as well as 5% level 1 – to – 5% level of significance were used. To determine a significant interaction effect, a lessened p-value of 0.1 was applied (Aiken et al., 1991).

Results

In this section the results obtained in this study will be presented and discussed. Firstly, the distribution of data for the relevant variables will be presented. Table 3 provides more detail on the distribution of data by means of descriptive statistics (means, standard deviations, skewness, and kurtoses) for the variables that will be used in the analyses.

Table 3

Means, Standard Deviations, Skewness and Kurtoses for the Variables

Variable	Mean	Sd*	Skewness	Kurtosis
Posttraumatic Growth				
Factor 1: Relating to Others	21.00	8.16	-.335	-.792
Factor 2: New possibilities	13.51	6.31	-.125	-.869
Factor 3: Personal Strength	12.64	4.53	-.322	-.791
Factor 5: Appreciation of Life	8.58	4.18	-.345	-.951
Self-esteem	28.99	4.28	.040	-.080
Perceived Social Support				
Tangible	6.85	3.30	.276	-1.312
Emotional-informational	7.69	2.57	-.028	-.954

Note: * standard deviation

According to Peat et al. (2008), a range between -1 and +1 indicated slight skewness, while values between -2 and +2 indicated moderate skewness. For kurtosis, a normal distribution is between -3 and +3 (Brown, 1997). From Table 3, it is clear that for all the relevant variables the skewness, and kurtoses values fall within the normal limits and can therefore be used to investigate the formulated research objectives.

To investigate the first research objective, Pearson's product moment correlation coefficients were utilised to analyse the relationship between self-esteem and post-traumatic growth in participants living with psychophysiological skin disorders. The correlation coefficients between all the relevant variables (independent, dependent and intervening) are presented in Table 4 for the total group.

Table 4

Correlations between all the Variables for the Total Group (N=100)

Variable	F1	F2	F3	F5	Ros	Tan	Emo
Factor 1 (F1)	-	.79*	.81*	.73*	.56*	.36*	.56*
Factor 2 (F2)		-	.83*	.85*	.39*	.52*	.58*
Factor 3 (F3)			-	.82*	.48*	.40*	.48*
Factor 5 (F5)				-	.45*	.47*	.49*
Self-esteem (Ros)					-	.15	.32*
Tangible (Tan)						-	.65*
Emotional (Emo)							-

* $p \leq 0.01$

From Table 4, it can be noted that the posttraumatic growth variables show a significantly positive relationship with self-esteem together with perceived social support. Cohen (2004) as cited in Aron et al. (2013) postulates that correlation coefficients of .10 and above hold a small effect size, .30 and above a medium effect size, and .50 and above a large effect size; thus, indicative of the practical significance of the correlations. The self-esteem variable in particular, reported significantly positive correlations (1% significant level) with the PTG variables (F1, F2, F3,F5). Correlations reportedly ranged between moderate to large effect sizes which gives great practical value to the results. In answer to the first research objective, results show that the higher an individual's self-esteem, the more likely they are to possess posttraumatic growth factors. Similarly, the PSS variables (Tan and Emo) reported significantly positive correlations (1% significance level) with the PTG variables (F1, F2, F3,

F5), also ranging between moderate to large effect sizes. Thus, the more supported an individual perceives themselves to be, the more likely they are to reach posttraumatic growth.

In addition, the correlation between self-esteem and emotional-informational support were of a large effect size, suggesting that if one perceives oneself as feeling cared for and supported from an empathic stance, there is a likelihood of having a higher self-esteem. However, the effect size in terms of the correlation between self-esteem and tangible support were of small effect and should be interpreted with caution. It appears as though self-esteem is related to the type of perceived social support and posttraumatic growth factors within an individual.

To investigate the second research objective, multiple hierarchical regression analyses were conducted to determine the possible role (mediator or moderator) effect of perceived social support (two scales) on the relationship between self-esteem and posttraumatic growth (four scales) in participants living with psychophysiological skin disorders. Before the regression analyses were performed, the data were checked to ensure that all assumptions were met. Possible outliers, normality, multicollinearity, and homoscedasticity were investigated. Outliers were investigated through calculating Cook's Test. The maximum value for the Cook's Test was 0.258, thus, no outliers were identified (a value higher than 1 indicates the presence of outliers). To investigate the normality of data, the Shapiro-Wilk Test was used. Except for the self-esteem scores, the assumption of normality was violated (Shapiro-Wilk = $p < 0.05$). The violation was in line with the expected results, in that participants with a specific skin disorder would tend to obtain scores that deviate from the scores of a sample from a normal population. In other words, the distribution accurately reflected where the group should be in terms of the measured variables. The assumption about multicollinearity was investigated through the Variance Inflation factor (VIF). According to De Jongh et al. (2015) the

VIF thresholds of 5 are common for relatively small data sets and 10 for large data sets. The VIF-value ranged from 1.121 to 1.911 which are significantly lower than 5. It can be concluded that the assumption of multicollinearity was not violated. Lastly, the assumption of homogeneity of variance was investigated. Standardised residual values were calculated for each of the four dependent measurements. The lowest minimum and highest maximum standardised residual values were -3.036 and 2.467 which fall within the acceptable ranges of -3 and +3.

The analysis reflected in Table 5 investigated the role of tangible support (as perceived social support aspect) in the relationship between self-esteem and posttraumatic growth (relating to others, new possibilities, personal strength, and appreciation of life) in participants living with psychophysiological skin disorders.

Table 5:
Hierarchical Regression Analysis Predicting Posttraumatic Growth with Self-esteem as Independent Variable and Tangible (perceived social support) as Intervening Variable

Variables	Step 1	Step 2	Step 3
Factor 1: Relating to Others			
+Self-esteem	.557	.516	.516
+Tangible		.280	.286
+Self-esteem x Tangible			-.043
Model R^2	.310	.387	.389
Model ΔR^2	.310	.077	.002
Factor 2: New Possibilities			
+Self-esteem	.389	.319	.319
+Tangible		.470	.475
+Self-esteem x Tangible			-.031
Model R^2	.151	.367	.368
Model ΔR^2	.151	.216	.001
Factor 3: Personal Strength			
+Self-esteem	.475	.425	.425
+Tangible		.338	.338
+Self-esteem x Tangible			.005
Model R^2	.226	.337	.337
Model ΔR^2	.226	.112	.000
Factor 5: Appreciation of Life			
+Self-esteem	.454	.394	.394
+Tangible		.408	.409

+Self-esteem x Tangible			-.007
Model R^2	.207	.369	.369
Model ΔR^2	.207	.163	.000

** $p \leq 0.01$ * $p \leq 0.05$

+ Standardised beta coefficients are indicated

When self-esteem was entered in Step 1 to investigate the relationship with the participants' post-traumatic growth (relating to others), it was significant at the 1% level [$R^2 = .310$; $F_{1;988} = 44.124$; $p \leq .001$]. In Step 2, the intervening variable, tangible support, as well as the independent variable self-esteem, were both entered as predictors, and it was still significant on the 1% level [$R^2 = .387$; $F_{2;97} = 30.621$; $p \leq .000$]. In Step 3, the product term between self-esteem and tangible support was entered. The result indicated that no statistically significant interaction effect was found [$\beta = -.043$; $t = -.533$; $p \leq .595$]. It can be concluded that tangible support does not mediate or moderate the relationship between self-esteem and posttraumatic growth (relating to others) for participants living with psychophysiological skin disorders. From Table 5 it is clear that the relationship between self-esteem and the remaining post-traumatic growth aspects (new possibilities, personal strength, and appreciation of life) were not mediated or moderated by tangible social support.

The analysis reflected in Table 6 investigated the role of emotional-informational support (as social support aspect) in the relationship between self-esteem and post-traumatic growth (relating to others, new possibilities, personal strength, and appreciation of life) in participants living with psychophysiological skin disorders.

Table 6

Hierarchical Regression Analysis Predicting Posttraumatic Growth with Self-esteem as Independent Variable and Emotional-informational Support (percieved social support) as Intervening Variable

Variables	Step 1	Step 2	Step 3
Factor 1: Relating to Others			
+Self-esteem	.557	.421	.408
+Emotional		.428	.434
+Self-esteem x Emotional			.103
Model R^2	.310	.475	.485
Model ΔR^2	.310	.164	.010
Factor 2: New Possibilities			
+Self-esteem	.389	.226	.213
+Emotional		.509	.516
+Self-esteem x Emotional			.113
Model R^2	.151	.384	.397
Model ΔR^2	.151	.233	.013
Factor 3: Personal Strength			
+Self-esteem	.475	.359	.343
+Emotional		.364	.371
+Self-esteem x Emotional			.129
Model R^2	.226	.344	.361
Model ΔR^2	.226	.119	.016*
Factor 5: Appreciation of Life			
+Self-esteem	.454	.333	.326
+Emotional		.380	.384
+Self-esteem x Emotional			.060
Model R^2	.207	.336	.340
Model ΔR^2	.207	.130	.004

* $p \leq 0.1$

+ Standardised beta coefficients are indicated

Table 6 shows that for the dependent variable, personal strength (factor 3) a statistically significant relationship [$R^2 = .226$, $F_{1;98} = 28.534$, $p \leq .001$] with self-esteem was found (Step 1). In Step 2, emotional-informational support was added. The additional variance explained by emotional-informational support [$\Delta R^2 = .119$, $F_{1;97} = 17.601$; $p \leq .001$] was also significant. The relationship between self-esteem and personal strength was still significant which indicated that emotional-informational support did not mediate the relationship. In the final step, the interaction effect between self-esteem and emotional-informational support (Self-esteem x Emotional support) was

entered. The result indicated that a statistically significant interaction effect was found at the 10% level [$\Delta R^2 = .016$, $F_{1;96} = 2.463$; $p \leq .010$]. It can therefore be concluded that emotional-informational support indeed moderates the relationship between self-esteem and personal strength in participants living with psychophysiological skin disorders.

The nature of this moderator effect was investigated by calculating the strength and direction of the relationship between self-esteem and personal strength for those patients who achieved low and high scores on the moderator variable (emotional-informational support). For this purpose, two separate regression lines were calculated – one for those high on emotional-informational support (at or above the 75th percentile, $N = 22$; a score of 10 or higher) and one for those low on emotional-informational support (at or lower than the 25th percentile, $N = 22$; scored a score of 5 or lower). The regression lines are represented in Figure 1.

Figure 1

Regression lines for participants experiencing low and high levels of emotional-informational support respectively, with self-esteem as a predictor of personal strength

For participants with high levels of emotional-informational support their levels of personal strength increase with an increase in self-esteem. A significant positive correlation ($r = .396$; $p \leq 0.050$) was identified for this group between self-esteem and personal growth. However, for the group with low levels of emotional-informational support, a slight decrease in personal strength was identified, with an increase in self-esteem. In this case, no statistically significant relationship ($p \leq .106$; $p \leq .638$) was identified. Only in the case of participants with high perceived emotional-informational support levels was an increase in self-esteem noted to also increase their personal strength.

