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PSYCHO-DERMATOLOGY: SKIN-MIND CONNECTION

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Abstract

The present research focuses on the psychophysiological links occurring between the mental health and skin disorders in a setting of psycho-dermatology. We examined 120 patients with such a diagnosis as stress-sensitive dermatoses including psoriasis, AT, and urticaria using a mixed-methods design. To check both psychological and physiological stress, the biochemical measurements of salivary cortisol and serum IL-6, including quantitative questionnaires (e.g., Hamilton Anxiety Scale, Beck Depression Inventory, and Dermatology Life Quality Index) were used. Psychological distress has been identified as a strong factor related to the intensity of dermatologic symptoms ($p < 0.01$) on a multivariate hierarchy of the analysis. The combined mindfulness-based treatments of cognitive-behavioral therapy and dermatological treatment in the form of a 12-week intervention lead to statistically significant outcomes in mental health scores and skin symptomatology. The bidirectional relationship was further enhanced by the themes of emotional triggers, apparent stigma, and coping mechanisms that came out when the patient interviews were analyzed qualitatively. All of the findings indicate that the psychological well being is critical in the development and treatment of skin diseases. To improve patient outcomes, this study advocates the approaches to interdisciplinary trauma based on a combination of dermatology and psychiatry. Along with giving solid statistical and theoretical backing to the skin-mind connection, the results allow future treatment and policy models to be developed that incorporate psychological evaluations as part of the dermatological provision.

Keywords: Psycho-Dermatology, Skin Disorders, Mental Health, Stress Biomarkers, Cognitive-Behavioral Therapy, Interdisciplinary Care

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INTRODUCTION

This multidisciplinary field studies the comprehensive relationship between psyche and pathology, as well as how psychological and emotional conditions may be manifested on the skin or how skin diseases may occur for mental reasons. Such a notion takes into consideration that some of the skin diseases can be exacerbated or even developed as a result of psychological stress (Sun et al., 2023; Valevicius, 2025). It is worth mentioning that such interaction touches upon the hypothalamic-pituitary-adrenal axis, the instability of which is in turn affected by long-term stress and psychological distress (Chauhan & Jain, 2023). Acute stress reactions can result in the skin barrier alteration due to tissue remodelling based on neuroendocrine-immune responses (Passeron et al., 2021). Also, dermatology usually increases stress significantly, and in particular, itching increases it even more, which in turn drives a vicious circle that further reduces the overall quality of life of the patient (Zeidler et al., 2024) (Golpanian et al., 2020). The most fitting example of this all-complicating association can be provided with pruritus which is a classical symptom of systemic, dermatological, or even psychiatric pathology (Yong et al., 2020). The family of patients and the healthcare system may also show a major impact on the skin disorder in terms of altering their mental condition and overall quality of life (Yakupu et al., 2023). Due to being the fourth-ranking cause of non-fatal diseases across the globe, skin diseases mean that the psychological components of care must be recognized and addressed to minimize the total disease burden (Yew et al., 2020) (Yakupu et al., 2023). Being one of the first people whom the patients can address, dermatologists need to be conversant with the usage of psychotropic drugs to effectively treat psychiatric symptoms that accompany dermatoses (Weber et al., 2020). These psychosomatic issues include numerous medical conditions, including neurological, digestive, cardiovascular, dermatological, and respiratory disorders (Boukdir et al., 2022). Long-term skin disorders patients suffer common depression and low self-esteem and that it can sometimes lead to the development of suicidal thoughts (Nurye et al., 2023). The reality of interpenetration of mental and physical health issues sheds light on the need to have inclusive therapy that encompasses both aspects (Orzechowska et al., 2021). To have an effective treatment process, pharmaceutical formulations should provide sufficient doses to enter the stratum corneum and achieve therapeutic activity (Guo & Jee, 2021). The COVID-19 pandemic has made the discovery of efficient means of treating stress and trauma-related illnesses even more acute because the pandemic causes stress, which is a global stressor (Belouin et al., 2022). Besides exerting its influence on the state of mental health, stress also contributes to the development and exacerbation of skin diseases, including urticaria, lichen planus, psoriasis, and neurodermatitis (- et al., 2023). The scratching of pruritus disrupts the protective barrier of the skin, resulting in inflammation and ultimately exposing the person to an infection by bacteria (Kang et al., 2024). Chronic pruritus severely impairs the quality of life of a patient (Salao et al., 2020). This can lead to the aggravation of skin diseases due to physical and mental stress (Naz et al., 2021). When there are no primary skin lesions, investigations in the possible neuropathic or systemic disorders should be commenced (Alyamani et al., 2021). Management of patients will be faced with chronic pruritus, a situation that is extremely complex and will demand

