T.C.

ABANT IZZET BAYSAL UNIVERSITY

INSTITUTE OF SOCIAL SCIENCES

PSYCHOLOGICAL SYMPTOMATOLOGY AMONG PSORIATIC PATIENTS: EXPLANATORY ROLES OF PERCEIVED SOCIAL SUPPORT, EMOTIONAL APPROACH COPING, AND PSORIATIC EXPERIENCES

UFUK KOCATEPE

JUNE 2015

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INSTITUTE OF SOCIAL SCIENCES
DEPARTMENT OF PSYCHOLOGY
CLINICAL PSYCHOLOGY

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MASTER THESIS

UFUK KOCATEPE

Supervisor

Assoc. Prof. Dr. Mithat Durak

BOLU 2015

To Institute of Social Sciences,

The study titled "Psychological Symptomatology among Psoriatic Patients: Explanatory Roles of Perceived Social Support, Emotional Approach Coping, and Psoriatic Experiences", which belongs to Ufuk KOCATEPE, was certified as fully adequate in scope and quality, and as a **thesis for the degree of Master of Science** by the examining committee members.

06. 17. 2015

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ETHICAL APPROPRIATENESS DECLARATION

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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PREFACE

The current study was prepared as a master thesis, and examined explanatory roles of perceived social support, emotional approach coping, and psoriatic experiences on psychological symptomatology among psoriatic patients. One hundred eighty six plaque-type psoriatic patients from dermatology services have participated in this study, and they were asked specific questions about their demographics and skin condition, and applied specific measurements through the aim of the study.

Psoriasis is accepted as a biopsychosocial skin disease that requires psychosocial interventions adjunctive to the medical treatments. Understanding psycho-social aspects of Psoriasis could provide researches and practitioners with knowledge about the significant point for psycho-social treatment of the disease. Therefore, the current study examined explanatory roles of perceived social support, emotional approach coping, and psoriatic experiences on psychological symptomatology among psoriatic patients. Plaque-type psoriatic patients were selected, in that it is the most frequent type of Psoriasis.

The current thesis is both an end and beginning of some precious experiences. Through all processes of the current study, I have received a remarkable amount of support and help. Firstly, I sincerely express my appreciations to my supervisor Assoc. Prof. Dr. Mithat Durak for guiding me towards the best that I can do, studiously following my data collecting, data analyzing, and writing processes, and encouraging me to always look beyond. He has been open-minded along the process and a great guide along my academic journey, and makes success inevitable in every work he takes on. He believed in me as much as I did. The support and help that I have received from him were so valuable that I have always considered myself lucky to get the chance to learn so much from him.

I would like to thank Assoc. Prof. Dr. Emre Şenol-Durak, whom I have felt endless support from, for leading me always to the better directions with her treasurable points of view, and seminal ideas. She encouraged me to break new grounds, supported

all my decisions not only in an academic way, but also in my life. She has always made me feel home, been one of my family members, and one of my best friends. She has an important place in my heart and my life, I am hopeful that we will walk this road together.

I also would like to express my appreciations to Prof. Dr. Mustafa Teoman Erdem and Assoc. Prof. Dr. Mualla Polat for expanding my view with their precious suggestions and comments on this thesis. I am glad to have them as members in the Examining Committee of my study. Furthermore, Assoc. Prof. Dr. Mualla Polat was so supportive for me to reach several psoriatic patients, and I am also thankful for that.

Dr. Rüstem Şaşmaz helped me contact numerous psoriatic patients in Ankara. He made my data collecting process easier by directing me to the most available sources. I am glad to meet him.

The help that I received from lecturers Selen Korkmaz and Nazım Şen, who doubtlessly will be great psychologists, was so special that I want to thank them for being supportive and complaisant through the process. I hope we, together, will conduct many studies and share many valuable experiences.

Our master team was literally the best. We have been having great time together. I want to thank Emre Özdemir, Feride Özlem Elagöz, and Neşe Durğun for beautifying the process. I am proud of having such friends in my life.

My friends Sedat Durak and Samet Baş have always been there for me, tried to facilitate my work, and reassured that I would finish the study in the best way. It is a great feeling to have such good friends to trust when needed.

My family deserves all beauties in life. Words fail everytime I try to explain the meaning of every single member of that wonderful family. Firstly, I am grateful to my father Musa Kocatepe and my mother Yılnur Kocatepe for their endless love and support. They always believe in me and support me in every step I take. I want to thank them for nothing but their existence. I would like to further thank my sister, Ayça Kocatepe and my cousin Ece Köse for being complaisant and helping me by taking on any responsibilities that I asked for. I have no doubt that they will catch success in any work they will be in.

The psoriatic patients who accepted to participate in this study are thankworthy. I could not have conducted this research without the support that I have received from them. I hereby want to express my wishes for them to get well soon.

I could not write all the names that helped me through my thesis process. Still, every single speech, suggestion, or comment was very valuable. I would like to heartedly thank everybody who supported me. Every help and support mean everything to me.

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To my family who deserves

this graduation as much as I do…

ABSTRACT

PSYCHOLOGICAL SYMPTOMATOLOGY AMONG PSORIATIC PATIENTS: EXPLANATORY ROLES OF PERCEIVED SOCIAL SUPPORT, EMOTIONAL APPROACH COPING, AND PSORIATIC EXPERIENCES

Ufuk KOCATEPE

Master Thesis

Department of Psychology

Clinical Psychology

Supervisor: Assoc. Prof. Dr. Mithat DURAK

June 2015, XIX + 109 Pages

Psoriasis is a chronic, recurrent disorder characterized by heavily scaled plaques on skin. Psoriasis negatively affects patients' not only physical, but also emotional, psychological and social life. Therefore, interventions for those patients should be multidisciplinary as the disorder itself is multifaceted. Literature emphasizes the importance of psychological or psychosocial interventions for those patients to help them cope effectively with stress related to Psoriasis and to reduce psychiatric morbidity. With reference to the consideration that psoriatic patients are likely to experience distress related with their skin condition, the present study aims to examine the explanatory roles of perceived social support, emotional approach coping, and psoriatic experiences on psychological symptomatology among those patients. One hundred eighty six psoriatic patients participated in the current study. Participants were applied Demographical Information Form which includes questions about their condition in addition to

demographics, Brief Symptom Inventory, Multidimensional Scale of Perceived Social Support, Emotional Approach Coping – State Form, and Psoriatic Experiences Scale. Correlation analyses, independent samples t-tests, One-Way analysis of variances (ANOVA), and hierarchical multiple regression analyses were performed through the aim of the present study. The results of the study, particularly, emphasize the significant roles of dangerousness perceptions related to Psoriasis, perceived social support from friends, emotional expression, distortion of body-image, and social isolation due to Psoriasis in explaining psychological symptomatology. The findings are expected to give advices to clinicians working with psoriatic patients.

Key words: Psoriasis, Psychological Symptomatology, Perceived Social Support, Emotional Approach Coping, Psoriatic Experiences.

ÖZET

PSORİATİK HASTALARDA PSİKOLOJİK SEMPTOMATOLOJİ: ALGILANAN SOSYAL DESTEĞİN, DUYGUSAL BAŞA ÇIKMANIN VE PSORİATİK DENEYİMLERİN AÇIKLAYICI ROLÜ

Ufuk KOCATEPE

Yüksek Lisans Tezi

Psikoloji Anabilim Dalı

Klinik Psikoloji

Danışman: Doç. Dr. Mithat DURAK

Haziran 2015, XIX + 109 Sayfa

Psoriasis ciltte ağır şekilde pullanmış plaklarla karakterize olan kronik ve tekrarlayıcı bir hastalıktır. Hastaların sadece fiziksel değil, aynı zamanda duygusal, psikolojik ve sosyal yaşamlarını da olumsuz etkiler. Hastalık çok boyutlu olduğundan, bu hastalara uygulanacak müdahaleler de multidisipliner olmalıdır. Alanyazın bu hastaların Psoriasis'e ilişkin stresle etkili şekilde baş etmelerine yarar sağlamak ve psikiyatrik sıkıntıları önlemek için psikolojik ve psiko-sosyal müdahalelerin önemini vurgulamaktadır. Psoriatik hastaların cilt durumlarıyla ilişkili olarak psikolojik sıkıntı deneyimlemeye yatkın olduğu düşüncesinden hareketle, bu çalışma Psoriasis hastalarında algılanan sosyal desteğin, duygusal başa çıkmanın ve psoriatik deneyimlerin psikolojik semptomatoloji üzerindeki açıklayıcı rolünü incelemeyi amaçlamaktadır. Çalışmaya 186 psoriatik hasta katılmıştır. Katılımcılara demografik soruların yanısıra hastalıklarıyla

ilgili de sorular içeren Demografik Bilgi Formu, Kısa Semptom Envanteri, Çok Boyutlu Algılanan Sosyal Destek Ölçeği, Duygusal Başa Çıkma Ölçeği – Durumluluk Formu ve Psoriatik Deneyimleri Ölçeği uygulanmıştır. Çalışmanın amacı doğrultusunda korelasyon analizleri, bağımsız gruplar t-testleri, tek yönlü ANOVA ve hiyerarşik çoklu regresyon analizleri gerçekleştirilmiştir. Çalışmanın bulguları, psikolojik semptomatolojinin açıklanmasında, özellikle, Psoriasis'e ilişkin tehlikelilik algılarının, arkadaşlardan algılanan sosyal desteğin, duyguları ifade etmenin, beden algısında bozulmanın ve Psoriasis'e bağlı sosyal yalıtımın anlamlı rollerini vurgulamaktadır. Bulguların Psoriasis hastalarıyla çalışan klinisyenlere fikir vermesi beklenmektedir.

Anahtar kelimeler: Psoriasis, Psikolojik Semptomatoloji, Algılanan Sosyal Destek, Duygusal Başa Çıkma, Psoriatik Deneyimler.

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ABBREVIATION LIST

ANOVA : Analysis of Variance

BSI : Brief Symptom Inventory

CBT : Cognitive Behavioral Therapy

DBI : Distortion of Body-Image

DVC : Difficulty in Verbal Communication

EACS : Emotional Approach Coping Scale

GHQ : General Health Questionnaire

EE : Emotional Expression

EP : Emotional Processing

ES : Effect of the Stress

IBM : International Business Machines

M : Mean

Max : Maximum

Med : Medication

Min : Minimum

MSPSS : Multidimensional Scale of Perceived Social Support

Pd : Psoriasis Duration

PES : Psoriatic Experiences Scale

PS : Psychological Symptomatology

PSRSS : Psoriasis

PSS : Perceived Social Support

SCL-R : Symptom Checklist Revised

SD : Standard Deviation

SE : Stress Experience

SI : Social Isolation

Smts : Sometimes

SSfa : Perceived Social Support from Family

SSfr : Perceived Social Support from Friends

SSso : Perceived Social Support from Significant Others

Std : Standard

UVB : Ultraviolet B

INTRODUCTION

Chronic illness is a condition that is long-lasting, and requires regular medical treatment (Sweeney 2009). Chronic illnesses are usually accompanied by psychological distress, and in turn they cause greater disability. There have been various studies conducted with patients with chronic illnesses to investigate various psychological components among those patients. For instance, Johnson, Striley and Cottler (2007) suggested that patients with chronic obstructive pulmonary disease probably hold feelings of stigmatized by people around them, so that there might be decreases in self-esteem which results in avoidance in social activities, and isolation from community. Further, in a study that had been conducted with patients with chronic pain, decreased social support was shown to be associated with increased depression and intensity of pain (López-Martínez, Esteve-Zarazaga, and Ramírez-Maestre 2008). Also, emotional approach coping was effective, that is higher emotional approach coping meant high levels of adaptive cognition and positive affect (Juth et al. 2015).

As Psoriasis is a chronic skin disease which is inflammatory and recurrent (Griffiths and Richards 2001), those psychological components are also vital for psoriaric patients. Literature has been investigating various psycho-social aspects of Psoriasis since the last decades. For instance, Leibovici and her colleagues (2010) stated that psoriatic patients suffered more from psychiatric morbidity, particularly depression, anxiety, and loss of control on behavior than the control group consisting of non-psoriatic individuals. Moreover, Pereira, Brito and Smith (2012) mentioned that adolescent and young adult psoriatic patients who are satisfied with their appearance have contacts to socialize more often. They also reported that perceiving own condition as severe leads to higher levels of anxiety, and lower levels of quality of life. Further, perceived social support is also important, in that it was shown to be positively correlated with acceptance of life with Psoriasis and negatively correlated with depression levels in psoriatic women (Janowski et al. 2012). Moreover, considering the stressful experiences caused by the disease, coping seems to be an important issue to investigate among psoriatic patients.

In the light of the information mentioned above, the current study aimed to explore the explanatory roles of perceived social support, emotional approach coping, and psoriatic experiences on psychological symptomatology among psoriatic patients. One hundred eighty six psoriatic patients who consulted dermatology services for medical treatment in Bolu and Ankara, voluntarily participated in the study by self-reporting on the Demographical Information Form, Brief Symptom Inventory, Multidimensional Scale of Perceived Social Support, Emotional Approach Coping – State Form, and Psoriatic Experiences Scale. Data was analyzed by using correlation analysis, independent samples t-tests, One-Way analysis of variances, and hierarchical multiple regression analyses.

The results of the current study were as expected and satisfactory. To summarize, perceiving the condition as dangerous and social isolation were positively associated while age, monthly income, and perceived social support from friends were negatively associated with psychological symptomatology. This study has limitations due to using self-report measurements, consisting only plaque type psoriatic patients, and collecting data regardless of the severity of Psoriasis. Those findings, however, are expected to give advices to clinicians working with psoriatic patients.

CHAPTER I

1. LITERATURE REVIEW

1.1. The Characteristics of Chronic Illnesses Including Psoriasis

1.1.1. Psychological Aspects of Chronic Illnesses

Chronic illness is an at least one-year-old medical condition that prevents an individual from completing daily duties, and requires medical care regularly (Sweeney 2009). Those diseases are not curable, however, they can and should be controlled.

Having a chronic illness, doubtlessly, is stressful for all patients. As the chronic diseases are accompanied by various disabilities, psychological morbidity gains a remarkable importance among patients suffering from such diseases. Kayahan and his colleagues, (2006), for instance, stated that when chronic illnesses are accompanied by depressive symptoms, the condition causes more disability than alone.

Chronic illnesses, especially those accompanied by physical symptoms such as pain, are well-known to be associated with psychological morbidity. Studies have provided remarkable information about the psychological comorbidities of, and/or approaches to interventions to various chronic illnesses such as chronic pulmonary diseases (Popa-Velea and Purcarea 2014), chronic pain (Adachi et al. 2014), chronic orofacial pain (Vickers and Boocock 2005), arthritis (Abraido-Lanza, Guier, and Colon 1998), Hirschsprung's disease (Athanasakos et al. 2006), and chronic pelvic pain

(Bryant, Fitzgibbon and Chia 2014). The literature recommends further investigation into specific diseases to construct psychosocial intervention programs.

1.1.2. Factors Affecting Psychological Symptomatology in Chronic Illnesses

Patients with chronic illnesses face not only the physical burden of the diseases, but also the psychological and social aspects of them. There have been various studies conducted with patients with chronic illnesses to investigate various psychological components among those patients. Those studies generally focused on the disease related variables such as perceived threat, seriousness, or dangerousness of the medical condition, perceived social support, coping, feelings of stigmatization, disease-related and non-related stress experiences, and more which are below mentioned in detailed.

1.1.2.1. Disease Related Variables and Psychological Symptomatology

Perception about the condition may affect the patients in terms of many aspects regarding the disease. These disease related variables are perceptions about the condition as being dangerous, serious, and having feelings of stigmatization due to the condition. For instance, a recent study showed that increased levels of the seriousness perceptions of the disease were related to decreased glycaemic control among patients with Type 2 diabetes (Voigt et al. 2015). Among women with chronic pelvic pain, perceiving the condition as uncontrollable by self was related to escalated anxiety (Fitzgibbon and Chia 2013). Also, disease-related perceptions of threat tend to negatively affect perceptions of general health and levels of psychological symptoms (Karademas et al. 2008).

Stigma is another concern with regard to chronic illnesses. Stigmatization in chronic illnesses usually target the diagnosis of the chronic illness, that is the diagnosis itself is the stigma factor (Earnshaw et al. 2013). Women with chronic mental illnesses reported strong feelings of stigmatization resulting in feelings of being socially excluded (Camp, Finlay and Lyons 2002). Patients with chronic illnesses may anticipate stigma due to their condition, and this anticipation lowers the quality of life, especially in the

case when the perceived stress is high, social support is low, and the levels of patient dissatisfaction of the stigma is high (Earnshaw, Quinn and Park 2011). Johnson, Striley and Cottler (2007) suggested that patients with chronic obstructive pulmonary disease probably hold feelings of being stigmatized by people around them, so that there might be a decrease in self-esteem which results in avoidance from social activities, and isolation from community.

1.1.2.2. Social Support and Psychological Symptomatology

Several studies have been conducted on different samples, showing the negative association between depression and social support for decades (i.e., Elmore 1984; Friedmann et al. 2014; He et al. 2014a; He et al. 2014b; Kim, Connolly and Tamim 2014; Symister and Friend 2003). Different forms of social support (e.g., disease-related, tangible, emotional, informational, belonging, etc.) have been investigated in various samples with chronic illnesses. Generally forms of social support are emphasized as being associated with the course of chronic illnesses, such as its lower prevalence (Gallo et al. 2014). Also, lower levels of social support were mentioned to increase disease-related stress in diabetes (Baek, Tanenbaum and Gonzalez 2014). Besides, higher levels of social support were associated with increased levels of adapting eating regimen and physical activity levels of Type 2 diabetes (Rosland et al. 2014), improved health outcomes among patients with chronic kidney disease (Muhammad et al. 2014), improved health-related quality of life among elderly with chronic heart failure (Årestedt et al. 2013), buffered depression during antiviral therapy for chronic hepatitis C (Evon et al. 2011), reduced fatigue in patients with chronic fatigue syndrome (Jason et al. 2010). Disease-related support was reported to relate to higher degrees of self-management behavior in patients with chronic illnesses, namely the daily duties that individuals should perform by the force of illness (Gallant 2003). Moreover, Wada and his colleagues (2008) found a significant negative association between social support and chronic fatigue.

However, in contrast to receiving or perceiving social support from others, friendships with critical and negative communications contributes to the onset and maintaining processes of chronic sleep disturbance (Gosling et al. 2014).

Social support is also associated with self-esteem. It is stated that the correlation between those variables was relatively high (Symister and Friend 2003). In a study that had been conducted on patients with chronic pain, decreased social support was shown to be associated with increased depression and intensity of pain (López-Martínez, Esteve-Zarazaga and Ramirez-Maestre 2008). Also, increased social support was associated with lower levels of disease-related coping styles.

Nabi, Prestin and So (2013) suggested that increased number of friends on social network sites is associated with increased perceptions about receiving social support, and therefore decreased stress, physical illness, and increased psychological well-being. Receiving/perceiving emotional social support in a stressful situation, help in daily duties, or just to be aware of having others around contribute to the adaptation to the chronic physical conditions process (Sells et al. 2009). On the contrary, perceived loneliness may predict poor health outcomes in patients with chronic heart failure (Löfvenmark et al. 2009).

However, in contrast to receiving or perceiving social support from others, friendships with critical and negative communication contributes to the onset and maintaining processes of chronic sleep disturbance (Gosling et al. 2014). Thus, feelings of being negatively criticized by others may lead to perceiving low levels of social support, and therefore to various negative outcomes in patients', psychological status.

1.1.2.3. Emotional Approach Coping and Psychological Symptomatology

Stress is an inevitable factor in everyday life. Considering a chronic illness and its physical, psychological, and social consequences, stress and coping are crucial issues to take into account while evaluating those patients. Literature has suggested definitions and effectiveness of a large variety of coping strategies so far. Lately, Stanton and her colleagues (1994) proposed a new framework for coping strategies, namely emotional approach coping which means identifying, understanding, and expressing emotions when a stressor is encountered. This recent view of emotional coping has been studied in various samples from healthy individuals to medical patients so far. Findings, generally, support this brand new view for emotional coping as a useful strategy. In general,

realizing and understanding emotions may lead individuals to express them more effectively, others to receive it better, and as a consequence, to gain a positive mood (Juth et al. 2015).