Discussion

The overall aim of the study was to examine the role of perceived social support in the relationship between self-esteem and posttraumatic growth amongst participants living with psychophysiological skin disorders. The study sought to respond to two objectives. First, to investigate whether a significant relationship exists between self-esteem and posttraumatic growth in participants living with psychophysiological skin disorders. Second, to explore whether perceived social support mediates/moderates the relationship between self-esteem and posttraumatic growth in participants living with psychophysiological skin disorders.

Self-esteem as the predictor variable, posttraumatic growth as the outcome variable, and perceived social support as the moderating/mediating variable were measured through means of The Rosenberg Self-esteem Scale, The Posttraumatic Growth Inventory and the Brief Social Support Scale (Beutel et al, 2017; Rosenberg, 1965; Tedeschi & Calhoun, 1996). The reliability score (internal consistency) for the above-mentioned scales and subscales were shown to be acceptable in studies within the social

sciences context, (see Table 2), (Lance et al. 2006) with the exception of spiritual change. In addition, all variables, skewness and kurtoses (see Table 3) values fell within normal limits.

To address the first objective, the present study investigated if there is a significant relationship between self-esteem and posttraumatic growth, where correlations between the various variables were calculated (see Table 4). As expected, the results indicated that self-esteem showed significantly positive relationships with posttraumatic growth. In other words, the higher the level of self-esteem, the higher the development of posttraumatic growth. This finding resonates with a study by Zhai et al. (2014) in which they found that aspects of self-esteem promote posttraumatic growth, and that similar to other populations with trauma and adversity, people with psychophysiological skin disorders reported posttraumatic growth.

To address the second objective, this study sought to investigate whether perceived social support moderates/mediates the relationship between self-esteem, and posttraumatic growth in participants with psychophysiological skin disorders. Significant findings are discussed below.

The current study revealed a significantly positive relationship between self-esteem, the intervening variable of perceived social support, in particular emotional-informational support (validation and empathy) and posttraumatic growth (See Table 6). Intrinsically, the higher one's self-esteem, the higher one perceives feeling cared for and validated by their close relatives and friends, which will enhance posttraumatic growth. This finding resonates with Bryson and Bogart's (2020) study in which they found that

emotional-informational support is thought to be helped by self-esteem and feelings of personal strength in individuals with rare diseases. Griffiths et al. (2011) postulate that support from friends as well as family holds a superior position to support from other sources. Thus, perceiving a high emotional-informational support is especially relevant in gaining a greater feeling in self-reliance, better handling of difficulties and accepting the way things work out. Subsequently, a study found that individuals with low self-esteem are less receptive to emotional-informational support that positively reframes their experience than are individuals with high self-esteem (Marigold et al., 2014).

Findings further yield interesting results in exploring whether perceived social support, in particular tangible support (practical, material aid and behavioural assistance), moderates or mediates the relationship between self-esteem and posttraumatic growth (relating to others, new possibilities, personal strength, and appreciation of life) (See Table 5). As the results indicated, tangible support did not succeed in having any moderating or mediating effects in participants living with psychophysiological skin disorders. This concurs with findings in a study where patients with social anxiety and Type D personality often needed emotional support, which appeared to be more important than practical, tangible support (Beutel et al., 2017). In contrast, studies have found that tangible support is more typically predominant when physical dependency is necessary. A study by Huang et al. (2013) reported that tangible support was found to moderate the relationship between depressive symptoms and quality of life in breast cancer patients which is suggestive that the more physically disabling the disease, the more tangible the support benefits.

The results from the multiple hierarchical regression analyses emphasised the practical implications of distinguishing between the emotional-informational and practical, tangible dimensions of perceived social support in participants living with psychophysiological skin disorders.

Limitations of the Study

While this study can be regarded as having somewhat achieved its goal, there are certain limitations that need to be indicated, which include the following:

First, the nature and size of the sample pose a limitation of the study. The results of this study cannot be generalised to the larger South African population, since the research study was conducted on a small sample of participants at a hospital in Bloemfontein, Free State province, South Africa, limiting the generalisability of the study.

Second, a non-probability, convenience sampling method was utilised; thus, not allowing everyone in the population the same chance of being selected.

Thirdly, this was a quantitative, correlational study and causality could not be determined. Despite the fact that the temporality of association is a strong criterion for causality, cross-sectional studies cannot prove causality, although they do help to generate causal hypotheses (Makhubela, 2021).

Fourthly, all variables were measured by means of self-reporting scales that were completed by the participants, which can offer an opportunity for the distortion of

results given the inherent intentions of the participant. The researcher did try to mitigate this effect by being available, with the assistance of an assistant familiar in other languages, to assist participants with any questions they might have.

Fifthly, participants could have provided socially conforming information that might not be a true reflection of their perceived social support, self-esteem or posttraumatic growth factors, regardless of all attempts to ensure that this did not occur.

Finally, the last factor that we took cognisance of was the overlaps in skin conditions that were occasionally experienced by our participants, which were factored in during data collection. Examples included participants with psoriasis that also had alopecia (hair-loss), atopic and psoriatic participants invariably presenting with pruritus (itching).

Recommendations

The inclusion of alternative forms for assessing self-esteem, perceived social support and posttraumatic growth, in combination with self-report measures, could make the findings more robust and applicable within the South African context. For instance, it would be appropriate to add additional items on health behaviours, for instance, to the instrument for measuring PTG in participants with psychophysiological skin diseases. A mixed method approach where qualitative interviews are added and analysed may yield a more in-depth experience of the various variables. Longitudinal research studies could be added to assess the long-term effects of perceived social support on self-esteem and posttraumatic growth, and this would also be beneficial in measuring and analysing change in the variables over time.

Implications and future directions

Despite the abovementioned limitations, this study augments the body of knowledge in terms of perceived social support on self-esteem and posttraumatic growth in participants living with psychophysiological skin disorders within the South African context. As previously mentioned, positive psychology perspectives and their feasibility have been largely ignored amongst the psychophysiological skin population, thus, this study significantly contributes to highlighting the need for a holistic approach in treating people with skin conditions. The findings of this study can be utilised to create interventions / psycho-educational programmes in which families, and communities, can be educated about the aforementioned factors.

Interventions should be extended to the participants' families and communities, as it became evident that emotional-informational support can have a positive effect on participants. Family involvement is a significant factor to consider in any intervention, and in the care and treatment of people s with psychophysiological skin conditions, it is possibly crucial to optimally increase the collaboration between dermatology and psychology.

REFERENCES

- Ahmed, A., Butler, D. C., & Reichenberg, J. (2013). Quality-of-life effects of common dermatological diseases, *Semin Cutan Med Surg*, 32(2), 101-109.
<https://doi.org/10.12788/j.sder.0009>
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.
- Alesi, M., Rappo, G., & Pepi, A. (2012). Self-esteem at school and self-handicapping in childhood: Comparison of groups with learning disabilities. *Psychological reports*, 111(3), 952-962. <https://doi.org/10.2466/15.10.PR0.111.6.952-962>
- Aron, A., Coups, E.J., & Aron, E.N. (2013). *Statistics for Psychology*. Pearson.
- Asbring, P. (2001). Chronic illness—a disruption in life: identity-transformation among women with chronic fatigue syndrome and fibromyalgia. *Journal of advanced nursing*, 34(3), 312-319. <https://doi.org/10.1046/j.1365-2648.2001.01767.x>
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Basavaraj, K. H., Navya, M. A., & Rashmi, R. (2010). The relevance of psychiatry in dermatology: Present concepts. *Indian Journal of Psychiatry*, 52(3), 270. <https://doi.org/10.4103/0019-5545.70992>
- Beutel, M. E., Brähler, E., Wiltink, J., Michal, M., Klein, E. M., Jünger, C., Wild, P. S., Münzel, T., Blettner, M., Lackner, K., & Nickels, S. (2017). Emotional and tangible social support in a German population-based sample: Development and validation of the Brief Social Support Scale (BS6). *PLoS One*, 12(10), 1-20. <https://doi.org/10.1371/journal.pone.0186516>
- Bewley, A. (2017). The neglected psychological aspects of skin disease. *BMJ*, 358, 1-2.
<https://doi.org/10.1136/bmj.j3208>

- Brent, J.J., & Kraska, P.B. (2010). Moving beyond our methodological default: A case for mixed methods. *Journal of Criminal Justice Education*, 21(4), 412–430.
<https://doi.org/10.1080/10511253.2010.516562>
- Brooks, M. (2018). *Rethinking posttraumatic growth: Psychological processes, outcomes, and individual differences between survivors of multiple types of adverse events* (Doctoral dissertation, University of Central Lancashire).
- Brown, J.D. (1997). *Statistics corner: Questions and answers about language testing statistics: Skewness and kurtosis*. www.jalt.org/test/bro_1.htm.
- Bryson, B. A., & Bogart, K. R. (2020). Social support, stress, and life satisfaction among adults with rare diseases. *Health Psychology*, 39(10), 912-920.
<https://doi.org/10.1037/hea0000905>
- Calhoun, L. G., Cann, A., & Tedeschi, R. G. (2010). The posttraumatic growth model: Sociocultural considerations. In T. Weiss & R. Berger (Eds.), *Posttraumatic growth and culturally competent practice: Lessons learned from around the globe* (p. 1–14). John Wiley & Sons.
- Calhoun, L. G., & Tedeschi, R. G. (2014). The foundations of posttraumatic growth: An expanded framework. In *Handbook of posttraumatic growth* (pp. 3-23). Routledge.
- Carver, C. S., & Scheier, M. F. (2001). *On the self-regulation of behavior*. Cambridge University Press.
- Cash, T. F., & Smolak, L. (Eds.). (2011). *Body image: A handbook of science, practice, and prevention*. Guilford Press.
- Chamorro-Premuzic, T., Von Stumm, S., & Furnham, A. (Eds.). (2015). *The Wiley-Blackwell handbook of individual differences*. John Wiley & Sons.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic medicine*.
- Cohen, S. (2004). Social relationships and health. *American psychologist*, 59(8), 676.

- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological bulletin*, 98(2), 310-357. <https://doi.org/10.1037/0033-2909.98.2.310>
- Collins, A. E., Niles, B. L., Mori, D. L., Silberbogen, A. K., & Seligowski, A. V. (2014). A telephone-based intervention to promote diabetes management in veterans with posttraumatic stress symptoms. *Professional Psychology: Research and Practice*, 45(1), 20-26. <https://doi.org/10.1037/a0032604>
- Cowen, E. L., & Kilmer, R. P. (2002). "Positive psychology": Some plusses and some open issues. *Journal of community psychology*, 30(4), 449-460.
- Csikszentmihalyi, M., & Seligman, M. (2000). Positive psychology. *American psychologist*, 55(1), 5-14. <https://10.1037/0003-066X.55.1.5>
- De Jongh, P. J., De Jongh, E., Pienaar, M. P., Gordon-Grant, H., Oberholzer, M., & Santana, L. (2015). The impact of pre-selected variance in ation factor thresholds on the stability and predictive power of logistic regression models in credit scoring. *ORiON*, 31(1), 17-37. <https://www.ajol.info/index.php/orion/article/view/118692>
- De Waard-van der Spek, F. B., Oranje, A. P., De Raeymaecker, D. M. J., & Peereboom-Wynia, J. D. R. (1989). Juvenile versus maturity-onset alopecia areata: A comparative retrospective clinical study. *Clinical and Experimental Dermatology*, 14(6), 429-433. <https://doi.org/10.1111/j.1365-2230.1989.tb02604.x>
- Donnellan, M. B., Trzesniewski, K. H., & Robins, R. W. (2011). Self-esteem: Enduring issues and controversies. In T. Chamorro-Premuzic, S. von Stumm, & A. Furnham (Eds.), *The Wiley-Blackwell handbook of individual differences* (pp. 718–746). Wiley Blackwell.

- Eagle, D. E., Hybels, C. F., & Proeschold-Bell, R. J. (2019). Perceived social support, received social support, and depression among clergy. *Journal of Social and Personal Relationships*, 36(7), 2055-2073. <https://doi.org/10.1177/0265407518776134>
- Evers, A. W. M., Lu, Y., Duller, P., Van der Valk, P. G. M., Kraaimaat, F. W., & Van de Kerkhof, P. C. M. (2005). Common burden of chronic skin diseases? Contributors to psychological distress in adults with Psoriasis and atopic dermatitis. *British Journal of Dermatology*, 152(6), 1275-1281. <https://doi.org/10.1111/j.1365-2133.2005.06565.x>
- Field, A. (2013). *Discovering statistics using IBM SPSS Statistics*. Sage.
- Folks, D. G., & Warnock, J. K. (2001). Psychocutaneous disorders. *Current psychiatry reports*, 3(3), 219-225. <https://doi.org/10.1007/s11920-001-0057-3>
- Fouche, C.B., & De Vos, A.S. (2009). Quantitative research design. In AS. De Vos, C.B. Strydom, C.B. Fouche, & C.S.L. Delport, (Eds.), *Research at grass roots: For the social science and human services professions* (3rd ed., pp. 132–143). Van Schaik.
- Fox, F. E., Rumsey, N., & Morris, M. (2007). “Ur skin is the thing that everyone sees and you cant change it!”: Exploring the appearance-related concerns of young people with psoriasis. *Developmental Neurorehabilitation*, 10(2), 133-141. <https://doi.org/10.1080/13638490701217594>
- Gelman, A., & Hill, J. (2006). *Data analysis using regression and multilevel/hierarchical models*. Cambridge University Press
- Ghosh, A., & Deb, A. (2017). Positive psychology interventions for chronic physical illnesses: A systematic review. *Psychological Studies*, 62(3), 213-232. <https://doi.org/10.1007/s12646-017-0421-y>
- Giannopoulou, I., Strouthos, M., Smith, P., Dikaiakou, A., Galanopoulou, V., & Yule, W. (2006). Posttraumatic stress reactions of children and adolescents exposed to the Athens 1999 earthquake. *European Psychiatry*, 21(3), 160-166. <https://doi.org/10.1016/j.eurpsy.2005.09.005>

- Ginsburg, I. H., & Link, B. G. (1989). Feelings of stigmatization in patients with psoriasis. *Journal of the American Academy of Dermatology*, 20(1), 53-63.
[https://doi.org/10.1016/S0190-9622\(89\)70007-4](https://doi.org/10.1016/S0190-9622(89)70007-4)
- Gip, L., Lodin, A., & Molin, L. (1969). Alopecia areata. A follow-up investigation of outpatient material. *Acta Dermato-Venereologica*, 49(2), 180-188.
 europepmc.org/article/med/4184566
- Gravetter, F. J., & Forzano, L. A. B. (2003). *Research methods for the behavioral sciences*. Thomson.
- Griffiths, K.M., Crisp, D.A., Barney, L., & Reid, R. (2011). Seeking help for depression from family and friends: A qualitative analysis of perceived advantages and disadvantages. *BMC Psychiatry*, 11(1), 196. <https://doi.org/10.1186/1471-244X-11-196>
- Health Professions Act [Act no. 56 of 1974]. (1974). *Ethical Rules of Conduct for practitioners registered under the Health Professions Act, 1974*.
https://www.hpcsa.co.za/Uploads/PSB_2019/Exams/ethical_rules_annexure_12.pdf
- Health Professions Council of South Africa [HPCSA]. (2016). *Guidelines for good practice in the health care professions: General ethical guidelines for health researchers*.
https://www.hpcsa.co.za/Uploads/Professional_Practice/Conduct%20%26%20Ethics/Booklet%2013%20Gen%20Ethical%20Guidelines%20for%20Health%20Researchers.pdf
- Huang, C. Y., & Hsu, M. C. (2013). Social support as a moderator between depressive symptoms and quality of life outcomes of breast cancer survivors. *European Journal of Oncology Nursing*, 17(6), 767-774. <https://doi.org/10.1016/j.ejon.2013.03.011>
- Howell, D.C. (2013). *Statistical methods for psychology* (8th ed.). Wadsworth.
- IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.
- Jafferany, M. (2007). Psychodermatology: a guide to understanding common psychocutaneous disorders. *Primary care companion to the Journal of clinical psychiatry*, 9(3), 203-213. www.psychiatrist.com/wp-content/uploads/2021/02/25481_psychodermatology-guide-understanding-common-psychocutaneous.pdf

- Jayawickreme, E., & Blackie, L. E. (2014). Post-traumatic growth as positive personality change: Evidence, controversies and future directions. *European Journal of Personality*, 28(4), 312-331. <https://doi.org/10.1002/per.1963>
- Joseph, S., Maltby, J., Wood, A. M., Stockton, H., Hunt, N., & Regel, S. (2012). The Psychological Well-Being—Post-Traumatic Changes Questionnaire (PWB-PTCQ): Reliability and validity. *Psychological Trauma: Theory, Research, Practice, and Policy*, 4(4), 420-428. <https://doi.org/10.1037/a0024740>
- Juczyński, Z., & Ogińska-Bulik, N. (2012). In spite of adversity—posttraumatic growth in the aftermath of experienced negative life events. *Experiencing a suffering*, 1, 301-320. <https://d1wqtxts1xzle7.cloudfront.net/49397681/>
- Kanji, A. (2019). Perspective on Living With a Skin Condition and its Psychological Impact: A Survey. *Journal of patient experience*, 6(1), 68-71. <https://doi.org/10.1177/2374373518774397>
- Kantor, J. (2021). January 2021: Skin disease, sleep, and mental health. *Journal of the American Academy of Dermatology*, 84(1), 23-30. <https://doi.org/10.1016/j.jaad.2020.10.058>
- Karimkhani, C., Dellavalle, R. P., Coffeng, L. E., Flohr, C., Hay, R. J., Langan, S. M., ... & Naghavi, M. (2017). Global skin disease morbidity and mortality: an update from the global burden of disease study 2013. *JAMA dermatology*, 153(5), 406-412. <https://doi.org/10.1001/jamadermatol.2016.5538>
- Kashdan, T. B., & Kane, J. Q. (2011). Post-traumatic distress and the presence of post-traumatic growth and meaning in life: Experiential avoidance as a moderator. *Personality and individual differences*, 50(1), 84-89. <https://doi.org/10.1016/j.paid.2010.08.028>
- Kleinman, A. (1988). *Suffering, healing and the human disorder*. Basic Books.

- Koblenzer, C. S. (2005). The emotional impact of chronic and disabling skin disease: A psychoanalytic perspective. *Dermatologic Clinics*, 23(4), 619-627.
<https://doi.org/10.1016/j.det.2005.05.013>
- Koo, J., & Lebwohl, A. (2001). Psychodermatology: the mind and skin connection. *American family physician*, 64(11), 1873-1879. aafp.org/afp/2001/1201/p1873.html
- Koo, J. Y., & Lee, C. S. (2003). General approach to evaluating psychodermatological disorders. In *Psychocutaneous medicine* (pp. 17-28). CRC Press.
- Lakey, B., & Cassady, P. B. (1990). Cognitive processes in perceived social support. *Journal of personality and social psychology*, 59(2), 337.
- Lakey, B., & Dickinson, L. G. (1994). Antecedents of perceived support: Is perceived family environment generalized to new social relationships?. *Cognitive Therapy and Research*, 18(1), 39-53. <https://doi.org/10.1007/BF02359394>
- Lakey, B., & Orehek, E. (2011). Relational regulation theory: a new approach to explain the link between perceived social support and mental health. *Psychological review*, 118(3), 482-495. <https://doi.org/10.1037/a0023477>
- Lance, C.E., Butts, M.M., & Michels, L.C. (2006). The sources of four commonly reported cut-off criteria. *Organizational Research Methods*, 9(2), 202-220.
<https://doi.org/10.1177/1094428105284919>
- Linley, P. A., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress: Official Publication of the International Society for Traumatic Stress Studies*, 17(1), 11-21.
<https://doi.org/10.1023/B:JOTS.0000014671.27856.7e>
- Lyakhovitsky, A., Gilboa, S., Eshkol, A., Barzilai, A., & Baum, S. (2017). Late-onset Alopecia Areata: A retrospective cohort study. *Dermatology*, 233(4), 289-294.
<https://doi.org/10.1159/000481881>