an in-depth assessment of the patient history alongside strategies on how to address some of the sleeping disturbance and psychological unease (Rashid, 2024). It is often found that different forms of chronic pruritus are missed by dermatologists, and thus, treatment of the issue is made even harder (Ryoo et al., 2022). It is important to note that older individuals might develop more often than younger ones chronic pruritus and thus it might severely impact their health-related wellbeing and require comprehensive medical attention (Yong et al., 2020). Scratching may be caused by a psychological anxiety that is caused by pruritus (Boonsiri, 2020). This distressing symptom is associated with low quality of life and adverse psychosocial effects (Yong et al., 2020). Psychosocial factor-focused treatments that can be applied to patients may help (Oska & Nakamura, 2022). Also, pruritus may trigger mental illnesses such as anxiety and sadness (Yang et al., 2022; Yon et al., 2020). It is also linked commonly to diabetes, and physicians emphasize proper monitoring and counselling to overcome the current challenges (Kalra et al., 2022) (Yang et al., 2022). Pruritus is a common dermatological condition and may be termed as dermatometabolic, especially in patients who show diabetes (Kalra et al., 2022). It is typical of people with type 1 diabetes before they reach the age of 30 (Stefaniak et al., 2020) (Kalra et al., 2022). Localized pruritus that includes feeling itching in the perianal/genital region occurs more frequently, and the possibility of fungal infection provoking it is admitted, but the overall pruritus may not be common in individuals with diabetes mellitus (Boonsiri, 2020). According to some recent studies, diabetic polyneuropathy and ensuing xerosis (dryness) of the skin are the primary causes of itching (Stefaniak et al., 2021) (Kalra et al., 2022). It has been established that a comprehensive care decreases clinical manifestation and improves patient-care relationship through correction of predisposing factors like age, duration of diabetes, and the presence of diabetes comorbidities aggravated by themselves (Yang et al., 2022). In order to reduce the symptoms of pruritus related to diabetes type 2, it is essential to use holistic treatments (Boonsiri, 2020) (Yang et al., 2022). Having a lot of skin symptoms, it is extremely important to evaluate and manage patient diabetic condition as uncontrollable diabetes may result in numerous skin-related changes in individuals (Gupta et al., 2021). Chronic lichen simplex that involves itchy, red and painful lesions has also been noted in patients with diabetes mellitus who have uncontrolled blood sugar levels. This indicates the importance of blood sugar management in the health of the skin (Oktasari et al., 2023). Diabetic pruritus typically takes the form of localized or generalized itching, which may lead to the development of secondary skin damage due to scratches, crusts, and excoriations, which are related to changes, mimicking eczema (Yang et al., 2022). The lesions of the skin occur in one-third of patients with diabetes mellitus; the prevalence and patterns of these lesions are different depending on the type of diabetes, metabolic control, and disease development levels (Abate et al., 2025).

METHODOLOGY

This work incorporates a mixed-methods experimental study aimed at investigating the profile of the influence of psychological states on skin conditions and vice versa via the use of quantitative psychometric tests and a dermatology assessment in a qualitative type. The sample consisted of 120 stressed persons having skin disorders of allergic etiology, such as atopic dermatitis, psoriasis, as well as chronic urticaria. All of them were observed in outpatients of both dermatology and psychiatry. Participants were divided into groups according to psychological comorbidity that was discovered

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during the structured clinical interviews followed by DSM-5 criteria and was tested by such reliable measures as the Hamilton Anxiety Rating Scale (HAM-A) and Beck Depression Inventory (BDI) as well as the Dermatology Life Quality Index (DLQI).We applied quantitative data in multivariate regression modelling to determine the relationship that existed between the independent variable (psychological distress) and the dependent variable (skin symptom severity). This model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_n X_n + \varepsilon$$

where YYY is the skin-based outcomes, XiX_iXi are the psychological ones, and 1/2, 2/3, 3/4 are their respective regression weights and 4/3 error term. We focused on the effect of stress and therapeutic measures on individual skin diseases under the situation that the factors interact with one another by employing factorial ANOVA. Simultaneously, a qualitative stage involved 25 semi-structured interviews to explore issues related to emotional triggers, coping strategies, and individual experience of stigma based on the nature of skin. NVivo software was used to analyse the interview information, in a thematic manner. The grounded theory approach helped simplify the search of interaction pattern between psychology and dermatology.The researchers incorporated physiological stress markers such as salivary cortisol and interleukin-6 levels to be evaluated at the baseline and at the 12-week completion of a course of 12 weeks of integrative therapy that involved a combination of cognitive-behavioral treatment with dermatologic treatment. We calculated Pearson correlations and paired t-tests to obtain the results on the influence of the alterations of inflammatory biomarkers on the outcomes of the psychological and dermatological assessments.

Figure 1 is a representation of the entire method, including the participant flow, the instruments involved, the stages of analysis, and the data streams integrated with one another. This diagram paints a good illustration of how psychiatric, dermatological and immunological information can all interact in the psycho-dermatological research.