Higher emotional approach coping meant high levels of adaptive cognition and positive affect and this finding was interpreted as high levels of feeling in control in life and generally having positive affect (Juth et al. 2015). This finding may implicate positive health outcomes in patients with chronic illnesses in that positive affect is well-established to be associated with being physically and psychologically healthy. Negative appraisals of stressors may be prevented by emotional approach coping, namely active processing and expressing emotions. Those preventions, in turn, might result in increased positive perceptions related with being able to handle stressors in effective ways, accordingly increased positive affect (Juth et al. 2015). Similarly, coping self-efficacy was related to expressing emotions in a sample of patients suffering from prostate cancer (Hoyt et al. 2013a; Hoyt et al. 2013b).

Expressing emotions by writing them down increases processing emotions, and therefore may provide effective affect modulation, and in a similar way, biological changes (Hoyt et al. 2013a; Hoyt et al. 2013b). Master her colleagues (2009) suggested that emotional expression was related to left-sided resting frontal EEG activity which means motivational orientation. These findings highlight the indirect biological effect of emotional approach coping, and offer an examination of the possible effectiveness of emotional approach coping in psoriatic patients.

Women tend to use both of the emotional approach coping sub-factors to a higher degree when compared to men (Marques et al. 2009). When its role was tested in the sample of cancer survivors, similarly emotional processing was found to be more effective for adjustment process in women than in men (Cho, Park and Blank 2013). However, writing emotions down to increase emotional coping strategies was cited to serve as a coping strategy for cancer in both gender (Hoyt 2009). Therefore, there were controversial findings regarding gender.

There are several studies that examined the effect of emotional approach coping in different samples. For instance, in a sample of Veterans who experienced a trauma,

post-traumatic stress disorder and depression was negatively, and hope was positively correlated with both of the emotional approach coping sub-factors (Hassija et al. 2012). Tull, Gratz and Lacroce (2006) stated that decreased use of emotional approach coping may result in increased depressive symptomatology. Likewise, anxious patients (panic disorder, social anxiety disorder, generalized anxiety disorder) reported lower levels of emotional approach coping, especially expressing emotions, when compared to controls, what suggests that those anxiety disorders are associated with the non-use of emotional approach coping (Marques et al. 2009).

1.2. What is Psoriasis?

Psoriasis is an inflammatory, chronic, and recurrent skin disease (Griffiths and Richards 2001) which is predominantly characterized by red-colored, scaled plaques on skin (Stern et al. 2004) that has recurrence episodes which cannot be predicted before. The disease is commonly accepted as an immune-mediated disease and a bio-psycho-social condition.

To briefly categorize, the subtypes of Psoriasis are classified as plaque Psoriasis, inverse Psoriasis, erythrodermic Psoriasis, guttate Psoriasis, pustular Psoriasis and psoriatic arthritis. Plaque Psoriasis is characterized by heavily plaqued lesions on skin and this type is the most common subtype (Kumar et al. 2004). Inverse Psoriasis is the condition effecting intertriginous, skin fold areas (Wilmer and Hatch 2013) and this type of Psoriasis is seen as relatively rare (Ješe et al. 2014). Erythrodermic Psoriasis is the condition effecting almost every part of the body, which is also uncommon but severe (Koutsoukou et al. 2014; Mumoli et al. 2013). Guttate Psoriasis is the distinctive type of Psoriasis in which the lesions are characterized by guttates across the body. This type is mostly seen in children and young adults (Rogers 2002). Pustular Psoriasis is also an uncommon type of Psoriasis and is characterized by diffuse erythema with a sudden onset (Zhang et al. 2015). Psoriatic arthritis is characterized by joint involvement, which is usually comorbid with arthritis (Leibovici et al. 2010).

Psoriasis generally appears with small nummular guttates (having drops or droplike markings), and when in progress they turn into colorful and shaped patterns (Ingram 1954). Psoriatic patients suffer from various physical problems related to the disease. Sensations of itching (Szepietowski, Reich and Wisnicka 2002; Zhu et al. 2014), burning (Zamirska et al. 2008), scratching (Ograczyk et al. 2014), pitting and pruritus (severe itching of the skin) are illustrated as the most common examples. Pruritus, which has been widely reported to be experienced by psoriatic patients (i.e., Janowski, Steuden and Bogaczewicz 2014; Reich, Hrehorow and Szepietowski 2010), is a significant symptom of Psoriasis. Pruritus in Psoriasis may vary according to the body areas, as patients whose lesions are placed on body parts which can be easily covered by clothing, reported lower pruritus levels than patients whose lesions are placed on more visible body parts (Janowski, Steuden and Bogaczewicz 2014). Moreover, pruritus is enhanced by increased disease severity (Ograczyk et al. 2014). This may be related to several physiological factors. On the other hand, Kumar and his colleagues (2004) stated that pitting was the most common symptom among their psoriatic children participants.

Psoriasis has no certain cure (Fortune et al. 2002). Thereby, the medical treatment generally aims to soothe the symptoms, thus to reduce a possible decrease in patients' quality of life (Wahl et al. 2000).

1.2.1. Epidemiology of Psoriasis

"*Psoriasis affects all sorts and conditions of men and women, of all races and creeds, all strata of society, rich and poor, wise and foolish, the hungry, the well-fed, the sick, and the sound.*" (Ingram 1954)

Hereditary background, when accompanied by environmental factors makes an individual vulnerable to various chronic diseases. Psoriasis is one of the chronic skin disorders which has its roots in genetics and environmental factors. Beyond familial history, genetic factors, and environmental factors; smoking (Naldi and Mercuri 2009; Fortes et al. 2005) and alcohol intake (Poikolainen et al. 1990; Qureshi et al. 2010) are also mentioned as predisposing risk factors for Psoriasis. Furthermore, Psoriasis may

proceed with nail involvement (Kumar et al. 2004) – regardless of the age of onset (Chularojanamontri et al. 2014).

A recent epidemiological study indicated that the disease is more common in adults than in children (Parisi et al. 2013). There is no clear evidence that the disease varies across gender (Parisi et al. 2013; Sampogna et al. 2004) concluded in their study that a great proportion of the participants reported itching, hurt on the skin, burning, stinging, trouble with water, irritation, sensitive skin, and bleeding. Expression of Psoriasis in children is different from that in adulthood in the way that scars are thinner, softer, and less scaly, with the female to male ratio of two (Kumar et al. 2004). Although the prevalence varies across different areas of the world (Enamandram and Kimball 2013), it is considered to affect nearly 2-4% of the Western population (Stern et al. 2004). Yet, no clear acceptance about the prevalence of Psoriasis has been mentioned in the literature.

Chularojanamontri and her colleagues (2014) stated that their psoriatic participants reported suffering from hypertension and diabetes mellitus as the most frequent comorbidities. In addition, smoking, alcohol consumption (Kirby et al. 2008), obesity (Sterry, Strober and Menter 2007), inflammatory bowel disease, metabolic dysfunction, cardiovascular diseases, and psychiatric conditions (Gulliver 2008) are also mentioned as coexisting.

Psoriasis with an onset before the age of 40 is called Type 1 Psoriasis; onset after the age of 40 is called Type 2 Psoriasis. Psoriatic patients with an early onset, namely Type 1 patients, suffered from higher levels of psychopathology than those with a late onset, namely Type 2 patients (Gupta, Gupta and Watteel 1996). On the other hand, in terms of obesity, Type 2 psoriatic patients were found to be at a greater risk when compared with Type 1 patients (Heredi et al. 2013).

1.2.2. Medical Treatment of Psoriasis

As Psoriasis is a chronic skin condition characterized by acute relapses, those patients are mostly in need for a long-term therapy. From this point of view, adherence

to therapy to manage the disease gains importance (Balato et al. 2013). However, a common effective treatment for entire psoriatic patient groups does not exist as patients' responses to treatment differ from one to another. Moreover, the response to the same medication applied to one patient could even change across time (Alper et al. 2012).

To mention generally, the treatment plans of psoriatic patients often involve acitretin, cyclosporine, etanercept, methotrexate, infliximab, ustekinumab, adalimumab, and adjunctive Ultraviolet B (UVB) phototherapy (Alper et al. 2012). A recent study recommends using Ultraviolet B (UVB) phototherapy at home settings as UVB therapy demands financial cost and causes inconveniency (Anderson and Feldman 2015).

Gulliver (2008) stated that attempting to reduce the severity of a comorbid disorder might be also effective for the severities of other comorbidities as they share common underlying mechanisms with Psoriasis. Since Psoriasis manifests itself within a complex clinical framework, an evaluation of the disease must consist of both physical and psychological aspects (Kirby and Griffiths 2001). There have been several studies supporting the idea about the necessity of adjunctive psychosocial interventions and insufficiency of medical treatment per se (i.e., Szramka-Pawlak et al. 2014).

1.2.3. Psychological Symptomatology among Psoriatic Patients

Dermatologists tend to reflect the information of an incurability of the disease to the patients, these feelings of hopelessness negatively contribute to the prognosis (Ingram 1954), and may lead to psychological sequel (Magin et al. 2009). However, hope was found to be negatively correlated with quality of life in psoriatic patients (Szramka-Pawlak et al. 2014). Leibovici et al. (2010) stated that psoriatic patients suffered more from psychiatric morbidity, particularly depression, anxiety, and loss of control of behavior than the control group consisting of non-psoriatic individuals. Nevertheless, Psoriasis severity was not associated with psychiatric diseases (Finzi et al. 2007).

Rapp and his colleagues (1999) asserted that Psoriasis also causes disability as much as main chronic health conditions do. Moreover, psoriatic patients reported reduced well-being when compared with non-psoriatic controls (Leibovici et al. 2010).

Janowski and Pietrzak (2008) suggested that Psoriasis in childhood may be a risk factor for developing psychological disorders even in the absence of any obvious or latent psychological components. They also noted the importance of psychological interventions during this period as they may provide parents with an understanding of appropriate attitudes and educational techniques, and help them avoid possible negative effects of the disease on the child's personality. Psoriasis, especially in childhood, may cause several emotional and psychological predispositions, therefore there is a great need for psychological attention (Kumar et al. 2004). Another psychologically risky group with Psoriasis are adolescents. Distortions in appearance may adversely affect the adolescent's already existing sensitivity in body image, and hence decrease their self-esteem (Janowski and Pietrzak 2008).

Mizara, Papadopoulos and McBride (2012) highlighted a number of predominant maladaptive schemas, namely vulnerability to harm, defectiveness/shame, emotional deprivation, social isolation, failure, and subjugation, to be possibly present in patients with Psoriasis. They found that defectiveness/shame and vulnerability to harm schemas together were predictors of anxiety. On the other hand, defectiveness/shame and social isolation schemas together were predictors of depression. In addition to these results, psoriatic patients were found to hold emotional inhibition schemas (Mizara, Papadopoulos and McBride 2012). Especially the last finding is intriguing whether emotional expression could be effective in eliminating psychiatric morbidity in psoriatic patients.

There is considerable information, throughout a qualitative study, suggesting that anxiety and depression are associated with each other in a casual way due to the feelings of embarrassment, shame, and hence behavioral avoidance (Magin et al. 2009). Furthermore, psoriatic patients who were diagnosed before the age of 20 were found to have higher levels of anxiety and depression (Remrod, Sjostrom and Svensson 2013). In the aforementioned study, this group of patients was indicated to hold somatic trait anxiety, psychic trait anxiety, stress susceptibility, embitterment, mistrust, trait irritability, and verbal trait aggression.

Patients with Psoriasis at older ages were found to have lower quality of life related to their skin when compared with younger patients (Sampogna et al. 2006).

Meanwhile, the knowledge of psychiatric comorbidities was the starting point of conducting this research.

1.2.4. Psoriasis and Psychological Intervention Programs

When considering psychiatric comorbidities among psoriatic patients, these patients essentially need receiving psychological interventions adjunctive to the medical treatment. Psychological effects of Psoriasis are generally underestimated by dermatologists (Idriss, Kvedar and Watson 2009). After evaluation of those patients, developing patient-specific psychological intervention programs is important to achieve successful outcomes (Shah and Bewley 2014).

In the related literature, cognitive behavioral therapy (CBT) has been a widely used approach to psychological interventions of Psoriasis. There is, however, a considerable evidence for the efficacy of systemic family therapy to provide clearance of the lesions. Within this framework, family and social relationships and how they might, in turn, have effects on presenting problems, were focused on (Shah and Bewley 2014). Within a recent study, internet based cognitive behavioral therapy focusing on self-esteem, thinking styles, depression, low mood, tension, stress, coping and Psoriasis management, was applied to Psoriatic patients (Bundy et al. 2013). The results showed that this type of therapy is useful in decreasing anxiety whereas similar outcomes was not seen for depression. Furthermore, psychological distress, feelings of stigmatization, quality of life, underlying emotional themes (especially in patients who are resilient to the pharmacotherapy) are suggested to be taken into account while attempting to set a psychological intervention (Janowski and Pietrzak 2008).

Societal support was suggested to debilitate psychological morbidity in Psoriasis (Magin et al. 2009). In the aforementioned study, acceptance of the disease was also showed to have a similar effect. Researchers recommended a psychological intervention which is patient-centered, focused on coping styles, and education.

A study was conducted in which a group of psoriatic patients was regularly called by telephone by trained health nurses, during which conversations they talked about

disease related matters in the light of problem solving, decision making and action planning strategies, while the second group was solely called and did not receive any intervention (Walters et al. 2013). This technique was reported to reduce anxiety and self-management coping over 12 months, regardless of the quality of the phone calls. Similarly, Idriss, Kvedar and Watson (2009) suggested leading psoriatic patients to online support groups which in turn may result in enhanced therapeutic effect.

Using text messages to motivationally support psoriatic patients in terms of adherence to treatment process showed satisfactory results (Balato et al. 2013). Moreover, those studies suggested that the technique of motivating and educating text messages may contribute to better self-care behavior, positive disease-related outcomes, and control on the disease in the way that those messages provide an ongoing communication between the patients and the physician.

Support groups can be counted as well options for patients with various chronic illnesses. Attending support groups comprised of patients suffering from the same illness may provide patients with options to share experiences and listen to the experiences of the other group members. Support groups are not only organized as face-to-face meetings, but also internet could allow for the similar effects. Idriss, Kvedar and Watson (2009) stated that online support groups provided psoriatic patients with decreasing disease severity, increasing the quality of life, and a support network. The aforementioned research also emphasizes the great need of psychological support among psoriatic patients.

It is widely suggested that applying same treatment plans to all psoriatic patients is inadequate. For instance, psychosocial intervention programs for psoriatic patients should be arranged differently across gender, as they found significant gender differences in terms of correlations between social support and depression (Janowski et al. 2012). Therefore, evaluating each psoriatic client in terms of both the center of their problems, and the psychosocial aspects that they suffer from is so important for clinicians working in this field. Furthermore, approaches to each client should be unique. In other words, sensitive evaluation of one patient's needs is necessary. For instance, one patient may perceive high levels of societal support but also perceive high levels of distortion of body-

image related to Psoriasis while the other patient is rather satisfied with the appearance, but has social problems.

Shah and Bewley (2014) implied the limitations of the effectiveness of cognitive-behavioral therapy and stress management training in terms of the inadequate sample sizes and follow-up studies, and emphasized the need for different views for the psychosocial interventions to Psoriasis. Therefore, understanding variables associated with psychological well-being among these patients is so valuable to develop further intervention programs.

1.2.5. Factors Affecting Psychological Symptomatology of Psoriasis

Skin is a widely visible organ of human body. Most deformations are noticeable from the outside, so that it is not necessary for psoriatic patients to verbally express their disease to other individuals. As a chronic disease, Psoriasis also has several psychological and social aspects apart from the physical symptoms special to the condition. Factors which are explained below in detail are disease related variables, social support, stress and coping.

1.2.5.1. Disease Related Variables

Skin is a valuable element in human interactions. In this view, feeling of shame becomes an important factor related to the appearance due to the nature of Psoriasis. The concept of body-image gains importance when studying body-related issues. Body-image is an essential factor considering one's overall well-being; moreover, negative body-image refers to one's perception of being unattractive, and positive body-image refers to the acceptance of body the way it is (Lee et al. 2014). Dissatisfaction with the body may lead to a number of struggles and negative outcomes. For instance, negative body-image associates with a decrease in the quality of life and self-esteem (Lo Coco et al. 2014; Steinmann et al. 2011; Wilson, Latner and Hayashi 2013).

Approving or disapproving messages from the environment have influences on body-image (Lee et al. 2014). Perceived disfigurement or some part of body is usually hidden by an individual who suffers from distortion in body-image, so that the individual avoids facing negative feelings related to the perceived and shown disfigurement. Thus, the individual becomes more likely to repeat those avoidant behaviors (Callaghan et al. 2015).

Apart from the perceptions, satisfaction with the body-image also contributes to well-being. Pereira, Brito and Smith (2012) mentioned that adolescents and young adults who are satisfied with their appearance have more contacts to socialize. This dimension is especially important when considering that diseases with an early onset cause higher levels of depression and anxiety compared those with late onsets (Pereira, Brito and Smith 2012). A finding about sexual relationships Knowles, Gass and Macrae (2013) stated that positive body-image leads to satisfaction of the sexual intimacy, and thus contributes to the marital relationship. In addition to the body-image, perceptions about illness are also important. For instance, Pereira, Brito and Smith (2012) suggested that perceiving own condition as severe leads to higher levels of anxiety, and lower levels of quality of life in terms of global quality of life and “everyday activities” in a sample of psoriatic patients than perceiving it as mild or moderate.

In addition to satisfaction with the body–image and perception of the condition, it is well-emphasized that social isolation is another risk factor for health. There have been many research examining different aspects of social isolation. There is an evidence that social isolation is as harmful to health as obesity or smoking are (Pantell et al. 2013). Perceived social isolation was positively correlated with catastrophizing pain, anxiety, and depression; moreover in a 6-month follow up study, perceived social isolation predicted the low back pain related disability (Oliveira et al. 2015).

Feeling of being socially integrated is suggested to be a protective factor for the inflammatogenic effects derived from a sleep disturbance (Cho, Park and Blank 2015). Many people, however, are embedded in restricted social areas, and this may be insufficient to socialize as Medvene and his colleagues (2015) showed that participants in restricted social networks were found to be socially isolated, lonely, and to have a few positive relationships. Participants embedded in family networks, however, reported

relatively high levels of positive relationships than the participants embedded in other type of restricted networks. This suggested that socializing in family may be essential for those participants who were home and community based service clients.

Social difficulties may not only contribute to various physical or psychological symptoms and exacerbate them (Friedler, Crasper and McCullough 2014), but also trigger those pre-existing difficulties like in the example where pre-existing interpersonal difficulties were suggested to predict suicidal behavior in older patients with depression (Harrison et al. 2010). More importantly, coping with social aspects of Psoriasis was associated with improved quality of life (Rapp, Cottrell and Leary 2001).

Communication is vital for socializing, and so for social support. Difficulty in communication may occur due to a neurological impairment or an individual might be tired of explaining the condition that he/she is in (Kocatepe, Durak and Polat 2015). Doubtlessly, both have negative effects on individuals with disadvantages. For instance, in a recent study, older people experiencing communication difficulties tended to catastrophize the pain they experienced (Chan, Kwan and Chi 2014). Leibovici and her colleagues (2010) suggested that psoriatic patients had reduced levels of involvement in social relationships. Kocatepe, Durak and Polat (2015) mentioned that, in their face-to-face interviews, psoriatic patients tend to report being tired of explaining their condition and lesions to curious people. Moreover, there is a body of evidence that psoriatic patients are likely to experience alexithymia (Fortune et al. 2002; Korkoliakou et al. 2014; Richards et al. 2005) – difficulties in understanding, processing and expressing emotions (Sifneos 1973).

1.2.5.2. Social Support

Perceived social support was shown to be positively correlated with acceptance of life with Psoriasis irrespective of gender, and negatively correlated with depression levels in psoriatic women (Janowski et al. 2012). Apart from this study, the role of social support on psoriatic patients has been examined generally with alexithymia (i.e., Picardi 2003;

Picardi 2005), adaptation to the disease (i.e., Janowski 2012) and adherence to treatment (i.e., Balato 2013) variables.