- Maddux, J. E. (2008). Positive psychology and the illness ideology: Toward a positive clinical psychology. *Applied Psychology*, 57, 54-70. <https://doi.org/10.1111/j.1464-0597.2008.00354.x>
- Maddux, J. E., & Lopez, S. J. (2015). Deconstructing the illness ideology and constructing an ideology of human strengths and potential in clinical psychology. *Positive psychology in practice: Promoting human flourishing in work, health, education, and everyday life*, 411-428. <https://doi.org/10.1002/9781118996874.ch25>
- Magyar-Moe, J. L., Owens, R. L., & Conoley, C. W. (2015). Positive psychological interventions in counseling: What every counseling psychologist should know. *The Counseling Psychologist*, 43(4), 508-557. <https://doi.org/10.1177/0011000015573776>
- Makhubela, M. (2021). Comorbid anxiety and depression psychopathology in university students: a network approach. *South African Journal of Psychology*, 51(1), 35-53. <https://hdl.handle.net/10520/ejc-sapsyc-v51-n1-a4>
- Maree, K., & Pietersen, J. (2010). Chapter 10: Sampling. In K. Maree (Ed.), *First steps in research* (pp. 172-196). Van Schaik Publishers.
- Marigold, D. C., Cavallo, J. V., Holmes, J. G., & Wood, J. V. (2014). You can't always give what you want: The challenge of providing social support to low self-esteem individuals. *Journal of Personality and Social Psychology*, 107(1), 56-80. <https://doi.org/10.1037/a0036554>
- Miniszewska, J. (2015). Psychodermatology from the perspective of a psychologist. *Health Psychology Report*, 3(4), 269-280. <https://doi=10.1.1.1086.1226&rep=rep1&type=pdf>
- Müller, R., Gertz, K. J., Molton, I. R., Terrill, A. L., Bombardier, C. H., Ehde, D. M., & Jensen, M. P. (2016). Effects of a tailored positive psychology intervention on well-being and pain in individuals with chronic pain and a physical disability. *The Clinical journal of pain*, 32(1), 32-44. <https://doi.org/10.1097/AJP.0000000000000225>

- National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research*. U.S. Department of Health and Human Services. <https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html>
- Nevitt, G. J., & Hutchinson, P. E. (1996). Psoriasis in the community: prevalence, severity and patients' beliefs and attitudes towards the disease. *British Journal of Dermatology*, 135(4), 533- 537. <https://doi.org/10.1046/j.1365-2133.1996.d01-1035.x>
- Ogińska-Bulik, N. (2013). The role of social support in posttraumatic growth in people struggling with cancer. *Health Psychology Report*, 1(1), 1-8.
- Ogińska-Bulik, N., & Kobylarczyk, M. (2016). Association between resiliency and posttraumatic growth in firefighters: the role of stress appraisal. *International journal of occupational safety and ergonomics*, 22(1), 40-48. <https://doi.org/10.1080/10803548.2015.1109372>
- Oladipo, Samuel, E., & Kalule-Sabiti, I. (2014). Exploring the suitability of Rosenberg self-esteem scale for adult use in south-western Nigeria. *Gender and Behaviour*, 12(1), 6027-6034. <https://hdl.handle.net/10520/EJC154676>
- Orth, U., & Robins, R. W. (2014). The development of self-esteem. *Current directions in psychological science*, 23(5), 381-387. <https://doi.org/10.1111/j.0963-7214.2005.00353.x>
- Papadopoulos, L., Bor, R., Legg, C., & Hawk, J. L. (1998). Impact of life events on the onset of vitiligo in adults: preliminary evidence for a psychological dimension in aetiology. *Clinical and experimental dermatology*, 23(6), 243-248. [10.1046/j.1365-2230.1998.00384.x](https://doi.org/10.1046/j.1365-2230.1998.00384.x)
- Papadopoulos, L., Bor, R., & Legg, C. (1999). Coping with the disfiguring effects of vitiligo: a preliminary investigation into the effects of cognitive-behavioural therapy. *British*

Journal of Medical Psychology, 72(3), 385-396.

<https://doi.org/10.1348/000711299160077>

Peat, J., Barton, B., & Elliott, E. (2008). *Statistics workbook for evidence-based health care*. Wiley-Blackwell.

Picardi, A., & Abeni, D. (2001). Stressful life events and skin diseases: Disentangling evidence from myth. *Psychotherapy and Psychosomatics*, 70(3), 118-136.

<https://doi.org/10.1159/000056237>

Picardi, A., Mazzotti, E., Gaetano, P., Cattaruzza, M. S., Baliva, G., Melchi, C. F., Biondi, M., & Pasquini, P. (2005). Stress, social support, emotional regulation, and exacerbation of diffuse plaque psoriasis. *Psychosomatics*, 46(6), 556-564.

<https://doi.org/10.1176/appi.psy.46.6.556>

Poudel, K. C., Buchanan, D. R., Amiya, R. M., & Poudel-Tandukar, K. (2015). Perceived family support and antiretroviral adherence in HIV-positive individuals: results from a community-based positive living with HIV study. *International quarterly of community health education*, 36(1), 71-91.

<https://doi.org/10.1177/0272684X15614220>

Procidano, M. E., & Smith, W. W. (1997). Assessing perceived social support. In *Sourcebook of social support and personality* (pp. 93-106). Springer, Boston, MA.

Reddy, M. S. S., & Chaturvedi, S. K. (2017). Psychosocial Issues in Dermatology. *EMJ*

Dermatol, 5(1), 83-89. [emj.emg-](http://emj.emg-health.com/wpcontent/uploads/sites/2/2018/01/Psychosocial-Issues-in-Dermatology.pdf)

[health.com/wpcontent/uploads/sites/2/2018/01/Psychosocial-Issues-in-Dermatology.pdf](http://emj.emg-health.com/wpcontent/uploads/sites/2/2018/01/Psychosocial-Issues-in-Dermatology.pdf)

Rodriguez, N., Flores, R. T., London, E. F., Bingham Mira, C., Myers, H. F., Arroyo, D., &

Rangel, A. (2019). A test of the main-effects, stress-buffering, stress-exacerbation, and joint-effects models among Mexican-origin adults. *Journal of Latinx*

Psychology, 7(3), 212. <https://doi.org/10.1037/lat0000116>

- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
- Rosenberg, M. (1989). *Society and the adolescent self-image*. Wesleyan University Press.
- Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American sociological review*, 141-156. <https://doi.org/10.2307/2096350>
- Sarason, B. R., Pierce, G. R., & Sarason, I. G. (1990). Social support: The sense of acceptance and the role of relationships. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 97–128). John Wiley & Sons.
- Seligman, M. E. (2012). *Flourish: A visionary new understanding of happiness and well-being*. Simon and Schuster.
- Seligman, M. E., & Csikszentmihalyi, M. (2014). Positive psychology: An introduction. In *Flow and the foundations of positive psychology* (pp. 279-298). Springer, Dordrecht.
- Shah, R. B. (2018). Impact of collaboration between psychologists and dermatologists: UK hospital system example. *International journal of women's dermatology*, 4(1), 8-11. <https://doi.org/10.1016/j.ijwd.2017.10.003>
- Sharma, D., Mathur, D. M., Jeenger, J., Sharma, M., & Gupta, K. (2018). Quality of life and self-esteem in patients with Psoriasis, vitiligo and healthy controls: A cross sectional study. *Telangana Journal of Psychiatry*, 4(2), 96-102. <https://doi.org/10.18231/2455-8559.2018.0011>
- Sheldon, K. M., & King, L. (2001). Why positive psychology is necessary. *American psychologist*, 56(3), 216 –217. <https://doi.org/10.1037/0003-066X.56.3.216>
- Shen, M., Xiao, Y., Su, J., Zhao, S., Li, J., Tao, J., ... & Chen, X. (2020). Prevalence and patient-reported outcomes of noncommunicable skin diseases among college students in China. *JAAD International*, 1(1), 23-30. <https://doi.org/10.1016/j.jdin.2020.03.003>
<https://doi.org/10.1016/j.jad.2019.08.092>

- Schunk, D. H. (1985). Self-efficacy and classroom learning. *Psychology in the Schools*, 22(2), 208-223. [https://doi.org/10.1002/1520-6807\(198504\)22:2<208::AID-PITS2310220215>3.0.CO;2-7](https://doi.org/10.1002/1520-6807(198504)22:2<208::AID-PITS2310220215>3.0.CO;2-7)
- Shuwiekh, H., Kira, I. A., & Ashby, J. S. (2018). What are the personality and trauma dynamics that contribute to posttraumatic growth?. *International Journal of Stress Management*, 25(2), 181. <https://doi.org/10.1037/str0000054>
- Stangor, C. (2011). *Research methods for the behavioral sciences*. Wadsworth Cengage Learning.
- Stangor, C. (2015). *Research methods for the behavioural sciences* 5th ed. Cengage Learning.
- Sztonyk, B., & Formella, Z. (2020). The role of social support in contributing to posttraumatic growth in persons with vision impairment. *Health Psychology Report*, 8(3), 238-247. <https://doi.org/10.5114/hpr.2020.96896>
- Taku, K., & Britton, M. (2018). Relationships between self-esteem and posttraumatic growth among adolescents in the US. *Ment Health*, 14, 656-655.
mhfmjournal.com/pdf/relationships-between-selfesteem-and-posttraumatic-growth-among-adolescents-in-the-us.pdf
- Tallman, B. A., & Hoffman, A. C. (2017). Meaning making concerning acquired disability. In *Reconstructing Meaning After Trauma* (pp. 133-151). Academic Press.
- Tedeschi, R. G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress*, 9(3), 455-471.
<https://doi.org/10.1007/BF02103658>
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1-18.
https://doi.org/10.1207/s15327965pli1501_01
- Tedeschi, R. G., & Calhoun, L. G. (2006). *Handbook of posttraumatic growth: Research and practice*. Lawrence Erlbaum.

- Tedeschi, R. G., Shakespeare-Finch, J., Taku, K., & Calhoun, L. G. (2018). Posttraumatic growth: Theory, research, and applications. Routledge.
- Teoh, H. J., & Rose, P. (2001). Child mental health: Integrating Malaysian needs with international experiences. *Mental health in Malaysia*, 103-121.
- Thompson, A., & Kent, G. (2001). Adjusting to disfigurement: processes involved in dealing with being visibly different. *Clinical psychology review*, 21(5), 663-682.
[https://doi.org/10.1016/S0272-7358\(00\)00056-8](https://doi.org/10.1016/S0272-7358(00)00056-8)
- Van Der Donk, J., Hunfeld, J. A. M., Passchier, J., Kneegt-Junk, K. J., & Nieboer, C. (1994). Quality of life and maladjustment associated with hair loss in women with alopecia androgenetica. *Social Science & Medicine*, 38(1), 159-163. [https://doi.org/10.1016/0277-9536\(94\)90311-5](https://doi.org/10.1016/0277-9536(94)90311-5)
- Verhoeven, E. W., De Klerk, S., Kraaimaat, F. W., Van De Kerkhof, P., De Jong, E. M., & Evers, A. W. (2008). Biopsychosocial mechanisms of chronic itch in patients with skin diseases: A review. *Acta Dermato-Venereologica*, 88(3), 211-218.
<https://doi.org/10.2340/00015555-0452>
- Walker, C., & Papadopoulos, L. (Eds.). (2005). *Psychodermatology: The psychological impact of skin disorders*. Cambridge University Press.
- Walker-Williams, H. J., Van Eeden, C., & Van der Merwe, K. (2012). The prevalence of coping behaviour, posttraumatic growth and psychological well-being in women who experienced childhood sexual abuse. *Journal of Psychology in Africa*, 22(4), 617-622.
<https://doi.org/10.1080/14330237.2012.10820576>
- Westphal, M., & Bonanno, G. A. (2007). Posttraumatic growth and resilience to trauma: Different sides of the same coin or different coins?. *Applied Psychology*, 56(3), 417-427.
<https://doi.org/10.1111/j.1464-0597.2007.00298.x>

- Yasin, A. S., & Dzulkifli, M. A. (2010). The relationship between social support and psychological problems among students. *International Journal of Business and Social Science*, 1(3), 110-116. ijbssnet.com/journals/Vol._1_No._3_December_2010/11.pdf.
- Zaidi, Z., Hussain, K., & Sudhakaran, S. (2019). *Psychocutaneous Disorders. In Treatment of Skin Diseases* (pp. 381-386). Springer, Cham.
- Zhai, J., Huang, Y., Gao, X., Jiang, H., & Xu, J. (2014). Post-trauma growth in a mainland Chinese population with chronic skin disease. *International Journal of Dermatology*, 53(4), 450-457. <https://doi.org/10.1111/j.1365-4632.2012.05734.x>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, 52(1), 30-41. https://doi.org/10.1207/s15327752jpa5201_2

APPENDIX A

Demographic Questions and Questionnaires

Thank you for agreeing to participate in this research study. Your data will be treated confidentially at all times. You may withdraw from this study at any given moment during the completion of the questionnaire. The results of the study may be published.