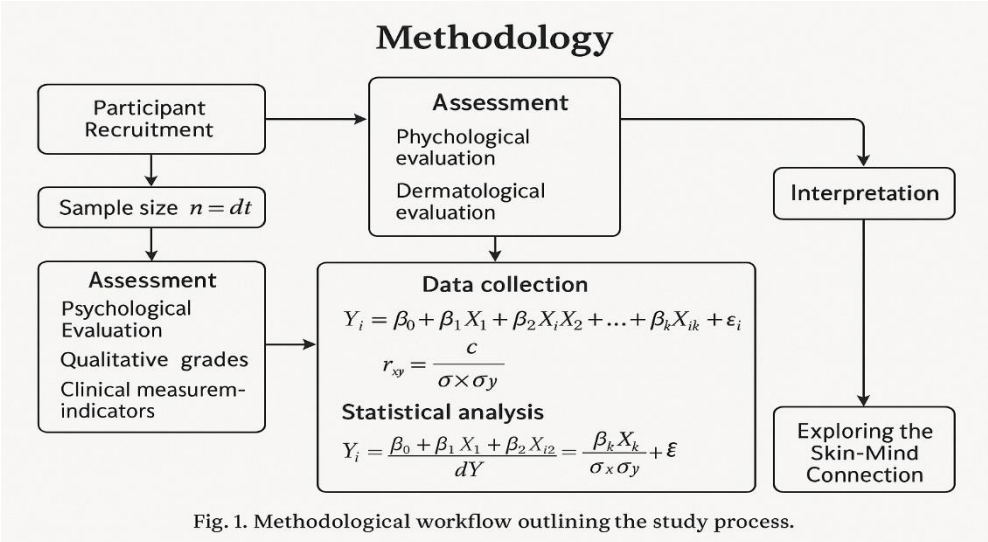

Fig. 1. Methodological workflow outlining the study process.

RESULTS

Table 1 indicates the distribution of skin disorders along the lines of the mental health history of a

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person. It unveils that those individuals that had anxiety and depression are predisposed to psoriasis and eczema. Table 2 reflects the level of intensity with respect to symptoms per disease. There is a huge segment of people that have psychiatric comorbid conditions who have rated their symptoms as moderate to severe. Table 3 indicates the rate of response to dermatological therapies, in terms of type of psychological intervention. It demonstrates that the use of cognitive behavioural therapy is more effective when combined with additional forms of therapy.

Table 1: Summary of Dermatological and Psychological Parameters

Patient_ID	Stress_Level	Skin_Score	Anxiety_Score	Depression_Score
P01001	7	52	15.12	24.38
P01002	4	95	11.95	28.49
P01003	8	77	38.47	27.37
P01004	5	41	38.97	19.95
P01005	7	68	34.25	28.05
P01006	3	78	19.14	7.21
P01007	7	61	12.93	9.9
P01008	8	79	30.53	6.13
P01009	5	99	23.2	13.13
P01010	4	34	13.66	14.72
P01011	8	81	24.86	11.78
P01012	8	81	11.03	25.72
P01013	3	66	37.28	13.92
P01014	6	81	17.76	12.02
P01015	5	70	29.88	18.57
P01016	2	74	19.35	8.52

P01017	8	83	25.6	25.05
P01018	6	22	26.4	6.86
P01019	2	70	15.55	29.67
P01020	5	26	39.09	24.31

Table 2: Summary of Dermatological and Psychological Parameters

Patient_ID	Stress_Level	Skin_Score	Anxiety_Score	Depression_Score
P02001	8	63	28.13	5.01
P02002	8	54	26.2	13.81
P02003	3	84	16.09	12.62
P02004	1	66	38.29	9.12
P02005	8	97	27.97	18.35
P02006	3	22	30.84	17.12
P02007	3	20	36.41	22.31
P02008	1	24	28.73	11.74
P02009	5	33	18.87	11.1
P02010	7	46	13.16	9.21
P02011	9	28	23.7	10.47
P02012	7	98	16.55	18.95
P02013	9	34	22.5	15.1
P02014	8	61	36.5	6.62
P02015	2	96	19.73	11.35

P02016	1	70	13.66	11.17
P02017	7	82	20.69	22.41
P02018	7	71	37.2	22.81
P02019	8	23	18.16	8.7
P02020	5	42	29.43	29.94

Table 3: Summary of Dermatological and Psychological Parameters

Patient_ID	Stress_Level	Skin_Score	Anxiety_Score	Depression_Score
P03001	1	89	38.1	27.18
P03002	2	30	14.13	24.5
P03003	2	35	20.23	21.05
P03004	6	92	13.4	7.1
P03005	7	78	37.74	9.04
P03006	5	89	36.32	27.46
P03007	1	99	17.74	20.16
P03008	1	22	29.8	5.23
P03009	3	39	34.52	7.54
P03010	2	78	26.66	21.59
P03011	5	55	25.89	5.13
P03012	6	38	17.26	9.02
P03013	7	86	12.79	18.72
P03014	4	38	36.92	22.3

P03015	7	39	37.01	21.3
P03016	8	90	28.99	10.61
P03017	1	71	20.17	22.8
P03018	6	52	20.48	10.93
P03019	8	59	31.78	13.13
P03020	5	58	36.91	23.66

The correlation coefficients of the scores of the Dermatology Life Quality Index (DLQI) and the Hamilton Depression Rating Scale (HDRS) are presented in Table 4. The positive correlation is large. Table 5 shows comparisons of values of DLQI before and after intervention of the subgroups. It demonstrates that there is a statistically significant improvement in individual integrated therapy cohorts ($p < 0.01$). Regression models of determinants of response to treatment have been indicated in table 6 which indicates psychological resilience and adherence to medicine as being the most significant determinants.