To begin with, alexithymia is a risk factor for receiving or perceiving social support among psoriatic patients. Picardi and his colleagues (2005) suggested that Psoriasis correlates with alexithymia, and psoriatic patients avoid close and intimate relationships, so they lack social support. Similarly, a finding supported that psoriatic patients tend to conceal the emotional influence of the disease from their partners (Richards et al. 2004).

Since the stressful experiences that Psoriasis causes in one's life, adapting to the psoriatic life is vital for those patients. Having supporters around may facilitate the adaptation process. For instance, in a study, acceptance of living with Psoriasis was positively correlated with global perceived social support (Janowski 2012).

Adherence to treatment is another issue that literature has widely focused on. Treament processes for chronic illnesses usually require specific effort that patients should pay, such as eating regimen, physical activities, applying cream or taking medicine regularly. For instance, (Balato 2013) used text message technique that they send educational and reminder messages to patients once a day, and reported that this technique was useful to increase adherence to therapy.

Furthermore, Bewley and his colleagues (2014) asked questions to their psoriatic participants to evaluate the burden of the disease on their lives. The burden questions were about the degree of the visibility of Psoriasis, feelings of being understood by the people around them, feelings of being avoided by others, the effort to hide the lesions, feelings of helplessness, and inability to participate in activities. Bewley and his colleagues (2014) suggested that participants who reported to experience most of such difficulties were in a greater need for support.

1.2.5.3. Stress

Stress among psoriatic patients is a vital issue to study, considering the difficulties that the disease causes in patients' lives. Finzi and his colleagues (2007) conducted a study aiming to evaluate the psychological distress in 1580 patients with Psoriasis. Results showed that 46% of the participants experience both minor (detected by GHQ-12) and major (detected by BSI) psychological distress, which was seen three times more often in women than men, thus dermatologists were advised to consider this information especially when examining psoriatic women.

Stress or psychological stress have an important role at the onset, exacerbating and/or maintaining the disease, thus Psoriasis has been known as being "psychosomatic" (Griffiths and Richards 2001). Contrary to this, Picardi and his colleagues (2005) found no association between Psoriasis and stress. This adverseness may be due to the difference in terms of stress conceptualizing in those aforementioned studies. In the current study, psoriatic experiences were held as stressors; namely distortion of body-image, social isolation, and difficulty in verbal communication related to Psoriasis.

Kocatepe, Durak and Polat (2015) reported to have interviewed a number of psoriatic patients, emphasizing especially the stressful aspects of the disease. Psoriatic patients mostly reported distress due to others' noticing the lesions, negative attributions regarding their body-image, withdrawal from most of the social activities or attending them with anxiety, being tired of explaining the nature of Psoriasis to others, and feeling uncomfortable when talking about the condition.

1.2.5.4. Emotional Approach Coping

Taking into account that Psoriasis is a largely stressful condition, coping processes play a considerable role. For instance, those patients were showed to commonly adopt planning, active (Finzi et al. 2007; Fortune et al. 2002), acceptance, and positive reinterpretation (Fortune et al. 2002) coping strategies so as to cope with Psoriasis. Moreover, psoriatic patients who participated in an itch coping program gained

betterments in their conditions, and they also reduced itching and scratching (Ograczyk et al. 2014).

In a 1-year follow up study, psoriatic patients who adopted coping strategies, such as seeking social support, seeking distraction, and being less passive in coping reported lower levels of attending different therapies, anxiety, depression, and improvements in physical health (Scharloo et al. 2000). In this study, emotional expression was also mentioned to lower anxiety and depression and support physical health. However, related literature has been less likely to investigate emotional approach coping in psoriatic patients.

Considering the tough stressors in psoriatic lives due to the disease, emotional approach coping may serve as a protective factor for psychological symptomatology. Function of emotional approach coping has been studied in various samples from healthy to medical patients so far. Findings, generally, support that emotional approach coping is a useful approach to coping strategies.

There is a body of evidence that the benefit of emotional approach coping depends on the context in which an individual encounters the stressor. This coping strategy is especially valuable in social contexts on an interpersonal level, and in uncontrollable situations (Austenfeld and Stanton 2004). Concordantly, Psoriasis is an incurable skin condition to which neither dermatologists nor patients provide a clear solution, emotional approach coping may function as a supporting content in socializing, especially when considering that psoriatic patients often suffer from feelings of stigmatization, which has been well known in the related literature.

Alexithymia tends to have higher prevalence among psoriatic patients when compared to healthy population (Korkoliakou et al. 2014). Lack of the skills of realizing and expressing emotions may be considered as a risk factor for exacerbated Psoriasis irrespective of gender, age, or severity of the disease. In that research, a great proportion of psoriatic participants were found to be alexithymic (Korkoliakou et al. 2014). Therefore, understanding whether emotional processing or expression play a role on well-being of psoriatic patients may help to explore emotional facets of the disease.

1.3. Aims of the Present Study

Disease-related stress leads to an inevitable burden in psoriatic patients' lives. Psoriatic patients are probably overwhelmed with the consequences of the disease such as feelings of stigmatization resulting in distortion of body-image, social difficulties resulting in isolation and others' curiosity about the disease (Kocatepe, Durak and Polat 2015). The emotional burden is likely to be underestimated by the physicians, the people around those patients, and perhaps even by themselves.

Considering all those difficulties mentioned in the literature review, studies conducted with patients have not examined the role of psoriatic experiences, perceived social support, and emotional approach coping together on psychological symptomatology. A clear understanding of psoriatic patients' psoriatic experiences, their associations with psychological symptomatology, and comprehensive examination of the explanatory roles of perceived social support and emotional approach coping on psychological symptomatology could further expand our knowledge about psychosocial aspects of the disease.

The purposes of the present study are to examine the extent to which psoriatic patients' psychological symptomatology is associated with psoriatic experiences, and the explanatory roles of psoriatic experiences, perceived social support, and emotional approach coping on psychological symptomatology. Through the purposes of the present study, several hypotheses focusing on the associations mainly between psychological symptomatology, psoriatic experiences, perceived social support, and emotional approach coping are constituted based on the literature findings. For instance, increased disease-related social isolation is expected to associate with higher psychological symptomatology. Afterwards, correlation analysis, independent samples t-tests, One-Way ANOVAs, and hierarchical regression analyses are employed in order to examine the explanatory roles of psoriatic experiences, perceived social support, and emotional approach coping on psychological symptomatology.

1.4. Hypotheses of the Present Study

This study will test nine hypotheses with hierarchical regression analyses in three sets run for the data obtained from psoriatic patients. First set of analyses run for the measures of *Psoriatic Experiences:* After controlling for the possible effects of the socio-demographic and current health status variables, perceived social support, and emotional approach coping measures,

Hypothesis 1: Lower age will be associated with higher *distortion of body-image, social isolation* and *difficulty in verbal communication* measures of psoriatic experiences.

Hypothesis 2: Duration of Psoriasis will be associated with *distortion of body-image, social isolation* and *difficulty in verbal communication* measures of psoriatic experiences.

Hypothesis 3: Higher levels of perceptions about the dangerousness of Psoriasis will be associated with higher *distortion of body-image, social isolation* and *difficulty in verbal communication*.

Hypothesis 4: Lower perceived social support from family, friends, and significant others will be associated with higher *distortion of body-image*, *social isolation*, and *difficulty in verbal communication*.

Hypothesis 5: Lower emotional processing and emotional expression will be associated with higher *distortion of body-image*, *social isolation*, and *difficulty in verbal communication*.

Second, analyses run for the *Psychological Symptomatology* measure*:* After controlling the possible effects of the socio-demographic and current health status variables, perceived social support, emotional approach coping, and psoriatic experiences measures;

Hypothesis 6: Lower age will be associated with higher *Psychological Symptomatology*.

Hypothesis 7: Higher levels of perceptions about the dangerousness of Psoriasis will be associated with higher *Psychological Symptomatology*.

Hypothesis 8: Lower perceived social support from family, friends, and significant others will be associated with higher *Psychological Symptomatology*.

Hypothesis 9: Higher distortion of body-image, social isolation, and difficulty in verbal communication will be associated with higher *Psychological Symptomatology*.

CHAPTER II

2. METHOD

This chapter will be giving information about the population and sample, participants, measurements that were used, and procedure of the present study.

2.1. Population and Sample

The current study sampled patients with plaque-type Psoriasis who had consulted to Bolu, Abant İzzet Baysal University, Medical Faculty Hospital and Ankara, Dışkapı Yıldırım Beyazıt Training and Research Hospital for medical treatment, from the population of Psoriatic patients in Turkey.

2.2. Participants

Among the 186 patients with Psoriasis who were participated in the present study, 50.5% of them were male (n = 94), and 49.5% were female (n = 92). The age ranged between 17 and 66 (M = 37.30).

The examined distribution of jobs showed that 19.9% of the participants were housewives (n = 37), 12.4% were worker (n = 23), 11.8% officer (n = 22), 8.1% officer (n = 15), 8.1% student (n = 15) , 7.5% technician (n = 14), 7.5% retired (n = 14), 5.4%

health personnel (n = 10), 5.4% teacher-lecturer (n= 10), 4.3% tradesman (n = 8), 3.2% architect-engineer (n = 6), 2.2% director (n = 4), 2.2% farmer (n = 4), 1.1% security personnel (n = 2) and 1.1% of the participants were unemployed (n = 2). Furthermore, 59.7% of the participants reported that they currently work (n = 111) and 40.3% reported that they do not (n = 75).

Most of the participants were married (65.1%, n = 121). Of the remained participants 26.9% were single (n = 50), 4.8% divorced (n = 9), and 3.2% were widowed (n = 6).

When asked the total number of the members of their house, including themselves, 7.5% of the participants were living alone (n = 14), 12.4% reported they live with another person (n = 23), 34.9% of the participants reported the total number of the house members was 3 (n = 65), 25.8% reported it was 4 (n = 48), and finally, 19.4% stated 5 or more people were living in their house (n = 36).

A great majority of the participants had children (63.4%, n = 118) while 36.6% did not (n = 68). In a more detailed examination, 22% of the participants had only one child (n = 41), 24.2% had 2 children (n = 45), 14% had 3 children (n = 26) and 3.2% had 4 or more children (n = 6).

Participants of the present study were also asked whether they use substance in terms of smoking and alcohol drinking. Results showed that 47.3% of the participants do not smoke (n = 88). Among who smoke, 16.1% reported that they smoke less than a box in a day (n = 30), 32.8% reported a box in a day (n = 61), and 3.8% reported that they smoke more than a box of cigarettes in a day (n = 7).

In terms of alcohol use, a great majority of the participants reported that they do not drink alcohol (79.6%, n = 148). Among the participants who drink alcohol, most of them shared that they drink alcohol one or less in a month (14.5%, n = 27) and the rest of the participants who drink alcohol reported that they drink more than once in a month (5.9%, n = 11). Table 2.1 illustrates the details about the demographic variables of the participants.

Most of the participants have never been inpatient due to Psoriasis (74.7%, n = 139). However, 9.1% reported that they have experienced being inpatient twice (n = 17), 7% reported three times (n = 13), and 9.1% reported four or more times (n = 17).

The perception of the seriousness of Psoriasis was assessed with a question. To the view of an important number, namely 45.7% of the participants, their illness was sometimes good, sometimes bad (n = 85). Among the rest of the participants, 11.8% reported it was very bad (n = 22), to 19.9% it was bad (n = 37), to 12.9% it was good (n = 24), and finally, to 9.7% it was very good (n = 18).

Participants were also asked to rate their perception of the dangerousness of Psoriasis. A great number of the participants reported their Psoriasis was not life-threatening at all (55.4%, n = 103). 23.1% of the participants reported their Psoriasis was slightly life-threatening (n = 43), 15.1% reported it was moderately life-threatening (n = 28), 6.5% reported it was immensely life-threatening (n = 12).

Most of the participants do not have any other medical condition (64%, n = 119). 26.9% had a medical condition (n = 50), and 9.1% has 2 or more medical conditions other than Psoriasis (n = 17). An important number of the participants have never been inpatient due to another medical condition other than Psoriasis (66.1%, n = 123), while 33.9% have not (n = 63).

In terms of other medical illnesses, 15.1% of the participants (n = 28) who previously reported to have at least one medical condition other than Psoriasis suffered from heart/circulatory/respiratory system problems. 9.7% of these participants suffered from endocrine system (n = 18), 7.5% suffered from musculoskeletal system (n = 14), 7% suffered from sensory system (n = 13), 5.4% suffered from digestive system (n = 10), 1.6% suffered from urinary system (n = 3), and 1.1% suffered from neurological problems (n = 2). In more detail, among these participants 26.9% of them had only one medical condition other than Psoriasis (n = 50), 7% had two (n = 13), and 2.2% had three (n = 4) other medical conditions other than Psoriasis.

Among all participants, only 14.5% reported to have had a psychological diagnosis (n = 27) in which 8.1% reported to have had depression (n = 15), 4.8% anxiety disorder (n = 9), 2.2% panic disorder (n = 4), 1.1% social phobia (n = 2), and 0.5% of

these participants reported to have had vaginismus (n = 1). Table 2.2 illustrates the details about the health-related variables of the participants.

2.3. Measurements

Demographical Information Form, Brief Symptom Inventory, Multidimensional Scale of Perceived Social Support, Emotional Approach Coping Scale, and Psoriatic Experiences Scale were utilized for the purpose of the present study.

2.3.1. Demographical Information Form

A Demographical Information Form was structured to obtain information about the patients (e.g., gender, age, education level, monthly income, etc.), their Psoriasis (e.g., how long they have been suffering from Psoriasis, whether they had been hospitalized or not, etc.), and variables which may be useful for a better understanding of the dynamics of the disease (e.g., smoking, alcohol, other medical conditions, psychological diagnosis, etc.). This form is available in Appendix A.

Table 2.1: Demographic variables of the participants

Demographic Variables	n	%		n	%
Gender			**Marital status**		
Mae	94	50.5	Married	121	65.1
Female	92	49.5	Single	50	26.9
Education			Divorced	9	4,8
Not literate	4	2.2	Widowed	6	3.2
Literate	3	1.6	**House members**		
Primary school graduate	28	15.1	One member	14	7.5
Middle school graduate	15	8.1	Two members	23	12.4
High school graduate	65	34.9	Three members	65	34.9
Two-year degree	28	15.1	Four members	48	25.8
Licence graduate	39	21.0	Five and more	36	19.4
Master's degree	2	1.1	**Child**		
Doctorate graduate	2	1.1	None	68	36.6
Profession			One child	41	22.0
Housewife	37	19,9	Two children	45	24.2
Worker	23	12,4	Three children	26	14.0
Officer	22	11,8	Four and more	6	3.2
Student	15	8,1	**Job status**		
Self-employed	15	8.1	Working	111	59.7
Retired	14	7,5	Not working	75	40.3
Technician	14	7,5	**Smoking frequency (daily)**		
Health personnel	10	5.4	Never	88	47,31
Teacher-Lecturer	10	5.4	Less than a box	30	16.13
Tradesmen	8	4,3	A box	61	32,80
Architect-Engineer	6	3.2	More than a box	7	3.76
Director	4	2,2	**Alcohol use frequency (monthly)**		
Farmer	4	2,2	Not drinking	148	79,57
Security personnel	2	1.1	One or less	27	14.52
Unemployed	2	1.1	More than once	11	5.91

2.3.2. Brief Symptom Inventory (BSI)

Derogatis and Melisaratos (1983) developed the Brief Symptom Inventory, which is a self-report instrument consisting of 53 items scored on a five-point Likert type scale ranging from “not at all” (0) to “extremely distress” (4). It is a brief form of the revised

Symptom Checklist-90 (SCL-R-90). General physical and psychological distress is aimed to be assessed with this instrument. Higher scores mean greater physical and psychological distress. The internal consistency for the total scale was reported to be .95.

Şahin and Durak (1994) made the Turkish adaptation of the instrument, and the psychometric properties of the scale was satisfactory. In this study internal consistency of the scale was .97. Exampling items of the BSI is shown in Appendix B.

Table 2.2: Variables related to health

Disease Related Variables	N	%	**Other Medical Conditions**	n	%
Have you been inpatient due to PSRSS?			**Total number of other medical conditions**		
Never	139	74.73			
Twice	17	9.14	None	119	63,98
3 times	13	6.99	One	50	26,88
4 or more times	17	9.14	Two or more	17	9,14
Treatment phase			**Have you been inpatient due to other medical condition?**		
Recieving med. regularly	75	40.32			
Recieving med. occasionally	67	36.02	Yes	63	33,90
Not recieving med.	44	23.66	No	123	66,10
Perceptions About the Disease Seriousness			**Have you been diagnosed with a psychological diagnosis?**		
Very bad	22	11.80	I have	27	14,50
Bad	37	19.90	I don't have	159	85,50
Smts. good smts. Bad	85	45.70	**Stressful Experience**		
Good	24	12.90	**What was your stressful experience?**		
Very good	18	9.70	No stressful experience	98	52,69
Dangerousness			Bereavement	26	13,98
Not life-threatening at all	103	55.38	Familial problems	22	11.83
Slightly life-threatening	43	23.12	Lllness	19	10.22
Moderately life-threatening	28	15.05	Job problems	11	5.91
Immensely life-threatening	12	6.45	Traffic accident	10	5.38

2.3.3. Psoriatic Experiences Scale (PES)

Kocatepe, Durak and Polat (2015) developed the scale aiming to measure stressful experiences that psoriatic patients encounter due to Psoriasis. It is a self-report type scale consisting of 16 items, and scored on a 5 point Likert scale ranging from 1 (never) to 5 (always). The PES was reported to consist of three subscales, namely distortion of body-image, social isolation, and difficulty in verbal communication. Distortion of body-image is related to feelings of shame, trying to hide the lesions and scars, being discomfortable when others look at the lesions and scars. Social isolation refers to feelings of loneliness, difficulty in making emotional relationships, avoiding to make new friendships. Lastly, difficulty in verbal communication refers to avoiding to talk about Psoriasis, feeling discomfortable when others ask about the condition, and being tired of explaining Psoriasis to others. The psychometric properties of the scale were reported to be satisfactory in Turkish psoriatic patients.

The internal consistencies of the distortion of body-image, social isolation, and difficulty in verbal communication factors, in the current study, were .89, .91, and .84, respectively. Exampling items of the PES is given in the Appendix C.

2.3.4. Multidimensional Scale of Perceived Social Support (MSPSS)

Zimet and his colleagues (1988) developed the MPSS, which is a self-report type scale consisting of 12 items, and scored on a 7 point Likert scale ranging from 1 (disagree very strongly) to 7 (agree very strongly). It was designed to evaluate the individual's perception of the social support he receives from his family, friends and significant others. The MSPSS involves three subscales of perceived social support, namely, from family, friends, and significant others. They proposed that the Cronbach's Alpha coefficient ranged from .79 to .98, and test-retest reliability coefficients, in 2 or 3 months period, were satisfactory (.72 - .85).

Eker, Arkar and Yaldız (2000) conducted the Turkish adaptation study, and reported that the MSPSS is an appropriate measurement to use in Turkish samples. Cronbach's Alpha coefficients of the subscales and total scale were reported to range

between .80 and .95. In this study, internal consistencies of the total scale, the factor of perceived social support from family, the factor of perceived social support from friends, and the factor of perceived social support from significant others were .91, .85, .88, and .92, respectively. The examples of the items of MSPSS is available in Appendix D.

2.3.5. Emotional Approach Coping Scale – State Form (EACS)

Stanton and her colleagues (2000) developed the EACS to evaluate emotional processing and emotional expression with 16 items. It is scored on a 5 point Likert scale ranging between 1 (I don't do this at all) to 5 (I do this a lot). In terms of internal consistency, the reliability coefficients for emotional processing subscale was .72, and for emotional expression .82 (Stanton et al. 2000).