INSTRUCTIONS: Please check ✓ one of the boxes which apply to you.

1. What is your home language?

English	<input type="checkbox"/>	Sesotho	<input type="checkbox"/>
Afrikaans	<input type="checkbox"/>	siSwati	<input type="checkbox"/>
isiNdebele	<input type="checkbox"/>	Tshivenda	<input type="checkbox"/>
isiXhosa	<input type="checkbox"/>	Xitsonga	<input type="checkbox"/>
isiZulu	<input type="checkbox"/>	Setswana	<input type="checkbox"/>
Sepedi	<input type="checkbox"/>	Other (Please Specify):	<input type="checkbox"/>

2. Which Ethnic Group are you?

Asian	<input type="checkbox"/>	Indian	<input type="checkbox"/>
Black / African	<input type="checkbox"/>	White / Caucasian	<input type="checkbox"/>
Coloured	<input type="checkbox"/>	Other (Please Specify):	<input type="checkbox"/>

3. My age is: _____ years.

4. Which gender are you?

Male	<input type="checkbox"/>
Female	<input type="checkbox"/>
Other (Please Specify):	<input type="checkbox"/>

5. Type of psychophysiological skin disorder:

Atopic Dermatitis	
Psoriasis	
Alopecia	
Pruritus	

6. How long have you been diagnosed?

I have been diagnosed for _____ year(s)

I have been diagnosed for _____ month(s)

Brief Social Support Scale

Thank you for agreeing to participate in this research study. Your data will be treated confidentially at all times. You may withdraw from this study at any given moment during the completion of the questionnaire. The results of the study may be published.

INSTRUCTIONS: Please read each statement carefully and mark ✓ the answer on the answer sheet that best describes your perceived social support system:

	1 (Never)	2 (Occasionally)	3 (Mostly)	4 (Always)
If you need it, how often is someone available...				
1. To take you to the doctor if you need it				
2. To prepare your meals if you are unable to do it yourself				
3. To help with daily chores if you were sick				
4. To give you good advice about a crisis				
5. To confide in or talk to about yourself or your problems				
6. Who understands your problems				

Rosenberg Self-Esteem Scale

Thank you for agreeing to participate in this research study. Your data will be treated confidentially at all times. You may withdraw from this study at any given moment during the completion of the questionnaire. The results of the study may be published.

INSTRUCTIONS: Below is a list of statements dealing with your general feelings about yourself. Place a check ✓ mark in the box to indicate your answers.

	1 (Strongly Disagree)	2 (Disagree)	3 (Agree)	4 (Strongly Agree)
1. On the whole, I am satisfied with myself.				
2. At times, I think I am no good at all.				
3. I feel that I have a number of good qualities				
4. I am able to do things as well as most other people				
5. I feel I do not have much to be proud of				
6. I certainly feel useless at times)				
7. I feel that I'm a person of worth, at least equal to others				
8. I wish I could have more respect for myself				
9. All in all, I am inclined to feel that I'm a failure				
10. I take a positive attitude toward myself				



Posttraumatic Growth Inventory

Thank you for agreeing to participate in this research study. Your data will be treated confidentially at all times. You may withdraw from this study at any given moment during the completion of the questionnaire. The results of the study may be published.

INSTRUCTIONS: Please indicate for each of the statements below the degree to which this change occurred in your life as a result of the crisis/disaster. Place a check ✓ mark in the box to indicate your answers.

Please look at the descriptions below to write your answers in the correct column:

- 0: I did not experience this change as a result of my crisis
- 1: I experienced this change to a very small degree as a result of my crisis
- 2: I experienced this change to a small degree as a result of my crisis
- 3: I experienced this change to a moderate degree as a result of my crisis
- 4: I experienced this change to a great degree as a result of my crisis
- 5: I experienced this change to a very great degree as a result of my crisis

Possible Areas of Growth and Change	0	1	2	3	4	5
1. I changed my priorities about what is important in life.						
2. I have a greater appreciation for the value of my own life.						

0: I did not experience this change as a result of my crisis

1: I experienced this change to a very small degree as a result of my crisis

2: I experienced this change to a small degree as a result of my crisis

3: I experienced this change to a moderate degree as a result of my crisis

4: I experienced this change to a great degree as a result of my crisis

5: I experienced this change to a very great degree as a result of my crisis

Possible Areas of Growth and Change	0	1	2	3	4	5
3. I developed new interests.						
4. I have a greater feeling of self-reliance.						
5. I have a better understanding of spiritual matters.						
6. I more clearly see that I can count on people in times of trouble.						
7. I established a new path for my life.						
8. I have a greater sense of closeness with others.						
9. I am more willing to express my emotions.						
10. I know better that I can handle difficulties.						

0: I did not experience this change as a result of my crisis

1: I experienced this change to a very small degree as a result of my crisis

2: I experienced this change to a small degree as a result of my crisis

3: I experienced this change to a moderate degree as a result of my crisis

4: I experienced this change to a great degree as a result of my crisis

5: I experienced this change to a very great degree as a result of my crisis

Possible Areas of Growth and Change	0	1	2	3	4	5
11. I am able to do better things with my life.						
12. I am better able to accept the way things work out.						
13. I can better appreciate each day.						
14. New opportunities are available which wouldn't have been otherwise						
15. I have more compassion for others.						
16. I put more effort into my relationships.						
17. I am more likely to try to change things which need changing.						

0: I did not experience this change as a result of my crisis

1: I experienced this change to a very small degree as a result of my crisis

2: I experienced this change to a small degree as a result of my crisis

3: I experienced this change to a moderate degree as a result of my crisis

4: I experienced this change to a great degree as a result of my crisis

5: I experienced this change to a very great degree as a result of my crisis

Possible Areas of Growth and Change	0	1	2	3	4	5
18. I have a stronger religious faith.						
19. I discovered that I'm stronger than I thought I was.						
20. I learned a great deal about how wonderful people are.						
21. I better accept needing others.						

HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This study has received approval from both the General Human Research Ethics Committee (GHREC) as well as the Health Sciences Research Ethics Committee (HSREC) of the UFS. A copy of the approval letters can be obtained from the researcher

[UFS-HSD2020/1880/2004]

WHY ARE YOU INVITED TO TAKE PART IN THIS RESEARCH PROJECT?

I am inviting you to take part in this research because you well-represent the characteristics of this study. These characteristics are:

(a) Patients aged between 18 and 60 years and diagnosed with psychophysiological skin disorders within the past six (6) to seventy-two (72) months.

(b) Participants can comprise of all genders and all races.

As you are aware, Dr. Lehlohonolo Makhakhe, your doctor (dermatologist) has given permission that I can administer questionnaires at the dermatology clinic, so long as you are willing to participate as it is completely voluntary. The approximate number of participants will include 100 patients with psychophysiological skin disorders namely Psoriasis, Atopic Dermatitis, Alopecia and Pruritus and I would appreciate your participation.

WHAT IS THE NATURE OF PARTICIPATION IN THIS STUDY?

The study involves the use of questionnaires. The sorts of questions and statements that will be asked include things such as:

(a) "I am better able to accept the way things work out"

(b) "How often is someone available to confide in or talk to about yourself or your problems"

(c) "On the whole, I am satisfied with myself".

The expected duration of participation will only be requested once and the time needed to complete the specific questionnaires will be approximately 25-35 minutes.

CAN THE PARTICIPANT WITHDRAW FROM THE STUDY?

Being in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason. Yet, if you have already completed the questionnaires, it will not be possible to withdraw as once you submit these documents, you are giving consent to allow the information to be used in the research. No identifying information, such as your name will be asked, and you will, therefore, be completely anonymous. Your responses will remain confidential and your anonymity will be guaranteed.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

Your participation would benefit in this study because it may enable you to understand how evaluations on self-esteem and social support can positively change, which can aid in counteracting the stress of your psychophysiological skin disorders and promote a more balanced quality of life.

WHAT IS THE ANTICIPATED INCONVENIENCE OF TAKING PART IN THIS STUDY?

If you experience any emotional distress due to participation, counselling, and support services will be made available. We are in contact with Gateway Clinic and Pelonomi Hospital.

Details:

Pelonomi Hospital (Ms. Lorna Pilane) -Tel: 051 405 1468/051 405 1541

Gateway Mental Health Clinic (Mr. Etienne van Lille) -Tel: 051 4039652

-

We understand you may be at risk for contracting the coronavirus since you are outpatients visiting the clinic. However, measures will be put in place to ensure the practice of social distancing, wearing of masks as well as to help with sanitization before and after you have completed the questionnaires.

WILL WHAT I SAY BE KEPT CONFIDENTIAL?

Confidentiality of information will be maintained by:

Your name will not be recorded; anywhere and no one will be able to connect you to the answers you give. Your answers will be given a code number and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings. Your answers may be reviewed by people responsible for making sure that research is done properly such as members of the Research Ethics Committee. Otherwise, records that identify you will be available only to people working on the study, unless you permit for other people to see the records. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

HOW WILL THE INFORMATION BE STORED AND ULTIMATELY DESTROYED?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet at the University of the Free State. For future research or academic purposes; electronic information will be stored on a password-protected computer.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

There will be no direct payment, incentive, or reward for taking part in the study. There are also no financial costs for the participants involved.

HOW WILL THE PARTICIPANT BE INFORMED OF THE FINDINGS / RESULTS OF THE STUDY?

If you would like to be informed of the final research findings, please contact Shannon on 073 251 3258 or email: shannonhawker007@gmail.com.