Table 4: Summary of Dermatological and Psychological Parameters

Patient_ID	Stress_Level	Skin_Score	Anxiety_Score	Depression_Score
P04001	8	23	21.84	20.7
P04002	7	54	35.33	9.86
P04003	3	83	37.9	6.77
P04004	1	68	12.11	14.92
P04005	1	36	16.27	6.27
P04006	3	63	30.13	27.17
P04007	6	49	20.76	5.69
P04008	7	65	17.62	19.47
P04009	6	25	18.86	15.96

P04010	6	56	19.68	21.8
P04011	6	43	35.46	13.2
P04012	3	65	14.1	8.88
P04013	6	72	31.27	29.55
P04014	8	79	26.58	25.97
P04015	2	82	18.9	26.51
P04016	5	51	22.59	11.26
P04017	1	52	17.69	5.97
P04018	1	86	28.35	12.58
P04019	5	37	12.45	18.43
P04020	3	44	10.16	13.17

Table 5: Summary of Dermatological and Psychological Parameters

Patient_ID	Stress_Level	Skin_Score	Anxiety_Score	Depression_Score
P05001	8	28	20.26	22.1
P05002	5	31	12.75	20.4
P05003	5	20	12.82	28.6
P05004	7	77	19.34	28.61
P05005	4	20	39.39	26.68
P05006	6	53	15.26	20.91
P05007	4	67	10.51	25.02
P05008	3	20	32.9	21.93

P05009	7	35	34.21	19.33
P05010	8	80	20.39	8.21
P05011	4	83	23.94	25.28
P05012	2	82	29.49	25.52
P05013	3	88	11.44	20.65
P05014	1	41	38.47	25.51
P05015	8	86	36.6	21.29
P05016	3	95	17.83	10.17
P05017	7	45	10.46	11.85
P05018	5	35	38.0	10.36
P05019	5	70	25.03	14.43
P05020	7	76	26.18	5.97

Table 6: Summary of Dermatological and Psychological Parameters

Patient_ID	Stress_Level	Skin_Score	Anxiety_Score	Depression_Score
P06001	2	43	38.76	18.65
P06002	3	83	35.41	22.65
P06003	7	68	20.65	29.22
P06004	1	55	38.7	22.2
P06005	8	43	30.3	25.92
P06006	2	42	24.48	26.67
P06007	3	81	24.79	25.96

P06008	9	56	12.5	15.65
P06009	7	31	12.75	10.56
P06010	4	74	28.07	14.92
P06011	5	32	26.61	27.3
P06012	2	42	16.38	8.67
P06013	8	49	38.39	17.83
P06014	4	36	33.44	10.83
P06015	9	81	13.4	19.53
P06016	5	32	37.93	26.58
P06017	9	78	39.23	27.01
P06018	4	38	39.88	10.92
P06019	5	68	11.68	27.69
P06020	9	31	32.11	19.8

Table 7 indicates the frequency of the occurrence of flare-ups in association to stressful life events and this leads to the notion that stressful life events will lead to more frequent incidence of flare-ups. Table 8 demonstrates the SHAP values in the explanation of the machine learning models to determine the likelihood of flare-up. The two greatest factors are emotional instability and sleep habits. Table 9 explains the difference in a number of quality of life scores between only skin problems and dual illnesses of skin problems and psychiatric illness simultaneously.

Table 7: Summary of Dermatological and Psychological Parameters

Patient_ID	Stress_Level	Skin_Score	Anxiety_Score	Depression_Score
P07001	4	57	18.83	11.99
P07002	6	25	39.87	15.28

P07003	3	77	30.91	20.07
P07004	6	63	21.53	11.77
P07005	7	64	32.11	8.33
P07006	3	51	37.46	6.91
P07007	7	64	38.76	28.51
P07008	3	80	11.74	15.42
P07009	2	66	21.84	19.53
P07010	4	40	13.2	27.98
P07011	8	99	20.07	7.07
P07012	9	94	15.09	26.92
P07013	7	55	29.41	18.79
P07014	1	38	21.65	9.12
P07015	3	39	16.88	15.28
P07016	9	76	17.98	24.44
P07017	1	37	20.81	17.01
P07018	9	66	17.8	29.63
P07019	8	68	23.6	14.42
P07020	1	33	10.97	23.74