Turkish adaptation study of the scale was conducted by Senol-Durak and Durak (2011). They found the internal consistency of the emotional processing, emotional expression and total scale were, .86, .90, and .90, respectively. Psychometric properties of the scale was reported to be satisfactory in a sample of Turkish university students. In the present study, internal consistencies of emotional processing, emotional expression, and the total scale were .90, .89, and .94, respectively. The EACS is exampled in Appendix E.

2.4. Procedure

Ethical appropriateness form for this study has been obtained from Abant İzzet Baysal Üniversitesi Human Research Ethics Committee. Later, for the purpose of the present study, data was gathered from 186 patients with Psoriasis who consulted for medical treatment in Bolu, Abant Izzet Baysal University, Medical Faculty Hospital and Ankara, Dışkapı Yıldırım Beyazıt Training and Research Hospital. All participants were informed about the study, their consents were obtained, and they voluntarily participated in the study. It took almost 40 minutes to complete all questions. After administration of all questionnaires, participants were informed about the appreciation of the researcher.

CHAPTER III

3. RESULTS

Results are organized in two different sections. First, data cleaning, descriptive statistics of the variables (i.e., means and standard deviations), and correlation among the variables are presented. Then, the results of several t-tests, One-Way ANOVAs, and hierarchical regression analyses which were conducted to explain the associations among perceived social support, emotional approach coping, psoriatic experiences, and psychological symptomatology were given.

3.1. Data Cleaning

Data was entered in IBM Statistical Package for the Social Sciences 21 programme. Afterwards, it was examined in terms of data entry, and values which were incorrectly entered were corrected. Missing values were managed by using Multiple Imputation technique. Also, fit between distributions and the assumptions of multivariate analysis were made. One case was excluded from the data for having low $\underline{z}$ score, namely being univariate outliers. No cases were deleted for being identified as multivariate outliers by using Mahalanobis distance with $p \leq .001$. Finally, data was consisted of 186 participants.

3.2. Descriptive Statistics

Means, standard deviations, and possible ranges of variables are demonstrated in Table 3.1.

Table 3.1: Descriptive information for the measures of the study

Measures	Mean	Std. Deviation	Min.	Max.
Perceived Social Support				
PSS from Family	21.88	6.25	4	28
PSS from Friends	18.92	7.00	4	28
PSS from Significant Others	17.37	8.22	4	28
Emotional Approach Coping				
Emotional Processing	25.02	7.82	8	40
Emotional Expression	23.30	7.88	8	40
Psoriatic Experiences				
Distortion of Body-Image	18.69	6.99	6	30
Social Isolation	12.98	7.02	6	30
Difficulty in Verbal Communication	11.33	4.84	6	30
Psychological Symptomatology	114.67	44.26	53	246

3.3. Correlations among Variables

3.3.1. Psychological Symptomatology

According to the correlation analysis, psychological symptomatology was significantly and positively correlated with distortion of body-image ($r = .58$, $p \leq .001$), and social isolation ($r = .63$, $p \leq .001$), and difficulty in verbal communication ($r = .53$, $p \leq .001$), and perceived dangerousness of Psoriasis ($r = .44$, $p \leq .001$). On the other hand, psychological symptomatology was significantly and negatively correlated with emotional expression ($r = -.17$, $p \leq .05$), and perceived social support from family ($r = -.34$, $p \leq .001$), and perceived social support from friends ($r = -.46$, $p \leq .001$), and perceived social support from significant others ($r = -.15$, $p \leq .05$), and perceived seriousness of Psoriasis ($r = .23$, $p \leq .01$), and age ($r = -.24$, $p \leq .001$).

3.3.2. Distortion of Body-Image

Distortion of body-image was significantly and positively correlated with social isolation ($r = .68$, $p \leq .001$), and difficulty in verbal communication ($r = .73$, $p \leq .001$), and perceived dangerousness of Psoriasis ($r = .24$, $p \leq .001$), and the effect of the recently experienced stress ($r = .25$, $p \leq .05$). Furthermore, distortion of body-image was significantly and negatively correlated with emotional expression ($r = -.34$, $p \leq .001$), and perceived social support from family ($r = -.23$, $p \leq .01$), and perceived social support from friends ($r = -.39$, $p \leq .001$), and perceived social support from significant others ($r = -.28$, $p \leq .001$), and perceived seriousness of Psoriasis ($r = .32$, $p \leq .001$), and age ($r = -.21$, $p \leq .01$).

3.3.3. Social Isolation

The correlation analysis also showed that social isolation was significantly and positively correlated with difficulty in verbal communication ($r = .66$, $p \leq .001$), and perceived dangerousness of Psoriasis ($r = .36$, $p \leq .001$). On the other hand, social

isolation was significantly and negatively correlated with emotional expression ($r = -.18$, $p \leq .05$) and perceived social support from family ($r = -.30$, $p \leq .001$), and perceived social support from friends ($r = -.45$, $p \leq .001$), and perceived social support from significant others ($r = -.29$, $p \leq 001$), and perceived seriousness of Psoriasis ($r = .31$, $p \leq .001$).

3.3.4. Difficulty in Verbal Communication

Difficulty in verbal communication was significantly and positively correlated with perceived dangerousness of Psoriasis ($r = .22$, $p \leq .01$). Moreover, difficulty in verbal communication was significantly and negatively correlated with emotional expression ($r = -.37$, $p \leq .001$), and perceived social support from family ($r = -.19$, $p \leq .01$), and perceived social support from friends ($r = -.36$, $p \leq .001$), and perceived social support from significant others ($r = -.26$, $p \leq .001$), and perceived seriousness of Psoriasis ($r = .31$, $p \leq .001$), and age ($r = -.21$, $p \leq .01$).

In addition to the correlates of psychological symptomatology and factors of psoriatic experiences, emotional expression was significantly and positively correlated with emotional processing ($r = .76$, $p \leq .001$), and perceived social support from friends ($r = .20$, $p \leq .01$).

Perceived social support from family was significantly and positively correlated with perceived social support from friends ($r = .58$, $p \leq .001$), and perceived social support from significant others ($r = .38$, $p \leq .001$), and perceived dangerousness of Psoriasis ($r = -.31$, $p \leq .001$).

Furthermore, perceived social support from friends was significantly and positively correlated with perceived social support from significant others ($r = .52$, $p \leq .001$), and perceived seriousness of Psoriasis ($r = -.30$, $p \leq .001$). On the other hand, perceived social support from friends was significantly and negatively correlated with perceived dangerousness of Psoriasis ($r = -.28$, $p \leq .001$). Moreover, perceived social support from significant others was significantly and negatively correlated with perceived seriousness of Psoriasis ($r = -.20$, $p \leq .01$).

Duration of Psoriasis was significantly and negatively correlated with age ($r = -.41$, $p \leq .001$). Finally, perceived seriousness of Psoriasis was significantly and positively correlated with duration of the recently experienced stress ($r = .21$, $p \leq .05$), and age ($r = .17$, $p \leq .05$).

Table 3.2: Correlation analyses of the variables

	PS	DBI	SI	DVC	EP	EE	Ssfa	Ssfr	Ssso	Pd	Perc. Ser.	Perc. Dang.	Sd	ES	Age
PS															
DBI	.58***														
SI	.63***	.68***													
DVC	.53***	.73***	.66***												
EP	-.05	-.11	.05	-.10											
EE	-.17*	-.34***	-.18*	-.37***	.76***										
Ssfa	-.34***	-.23**	-.30***	-.19**	.12	.09									
Ssfr	-.46***	-.39***	-.45***	-.36***	.11	.20**	.58***								
Ssso	-.15*	-.28***	-.29***	-.26***	.02	.14	.38***	.52***							
Pd	-.06	.06	.08	.13	.03	-.01	.06	.00	.07						
Perc. Ser.	.23**	.32***	.31***	.31***	.01	-.14	-.09	-.30***	-.20**	-.02					
Perc. Dang.	.44***	.24***	.36***	.22**	.10	.06	-.31***	-.28***	-.11	-.07	-.10				
Sd	.04	-.07	.00	-.16	-.04	.02	-.08	.00	-.15	.02	.21*	-.14			
ES	.20	.23*	.13	.13	.15	-.01	-.04	-.03	.01	-.01	.04	.17	.03		
Age	-.24***	-.21**	-.13	-.21**	.07	.08	.01	.05	.02	-.41***	.17*	-.06	-.02	.01	
M	114.67	18.69	12.98	11.33	25.02	23.30	18.92	21.88	17.37	175.80	2.89	1.73	32.43	7.97	37.30
S	44.256	6.993	7.019	4.844	7.817	7.877	6.998	6.248	8.218	118.892	1.087	.944	24.276	2.331	11.488
Min.	53	6	6	4	8	8	4	4	4	12	1	1	12	2	17
Max.	246	30	30	20	40	40	28	28	28	483	5	4	108	10	66

Note-1. ***p ≤ .001, **p ≤ .01, *p ≤ .05

Note-2. PS = Psychological symptomatology, DBI = Distortion of body-image, SI = Social isolation, DVC = Difficulty in verbal communication, EP = Emotional processing, EE = Emotional expression, SSfa = Perceived social support from family, SSfr = Perceived social support from friends, SSso = Perceived social support from significant others, Pd = Psoriasis duration (month), Perc. Ser. = Perceived seriousness of Psoriasis, Perc. Dang. = Perceived dangerousness of Psoriasis, Sd = Recently experienced stress duration, ES = Effect of the recently experienced stress

3.4. Group Differences

Several independent samples t-tests and One Way ANOVAs were conducted to evaluate the group differences in terms of psychological symptomatology and the factors of Psoriatic Experiences, namely distortion in body-image, social isolation, and difficulty in verbal communication. The results are demonstrated in Table 3.3, and Table 3.4.

3.4.1. Independent Samples t-Tests

Independent samples t-test analyses were conducted in order to determine whether there were significant differences between variables that have two parts in terms of psychological symptomatology, distortion of body-image, social isolation, and difficulty in verbal communication. The results of the independent samples t-test analyses are given below.

3.4.1.1. Psychological Symptomatology

There was a significant difference between smokers and non-smokers in terms of psychological symptomatology [$t\ (184) = 2.18$, $p \leq .05$]. Smokers ($M = 121.32$) tend to have higher psychological symptomatology rates than non-smokers ($M = 107.27$). Figure 3.1 illustrates the result.

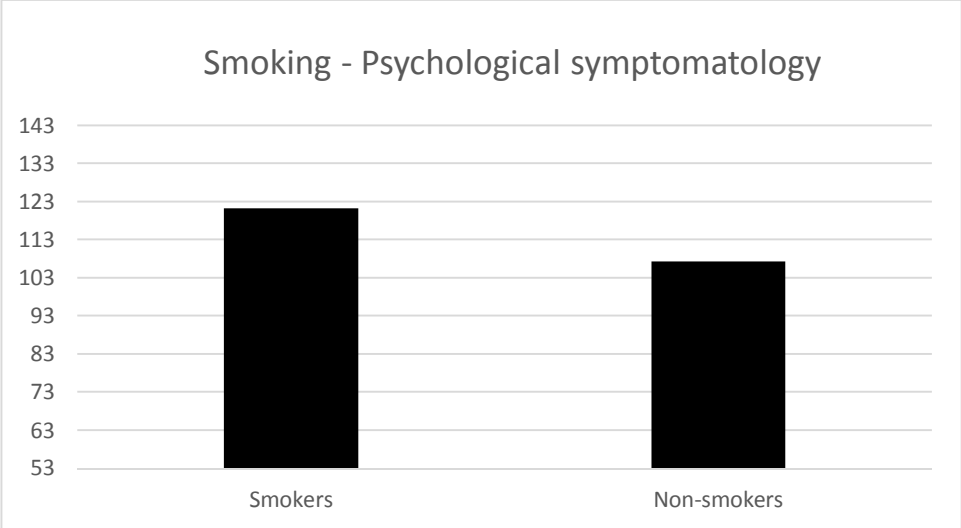

Figure 3.1: Psychological symptomatology and smoking

Psychological symptomatology was seen to differ according to the presence of a psychological diagnosis [t (184) = 5.70, p ≤. 001]. Participants who have had a psychological diagnosis (M = 156.15) showed higher scores in psychological symptomatology than participants who have not had (M = 107.63). Figure 3.2 indicates the result.

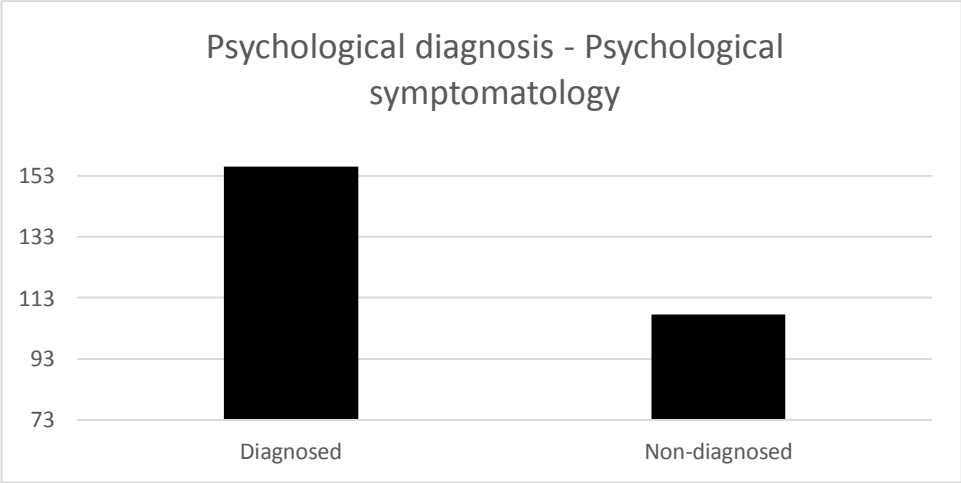

Figure 3.2: Psychological symptomatology and psychological diagnosis

Table 3.3: Independent samples t-test results

		Dependent Variable: Psychological Symptomatology						Dependent Variable: Distortion of Body-image					Dependent Variable: Social Isolation					Dependent Variable: Difficulty in Verbal Communication				
		n	M	S	t	df	p	M	S	t	df	p	M	S	t	df	p	M	S	t	df	p
GENDER	Female	92	120.64	46.88	1,83	184	.069	16.76	5,54	1.534	184	.127	10,50	5,63	-0,863	184	.389	12,18	4,70	2,418	184	.017
	Male	94	108.83	40.94				15.39	6,56				11,24	6,11				10,49	4,86			
WORK STATUS	Working	111	110.48	41.067	-1.579	184	.116	15.95	6,42	-0,34	184	.737	10,86	5,81	-0,032	184	.974	11,31	4,89	-0,074	184	.941
	Not working	75	120.88	48.208				16.25	5,63				10,89	6,02				11,36	4,81			
CHILD	I have	118	112.46	44.443	-0,90	184	.370	15.87	6,24	-0,58	184	.563	10,44	5,87	-1,335	184	.184	11,14	4,91	-0,712	184	.477
	I don't have	68	118.51	43.99				16.41	5,87				11,63	5,85				11,66	4,75			
SMOKE	Yes	98	121.32	44.550	2.183	184	.030	16.98	6,23	2.168	184	.031	12,01	6,19	2,829	184	.005	11,67	4,97	1,027	184	.306
	No	88	107.27	42.976				15,06	5,82				9,61	5,26				10,94	4,70			
ALCHL	Yes	38	111.53	43.596	-0,49	184	.625	15.37	6,28	-0,79	184	.428	9,74	4,67	-1,343	184	.181	10,03	4,43	-1,869	184	.063
	No	148	115.48	44.534				16.25	6,06				11,17	6,13				11,66	4,90			
IN-PATIENT	Yes	47	113.14	46.41	-0,34	184	.737	15.89	6,02	-0,23	184	.819	11,62	6,17	.999	184	.319	11,49	4,83	.264	184	.792
	No	139	115.45	43.28				16.13	6,15				10,63	5,78				11,27	4,86			
OTHER ILLNESS	I have	67	121.01	48.228	1.471	184	.143	16.55	5,83	.808	184	.420	11,24	6,13	.630	184	.529	11,03	4,79	-0,629	184	.530
	I don't have	119	111.1	41.641				15.80	6,25				10,67	5,74				11,50	4,89			
PSYC. DIAGNOSIS	I have	27	156.15	43.266	5,697	184	.000	18.74	5,12	2.495	184	.013	13,59	6,85	2,639	184	.009	12,56	4,85	1,428	184	.155
	I don't have	159	107.63	40.514				15.62	6,15				10,42	5,59				11,12	4,83			
STRESS	I have	88	124.88	45.680	3.045	184	.003	16.81	5,87	1.567	184	.119	11,11	6,25	.521	184	.603	11,47	4,63	.367	184	.714
	I don't have	98	105.51	41.045				15.41	6,25				10,66	5,54				11,20	5,05			

There was also a significant difference between participants according to a recently experienced stressful event [t (184) = 3.05, p ≤ .001]. Participants who have experienced such an event (M = 124.88) tend to have higher psychological symptomatology scores than participants who have not (M = 105.51). Figure 3.3 shows the result.

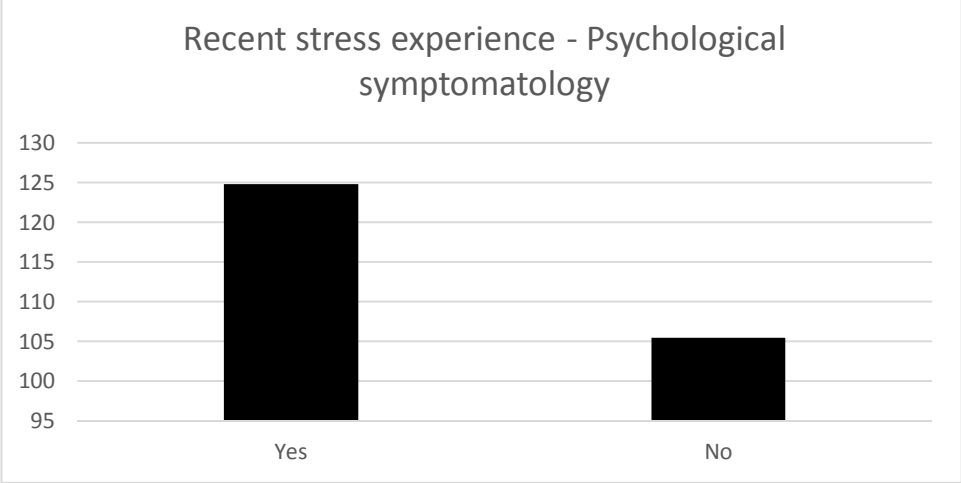

Figure 3.3: Psychological symptomatology and a recent stress

There were no significant differences between men (M = 108.83) and women (120.64), [t (184) = 1.83, p > .05]; workers (M = 110.48) and unemployed ones (M = 120.88), [t (184) = -1.58, p > .05]; participants having children (M = 112.46) and having no children (M = 118.51), [t (184) = -.90, p > .05]; participants who drink alcohol (M = 111.52) and who does not drink alcohol (M = 115.48), [t (184) = -.49, p > .05]; participants who have been inpatient (M = 113.14) and who have never been inpatient due to another medical condition other than Psoriasis (M = 115.46), [t (184) = -.34, p > .05]; participants who suffered from another medical condition (M = 121.01) and who did not (M = 111.10), [t (184) = 1.47, p > .05]; participants who suffered from heart/circulatory/respiratory system (M = 107.79) and who did not (M = 115.89), [t (184) = .89, p > .05]; participants who suffered from digestive system (M = 117.10) and who did not (M = 114.53), [t (184) = -.18, p > .05]; participants who suffered from musculoskeletal system (M = 136.14) and who did not (M = 112.92), [t (184) = -1.90, p

> .05]; participants who suffered from sensory system (M = 122.92) and who did not (M = 114.05), [t (184) = -.70, p > .05]; participants who suffered from endocrine system (M = 122.06) and who did not (M = 113.88), [t (184) = -.74, p > .05]; participants who suffered from neurological condition (M = 151.50) and who did not (M = 114.27), [t (184) = -1.19, p > .05]; participants who suffered from urinary system (M = 126.00) and who did not (M = 114.49), [t (184) = -.45, p > .05].