Feedback will be given in the form of a written one-page summary upon request.

Should you have concerns about how the research has been conducted, you may contact my supervisor: Dr. N.F. Tadi on 051 401 9313/Tadinf@ufs.ac.za; the administrator of the Faculty's Research Ethics Committee: Ms. Charné Vercueil on 051 401 7083/vercueilc@ufs.ac.za; or the Health Sciences Research Ethics Committee: Ms. MA Mulondo on 051 401 7795/MulondoMA@ufs.ac.za or EthicsFHS@ufs.ac.za

Thank you for taking the time to read this information sheet and for participating in this study.

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits, and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study. I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable). I am aware that the findings of this study will be anonymously processed into a research report, journal publications, and/or conference proceedings.

I have received a signed copy of the informed consent agreement.

Full Name of Participant: _____

Signature of Participant: _____ Date: _____

Signature of Translator:

Full Name(s) of Researcher(s): *Shannon Hawker*

Signature of Researcher:  Date: _____

HET DIE STUDIE ETIESE KLARING ONTVANG?

Hierdie studie het goedkeuring ontvang van beide die Algemene Menslike Navorsingsetiekkomitee (GHREC), sowel as die Gesondheidswetenskappe Navorsingsetiekkomitee (HSREC) van die UV. 'n Afskrif van die toestemmingsbriewe kan verkry word vanaf die navorser.

[UFS-HSD2020/1880/2004]

HOEKOM WORD JY GENOOI OM DEEL TE NEEM AAN HIERDIE NAVORSINGSPROJEK?

Ek nooi jou om deel te neem aan hierdie navorsingsprojek omdat jy goed-verteenwoordigend is van die kriteria van hierdie studie. Hierdie kriteria is:

- (a) Pasiënte tussen die ouderdom van 18 en 60 jaar en wat gediagnoseer is met psigofisiologiese versterings binne die afgelope ses (6) tot twee-en-sewentig (72) maande.
- (b) Deelnemers kan bestaan uit alle geslagte en alle rasse.

Soos jy bewus is, het Dr. Lehlohonolo Makhakhe, jou dokter (dermatoloog) toestemming verleen dat ek vraelyste mag afneem by die dermatologie kliniek, mits jy bereid is om deel te neem, en dit is heeltemal vrywillig. Die benaderende aantal deelnemers sal 100 pasiënte insluit met psigofisiologiese versterings, naamlik Psoriase, Atopiese Dermatitis, Haarverlies (Alopecia) en Kroniese velirritasie (Pruritus) en ek sal jou deelname waardeer.

WAT IS DIE AARD VAN DEELNAME IN HIERDIE STUDIE?

Die studie behels die gebruik van vraelyste. Die soorte vrae en stellings wat gevra gaan word sluit onder andere in:

- (a) "Ek is beter in staat om te aanvaar hoe dinge uitwerk"
- (b) "Hoe gereeld is iemand beskikbaar wat jy in jou vertroue kan neem of te praat oor jouself of jou probleme"
- (c) "Oor die algemeen is ek tevrede met myself"

Die verwagte duur van deelname sal slegs een keer wees en die tyd wat nodig is om die spesifieke vraelyste te voltooi is ongeveer 25-30 minute.

KAN DIE DEELNEMER ONTTREK VAN DIE STUDIE?

Om deel te wees van hierdie studie is vrywillig en jy is onder geen verpligting om toestemming tot deelname te verleen nie. Indien jy besluit om deel te neem sal jy 'n inligtingsblad gegee word om te hou en gevra word om 'n geskrewe toestemmingsvorm te teken. Jy mag onttrek op enige tyd en sonder enige rede. Alhoewel, indien jy reeds die vraelyste voltooi het, sal dit nie moontlik wees om te onttrek nie, want sodra jy hierdie dokumente inhandig, gee jy toestemming dat die inligting gebruik kan word in die navorsing. Geen identifiserende inligting, soos jou naam, sal gevra word nie en jy sal daarom heeltemal anoniem wees. Jou response sal vertroulik bly en jou anonimiteit verseker wees.

WAT IS DIE MOONTLIKE VOORDELE VAN DEELNAME AAN HIERDIE STUDIE?

Jou deelname sal die studie tot voordeel strek omdat dit jou in staat sal stel om te verstaan hoe evaluasies oor eiewaarde en sosiale ondersteuning positief kan verander wat kan help om die stres van jou psigofisiologiese verversteurings teen te werk en 'n meer gebalanseerde kwaliteit lewe kan bevorder.

WAT IS DIE VERWAGTE ONGEMAK VAN DEELNAME AAN HIERDIE STUDIE?

Indien jy enige emosionele nood ervaar as gevolg van jou deelname, sal voorligting en ondersteuningsdienste beskikbaar gemaak word. Ons is in kontak met Gateway Kliniek en Pelonomi Hospitaal.

Besonderhede:

Pelonomi Hospitaal (Me. Lorna Pilane) -Tel: 051 405 1468/051 405 1541

Gateway Geestesgesondheid Kliniek (Mnr. Ettienne van Lille) -Tel: 051 4039652

Ons verstaan dat jy die risiko loop om die corona-virus op te doen omdat jy as buite-pasiënt die kliniek besoek. Maatreëls sal egter in plek gesit word om te verseker dat sosiale afstand toegepas word, maskers gedra word, asook hulp is met sanitasie voor en nadat jy die vraelyste voltooi het.

SAL WAT EK SÊ VERTROULIK GEHOU WORD?

Vertroulikheid van inligting sal gehandhaaf word deur:

Jou naam sal nie afgeneem word nie; nêrens en niemand sal jou kan koppel aan die antwoorde wat jy gee nie. Jou antwoorde gaan 'n kode gegee word en jy sal op hierdie manier in die data, enige publikasies, of ander navorsingsrapportering-metodes soos konferensies, na verwys word. Jou antwoorde mag nagegaan word deur persone verantwoordelik daarvoor om seker te maak dat die navorsing na behore gedoen is, soos lede van die Navorsingsetiekkomitee. Andersins, rekords wat jou identifiseer sal slegs beskikbaar wees aan persone wat werk aan die studie, tensy jy ander mense toestemming gee om die rekords te sien. 'n Verslag van die studie mag ingedien word vir publikasie, maar individuele deelnemers sal nie in sodanige verslag identifiseerbaar wees nie.

HOE GAAN DIE INLIGTING GESTOOR EN UITEINDELIK VERNIETIG WORD?

Harde kopieë van jou antwoorde gaan deur die navorsers gestoor word vir 'n tydperk van vyf jaar in 'n geslote kas/liasseerkabinet by die Universiteit van die Vrystaat vir toekomstige navorsing of akademiese doeleindes; elektroniese inligting sal op 'n wagwoord-beskermdre rekenaar gestoor word.

SAL EK BETALING OF ENIGE INSENTIEWE ONTVANG VIR DEELNAME AAN HIERDIE STUDIE?

Daar sal geen direkte betaling, insentief, of beloning wees vir deelname aan die studie nie. Daar is ook nie finansiële onkoste vir betrokke deelnemers nie.

HOE SAL DIE DEELNEMER INGELIG WORD OOR DIE BEVINDINGS / RESULTATE VAN DIE STUDIE?

Indien jy graag ingelig wil word oor die finale navorsingsbevindings, kontak asseblief Shannon by 073 251 3258 of epos: shannonhawker007@gmail.com.

Terugvoer sal op aanvraag in die vorm van 'n geskrewe een-bladsy opsomming wees.

Indien jy enige bekommernisse het oor hoe die navorsing uitgevoer is, mag jy die studieleier kontak: Dr. N.F. Tadi by 051 401 9313/Tadinf@ufs.ac.za ; die administrateur van die Fakulteit se Navorsingsetiekkomitee: Me. Charné Vercueil by 051 401 7083/ vercueilc@ufs.ac.za; of die Gesondheidswetenskappe Navorsingsetiekkomitee: Me. MA Mulondo by 051 401 7795/MulondoMA@ufs.ac.za

Dankie dat jy die tyd geneem het om hierdie inligtingsblad te lees en vir jou deelname aan hierdie studie.

**TOESTEMMING OM AAN HIERDIE STUDIE
DEEL TE NEEM**

Ek, _____ (naam van deelnemer), bevestig dat die persoon wat my toestemming vra om aan die navorsing deel te neem, my ingelig het oor die aard, prosedure, moontlike voordele en verwagte ongerief van deelname.

Ek het gelees (of dit was aan my verduidelik) en ek verstaan die studie, soos uiteengesit in die inligtingsblad. Ek het voldoende geleentheid gehad om vrae te vra en is voorbereid om aan die studie deel te neem. Ek verstaan dat my deelname vrywillig is en dat ek enige tyd, sonder boete (indien van toepassing), kan onttrek. Ek is bewus dat die bevindings van die studie anoniem in 'n navorsingsverslag, vaktyskrif-publikasie, en/of konferensieverrigtinge, geplaas kan word.

Ek het 'n getekende afskrif van die ingeligte toestemmingsooreenkoms ontvang.

Volle name van Deelnemer: _____

Handtekening van Deelnemer: _____ Datum: _____

Handtekening van Vertaler: _____

Volle naam/e van Navorsers: *Shannon Hawker*

Handtekening van Navorsers:  Datum: _____

**LEQEPHE LA DINTLHA TSA THUTO YA DIPHUPUTSO LE FOROMO
YA TUMELLO**

LETSATSI

2021-2022

SEHLOOHO SA PROJEKE YA DIPHUPUTSO

The role of perceived social support in the relationship between self-esteem and post-traumatic growth in participants living with psychophysiological disorders

MOFUPUTSI E MOHOLO / MABITSO A BAFUPUTSI LE DINOMORO TSA BOIKOPANYO:

Shannon Hawker

2019660741

073 251 3258

FAKHALTHI LE LEFAPHA:

Fakhalthi ya

Humanities

Lefapha la Psychology

LEBITSO LA MOTATAISI WA DIPHUPUTSO LE DINOMORO TSA BOIKOPANYO:

Ngaka N.F Tadi

051 401 9313

MORERO / SEPHEO SA DIPHUPUTSO KE SEFE?

Sepheo sa thuto ena ha jwale ke ho hlahloba karolo ya tshetso ya setjhaba ho dikamano pakeng tsa boitsebo le ho hola ka ho hlora kamora kotsi e o hlahetseng e le hona ho fumana makgabane a tshelo bathong ba bang ba ileng ba fumanwa ba na le malwetse a letlalo a bakang ho hloka botsitso kelellong. Diphuputso tsena di tla thusa hore re utlwisise hantle kamoo bakudi le boraditeliniki ba ka thusang hore ho be le botsitso maikutlong a bakudi kamora tlokotsi bakeng sa bakudi ba hlahetsweng ke tlokotsi ya malwetse a letlalo a bakang tlhokeho ya botsitso ba kelello hore le bona ba fumane tsotello bophelong.