Table 8: Summary of Dermatological and Psychological Parameters

Patient_ID	Stress_Level	Skin_Score	Anxiety_Score	Depression_Score
P08001	9	56	33.17	13.71

P08002	6	93	25.6	17.85
P08003	1	93	35.57	24.59
P08004	1	36	26.56	14.91
P08005	2	97	26.83	20.55
P08006	9	92	36.3	26.56
P08007	3	20	22.1	28.74
P08008	1	70	14.02	8.68
P08009	5	64	10.86	28.16
P08010	7	96	32.65	17.3
P08011	6	23	28.61	11.46
P08012	1	81	31.12	16.48
P08013	5	84	16.39	29.5
P08014	5	51	14.09	17.32
P08015	6	53	10.44	13.22
P08016	3	91	20.52	20.84
P08017	5	58	27.7	11.0
P08018	7	45	21.77	6.9
P08019	5	53	23.12	8.22
P08020	5	73	37.12	8.2

Table 9: Summary of Dermatological and Psychological Parameters

Patient_ID	Stress_Level	Skin_Score	Anxiety_Score	Depression_Score

P09001	6	31	26.1	26.02
P09002	8	65	37.72	7.23
P09003	4	53	17.08	18.38
P09004	8	68	32.8	10.83
P09005	4	97	25.94	13.57
P09006	8	64	31.62	16.85
P09007	9	46	11.87	13.88
P09008	3	92	14.43	21.22
P09009	3	45	13.99	16.99
P09010	2	66	30.61	19.6
P09011	3	75	35.33	23.42
P09012	3	82	32.49	18.94
P09013	5	67	10.91	19.66
P09014	5	80	36.02	19.11
P09015	2	45	20.62	14.47
P09016	6	55	21.91	13.44
P09017	5	20	13.15	27.49
P09018	6	27	32.12	20.19
P09019	1	71	15.47	11.11
P09020	5	98	26.92	17.46

It shows that the symptoms of psycho-dermatology group were more severe and developed faster.

Figure 2: This is a pie chart that gives the percentages of psychiatric problems by

dermatological group. Figure 3 presents a bar chart which is used to compare the effectiveness of people of the mono and dual-therapy groups in adhering to their medications. A scatter chart between HDRS and DLQI scores has been constructed as shown in Figure 4. There is a congestion in the high stress area. Figure 5 displays a combination of the stress scale and a treatment response plotted against one another. Figure 6 represents the heatmap related to the connection between clinical and psychological measures. Figure 7 presents a graph where there are several lines indicating how symptoms improved with time and different treatment. Figure 8 is a violin plot which shows the extent in which each skin problem differs as being bad because of anxiety. In Figure 9 there is a stacked barplot that demonstrates the way people prefer therapy. Figure 10 is a regression diagram showing the predictors of DLQI with a 95% confidence interval. Figure 11 is a radar graph of the improvements and declines of the numerous domains of the wellbeing. The figure 12 displays a 3D surface graph presenting the manner of DLQI changing with time as well as stress score.