3.4.1.2. Distortion of Body-Image

There was a significant difference between smokers and non-smokers in terms of distortion of body-image [t (184) = 2.18, p ≤. 05]. Smokers (M = 19.73) tend to have higher scores in distortion of body-image than non-smokers (M = 17.52). (See Figure 3.4)

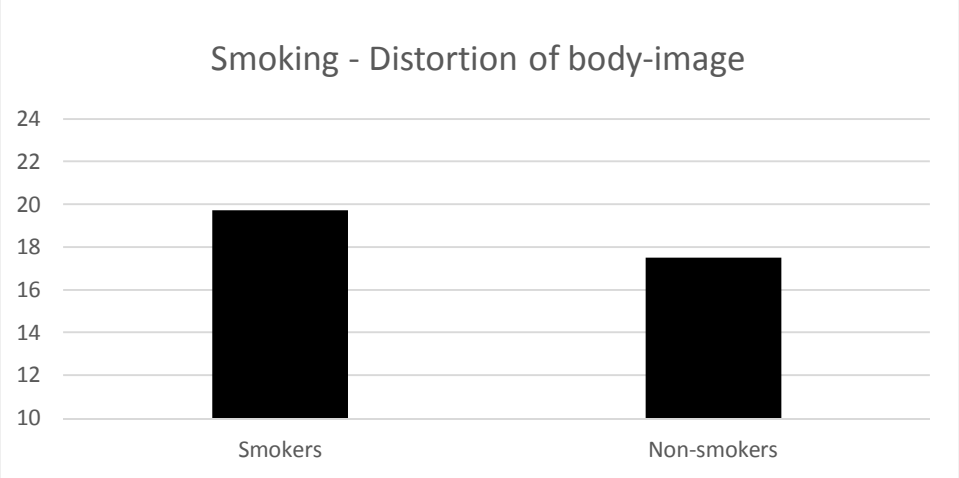

Figure 3.4: Distortion of body-image and smoking

Distortion of body-image differed between participants according to the presence of a psychological diagnosis [t (184) = 2.39, p ≤. 05]. Participants who have had a psychological diagnosis (M = 21.63) showed higher scores in distortion in body-image than participants who have not had (M = 18.19). (See Figure 3.5)

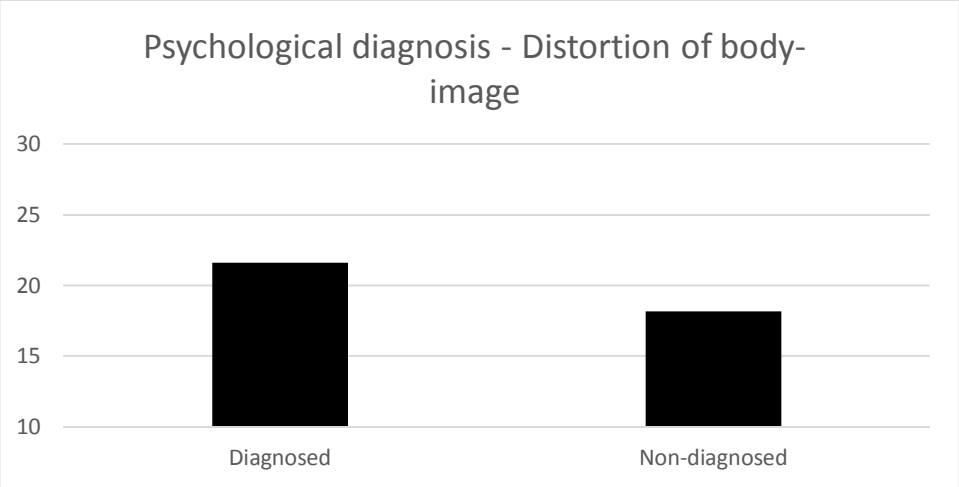

Figure 3.5: Distortion of body-image and psychological diagnosis

In terms of distortion of body-image, there was no significant differences between men (M = 17.77) and women (M = 19.63), [t (184) = 1.83, p > .05]; workers (M = 18.42) and unemployed ones (M = 19.08), [t (184) = -.63, p > .05]; participants having children (M = 18.53) and having no children (M = 18.96), [t (184) = -.40, p > .05]; participants who drink alcohol (M = 18.05) and who does not drink alcohol (M = 18.85), [t (184) = -.63, p > .05]; participants who have been inpatient (M = 18.68) and who have never been inpatient due to another medical condition other than Psoriasis (M = 18.69), [t (184) = -.01, p > .05]; participants who suffered from another medical condition (M = 19.19) and who did not (M = 18.40), [t (184) = .74, p > .05]; participants who have experienced a stressful event recently (M = 19.63) and who did not (M = 17.85), [t (184) = 1.74, p > .05].

3.4.1.3. Social Isolation

There was a significant difference between smokers and non-smokers in terms of social isolation [t (184) = 2.74, p ≤. 01]. Smokers (M = 14.30) tend to have higher scores in social isolation than non-smokers (M = 11.52). (See Figure 3.6)

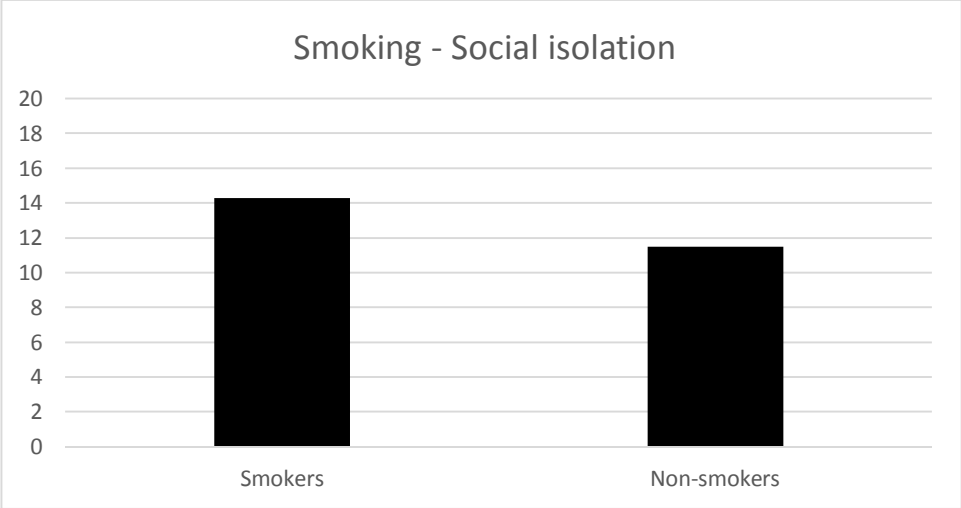

Figure 3.6: Social isolation and smoking

Social isolation was seen to have different scores on participants according to the presence of a psychological diagnosis [t (184) = 2.95, p ≤. 01]. Participants who have had a psychological diagnosis (M = 16.59) showed higher scores in social than participants who have not had (M = 12.37). (See Figure 3.7)

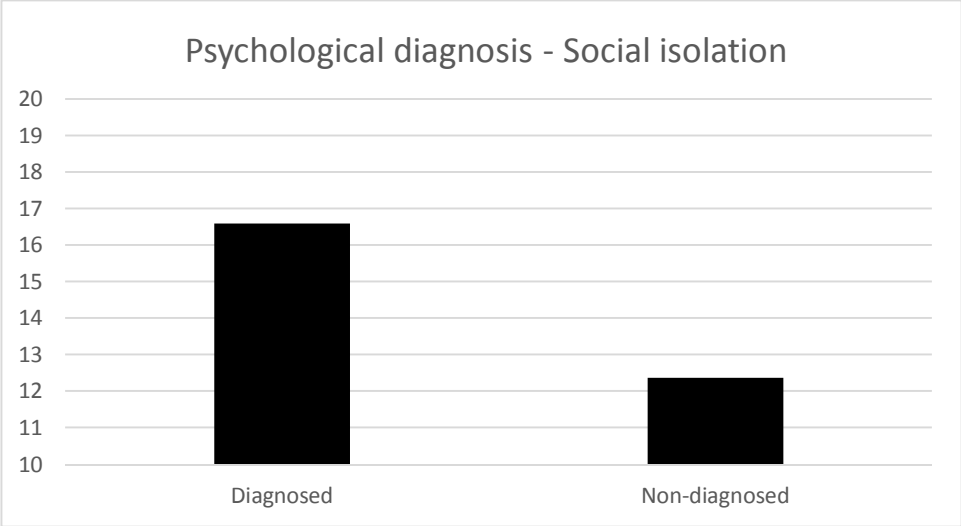

Figure 3.7: Social isolation and psychological diagnosis

There were no significant differences in terms of social isolation, between men (M = 13.36) and women (12.60), [t (184) = -.74, p > .05]; workers (M = 12.95) and unemployed ones (M = 13.04), [t (184) = -.09, p > .05]; participants having children (M = 12.47) and having no children (M = 13.87), [t (184) = -1.31, p > .05]; participants who drink alcohol (M = 11.68) and who does not drink alcohol (M = 13.32), [t (184) = -1.28, p > .05]; participants who have been inpatient (M = 12.75) and who have never been inpatient due to another medical condition other than Psoriasis (M = 13.11), [t (184) = -.33, p > .05]; participants who suffered from another medical condition (M = 13.46) and who did not (M = 12.71), [t (184) = .70, p > .05]; participants who have experienced a stressful event recently (M = 13.26) and who did not (M = 12.73), [t (184) = .51, p > .05].

3.4.1.4. Difficulty in Verbal Communication

According to gender, there was a significant difference in terms of difficulty of verbal communication [t (184) = 2.42, p ≤. 05]. Females (M = 12.18) had more difficulties in verbal communication about Psoriasis than men (M = 10.49). (See Figure 3.8)

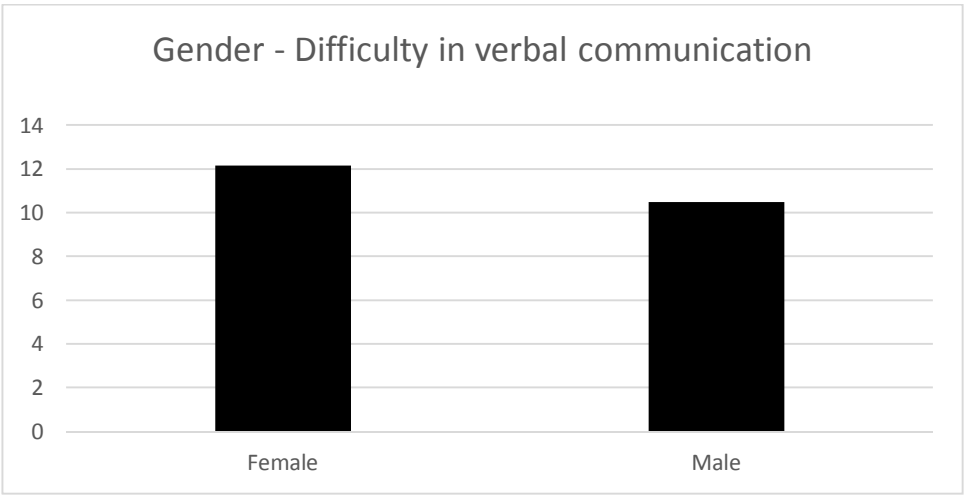

Figure 3.8: Difficulty in verbal communication and gender

No significant differences were found between workers (M = 11.31) and unemployed ones (M = 11.36), [t (184) = -0.07, p > .05]; participants having children (M = 11.14) and having no children (M = 11.66), [t (184) = -0.71, p > .05]; participants who smoke (M = 11.67) and who does not (M = 10.94), [t (184) = 1.03, p > .05]; participants who drink alcohol (M = 10.03) and who does not drink alcohol (M = 11.66), [t (184) = -1.87, p > .05]; participants who have been inpatient (M = 11.49) and who have never been inpatient due to another medical condition other than Psoriasis (M = 11.27), [t (184) = 0.26, p > .05]; participants who suffered from another medical condition (M = 11.03) and who did not (M = 11.50), [t (184) = -0.63, p > .05];; participants who have had a psychological diagnosis (M = 12.56) and who have not (M = 11.12) [t (184) = 1.43, p > .05]; participants who have experienced a stressful event recently (M = 11.47) and who did not (M = 11.20), [t (184) = .37, p > .05].

3.4.2. Analysis of Variance (ANOVA)

The effects of perception of the seriousness and the dangerousness of Psoriasis on four dependent variables, namely psychological symptomatology, distortion of body-image, social isolation, and finally difficulty in verbal communication about Psoriasis were examined by conducting One-Way ANOVA.

3.4.2.1. Psychological Symptomatology

The effect of perception of the seriousness of Psoriasis on psychological symptomatology was examined by administering One-Way ANOVA, and the result was significant [F (4, 181) = 3.86, $p \leq .01$]. According to the Bonferroni post-hoc results, the groups did not differ from each other significantly.

The effect of perception of the dangerousness of Psoriasis on psychological symptomatology, which was examined by carrying out One-Way ANOVA, was found to be significant [F (3, 182) = 14.65, $p \leq .001$]. According to the Bonferroni post-hoc results, participants who reported to perceive Psoriasis as not dangerous at all (M = 99.29) had

the lowest psychological symptomatology scores. There were no significant differences between participants who reported to perceive Psoriasis as slightly dangerous (M = 122.79) and participants who reported to perceive Psoriasis as moderately dangerous (M = 138.14); and between participants who reported to perceive Psoriasis as moderately dangerous and participants who reported to perceive Psoriasis as immensely dangerous (M = 162.83) in terms of psychological symptomatology. (See Figure 3.9)

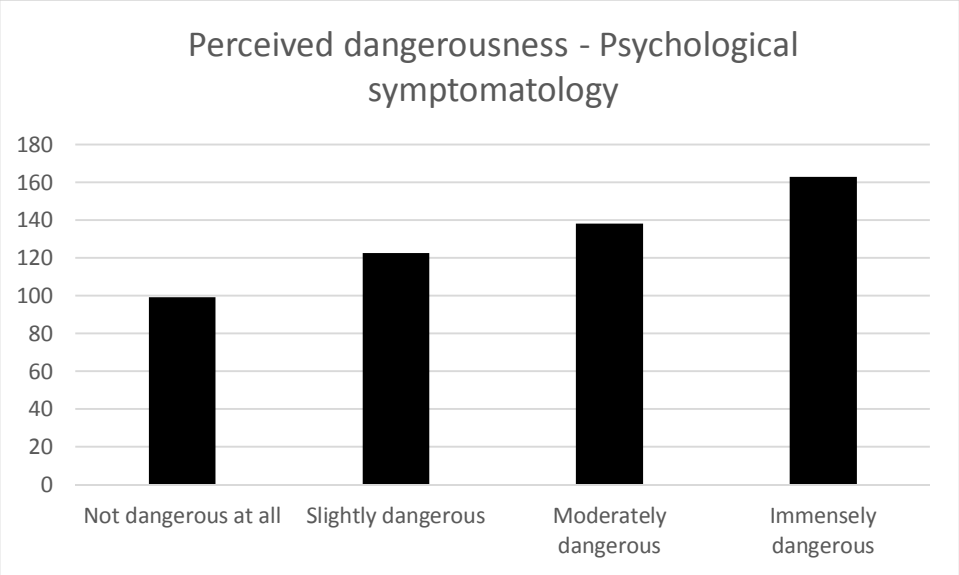

Figure 3.9: Psychological symptomatology and perceived dangerousness of Psoriasis

3.4.2.2. Distortion of Body-Image

The effect of perception of the seriousness of Psoriasis on distortion of body-image was examined by administering One-Way ANOVA, and the result was significant [$F(4, 181) = 5.15$, $p \leq .001$]. According to the Bonferroni post-hoc results, participants who reported to perceive the seriousness of Psoriasis as very bad (M = 22.82) had higher distortion of body-image scores than participants who reported to perceive the seriousness of Psoriasis as good (M = 15.71), and participants who reported to perceive the seriousness of Psoriasis as very good (M = 15.00). There were no significant differences between participants who reported to perceive the seriousness of Psoriasis as very bad, participants who reported to perceive the seriousness of Psoriasis as bad (M = 20.24), and

participants who reported to perceive the seriousness of Psoriasis as sometimes good, sometimes bad (M = 18.56); and between participants who reported to perceive the seriousness of Psoriasis as bad, participants who reported to perceive the seriousness of Psoriasis as sometimes good, sometimes bad, participants who reported to perceive the seriousness of Psoriasis as good, and participants who reported to perceive the seriousness of Psoriasis as very good in terms of distortion of body-image. (See Figure 3.10)

Figure 3.10: Distortion of body-image and perceived seriousness of Psoriasis

The effect of perception of the dangerousness of Psoriasis on distortion of body-image, examined with One-Way ANOVA, was significant [$F(3, 182) = 3.68$, $p \leq .05$]. According to the Bonferroni post-hoc results, however, the groups did not differ from each other significantly.

3.4.2.3. Social Isolation

The effect of perception of the seriousness of Psoriasis on social isolation was examined with One-Way ANOVA, and the result was seen to be significant [$F(4, 181) = 6.63$, $p \leq .001$]. According to the Bonferroni post-hoc results, participants who reported

to perceive the seriousness of Psoriasis as very bad (M = 19.18) had the highest social isolation scores. Furthermore, there were no significant differences between participants who reported to perceive the seriousness of Psoriasis as bad (M = 14.08), participants who reported to perceive the seriousness of Psoriasis as sometimes good, sometimes bad (M = 11.92), participants who reported to perceive the seriousness of Psoriasis as good (M = 11.04), and participants who reported to perceive the seriousness of Psoriasis as very good (M = 10.78). (See Figure 3.11)

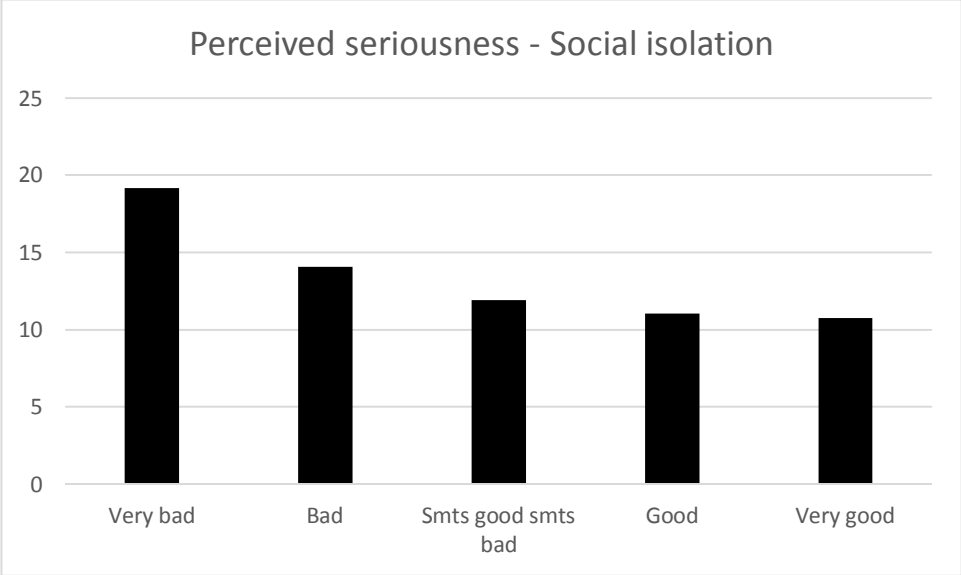

Figure 3.11: Social isolation and perceived seriousness of Psoriasis

The effect of perception of the dangerousness of Psoriasis on social isolation, which was examined by administering One-Way ANOVA, was significant [F (3, 182) = 9.59, $p \leq .001$]. According to the Bonferroni post-hoc results, participants who reported to perceive Psoriasis as not dangerous at all (M = 10.83) had the lowest social isolation scores. There were no significant differences between participants who reported to perceive Psoriasis as slightly dangerous (M = 14.77), participants who reported to perceive Psoriasis as moderately dangerous (M = 15.61), and participants who reported to perceive Psoriasis as immensely dangerous (M = 19.00) in terms of social isolation. (See Figure 3.12)