KE MANG YA ETSANG DIPHUPUTSO TSEE?

Lebitso la ka ke Shannon Hawker mme ke etsa diphuputso tsa ho fumana lengolo la kgau ya Master of Social Sciences la Yunivesithi ya Freistata. Jwaloka karolo ya kgau ena, ke tshwanela ho phethela projeke ya diphuputso mme ke fane ka pehelo mabapi le dintlha tseo ke di fumaneng. Ha ke fumana dintlha tse ngata, hoo ho bolela ho matlafala ha diphuputso tsa ka. Ke hlile ke na le thahasello e kgolo diphuputsong tsena hobane ho na le tshetso e fokolang e tobaneng le makgabane ho batho ba nang le bothata bona ba letlalo bo hlokisang botsitso ba kelello, mme ke rata ho hlokomedisa haholo ka taba ena. Ke rata ho eketsa boleng ba makgabane a batho bana ba tshwerweng ke bolwetse ba letlalo ho motho ka mong, boemong ba baahi, esita le setjhaba sohle kaofela ka ho

eketsa tshebedisano le boithuti ba letlalo esita le thuto ya mahlale a kelello esita le ho nnetefatsa hore bakudi ba alashwa ka botlalo.

NA DIPHUPUTSO TSEE DI DUMELETSWE KE BAHLOKOMEDI BA TSA BOITSHWARO?

Diphuputso tsena di fumane tumello ho tswa ho General Human Research Ethics Committee (GHREC) esita le Health Sciences Research Ethics Committee (HSREC) tsa UFS. Dikhopi tsa mangolo a tumello di ka fumanwa ho mofuputsi.

[UFS-HSD2020/1880/2004]

HOBANENG HA O MEMETSWA HO BA LE SEABO PROJEKENG YEE YA DIPHUPUTSO?

Ke o mema ho ba le seabo diphuputsong tsena hobane o tsamaelana hantle le ditshwanelo tsa diphuputso tsena. Ditshwanelo tseo ke tsena:

(a) Bakudi ba dilemo tse pakeng tsa 18 le 60 mme ba tsebahaditswe hore ba na le bolwetse ba letlalo bo hlokisang botsitso ba kelello nakong ya dikgwedi tse tsheletseng (6) ho isa ho tse mashome a mabedi a metso e mene (72).

(b) Bakudi bana e ka ba ba bong bofe kapa bofe kapa ba merabe yohle.

Jwalokaha o hlokomela, Ngaka Lehlohonolo Makhakhe, ngaka ya hao (ngaka ya letlalo) o fane ka tumello ya hore ke hlophise manane a dipotso tsa patlisiso mane tleliniking ya tsa letlalo, ha feela o na le thahasello ya ho ba le seabo jwalokaha e le boithaopo feela. Palo e lekanyeditsweng ya bankakarolo e tla kenyeletsa bakudi ba 100 ba nang le bolwetse ba letlalo le mathata a kelello e leng Psoriasis, Atopic Dermatitis, Alopecia le Pruritus mme ke tla thabela ha o ka ba le seabo.

MOKGWA WA HO BA LE SEABO DIPHUPUTSONG TSENA KE OFE?

Diphuputso tsena di sebedisa manane a dipotso tsa patlisiso. Mofuta wa dipotso le dipolelo tse tla hlahiswa o kenyeletsa dintho tse kang:

(a) "Ke na le hona ho amohela kamoo dintho di etsahalang ka teng"

(b) "Ke ka makgetlo a makae o ka tshepang motho, wa ba le lekunutu le yena ka wena kapa ka mathata a hao"

(c) "Ka kakaretso, ke ikgotsofaletse".

Bolelele ba nako ya ho ba le seabo bo tla batlwa hanngwe feela mme nako e hlokwang ho qeta manane ana a dipotso tsa patlisiso e tla ba e ka bang metsotso e 25-35.

NA MONKAKAROLO A KA IKGULA DIPHUPUTSONG TSEE?

Ho ba le seabo diphuputsong tsena ke boithaopo mme ha o a tlangwa ke letho ho dumela ho ba le seabo diphuputsong tsena. Haeba o dumela ho ba le seabo, o tla fuwa leqephe lena la dintlha ebe o kotjwa ho saenela foromo ya tumello. O na le bolokolohi ba ho ikgula ka nako efe kapa efe le ka ntle le ho fana ka lebaka. Leha ho le jwalo, haeba o se o tlatsitse manane a dipotso tsa patlisiso, ha ho na ba bobebe ho ikgula ka hore hang ha o nehelana ka ditokomane tsena, o fana ka tumello hore e sebediswe diphuputsong tsena. Ha ho na dintlha tse tla o tsebahatsa, jwaloka lebitso la hao, tseo o tla di botswa mme ka hona o tla dula o sa tsejwa ho hang. Dikarabo tsa hao di tla bolokwa e le sephiri mme ho se tsebahatswe ha hao ho tla dula ho babaletswa.

MENYETLA EO O KA E FUMANANG KA HO BA LE SEABO DIPHUPUTSONG TSENA E KA BA EFE?

Ho ba le seabo ha hao ho tla thusa haholo diphuputsong tsena hobane ho tla o thusa ho utlwisisa

kamoo ho hlahlojwa ha boitsebo ba hao le tshehetso ya setjhaba di ka fetohang ka tshwanelo ka teng, e leng ho ka thusang ho lwantsha kगतello ya malwetse a letlalo a bakang tlhokeho ya botsitso ba kelello le ho ntshetsa pele boleng ba bophelo bo tsitsitseng.

KE TSHITISO EFE E KA LEBELLWANG KA HO BA LE SEABO DIPHUPUTSONG TSEE?

Haeba o ba le boiphihlelo ba maikutlo a sa tsitsang ka lebaka la ho ba le seabo, kgothatso, le ditshebetso tsa tshehetso di tla fumaneha. Re sebedisana hammoho le Gateway Clinic le Sepetlele sa Pelonomi.

Dintlha ka botlalo:

Pelonomi Hospital (Mofumahadi Lorna Pilane) -Mohala: 051 405 1468/051 405 1541 Gateway Mental Health Clinic (Monghadi Ettienne van Lille) -Mohala: 051 4039652

Re a tseba hore o ka nna wa ba kotsing ya ho tshwaetswa ke kokwanahloko ya corona ka lebaka la hobane o le mokudi wa ka ntle ya etelang tleliniking. Leha ho le jwalo, ho tla ba le ditlhophiso ho etsa bonnete ba hore ho ba le phethahatso ya ho arohana ha batho, ho rwala dimonkwana (dimaske) esita le ho thusa ka ho nyanyatsa sanitizer pele le kamora ho tlatsa manane a dipotso tsa patlisiso.

NA SEO KE SE BUANG SE TLA BOLOKWA E LE SEPHIRI?

Sephiri sa dintlha tsa hao se tla baballwa ka hore:

Lebitso la hao ha le na ngodiswa direktong; kae kapa kae ha ho na ba le motho ya tla kgona ho o amanya le dikarabo tsa hao. Dikarabo tsa hao di tla fuwa nomoro ya khoutu mme o tla tsejwa ka hona ka hara dintlha tsa hao, diphatlalatsong, kapa ka hara mekgwa e meng ya dipehelo tsa diphuputso. Dikarabo tsa hao di ka lekolwa hape ke batho ba nang le baikarabelo ba ho etsa bonnete ba hore ho etswa diphuputso hantle jwaloka ditho tsa Research Ethics Committee. Leha ho le jwalo, direktoto tse o tsebahatsang di tla fumanwa feela ke batho ba sebetsang diphuputso tse, haese ha feela wena o dumela hore batho ba bang ba bone direktoto tsa hao. Pehelo ya diphuputso e ka nehelanwa bakeng sa phatlalato, empa monkarolo ka mong ha a na tsebahatswa ka hara pehelo eno.

DINTLHA TSEE DI TLA BOLOKWA JWANG MME QETELLONG DI HLAOLWE?

Dikhopi tse tshwarehang tsa dikarabo tsa hao di tla bolokwa ke mofuputsi ka nako ya dilemo tse hlano ka hara raka ya difaele e notlelwang ya Yunivesithi ya Freistata. Bakeng sa diphuputso tsa nako e tlang kapa merero e meng ya thuto; dintlha tsa elektroniki di tla bolokwa ka khomphutha e tshireleditsweng ka phasewete.

NA KE TLA FUMANA MOPUTSO KAPA DIHLAPISO KA HO BA LE SEABO DIPHUPUTSONG TSEE?

Ha ho na ba le moputso, dihlapiso kapa mpho bakeng sa ho ba le seabo diphuputso tse. Ha ho bile ha ho na ditshenyehelo tsa tjehelele bakeng sa bankakarolo ba amehang.

MONKAKAROLO O TLA TSEBISWA JWANG KA DIPHIHLELLO / DIPHETHO TSA DIPHUPUTSO?

*Haeba o rata ho tsebiswa ka diphihlelo tsa ho qetela tsa diphuputso tsena, ka kopo ikopanye le Shannon ho 073 251 3258 kapa imeile: shannonhawker007@gmail.com.
Dikarabo tsa tsebiso di tla fanwa ka tsela ya leqephe le le leng le ngotsweng la kakaretso haeba ho etswa kopo e jwalo.
Haeba o na le pelaelo mabapi le kamoo diphuputso di entsweng ka teng, o ka ikopanya le motataisi wa ka: Ngaka N.F. Tadi ho 051 401 9313/Tadinf@ufs.ac.za ; motsamaisi wa Fakhalithi ya Research Ethics Committee: Mofumahadi Charné Vercueil ho 051 401 7083/vercueilc@ufs.ac.za; kapa Health Sciences Research Ethics Committee: Mofumahadi MA Mulondo ho 051 401 7795/MulondoMA@ufs.ac.za*

Ke a o leboha ka ho ipha nako ya ho bala leqephe lena la dintlha le ho ba le seabo diphuputsong tsena.

**TUMELO YA HO BA LE SEABO
DIPHUPUTSONG TSENA**

Nna, _____ (lebitso la monkarolo), ke paka mona hore motho
ya nkopileng tumello ya ho ba le seabo diphuputso tse na o ntsebisitse ka sebopeho, tsela ya
tshetso, menyetla e ka bang teng, le tshitiso e lebeletsweng ya ho ba le seabo ha hao.