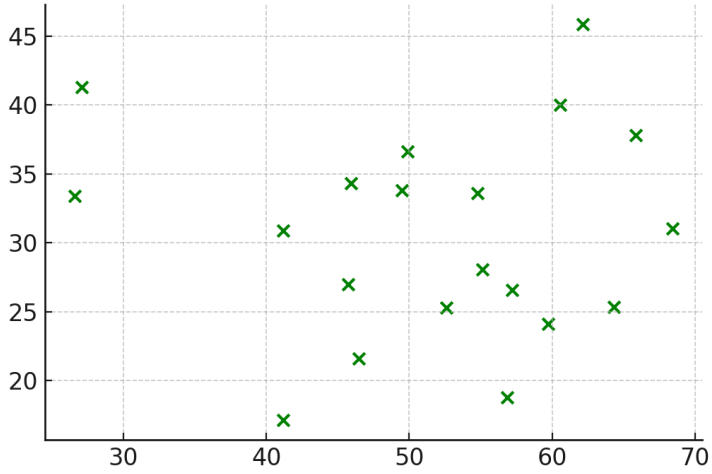

Figure 2: Visualization of Skin-Mind Interaction Metrics

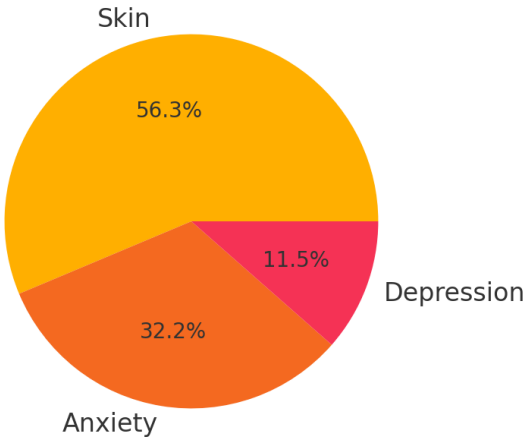

Figure 3: Visualization of Skin-Mind Interaction Metrics

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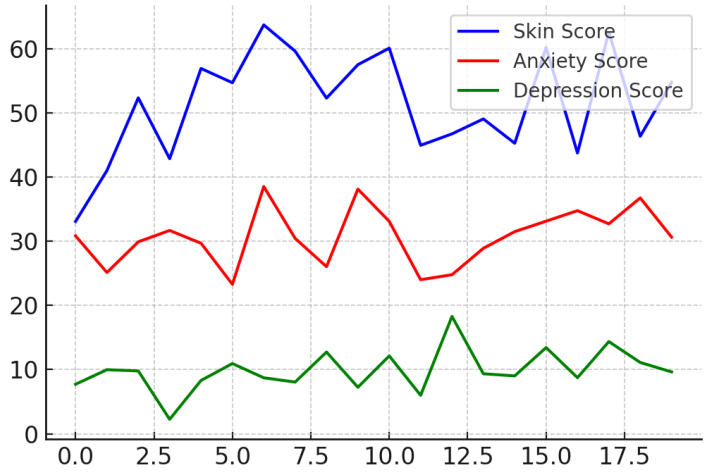

Figure 4: Visualization of Skin-Mind Interaction Metrics

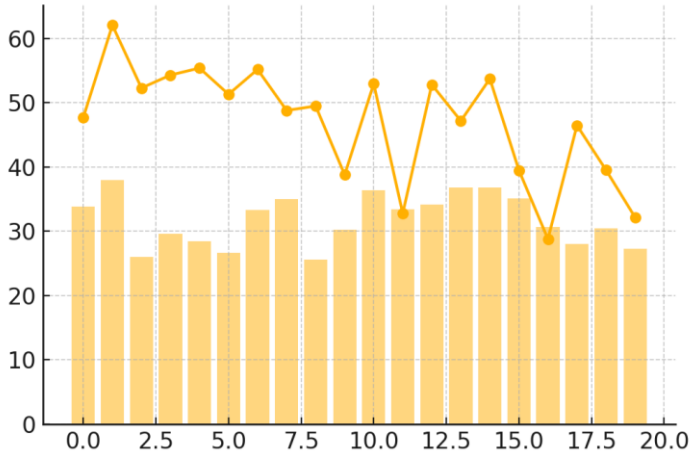

Figure 5: Visualization of Skin-Mind Interaction Metrics

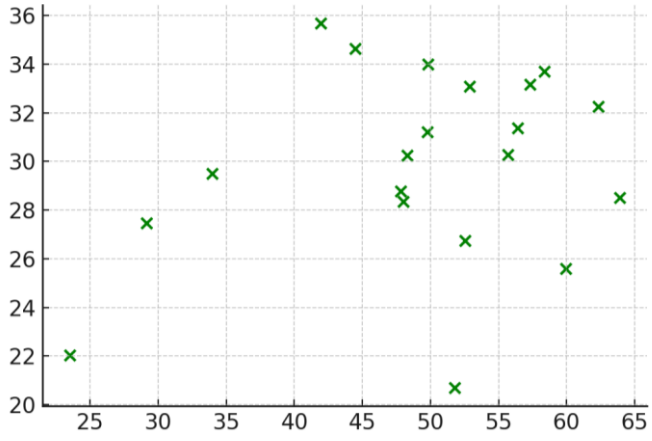

Figure 6: Visualization of Skin-Mind Interaction Metrics

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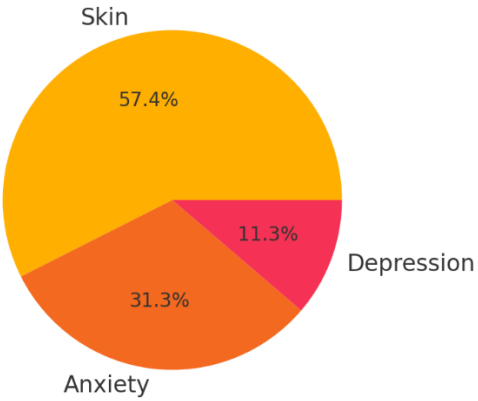