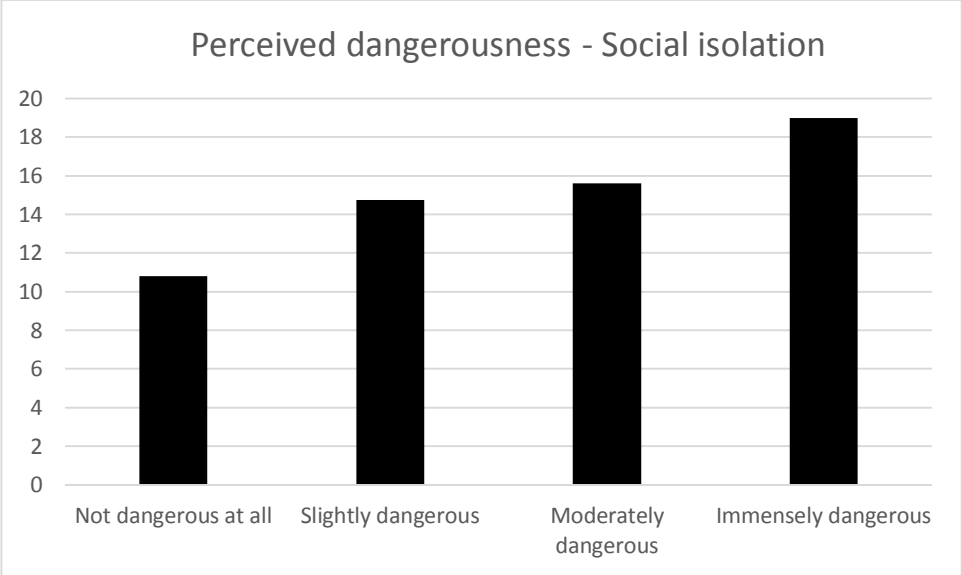

Figure 3.12: Social isolation and perceived dangerousness of Psoriasis

3.4.2.4. Difficulty in Verbal Communication

The effect of perception of the seriousness of Psoriasis on difficulty in verbal communication about Psoriasis was examined with One-Way ANOVA, and the result was significant [$F(4, 181) = 5.56$, $p \leq .001$]. According to the Bonferroni post-hoc results, participants who reported to perceive the seriousness of Psoriasis as very bad ($M = 14.73$) had higher difficulty in verbal communication scores than participants who reported to perceive the seriousness of Psoriasis as sometimes good sometimes bad ($M = 11.32$), participants who reported to perceive the seriousness of Psoriasis as good ($M = 9.21$), and participants who reported to perceive the seriousness of Psoriasis as very good ($M = 8.94$). Moreover, there were no significant differences between participants who reported to perceive the seriousness of Psoriasis as very bad and participants who reported to perceive the seriousness of Psoriasis as bad ($M = 11.86$); and between participants who reported to perceive the seriousness of Psoriasis as bad, participants who reported to perceive the seriousness of Psoriasis as sometimes good, sometimes bad, participants who reported to perceive the seriousness of Psoriasis as good, and participants who reported to perceive the seriousness of Psoriasis as very good. (See Figure 3.13)

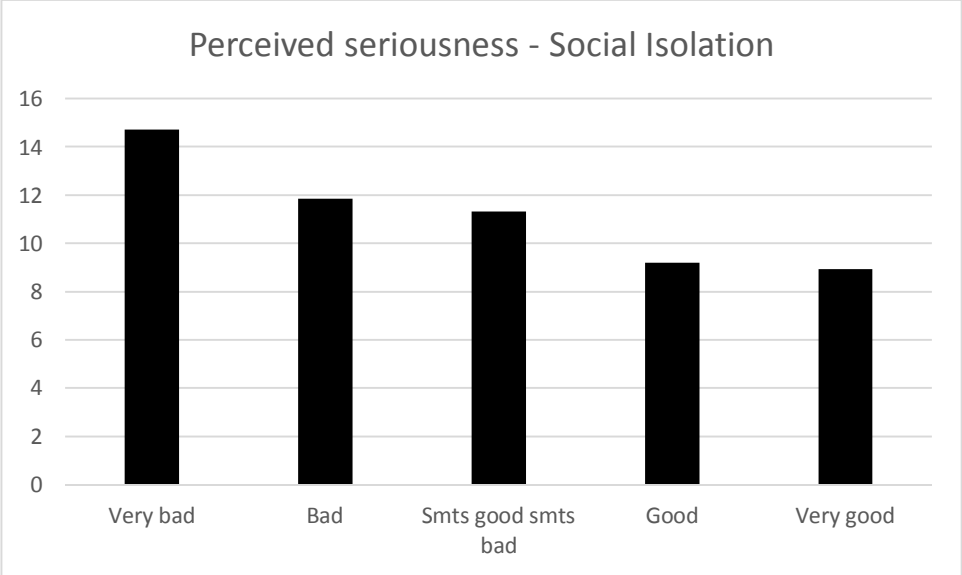

Figure 3.13: Social isolation and perceived seriousness of Psoriasis

The effect of perception of the dangerousness of Psoriasis on difficulty in verbal communication about Psoriasis, examined by One-Way ANOVA, was found to be significant [$F(3, 182) = 3.89$, $p \leq .01$]. However, groups did not differ from each other significantly, according to the Bonferroni post-hoc results.

Table 3.4: One-way ANOVA results

			PSYCHOLOGICAL SYMTOMATOLOGY					DISTORTION IN BODY-IMAGE					SOCIAL ISOLATION					DIFFICULTY IN VERBAL COMMUNICATION				
		n	M	S	F	df	p	M	S	F	df	p	M	S	F	df	p	M	S	F	df	p
PERCEIVED SERIOUSNESS OF PSORIASIS	Very bad	22	143,91	44,32				22,82	6,42				19,18	5,76				14,73	4,90			
	Bad	37	116,51	36,80				20,24	5,72				14,08	6,10				11,86	3,87			
	Smts. good Smts. bad	85	113,02	45,35	3,86	4, 181	≤.01	18,56	6,72	5,15	4, 181	≤.001	11,92	5,41	6,63	4, 181	≤.001	11,32	4,85	5,56	4, 181	≤.001
	Good	24	95,79	36,48				15,71	7,66				11,04	4,95				9,21	4,00			
	Very good	18	108,1	48,80				15,00	7,43				10,78	5,80				8,94	5,32			
PERCEIVED DANGEROUSNESS OF PSORIASIS	Not at all	103	99,29	36,86				17,36	7,17				10,83	5,95				10,27	4,73			
	Slightly	43	122,79	41,62				19,23	6,62				14,77	6,69				12,42	4,62			
	Moderately	28	138,14	46,17	14,65	3, 182	≤.001	21,43	6,48	3,68	3,182	≤.05	15,61	7,52	9,59	3, 182	≤.001	12,89	4,66	3,89	3, 182	≤.01
	Immensely	12	162,83	45,68				21,75	5,31				19,00	8,84				12,83	5,36			

3.5. Hierarchical Multiple Regression Analyses

Hierarchical multiple regression analyses were conducted to examine the association among the variables of the study. Hierarchical multiple regression analyses were performed to reveal the associates of the (i) Psoriatic Experiences, (ii) Psychological Symptomatology measures.

3.5.1. Psoriatic Experiences

Hierarchical multiple regression analyses were conducted to reveal the significant associates of psoriatic experiences factors; namely, distortion of body-image, social isolation, and difficulty in verbal communication. Variables were entered into the equation via three steps. In order to control for the possible effects of socio- demographic and current health status variables (i.e., age, gender, education, monthly income, number of children, frequency of smoking, frequency of alcohol use, duration of Psoriasis, number of other medical conditions, perceived dangerousness of Psoriasis), these first step variables were entered into the equation via stepwise method.

After controlling for the socio-demographic and current health status variables that were significantly associated with the dependent variable, the factors of perceived social support (i.e., perceived social support from family, perceived social support from friends, and perceived social support from significant others) were entered into the equation on the second step via enter method.

Finally, on the third step, factors of emotional approach coping (i.e., emotional processing and emotional expression) were entered into the equation via enter method.

Table 3.5: Variables associated with psoriatic experiences

Predictors in set	F for set	t for w/in set Predictors	df	Beta(β)	Model R^2 Change
A. Dependent Variable: DISTORTION of BODY-IMAGE					
I. Control variables	10.75***		1, 184		.055
Dangerousness of Psoriasis		3.28***	184	.24	
II. Control variables	8.15**		1, 183		.040
Age		-2.86**	183	-.20	
III. Control variables	4.04*		1, 182		.020
Duration of Psoriasis		2.01*	182	.15	
IV. Perceived Social Support	9.78***		3, 179		.125
PSS from Family		.29	179	.02	
PSS from Friends		-3.30***	179	-.29	
PSS from Significant Others		-1.70	179	-.13	
V. Emotional Approach Coping	13.33***		2, 177		.100
Emotional Processing		3.04**	177	.29	
Emotional Expression		-5.02***	177	-.49	
B. Dependent Variable: SOCIAL ISOLATION					
I. Control variables	27.21***		1, 184		.129
Dangerousness of Psoriasis		5.22***	184	.36	
II. Control variables	6.07*		1, 183		.028
Frequency of Smoking		2.47*	183	.17	
III. Control variables	3.93*		1, 182		.018
Frequency of Alcohol		-1.98*	182	-.14	
IV. Perceived Social Support	8.85***		3, 179		.107
PSS from Family		.25	179	.02	
PSS from Friends		-3.57***	179	-.31	
PSS from Significant Others		-1.11	179	-.08	
V. Emotional Approach Coping	9.35***		2, 177		.069
Emotional Processing		3.81***	177	.37	
Emotional Expression		-4.23***	177	-.41	
C. Dependent Variable: DIFFICULTY in VERBAL COMMUNICATION					
I. Control variables	9.63**		1, 184		.050
Dangerousness of Psoriasis		3.10**	184	.22	
II. Control variables	7.42**		1, 183		.037
Age		-2.72**	183	-.19	
III. Control variables	9.10**		1, 182		.043
Duration of Psoriasis		3.02**	182	.23	
IV. Control variables	4.73*		1, 181		.022
Frequency of Alcohol		-2.18*	181	-.15	
V. Perceived Social Support	7.57***		3, 178		.096
PSS from Family		.39	178	.03	
PSS from Friends		-2.81**	178	-.25	
PSS from Significant Others		-1.73	178	-.13	
VI. Emotional Approach Copping	18.73***		2, 176		.132
Emotional Processing		3.72***	176	.35	
Emotional Expression		-5.97***	176	-.57	

Note. * ρ < .05** ρ < .01*** ρ < .001

3.5.1.1. Distortion of Body-Image

Hierarchical regression analysis run for the distortion of body-image factor (see Table 3.5) revealed that, percevied dangerousness of Psoriasis had a significant association ($\beta = .24$, $t\ (184) = 3.28$, $p \leq .001$) with distortion of body-image, and this variable explained 5.5% of the variance ($F\ [1, 184] = 10.75$, $p \leq .001$). On the second step, age was found to be significantly associated ($\beta = -.20$, $t\ (183) = -2.86$, $p \leq .01$) with distortion of body-image, and increased the explained variance to 9.5% ($F\ [1, 183] = 8.15$, $p \leq .01$). On the third step, duration of Psoriasis was significantly associated ($\beta = .15$, $t\ (182) = 2.01$, $p \leq .05$) with distortion of body-image, and increased the explained variance to 11.5% ($F\ [1, 182] = 4.04$, $p \leq .05$).

Among the perceived social support factors, only perceived social support from friends was found to be significantly associated ($\beta = -.29$, $t\ (179) = -3.30$, $p \leq .001$) with distortion of body-image on the fourth step, and increased the explained variance to 24% ($F\ [3, 81] = 2.14$, $p > .05$).

On the fifth step, both emotional processing ($\beta = .29$, $t\ (177) = 3.04$, $p \leq .01$) and emotional expression were found to be significantly associated ($\beta = -.49$, $t\ (177) = -5.02$, $p \leq .001$) with distortion of body-image and with the entrance of emotional approach coping factors, explained variance increased to 34% ($F\ [2, 177] = 13.33$, $p \leq .001$).

3.5.1.2. Social Isolation

Hierarchical regression analysis run for the social isolation factor (see Table 3.5) revealed that, perceived dangerousness of Psoriasis had a significant association ($\beta = .36$, $t\ (184) = 5.22$, $p \leq .001$) with social isolation, and this variable explained 12.9% of the variance ($F\ [1, 184] = 27.21$, $p \leq .001$). On the second step, frequency of smoking was found to be significantly associated ($\beta = .17$, $t\ (183) = 2.47$, $p \leq .05$) with social isolation, and this variable increased the explained variance to 15.7% ($F\ [1, 183] = 6.07$, $p \leq .05$). On the third step, frequency of alcohol intake was found to be significantly associated ($\beta = -.14$, $t\ (182) = -1.98$, $p \leq .05$) with social isolation, and this variable increased the explained variance to 17.5% ($F\ [1, 182] = 3.93$, $p \leq .05$).

Among the factors of the perceived social support, only perceived social support from friends was found to be significantly associated (β = -.31, t (179) = -3.57, $p \leq .001$) with social isolation on the fourth step, and explained variance increased to 28.2% (F [3, 179] = 8.85, $p \leq .001$).

On the fifth step, both emotional processing (β = .37, t (177) = 3.81, $p \leq .001$) and emotional expression (β = -.41, t (177) = -4.23, $p \leq .001$) were found to be significantly associated with social isolation, and explained variance increased to 35.1% (F [2, 177] = 9.35, $p \leq .001$).

3.5.1.3. Difficulty in Verbal Communication

Hierarchical regression analysis run for the difficulty in verbal communication factor (see Table 3.5) revealed that, on the first step perceived dangerousness of Psoriasis was significantly associated (β = .22, t (184) = 3.10, $p \leq .01$) with difficulty in verbal communication, and this variable explained 5% of the variance (F [1, 184] = 9.63, $p \leq .01$). On the second step, age was found to be significantly associated (β = -.19, t (183) = -2.72, $p \leq .01$) with difficulty in verbal communication, and explained variance increased to 8.7% (F [1, 183] = 7.42, $p \leq .01$). On the third step, duration of Psoriasis was significantly associated (β = .23, t (182) = 3.02, $p \leq .01$) with difficulty in verbal communication, and explained variance increased to 13% (F [1, 182] = 9.10, $p \leq .01$). On the fourth step, frequency of alcohol intake was significantly associated (β = -.15, t (181) = 2.18, $p \leq .05$) with difficulty in verbal communication, and explained variance increased to 15.2% (F [1, 181] = 4.73, $p \leq .05$).

Among the perceived social support factors, only perceived social support from friends was found to be significantly associated (β = -.25, t (178) = -2.81, $p \leq .01$) with difficulty in verbal communication on the fifth step, and explained variance increased to 24.8% (F [3, 178] = 7.57, $p > .001$).

On the sixth step, both of the emotional approach coping factors, namely emotional processing (β = .35, t (176) = 3.72, $p \leq .001$) and emotional expression (β = -.57, t (176) = -5.97, $p \leq .001$) were significantly associated with difficulty in verbal

communication, and increased the explained variance to 38% ($F [2, 176] = 18.73$, $p \leq .001$).

3.5.2. Psychological Symptomatology

Hierarchical multiple regression analyses were conducted to reveal the significant associates of psychological symptomatology. Variables were entered into the equation via four steps. In order to control for the possible effects of socio- demographic and current health status variables (i.e., age, gender, education, monthly income, number of children, frequency of smoking, frequency of alcohol use, duration of Psoriasis, number of other medical conditions, perceived dangerousness of Psoriasis), these first step variables were entered into the equation via stepwise method.

After controlling for the socio-demographic and current health status variables that were significantly associated with the dependent variable, the factors of perceived social support (i.e., perceived social support from family, perceived social support from friends, and perceived social support from significant others) were entered into the equation on the second step.

On the third step, factors of emotional approach coping (i.e., emotional processing and emotional expression) were entered into the equation.

Table 3.6: Variables associated with psychological symptomatology

Predictors in set	F for set	t for w/in set Predictors	df	Beta (β)	Model R^2 Change
1. Control variables	44.01***		1, 184		.193
Perceived dangerousness of Psoriasis		6.63***	184	.44	
II. Control variables	11.04***		1, 183		.046
Age		-3.32***	183	-.22	
III. Control variables	5.73*		1, 182		.023
Education		-2.39*	182	-.15	
IV. Perceived Social Support	11.47***		3, 179		.119
PSS from Family		-.99	179	-.07	
PSS from Friends		-4.48***	179	-.36	
PSS from Significant Others		1.41	179	.10	
V. Emotional Approach Coping	2.85		2, 177		.019
Emotional Processing		1.55	177	.14	
Emotional Expression		-2.36*	177	-.22	
VI. Psoriatic Experiences	20.72***		3, 174		.158
Distortion of Body-Image		2.48*	174	.20	
Social Isolation		3.72***	174	.29	
Difficulty in Verbal Communication		.99	174	.08	

Note. $p < .05$ ** $p < .01$ *** $p < .001$

Finally, on the fourth step, factors of psoriatic experiences (i.e., distortion of body-image, social isolation, and difficulty in verbal communication) were entered into the equation.

According to the results of the hierarchical multiple regression analysis run for psychological symptomatology (see Table 3.6), perceived dangerousness of Psoriasis was found to be significantly associated ($\beta = .44$, $t(184) = 6.63$, $p \leq .001$) with psychological symptomatology, and this variable explained 19.3% of the variance ($F[1, 184] = 44.01$, $p \leq .001$). On the second step, age had significant association ($\beta = -.22$, $t(183) = -3.32$, $p \leq .001$) with psychological symptomatology, and with the entrance of this variable explained variance increased to 23.9% ($F[1, 183] = 11.04$, $p \leq .001$). Educational level was significantly associated ($\beta = -.15$, $t(182) = -2.39$, $p \leq .05$) with psychological

symptomatology on the third step, and explained variance increased to 26.2% (F [1, 182] = 5.73, $p \leq .05$).

After controlling socio-demographic and current health status variables, factors of perceived social support were entered into the analysis, and only perceived social support from friends was found to be significantly associated ($\beta = -.36$, t (179) = -4.48, $p \leq .001$) with psychological symptomatology on the fourth step, and explained variance increased to 38.1% (F [3, 179] = 11.47, $p \leq .001$).

On the fifth step, among the factors of emotional approach coping, only emotional expression was significantly associated with psychological symptomatology ($\beta = -.22$, t (177) = -2.36, $p \leq .05$) and increased the explained variance to 40% (F [2, 177] = 2.85, $p > .05$).

Among the factors of psoriatic experiences, distortion of body-image ($\beta = .20$, t (174) = 2.48, $p \leq .05$) and social isolation were found to be significantly associated ($\beta = .29$, t (174) = 3.72, $p \leq .001$) with psychological symptomatology on the sixth step, and with the entrance of the psoriatic experiences factors, explained variance increased to 55.8% (F [3, 174] = 20.72, $p \leq .001$). Table 3.7 illustrates a general summary of the multiple hierarchical regression analyses.

Table 3.7: General summary of general regression analyses

			Psoriatic Experiences			Psychological Symptomatology
			Distortion of Body-Image	Social Isolation	Difficulty in Verbal Communication	
PREDICTORS	Socio-Demographic and Current Health Status Variables	Age	- -		- -	- - -
		Gender				
		Education				-
		Monthly Income				
		Number of Children				
		Frequency of Smoking		+		
		Frequency of Alcohol Use		-	-	
		Duration of Psoriasis	+		+	
		Number of Other Medical Conditions				
		Perceived Dangerousness of Psoriasis	+ + +	+ + +	+ +	+ + +
	Perceived Social Support	Perceived Social Support from Family				
		Perceived Social Support from Friends	- - -	- - -	- -	- - -
		Perceived Social Support from Significant Others				
	Emotional Approach Coping	Emotional Processing	+ +	+ + +	+ + +	
		Emotional Expression	- - -	- - -	- - -	-
	Psoriatic Experiences	Distortion of Body-Image				+
		Social Isolation				+ + +
		Difficulty in Verbal Communication				
	Psychological Symptomatology					
		Total R^2	**34%**	**35%**	**38%**	**55.8%**

Note. Grey area demonstrated the variables that were not entered into equation.