Ke badile (kapa o ntlhaloseditse) mme ka utlwisa diphuputso tse na jwalokaha di hlalositse
leqephe la dintlha tsa tsebisiso. Ke bile le monyetla o lekaneng wa ho botsa dipotso mme ke loketse
ho ba le seabo diphuputso tse na. Ke a utlwisa hore ho ba le seabo ha ka ke boithaopo le hore ke
na le bolokolohi ba ho ikgula ka nako efe kapa efe ka ntle le kahlolo ya letho (haeba e ka ba teng). Ke
a hlokomela hore diphuputso tse na ha di na tsebahatswa ka hara pehelo ya
diphuputso, diphatlatso tsa jenale, le/kapa ditsamaiso tsa seboka.

Ke fumane khopi e saennweng ya tsebisiso ena ya tumello.

Mabitso a Monkarolo ka botlalo: _____

Tshaeno ya Monkarolo: _____ Letsatsi: _____

Tshaeno ya Mofetoledi: _____

Mabitso a Mofuputsi ka botlalo: *Shannon Hawker*

Tshaeno ya Mofuputsi:  Letsatsi: _____

APPENDIX C

Approval from the General Human Research Ethics Committee and the Health Sciences Research Ethics Committee



GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

05-Oct-2020

Dear Ms Hawker, Shannon SJ

Conditionally Approved

Research Project Title:

The role of perceived social support in the relationship between self-esteem and posttraumatic growth in patients living with psychophysiological skin disorders.

With reference to your application for ethical clearance for your research: it has been determined by the General/Human Research Ethics Committee of the University of the Free State that this research is ethically sound and may receive full ethical approval after the following provision(s) have been attended to:

Outcome: Conditional approval

Conditional approval pending permission from the FS Department of Health and appropriate authority overseeing Universitas hospital (UFS/FSDH).

Please attend to the abovementioned within sixty (60) days. Failure to respond or make prior arrangements within this time will result in your application being withdrawn (terminated). Please note: **This is not a valid ethical approval until you (the applicant) have attended to the above mentioned provisions and the ethics committee has validated them.**

Yours sincerely

Dr Adri Du Plessis

Chairperson: General/Human Research Ethics Committee

Adri Du Plessis

205 Nelson Mandela
Drive
Park West
Bloemfontein 9301
South Africa

P.O. Box 339
Bloemfontein 9300
Tel: +27 (0)51 401
9337
duplessisA@ufs.ac.za
www.ufs.ac.za



Health Sciences Research Ethics Committee

17-Mar-2021

Dear Ms Shannon Hawker

Ethics Clearance: **The role of perceived social support in the relationship between self-esteem and post-traumatic growth in patients living with psychophysiological disorders**

Principal Investigator: Ms Shannon Hawker

Department: **Psychology Department (Bloemfontein Campus)**

[Submission Page](#)

APPLICATION APPROVED

Please ensure that you read the whole document

With reference to your application for ethical clearance with the Faculty of Health Sciences, I am pleased to inform you on behalf of the Health Sciences Research Ethics Committee that you have been granted ethical clearance for your project.

Your ethical clearance number, to be used in all correspondence is: **UFS-HSD2020/1880/2004**

The ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension.

We request that any changes that may take place during the course of your research project be submitted to the HSREC for approval to ensure we are kept up to date with your progress and any ethical implications that may arise. This includes any serious adverse events and/or termination of the study.

A progress report should be submitted within one year of approval, and annually for long term studies. A final report should be submitted at the completion of the study.

The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act. No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2006); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; International Council for Harmonisation (ICH) Harmonised Guideline, Integrated Addendum to ICH E6(R1), Guideline for Good Clinical Practice (GCP) E6(R2), 2016, SAHPRA Guidelines as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

For any questions or concerns, please feel free to contact HSREC Administration: 051-4017794/5 or email EthicsFHS@ufs.ac.za.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours Sincerely



Prof. A. Sherriff
Chairperson: Health Sciences Research Ethics Committee

Health Sciences Research Ethics Committee
Office of the Dean: Health Sciences
T: +27 (0)51 401 7795/7794 | E: ethicsfhs@ufs.ac.za
IRB 00011992; REC 230408-011; IORG 0010096; FWA 00027947



Dear **Ms Shannon Hawker**

Ethics Number: UFS-HSD2020/1880/2004-0001

Ethics Clearance: **The role of perceived social support in the relationship between self-esteem and post-traumatic growth in patients living with psychophysiological disorders**

Principal Investigator: **Ms Shannon Hawker**

Department: **Psychology Department (Bloemfontein Campus)**

[Submission Page](#)

SUBSEQUENT SUBMISSION APPROVED

With reference to your recent submission for ethical clearance from the Health Sciences Research Ethics Committee. I am pleased to inform you on behalf of the HSREC that you have been granted ethical clearance for your request as stipulated below:

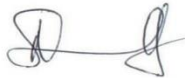
- Annual re-approval: The ethical clearance of this project is extended to 09 March 2023.

The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act. No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2020); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; International Council for Harmonisation (ICH) Harmonised Guideline, Integrated Addendum to ICH E6(R1), Guideline for Good Clinical Practice (GCP) E6(R2), 2016, SAHPRA Guidelines as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

For any questions or concerns, please feel free to contact HSREC Administration: 051-4017794/5 or email EthicsFHS@ufs.ac.za.

Thank you for submitting this request for ethical clearance and we wish you continued success with your research.

Yours Sincerely



Prof. A. Sherriff
Chairperson : Health Sciences Research Ethics Committee

Health Sciences Research Ethics Committee

Office of the Dean: Health Sciences

T: +27 (0)51 401 7795/7794 | E: ethicsfhs@ufs.ac.za

IRB 00011992; REC 230408-011; IORG 0010096; FWA 00027947

Block D, Dean's Division, Room D104 | P.O. Box/Posbus 339 (Internal Post Box G40) | Bloemfontein 9300 | South Africa

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APPENDIX D

Approval from the Department of Health



health

Department of
Health
FREE STATE PROVINCE

10 March 2021

Ms S Hawker
Dept. of Psychology
UFS

Dear Ms S Hawker

Subject: The role of perceived social support in the relationship between self-esteem and post-traumatic growth in patients living with psychophysiological disorders.

- Please ensure that you read the whole document. Permission is hereby granted for the above – mentioned research on the following conditions:
- Participation in the study must be voluntary
- A written consent by each participant must be obtained.
- Serious Adverse events to be reported to the Free State department of health and/ or termination of the study
- Ascertain that your data collection exercise neither interferes with the day to day running of **Universitas Hospital** nor the performance of duties by the respondents or health care workers.
- Confidentiality of information will be ensured and please do not obtain information regarding the identity of the participants.
- **Research results and a complete report should be made available to the Free State Department of Health on completion of the study (a hard copy plus a soft copy).**
- Progress report must be presented not later than one year after approval of the project to the Ethics Committee of the University of Free State and to Free State Department of Health.
- Any amendments, extension or other modifications to the protocol or investigators must be submitted to the Ethics Committee of the University of Free State and to Free State Department of Health.
- **Conditions stated in your Ethical Approval letter should be adhered to and a final copy of the Ethics Clearance Certificate should be submitted to sebeciats@fshealth.gov.za / makenamr@fshealth.gov.za before you commence with the study**
- No financial liability will be placed on the Free State Department of Health
- **Please discuss your study with Institution Manager on commencement for logistical arrangements see 2nd page for contact details.**
- Department of Health to be fully indemnified from any harm that participants and staff experiences in the study
- **As part of feedback you will be required to present your study findings/results at the Free State Provincial health research day**

I trust you find the above in order.

Kind Regards

Dr D Motau
HEAD: HEALTH

Date: 12/03/2021

APPENDIX E

Proof of Language and APA Editing



Date: 27 September 2022

DECLARATION OF EDITING

I, Professor Margaret Williams, hereby declare that I did the language editing on the dissertation detailed below. The manuscript for submission purposes in fulfilment of the requirements for the degree Masters in Psychology in the Department of Psychology, Faculty of the Humanities at the University of the Free State. The manuscript has been edited for English language, inclusive of grammar, punctuation, and spelling, plus APA reference check.

TITLE

The role of perceived social support in the relationships between self-esteem and posttraumatic growth in participants living with psychophysiological skin disorders.

AUTHOR

Shannon Jaimie Hawker

Disclaimer: The author is free to accept or reject my changes to the document after editing. However, I do not bear responsibility for revisions made to the document after my edit on 21/9/2022.

Signed:



Prof M Williams

APPENDIX F

Turnitin Report

S Hawker Dissertation MSocSci

ORIGINALITY REPORT

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APPENDIX G

Approval from the Dermatology Outpatient Department



health

Department of
Health
FREE STATE PROVINCE

To: Ethics committee (UFS)

Kindly note that I am available and willing to co-supervise and assist Master's student, Ms. Shannon Hawker on her study to be partly conducted at Universitas Hospital outpatient department (Dermatology) from the date of ethical approval to the study completion.

I hope that you will find the above in order

Dr Lehlohonolo Makhakhe
Consultant (Dermatology)
Universitas Academic Hospital
19/11/2020

DEPARTMENT OF DERMATOLOGY
UNIVERSITAS ACADEMIC HOSPITAL

Tel: (051) 401 7504/02 Fax: (051)
E-mail address: MakhakheL@ufs.ac.za

www.fs.gov.za

APPENDIX H

Letterheads from Gateway Mental Health Clinic and Pelonomi Academic Hospital



pelonomi hospital

Department of Health
Pelonomi Tertiary Hospital
FREE STATE PROVINCE

24/07/2020

TO WHOM IT MAY CONCERN

Re: The role of perceived social support in the relationship between self-esteem and post-traumatic growth in patients living with psychophysiological skin disorders Study

This is to confirm that Pelonomi Hospital Psychology department will be able to assist with further assessment and management of participants if needs be.

Regards

Pilane Lorna
(Principal Clinical Psychologist)
Pelonomi Tertiary Hospital
K Block 2nd Floor
(051) 405 1478 or (051) 405 1479



health

Department:
Health
REPUBLIC OF SOUTH AFRICA



health

Department of
Health
FREE STATE PROVINCE

27th July 2020

To: The Ethics Committee

Dear Prof/Dr/Sir/Madam

RE: STUDY: The role of perceived social support in the relationship between self-esteem and post-traumatic growth amongst patients with psychophysiological skin disorders. Student: Shannon Walker.

This letter is to confirm that participants involved in the related this study project could be accommodated at Gateway Mental Health Clinic for “emotional distress” that may develop during or subsequent to the participants’ participation in the study project.

The only conditions are that the identified patient is referred by a general practitioner or by a health worker at their nearest Department of Health Primary Health Clinic (“Clinic”), and that the patient himself/herself must contact the Gateway Mental Health Clinic at (051) 403 9652 (only between 08:30 and 09:30).

Enquiries can be made at 0727743006e@gmail.com.

Yours sincerely

E. van Lillo

Clinical Psychologist

NOT SIGNED WHEN SENT ELLECTRONICALLY