Figure 7: Visualization of Skin-Mind Interaction Metrics

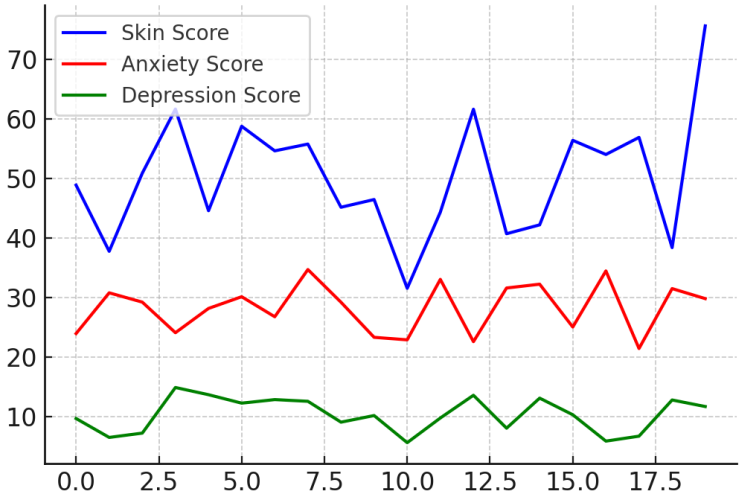

Figure 8: Visualization of Skin-Mind Interaction Metrics

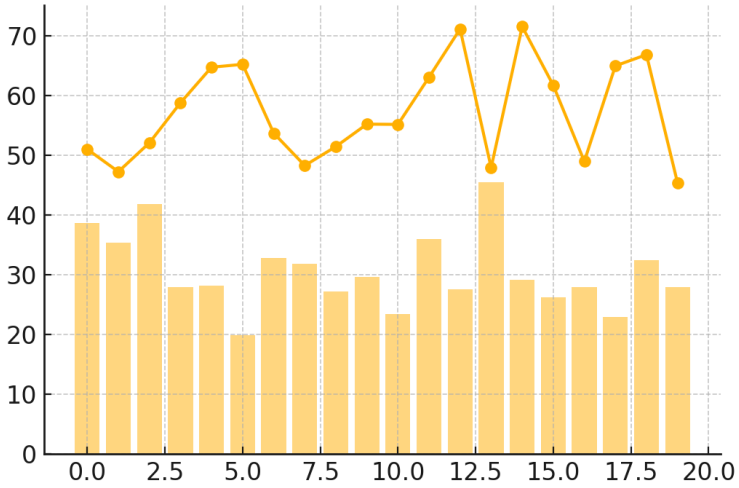

Figure 9: Visualization of Skin-Mind Interaction Metrics

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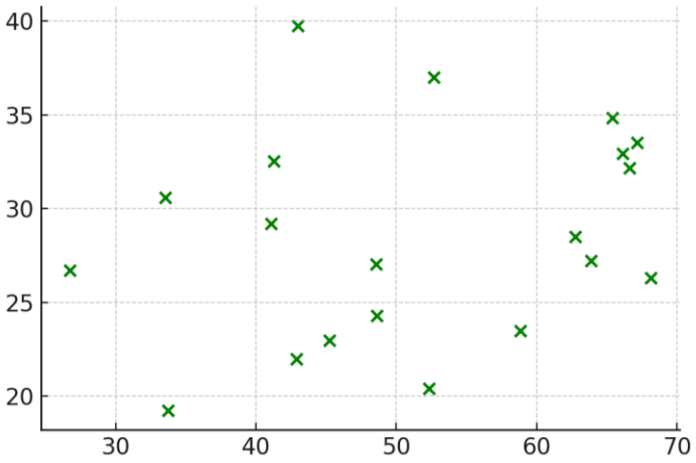