CHAPTER IV

4. DISCUSSION

Psoriasis is a chronic skin disease which is inflammatory and recurrent (Griffiths and Richards 2001). Psoriasis is usually characterized as red-colored, scaled plaques on skin (Stern et al. 2004). Recurrence episodes of Psoriasis cannot be predicted before. As Psoriasis biologically, psychologically, and socially affects individuals, the disease commonly accepted as a bio-psycho-social condition. Psoriatic patients encounter various stressful experiences and psychological distress related to Psoriasis. Therefore, studies involving psychological symptomatology and psoriatic experiences among those patients will allow for exploring variables that are possibly important to manage psychological distress.

Since the last decades, literature have been emphasizing the importance of treating this disease multidimensionally as itself is a bio-psycho-social disease. As the non-existence of a clear curative treatment plan for Psoriasis, doubtlessly, being a psoriatic patient is a stressful experience in one's life. From this point of view, attempting to treat only psoriatic symptoms by medical interventions is not sufficient to reduce the stress level caused by Psoriasis and to improve well-being. Adjunctive to effective medical interventions considering the psychological and social aspects of the disease in the assesment and treatment processes tends to be helpful for improvement of well-being or quality of life. This study consists of psycho-social variables which can be utilized in both assessment and treatment processes. In other words, the current study aimed to examine the psycho-social aspects of Psoriasis. It investigated the associations of such variables,

perceived social support, emotional approach coping, and stressful psoriatic experiences with psychological symptomatology. Through the aim of the present study, correlation analyses, independent samples t-tests, One-Way ANOVAs, and finally multiple hierarchical regression analyses were performed. Below are the detailed discussion and interpretations of the findings.

4.1. Correlations among Variables

In the frame of aims of the present study, psychological symptomatology was determined as the dependent variable; and the factors of perceived social support and emotional approach coping were determined as the independent variables in the present study. Besides, psoriatic experiences (distortion of body-image, social isolation, and difficulty in verbal communication) were determined as both dependent and independent variables of the study. After the data cleaning process, bivariate correlation analyses were performed to see the associations among the variables. Below, the significant correlations among independent variables and dependent variables are explained and discussed.

4.1.1. Psychological Symptomatology

On the basis of the results of bivariate correlations among the independent variables and psychological symptomatology, psoriatic experiences drew attention at first. Distortion of body-image, social isolation, and difficulty in verbal communication were positively correlated with psychological symptomatology.

The positive correlation between distortion of body-image and psychological symptomatology in the present study is parallel to the finding of Gupta and Gupta (1998) indicating that patients with a skin disorder tend to have reduced body-images, and suffer from a psychiatric problem. Specifically, distorted perceptions of body-image was associated with depression and suicide in patients with acne problems (Gupta and Gupta 1998). Similarly, as Psoriasis is a disfiguring and chronic skin disorder, psoriatic patients may experience distortions of body image (Kocatepe, Durak and Polat 2015), and this

experience may be a contributor to many psychiatric problems. For example, the item of "I feel ashamed of the lesions and scars of my skin" includes challenging emotions and thoughts that may increase the vulnerability for psychological symptomatology.

The positive corelation between social isolation and the psychological symptomatology is related with the perception about stress in social circumtances. This perception primarily depend on distress about psoriatic experiences. According to Baek, Tanenbaum and Gonzalez (2014) social isolation is the most stressful case one can bear with. Similarly, Pantell and his colleagues (2013) suggested that social isolation is as vital risk factor for mortality as many other clinical factors are. Doubtlessly, isolating oneself from socializing due to the disease-related concerns is distressing for psoriatic patients. For instance, the patient who stated the item of "I feel singled out due to my condition" not only suffers from social isolation, but also tends to be fragile for emotional problems in life. That is, the finding supports many other findings in literature on social isolation and psychological morbidity.

Difficulty in verbal communication about Psoriasis is positively correlated with psychological symptomatology. Psoriatic patients reported difficulties in communicating about Psoriasis, in that they reported to be tired of explaining the nature, prognosis, or the duration of the disease to the curious others (Kocatepe, Durak and Polat 2015). For example, one of the items for difficulty in verbal communication is "I feel tired of explaining others about my condition". Psoriatic patients are disturbed by curious others' asking questions about their skin condition. This may be related with feelings of shame. Therefore, this positive correlation is not surprising in a psoriatic patients sample.

After the correlations of psoriatic experiences with psychological symptomatology, negative correlations of perceived social support from family, friends, and significant others with psychological symptomatology were examined. Those findings are related with the non-existence of perceived emotional support and feelings of comfort in close environment. In addition to the family members and friends, the significant others (i.e. physicians, neighbours, etc.) are also important sources of support to cope effectively with psychological consequences of the disease due to the fact that social engagements are promoted by feelings of social acceptance. On the other hand,

non-existence of social support from those three sources are associated with distress in terms of having to explain and answer the questions about the disease.

In terms of emotional approach coping, correlations of emotional processing and emotional expression with psychological symptomatology were calculated. The effectiveness of emotional approach coping have been mentioned for decades in terms of decreased psychological problems (Stanton et al. 2000). For instance, Smith, Lumley and Longo (2002) suggested that emotional approach coping reduced affective pain and depression in a sample of patients with chronic myofascial pain. However, there was no significant correlation between psychological symptomatology and emotional processing in the present study. Realizing, understanding, and processing emotions among psoriatic patients were not associated with negative outcomes. This interesting finding brings alexithymia into mind in the sample of psoriatic patients (Fortune et al. 2002; Masmoudi et al. 2009; Richards et al. 2005). On the other hand, coping through emotional expression was negatively correlated with psychological symptomatology which is not surprising. Patients who easily express their emotions tend to have less psychological symptomatology.

Apart from perceived social support, emotional approach coping, and psoriatic experiences, the correlations between seriousness and dangerousness perceptions of Psoriasis and psychological symptomatology were tested. Seriousness perception of Psoriasis was related with psychological symptomatology. Likewise, perceived dangerousness of Psoriasis was also positively correlated with psychological symptomatology. Except the concerns about the appearance and the stress experiences due to Psoriasis in socializing, those findings are not mind confusing. Perceiving the disease as serious and life-threatening, in particular, means the disease is a serious medical condition and holds a serious risk that could lead to vital and dangerous consequences. Indeed, Psoriasis is not a life-threatening disease. Psoriatic patients may perceive the disease as serious and life-threatening either through the lack of knowledge or high levels of psychological distress. However, this is just a perception.

Age was negatively correlated with psychological symptomatology. This finding is parallel to a previous mention of Pereira, Brito and Smith (2012) suggesting that younger psoriatic patients tend to have higher levels of psychological morbidity than the

older ones. This may be related with coping in that older patients may cope with Psoriasis more effectively than the young. Appearance and beauty is more essential among young ages, and disfigured skin and stressful psoriatic experiences may affect them more negatively.

The current study did not indicate significant correlations of emotional processing, duration of Psoriasis, recently experienced stress, and effect of the recently experienced stress with psychological symptomatology. In terms of duration of Psoriasis, this finding indicates that perceptions about the disease is more crucial rather than the duration of the disease. Furthermore, the non-existence of significant correlations of recently experienced stress and effect of that stress with psychological symptomatology is not surprising as Psoriasis itself is a largely stressful condition with its chronic and persistent nature.

4.1.2. Psoriatic Experiences

The results of bivarite correlation analyses were also examined in terms of the associations of psoriatic experiences, namely distortion of body-image, social isolation, and difficulty in verbal communication with other variables. Firstly, the correlations among those sub-factors drew attention. As Kocatepe, Durak and Polat (2015) reported, there were positive correlations between distortion of body-image, social isolation, and difficulty in verbal communication. Those stressful experiences are specific to Psoriasis, that is, distortion of body-image refers to the dissatisfaction of disfigured skin due to Psoriasis; social isolation refers to avoid socializing due to the concerns related with Psoriasis; and difficulty in verbal communication refers to the discomfort about answering the questions that asked about Psoriasis and the lesions, and feeling tired of explaining the disease to the curious others (Kocatepe, Durak and Polat 2015).

4.1.2.1. Distortion of Body-Image

Likewise with psychological symptomatology, perceived social support from all sources, namely from family, friends and significant others, had negative correlations with distortion of body-image. Psoriatic patients might be more comfortable with their disfigured skin when together with people that they perceive support from and that they feel accepted. In other words, psoriatic patients may be more uncomfortable with their lesions and/or scars by the thought of being evaluated by the environment that they do not perceive social support from. There is a similar finding indicating that peer critism about appearance was associated with body-image dissatisfaction among adolescents (Jones, Vigfusdottir and Lee 2004). Considering the disfigured skin of psoriatic patients, this finding reaches a greater significance.

Another important variable for distortion of body-image was perception. Perceptions about Psoriasis was seen to have an negative impact on distortion of body-image levels in that perceived seriousness and perceived dangerousness of Psoriasis were positively correlated with distortion of body-image. Those negative perceptions serve as additives to the already existing concerns about appearance, thus they exacerbate the distortion of body-image. Feeling uncomfortable with the skin is itself a negative experience. The contribution of perceiving the disease as risky, life-threatening, and serious leads to increased levels of distortion of body-image.

In terms of the recently experienced stress, inreased levels of the effect of the recently experienced stress was correlated with increased levels of distortion of body-image. This finding supports, in particular, the finding of Murray, Byrne and Rieger (2011) that the mentioned study also found positive correlation between level of stress and dysfunctional body-image in an adolescent sample. Besides, the effect of the recently experienced stress may contribute to the already existing stress related to the perceptions about body-image; thus coping becomes more difficult.

Age was an important variable when it comes to body-image. There was a negative correlation between age and distortion of body-image. Younger psoriatic patients may be more negatively influenced by their disfigured appearance than the older

ones. Moreover, older psoriatic patients may cope more effectively with this stress than the younger ones.

4.1.2.2. Social Isolation

In terms of correlations of social isolation, perceiving social support was seen to be an important variable for psoriatic patients according to the bivariate correlation analysis. Perceived social support from all sources (family, friends, and significant others) was negatively correlated with social isolation which is not surprising. Expectations of being stigmatized and rejected may lead psoriatic patients to isolate themselves from social environment. As perceiving support is related with the feelings of being accepted, support is particularly vital for psoriatic patients not to avoid socializing.

Perceptions about Psoriasis was another independent variable that was examined in terms of its correlation with social isolation. Perceived seriousness and dangerousness of Psoriasis were positively correlated with social isolation. This may be related with the expectations about being rejected and stigmatized due to the perceived life-threatening and serious medical condition.

4.1.2.3. Difficulty in Verbal Communication

Likewise the correlations of psychological symptomatology, distortion of body-image, and social isolation with perceived social support sub-factors, perceived social support from all sources (family, friends, and significant others) were also negatively correlated with difficulty in verbal communication. Psoriatic patients may feel comfortable telling about disease related issues to those people whom they perceive social support from and feel being accepted by. On the other hand, non-existence of feelings of being accepted and supported may be associated with psoriatic patients' not being comfortable of explaining about lesions and scars.

Further, perceptions about the disease seems to have a significant role on experiencing difficulty in verbal communication. Perceived seriousness and perceived dangerousness of Psoriasis were positively correlated with difficulty in verbal communication. Perceiving the condition as risky and life-threatening may contribute to those feelings of stigmatization among psoriatic patients. Therefore, they do not feel comfortable in respect to talking about the disease as the questions remind them their health condition.

As the results of the correlations analysis for all dependent variables showed, younger patients tend to experience more severe distress and psoriatic experience when compared to the older ones. This finding indicates the importance of appearance for the youth. Younger patients are more negatively affected by the stigmatization feelings and they have more frequent expectations of being rejected. Thus, they avoid talking about the disease, they feel overwhelmed by the questions of curious people.

4.2. Group Differences

The current study utilized several independent samples t-tests and One-Way ANOVAs so as to evaluate the group differences in terms of psychological symptomatology and psoriatic experiences.

4.2.1. Psychological Symptomatology

Since psychological symptomatology is a dependent variable of the current study, it was examined if it differs according to different conditions. Below are the discussion of those variables that were analyzed in terms of psychological symptomatology.

Firstly, participants were asked whether they smoke or not, and those two groups of participants were examined whether they differ in terms of psychological symptomatology. Psoriatic patients who were smokers reported higher psychological symptomatology rates than non-smokers. This finding supports the results of the study of Tjora and his colleagues (2014) which emphasized the association between depression

and smoking in an adolescent sample. On the other hand, psoriatic patients who have psoriatic stress and/or psychological distress may resort to smoke as a maladaptive coping strategy. As smoking also holds risk for Psoriasis itself (Naldi and Mercuri 2009), smoking status may be an important part of the treatment process.

Another couple of groups were participants who have experienced a recent stress, and participants who have not. It was shown that psychological symptomatology differed according to the presence of a recently experienced stress. Likewise mentions in previous studies (i.e., Whitehead et al. 1992), experiencing a stressful event recently was associated with hightened symptomatology rates in that stress exacerbates most of the physical and psychological symptomatology.

4.2.2. Psoriatic Experiences

Apart from psychological symptomatology, psoriatic experiences (distortion of body-image, social isolation, and difficulty in verbal communication) were also dependent variables of the current study. Thus, group differences were examined also for those experiences.

4.2.2.1. Distortion of Body-Image

As a sub-factor of psoriatic experiences, and a dependent variable of the study, distortion of body-image was examined whether it differs according to different conditions.

Likewise the group differences in terms of psychological symptomatology, smokers reported higher levels of distortion of body-image due to Psoriasis than non-smoker participants. This finding supports a previous study of Okeke and her colleagues (2013) suggesting an association between body-dissatisfaction and smoking experience among adolescents. Psoriatic patients may try to compensate the dissatisfaction related to their appearance by smoking which is a maladaptive coping strategy.

Gender was not a differentiative factor for distortion of body-image among psoriatic patients of the current study. However, there are studies indicating the gender differences in terms of body-image, for instance Krok, Baker and McMillan (2013) stated that women reported more negative body-image rates than men in a sample of cancer patients. The Psoriasis-related distortions in body-image are most likely to be closely associated with disfigurements due to Psoriasis. Also, they are more than just imaginative distortions, that is Psoriasis really disfigures the skin.

4.2.2.2. Social Isolation

Another sub-factor of psoriatic experiences, social isolation, was assessed if it differs according to various conditions.

Smoking was an issue to focus in terms of social isolation. Likewise the results for psychological symptomatology and distortion of body-image, smokers also reported greater levels of being socially isolated due to Psoriasis than non-smokers. This finding partially support a previous finding that perceptions of being discriminated was associated with tendency of smoking (Alcaraz et al. 2012). Psoriatic patients may isolate themselves due to the stigmatization feelings related to the lesions, and this associates with smoking.

4.2.2.3. Difficulty in Verbal Communication

Finally, groups were compared in terms of difficulty in verbal communication. The result showed that females reported higher scores of difficulty in verbal communication when compared to males. This finding may suggest that females tend to be more uncomfortable with talking about the disease than men. However, there were no significant differences among gender in terms of the other sub-factors of psoriatic experiences. Thus, this finding leads one to think that females are more sensitive on communications about Psoriasis.

4.3. Multiple Regression Analyses

The results of the hierarchical multiple regression analyses, which were conducted to examine the associations between variables, were as expected. Below are the discussions of those hierarchical multiple regression analyses.

4.3.1. Psoriatic Experiences

Below are the discussion of the results of regression analyses conducted for the psoriatic experiences factors, namely distortion of body-image, social isolation, and difficulty in verbal communication.

4.3.1.1. Distortion of Body-Image

Distortion of body-image, as a sub-factor of psoriatic experiences, was one of the dependent variables that were examined in terms of the associations with the independent variables via multiple regression analyses.

Firstly, perceived dangerousness of Psoriasis was significantly associated with distortion of body-image as expected. The more psoriatic patients perceive their condition as life-threatening the more they experience distortion of body-image.

Secondly, age was significantly associated with distortion of body-image, suggesting that the disfigurement caused by Psoriasis has more negative influences on younger psoriatic patients. This finding is consistent with the related literature. For instance, Pereira, Brito and Smith (2012) found that psoriatic patients aged between 16 and 31 reported higher negative body-image rates that the older ones. Younger patients may perceive the disfigurements and/or symptoms of the diseases as more disastrous than the older ones since physical perfection and beauty are more important in youth. Older people may cope better with deformations on skin caused by Psoriasis.

Duration of Psoriasis was positively associated with distortion of body-image. Increased time with the condition seems to be a risk factor for worsened perceptions about body-image.

The results of the regression analysis for distortion of body-image in terms of perceived social support were interesting. Perceived social support from friends was the only factor among all sources of perceived social support that was found to be significantly associated with distortion of body-image. Those psoriatic patients may feel accepted by family members, or the physicians more easily; however, feeling accepted by friends may be more vital to reduce shame related to lesions of Psoriasis. This finding reaches greater importance when feelings of being stigmatized are considered. Family members or significant others like physicians may not stigmatize those patients with their condition, or the patients may not put importance on it. On the other side, expectations of such stigmatization seem to be more vital for psoriatic patients in terms of their levels of distortion of body-image. Similar to those mentions about the importance of friends factor for body-image, a previous research also suggested that exposure to critism from friends was found to be associated with bodily dissatisfaction (Jones, Vigfusdottir and Lee 2004).

Lastly, emotional processing was positively, emotional expression was negatively associated with distortion of body-image beyond all those variables mentioned above. Similarly, Hayaki, Friedman and Brownell (2002) reported that increased levels of emotional expression decreased bodily dissatisfaction. According to this finding, emotional processing related to Psoriasis is nonadvantageous for psoriatic patients, however, emotional expression seems to be essential to reduce distortion of body-image levels. While working with psoriatic patients, clinicians should encourage patients to express their emotions related to their condition.

4.3.1.2. Social Isolation

Social isolation was another factor of psoriatic experiences to be investigated in terms of its associates via multiple regression analysis. Firstly, perception about the dangerousness of the disease was positively associated with social isolation, as expected. Perceiving the condition as life-threatening seems to exacerbate the already existing stress

due to the condition, so patients who perceive Psoriasis as life-threatening may suffer more from psoriatic experiences.

Frequency of smoking was positively, frequency of alcohol intake was negatively associated with social isolation. Smoking can commonly be seen as comorbid to Psoriasis (Kirby et al. 2008), and tends to be a maladaptive coping strategy that psoriatic patients refer so as to cope with psoriatic experience, namely social isolation. As smoking was mentioned to be a predisposing risk factor for Psoriasis (Fortes et al. 2005; Naldi and Mercuri 2009), this maladaptive coping strategy may exacerbate the medical symptoms, and in turn, the levels of social isolation. Therefore, clinicians working with those patients should also evaluate the patients in terms of smoking. On the other hand, it is interesting that increase in alcohol intake was associated with decrease in social isolation. This may be explained as socializing in situations which includes alcohol. Alcohol intake was also counted as a comorbid behavioral problem to Psoriasis (Kirby et al. 2008), therefore, those patients may defectively feel themselves better in respect to coping with the stress caused by their condition with the help of alcohol, so they do not socially isolate themselves.

Further, perceived social support had greater importance than the variables mentioned above. Increased perceived social support from friends was associated with decreased social isolation, beyond all the control variables that were entered into the equation on the first step. Similar with the findings for distortion of body-image, feeling accepted by friends may be more vital for psoriatic patients so as not to isolate themselves from social integrations. Moreover, expectations about being stigmatized and critisized may associate with isolating themselves from such integrations. This tends to be a significant finding that healthcare professionals should take social isolation from friends into account rather than family members or significant other people like physicians or neighbours while working with psoriatic patients.

Beyond all those control variables and perceived social support factors, emotional processing and emotional expression were significantly associated with social isolation. Increased emotional processing seemed to be associated with increase in social isolation, however, increased emotional expression was found to decrease social isolation. Higher emotional processing and higher distress relationship was explained as ruminative nature

of emotional processing (Low, Stanton and Bower 2008), therefore, in the present study, higher emotional processing and lower social isolation relationship might be explained as higher emotional processing might create a kind of rumination which results in being less likely to engage in social relationships. This finding indicates the importance of working on merely emotional expression without focusing on understanding, analyzing, and thinking on emotions. Emotional processing seems to have negative impact on those patients, although coping through emotional expression works for decreasing social isolation.

4.3.1.3. Difficulty in Verbal Communication

As the last factor of psoriatic experiences, difficulty in verbal communication was examined in terms of its significant associates via multiple regression analysis. Firstly, in parallel to the aforementioned results about other factors of psoriatic experiences, perceived dangerousness of the disease was positively associated with difficulty in verbal communication, as expected. Perceiving the condition as life-threatening seems to exacerbate the levels of psoriatic experiences. Those patients may be educated about the nature of Psoriasis, in that, Psoriasis is not a life-threatening condition.

Secondly, age was negatively associated with difficulty in verbal communication, suggesting that younger patients had more difficulties in verbal communication about Psoriasis than the older ones. Similar to the association between distortion of body-image and age, physical appearance is likely to be more important in youth, and those young patients seemed to be more negatively affected by the psychological consequences of Psoriasis.

Thirdly, duration of Psoriasis was positively associated with difficulty in verbal communication. Patients who had the condition for a longer time experience higher levels of difficulties in verbal communication about Psoriasis, perhaps because they feel overwhelmed by questions and having to make explanations related to the disease. They may feel uncomfortable in respect to telling curious others about the condition. Furthermore, the significant associations between duration of Psoriasis and all sub-factors

of psoriatic experiences indicates that longer time with the disases is a risk factor for developing or maintaining stress due to Psoriasis.

Interestingly, frequency of alcohol intake was negatively associated with difficulty in verbal communication. Those patients may believe that alcohol helps them relax and get rid of the psoriatic stress for a while, so they do not perceive difficulties in verbal communication about Psoriasis.

After controlling for all those variables, among the perceived social support factors, only perceiving social support from friends was significantly associated with difficulty in verbal communication. This may also be related with the importance of feelings of acceptance by friends rather than by family members or significant others like physicians, neighbours, and/or fiancee. Perceptions of acceptance by friends should be promoted so as to reduce difficulties in verbal communication related to Psoriasis.

Lastly, emotional processing was positively and emotional expression was negatively associated with difficulty in verbal communication. Findings for psoriatic experiences in terms of emotional approach coping are similar, and suggest that psoriatic patients should be encouraged to express their emotions related to Psoriasis without consideration of analyzing them. Emotional processing seems to useless for those patients in terms of coping with the disease related stress.

4.3.2. Psychological Symptomatology

Multiple regression analysis was also run for psychological symptomatology so as to investigate the associations of this dependent variable. Firstly, similar with the previous findings which indicated that perceived threat was found to be associated with depression and anxiety among heart disease patients (Senol-Durak and Ayvasik 2010) and diabetic patients (Senol-Durak 2014), perceived dangerousness was positively associated with psychological symptomatology in the current study. Perceiving the condition as life-threatening is stressful itself, thus it has negative contribution on psychological symptomatology.

Likewise the association of psoriatic experiences, younger age also had a significant association with increased psychological symptomatology. Similarly, Pereira, Brito and Smith (2012) reported that young psoriatic patients tend to have greater levels of psychological morbidity, and it may be indirectly associated with bodily dissatisfaction. This finding indicates the importance of psycho-social interventions especially for those patients at young ages.

Another associate of psychological symptomatology was educational level. Patients with higher educational levels had lower levels of psychological symptomatology. Those patients may be more aware of the condition, search and reach valuable information about the nature of the disease, and they may cope more effectively with the psychological consequences of the disease.

Beyond the control variables, among the factors of perceived social support, only perceived social support from friends was associated with psychological symptomatology. Perceiving support from and feeling accepted by family and significant others like physicians, neighbours, fiancee, etc. may be more available than perceiving support from and feeling accepted by friends for psoriatic patients. Expectations of being stigmatized may increase the levels of psychological symptomatology among those patients.

Furthemore, emotional expression was negatively associated with psychological symptomatology, as expected. Similarly, Hassija and her colleagues (2012) demonstrated that increased emotional expression was associated with decreased levels of post-traumatic stress disorder and depression severity. According to the findings, expressing emotions related to Psoriasis seems to be useful for those patients to eliminate psychological symptomatology.

Beyond all those variables mentioned above, distortion of body-image and social isolation were significantly associated with psychological symptomatology. Bodily dissatisfaction tends to contribute to psychological distress, for example in a study dissatisfaction with body was associated with high depression levels (Jackson et al. 2014). The current study mirrored a similar finding in terms of body-image. Clinicians working with psoriatic patients should evaluate and focus on perceptions about body-image to

reduce levels of psychological symptomatology. Furthermore, increased social isolation was also related with increased psychological symptomatology, suggesting the clinicians to eliminate social isolation due to Psoriasis so as to reduce psychological symptomatology levels.

4.4. Limitations

Through the processes of planning, hypothesizing, data collecting, data analyzing, and reporting of the current study, scientific and ethical rules were fully obeyed. Consequently, the results of the study were generally as expected and satisfactory. However, there were various limitations that were inevitable, and they are explained below.

A limitation of the present study is that data was collected by using self report measurements. For a further understanding of psychological patterns of psoriatic patients, qualitatitive data via interviews and/or interventions should also be considered. Further studies are needed to combine practical studies with self report measurements.

The current study sampled merely plaque-type psoriatic patients since it is the most frequent subtype (Kumar et al. 2004). This sub-type is characterized by heavily plaqued lesions on skin. Other sub-types of Psoriasis are more rare than plaque-type Psoriasis and they are specific with their own nature, so to generalize the results of the present study to the other sub-types of Psoriasis, additional attention should be paid. Moreover, further studies are needed for examining the differences between the sub-types in terms of those variables used in this study.

Collecting data regardless of the severity of Psoriasis is also a limitation. The results of the current study did not indicate any differences that could possibly be produced by severity of the disease. The results also did not report any correlations or associations between severity of the disease and the dependent variables of the study. In order to see the effect of severity, further studies are needed to consist it as a variable.

Finally, further studies are need to involve other individual and social factors that could possibly have a role on psychological symptomatology, than those which were involved in the present study.

4.5. Clinical Implications

The current study is one of the first to investigate psychological symptomatology and stressful psoriatic experiences among psoriatic patients. Although, there are various studies to examine the associations between psychological symptomatology and Psoriasis, this is the first study to involve psychological experiences related to Psoriasis. In this sense, findings of the current study could be utilized within the context of revealing the emotions and thoughts of the patients, explaining their relation with psychological symptomatology, improving the prognosis and the consequences of the disease. In accordance with findings, particularly, activating the social support systems of the patients and promoting the effective use of emotional approach coping strategies could be followed to facilitate the lives of those patients and to reduce the negative psychological outcomes derived from the symptoms of the condition. Both psychotherapy and counseling processes could work with those patients. In those processes, psychological patterns, social support systems, emotional approach coping, perceptions of the dangerousness and the seriousness of Psoriasis could be the points to focus on for therapists and consultants.

Findings of the present study are limited with the evaluations of perceived social support, emotional approach coping, psoriatic experiences, and psychological symptomatology with self-report type measurements. Further studies are suggested to investigate other psychological pattern variables (i.e., personality, coping with stress, psychological hardiness etc.) among psoriatic patients. Besides, case studies in which prognosis and nature of Psoriasis are accompanied by psychological patterns of psoriatic patients, can be conducted in furhter research. A psychological model which includes the findings of the current study can be developed and tested by Structural Equation Modelling. Moreover, effectiveness of a therapy or counseling model which is expected

to recover the symptoms of Psoriasis can be investigated. Finally, psoriatic patients can be educated in terms of the nature and possible consequences of Psoriasis.

4.6. Conclusion

The current study revealed the importance of certain demographic variables (younger age, lower educational level), perceived dangerousness of Psoriasis, perceived social support from friends, emotional expression, distortion of body-image, and social isolation in explaining psychological symptomatology among psoriatic patients. The results demonstrated that especially dealing with perceptions about the dangerousness of the disease, distortion of body-image, social isolation, and promoting emotional expression related to Psoriasis and improving social support networks, especially friendships are crucial in the process of psycho-social treatment.

Also, psoriatic patients should be informed about the nature of the disease by clinicians during and after the treatment. This may prevent them from perceiving the condition as life-threatening, and in turn, decrease their psychological symptoms. Information process should be patient-centered. For instance, younger patients were shown to have higher levels of psychological symptomatology and psoriatic experiences. Also, less educated patients were at a higher risk for psychological symptomatology. Therefore, cooperation between psychologists and dermatologists is crucial during not only the treatment but also the information process.

Perceived social support from friends has an important role in terms of explaining psychological symptomatology among psoriatic patients. Those patients should be encouraged to engage in social activities without considering their appearance. In this respect, their distorted body-images due to Psoriasis should be focused on. Psychologists can work to help them cope more effectively with the disfigurement.

Encouraging the patients to express their emotions related to Psoriasis seemed to be vital for reducing psychological symptomatology and levels of psoriatic experiences. Various techniques, such as allowing them to write their feelings down, or encouraging them to share their feelings with their loved ones, can be used. However, processing

emotions seemed to be nonadvantegous for those patients. So, psoriatic patients should be motivated just to express their emotions related to Psoriasis rather than deeply thinking on and analyzing them.

Psoriatic experiences were shown to be highly correlated with psychological symptomatology. The results of the current study offer clinicians working in this field to work on those stressful experiences to reduce psychological symptomatology, and in turn, prevent exacerbations of the medical symptoms. In this respect, this study emphasizes the importance of congruence between dermatologists and psychologists during assessment and treatment processes.

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APPENDICES

Appendix A: Demographical Information Form

1. Yaşınız: ……
2. Cinsiyetiniz: ❑ Kadın ❑ Erkek
3. Eğitim Durumunuz:

a) Okuryazar Değil
b) Okuryazar
c) İlkokul Mezunu
d) Ortaokul Mezunu
e) Lise Mezunu
f) Ön Lisans Mezunu
g) Lisans Mezunu
h) Yüksek Lisans Mezunu
i) Doktora Mezunu

4. Mesleğiniz:

a) Memur
b) İşçi
c) Ev hanımı
d) Sağlık Personeli
e) Serbest Meslek
f) Öğrenci
g) Öğretmen-Öğretim üyesi
h) Mimar-mühendis
i) Esnaf
j) Tekniker-Teknisyen

k) Emekli
l) Yönetici
m) Çiftçi
n) Güvenlik Personeli
o) İşsiz
p) Diğer _____

5. Halen çalışıyor musunuz?

a) Evet
b) Hayır

6. Medeni haliniz:

a) Bekar
b) Evli
c) Ayrı
d) Boşanmış
e) Eşi vefat etmiş

7. Kaç çocuk sahibisiniz? ……..

8. Evinizde siz dahil kaç kişi yaşıyor? ……..

9. Ailenizin toplam aylık geliri ne kadardır? ……. TL

10. Sigara kullanıyor musunuz?

a) Evet
b) Hayır

11. Alkol kullanıyor musunuz?

a) Evet
b) Hayır

12. Ne kadar süredir Psoriasis (sedef) hastasısınız? …… yıl …….. ay

13. Psoriasis (sedef) hastalığı nedeniyle hiç hastaneye yattınız mı?

a) Evet
b) Hayır

Evet ise;

14. Kaç kez yattınız? ……

15. Psoriasis (sedef) dışında bir hastalık nedeniyle hiç hastaneye yattınız mı?

a) Evet
b) Hayır

16. Tedaviniz şu anda hangi aşamadadır?

a) Hastanede yatılı hasta olarak ilaç kullanıyorum.

b) Düzenli olarak ilaç kullanıyorum.

c) Ara ara ilaç kullanıyorum.

d) İlaç kullanmıyorum.

17. Hastalığınız ile ilgili olarak şu anki durumunuzu nasıl değerlendiriyorsunuz?

a) Çok kötü
b) Kötü
c) Zaman zaman iyi zaman zaman kötü
d) İyi
e) Çok iyi

18. Hastalığınızın hayati tehlikesini nasıl değerlendiriyorsunuz?

a) Hiçbir hayati tehlikesinin OLMADIĞINI düşünüyorum.

b) Hayati tehlikesinin ÇOK AZ derecede olduğunu düşünüyorum.
c) Hayati tehlikesinin ORTA derecede olduğunu düşünüyorum.
d) Hayati tehlikesinin OLDUKÇA FAZLA derecede olduğunu düşünüyorum.

19. Halen tedavi gerektiren başka bir hastalığınız var mı?

a) Evet
b) Hayır

20. Evetse; hastalığınız nedir?

a) Kalp-Dolaşım /Solunum sistemi (Kalp, tansiyon, kolesterol, damar tıkanıklığı, hemoroid, nefes darlığı vb.)
b) Sindirim sistemi (Ülser, gastrit, siroz, idrar, safra vb.)
c) Kas-iskelet sistemi (Kas, kemik, bağ doku hastalıkları vb.)
d) Duyu sistemi (Görme, işitme, koku, tat, cilt bozuk vb.)
e) Endokrin sistemi (Diyabet, obezite, tiroid, dahili bilimler vb.)
f) Nörolojik (Demans/Alzheimer, Parkinson, denge bozuk.)
g) Boşaltım sistemi sorunları (İdrar kaçırma, idrara çıkamama)

21. Psikolojik bir rahatsızlığınız var mı?

a) Evet
b) Hayır

22. Psikolojik bir rahatsızlığınız varsa:

a) Rahatsızlığınız nedir? _____
b) Bu rahatsızlığınız ne zamandan beri devam ediyor? _____yıl
ay

23. Yakın zamanda sizi etkileyen bir stres yaşadınız mı? Yaşamınızda sizi etkileyen önemli bir olay oldu mu? (Ör., bir yakın kaybı, trafik kazası gibi.)

a) Evet
b) Hayır

24. Stres yaşadıysanız; sizin için stres yaratan bu olay(lar) nedir?

---

a) Ne kadar süre oldu? _____yıl _____ay

b) Bu olay sizi ne kadar etkiledi?

1 (hiç etkilemedi) …….. 10 (çok etkiledi)

Appendix B: Brief Symptom Inventory

Aşağıda, insanların bazen yaşadıkları belirtilerin ve yakınmaların bir listesi verilmiştir. Listedeki her maddeyi lütfen dikkatle okuyunuz. Daha sonra belirtinin SİZDE BUGÜN DAHİL, SON BİR HAFTADIR NE KADAR VAR OLDUĞUNU yandaki bölmede uygun olan yerde seçiniz. Her belirti için sadece bir yeri seçmeye ve hiçbir maddeyi atlamamaya özen gösterin. Yanıtlarınızı aşağıdaki ölçeğe göre değerlendirin: Bu belirtiler SON BİR HAFTADIR sizde ne kadar var?

Examples of items:

1. İçinizdeki sinirlilik ve titreme hali

10. İnsanların çoğuna güvenilmeyeceği hissi

13. Kontrol edemediğiniz duygu patlamaları

17. Hüzünlü, kederli hissetmek

27. Karar vermede güçlükler

41. Bir şeyleri kırma, dökme isteği

49. Yerinde durmayacak kadar tedirgin hissetmek

Appendix C: Psoriatic Experiences Scale

Psoriasis (sedef) hastalarının yaşantılarını yansıttığı düşünülen olası ifadeler aşağıda sıralanmıştır. Lütfen, her bir ifadeyi dikkatlice okuyarak bu cümlelerde anlatılanların sizin için ne kadar olası olduğunu uygun seçeneği işaretleyerek belirtiniz.

Examples of items:

2. I avoid talking about my condition.

8. I feel being singled out due to my condition.

16. I feel ashamed of the lesions and scars on my skin.

Appendix D: Multidimensional Scale of Perceived Social Support

Aşağıda 12 cümle ve her bir cümle altında da cevaplarınızı işaretlemeniz için 1'den 7'ye kadar rakamlar verilmiştir. Her cümlede söylenenin sizin için ne kadar doğru olduğunu veya olmadığını belirtmek için rakamlardan yalnız bir tanesini daire içine alarak işaretleyiniz. Bu şekilde 12 cümlenin her birine bir işaret koyarak cevaplarınızı veriniz. ***Lütfen hiçbir cümleyi cevapsız bırakmayınız.*** Sizce doğruya en yakın olan rakamı işaretleyiniz.

Examples of items:

1. Ailem (örneğin, annem, babam, eşim, çocuklarım, kardeşlerim) bana gerçekten yardımcı olmaya çalışır.

4. İşler kötü gittiğinde arkadaşlarıma güvenebilirim.

6. Ailem ve arkadaşlarım dışında olan ve sevinç ve kederlerimi paylaşabileceğim bir insan (örneğin, flört, nişanlı, sözlü, akraba, komşu, doktor) var.

8. Sevinç ve kederlerimi paylaşabileceğim arkadaşlarım var.

Appendix E: Emotional Approach Coping – State Form

Bu anketi Psoriasis (sedef) hastalığının size neler hissettiğinizi, neler düşündüğünüzü ve ne tür tepkiler verdiğinizi göz önünde bulundurarak doldurunuz. Her bir ifadeyi dikkatle okuyunuz ve sizin için en uygun rakamı daire içine alınız. Doğru ya da yanlış cevap yoktur. Lütfen, tüm soruları cevaplayınız.

Examples of items:

1. Hastalığım hakkında gerçekten ne hissettiğimi anlamaya zaman ayırırım.

6. Hastalığımla ilgili duygularımı ifade etmeye önem veririm.

12. Hastalığımla ilgili duygularımı tam anlamak için onları irdelerim.

16. Hastalığımla ilgili duygularımı ifade ederken kendimi kısıtlamam.

Appendix F: Informed Consent Form

Bir araştırma projesine davet edilmektesiniz. Karar vermeden önce araştırmanın neden ve nasıl yapılacağını anlamanız çok önemlidir. Lütfen biraz zaman ayırın ve aşağıdaki bilgileri dikkatlice okuyun, isterseniz başkalarıyla tartışın. Açık olmayan bir bölüm varsa ya da daha ayrıntılı bilgiye ihtiyaç duyuyorsanız lütfen bize ulaşın. Ancak araştırmaya katılmak isteyip istemediğinize karar vermek için lütfen biraz düşünün.

Bu araştırma Abant İzzet Baysal Üniversitesi Fen Edebiyat Fakültesi Psikoloji Bölümü Klinik Psikoloji Bilim Dalı'nda Yüksek Lisans Tezi olarak Doç. Dr. Mithat Durak danışmanlığında yürütülmektedir. Bu araştırmanın sonunda Türkiye'deki Psoriasis hastalarının yaşamını etkileyen hastalığa bağlı psikolojik etmenleri belirlemek amaçlanmaktadır. Bu amaç doğrultusunda size hastalıkla ilişkili olduğu düşünülen bazı sorular ve anketler yöneltilecektir. Vereceğiniz tüm kimlik bilgilerinizin gizli tutulması en önemli sorumluluklarımızdandır. Araştırma süresince toplanan veri yalnızca araştırmacı ve danışman tarafından ulaşılabilir olacaktır.

Araştırmaya katılmanın size hemen dönecek bir faydası bulunmamakla beraber, araştırma sonuçlarımızın gelecekte, Türkiye'deki psoriasis hastalarının yaşadığı psikolojik sıkıntıların farkında olup uygun müdahaleleri geliştirme fırsatı tanıyarak bilimsel literatüre katkılarının olacağı umulmaktadır. Araştırmanın sonucu hakkında bilgi almak istediğinizde bize ulaşabilirsiniz.

Çalışmaya katılım gönüllülük esasına dayanmaktadır. Katılmayı kabul ettikten sonra, sürecin herhangi bir aşamasında hiçbir sebep göstermeksizin çalışmayı bırakma hakkına sahipsiniz.

Katılımınız için teşekkür ederiz.

Bu araştırma Abant İzzet Baysal Üniversitesi İnsan Araştırmaları Etik Kurulu tarafından onaylanmıştır. Araştırmaya katılımınızla ilgili her hangi bir şikâyetiniz varsa Etik Kurul Başkanı Prof. Dr. Hamit COŞKUN (Tel: 03742541310) bildirebilirsiniz. Her tür şikayetiniz gizlilikle değerlendirilecek, araştırılacak ve sonuç hakkında tarafınıza bilgi verilecektir.