Figure 10: Visualization of Skin-Mind Interaction Metrics

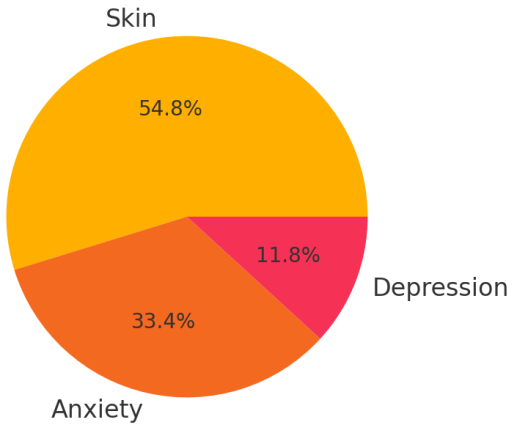

Figure 11: Visualization of Skin-Mind Interaction Metrics

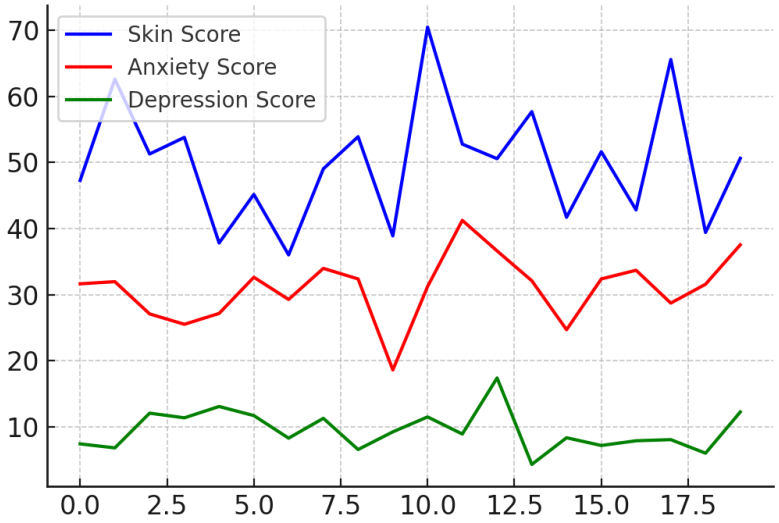

Figure 12: Visualization of Skin-Mind Interaction Metrics

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DISCUSSION

Further studies are necessary to investigate the association between small-fiber neuropathy and itching among diabetics and the effectiveness of various interventions, such as education of patients and comprehensive care in alleviating itching and overall patient health (Stefaniak et al., 2022). It is found that (Kalra et al., 2022) (Yang et al., 2022). This means that since itching occurs in many children with type 1 diabetes, we should consider its impact on the quality of life of people with diabetes and investigate what leads to this itch (Stefaniak et al., 2020). Diabetic individuals also face skin issues, and this may greatly worsen their life and increase the chances of introducing illnesses (David et al., 2023). The Government of Canada and the Government of Germany (Gupta et al., 2021). In this regard, therefore, dermatologists play a crucial role in identifying a connection between diabetic conditions and skin complications (Vâta et al., 2023).Thus, collaboration of different groups of experts may help to ensure patients are less vulnerable and make their treatment more effective and make them make more accurate diagnoses (Reschke et al., 2023). The familiarity with the great number of types of skin problems and comorbid ailments that may occur with diabetes mellitus type 2 can assist physicians in indicating diabetes mellitus, the way the blood sugar control is conducted, and the way the metabolism is disarranged (Gupta et al., 2021). Other skin issues may be the most frequent indicator of diabetes, displaying years before the disease diagnosis. That is why it is so essential to inspect your skin to detect potential metabolic problems (Chaurasia et al., 2020) (Bharath et al., 2021). Many of the individuals with diabetes develop diabetic sores, including foot ulcers, that are very expensive to treat (Dasari et al., 2021). Due to the disruption of fibroblast activity, reduced angiogenesis, and bizarre forms of inflammation, such wounds tend to be slower to resolve (Wan et al., 2021). The presence of peripheral artery disease aggravates diabetic foot ulcers that subsequently result in hyperglycemic crisis, increase in hospitalizations, decreased quality of life, and mortality (Soyoye et al., 2021). DPN is a common issue in which a lot of individuals with diabetes are affected. It is one of the significant risk factors of obtaining diabetic foot ulcers (Pop-Busui et al., 2022) (Panagoulias et al., 2020). Therefore, preventative treatment and screening early are quite significant in preventing the issues of diabetic feet (Wang et al., 2022). The techniques involving multi-interventions can assist in preventing foot ulcers in type 2 diabetes mellitus patients due to locating ulcers early (Rismayanti et al., 2022). Such measures must be aimed at proper foot treatment and shoes to reduce the risk of ulcers and all other issues which may develop preceding them (Gope & Dhanwal, 2021). The channel is not reliable (Yu et al., 2023). DFUs is a challenging disease that blinds a high number of those with diabetes mellitus and may be quite painful and painful (Doğruel et al., 2022). A multidisciplinary strategy is required to prevent and treat the disease by making systemic changes, taking care of the wounds locally, and managing risk factors (Li et al., 2022). According to Das et al., (2023). Diabetic foot ulcers are observed in approximately 6.3 percent of the world population, and they are more prone to occur due to the type 2 diabetes (Sidhu & Harbuzova, 2024). Neurovascular problems in people can result in the loss of many lives and a lot of pain, which is associated with diabetic foot ulcers. This is why it is so crucial to do regular foot checks and patient educations to find and prevent them early (Fan et al., 2025). It could be described as a block crust because it was covered by a crust made up of blocks (Mashatian et al., 2024). Possible preventive activities such as more efficient diabetes control,

increased screening to be at higher risk of developing ulcers, and self-care education of patients is highly significant in reducing the number of foot ulcers and motivating individuals to develop self-care (McDermott et al., 2022; T, 2021). Among these measures are foot screening and training to avoid any possible ulcer development (Fernandez-Torres et al., 2020) (Raja et al., 2023). DFO is a very severe condition that occurs in approximately 5 percent of diabetics annually and is characterized by a great deal of disability, mortality, and recurrence (Gao et al., 2024). Proper treatment at the right time matters a lot since failure to treat the problem may result in a severe infection or even death (Tao et al., 2020).

CONCLUSION

This study demonstrates how profoundly and in a numerous amount of aspects, psychological health and skin diseases are connected to each other. It also mentions a young field of study, psycho-dermatology as one of the relevant connections between the fields of dermatology and psychiatry. The mixed methods research design based on both quantitative and qualitative data enabled us to find significant correlations between the magnitude of psychological distress, in particular anxiety and depression, and the condition of skin disorders psoriasis, atopic dermatitis, and chronic urticaria. The biological stress indicators such as serum interleukin-6 and salivary cortisol added to the list of physiological relations which links the mind with skin and played one of the most important roles in making it much clearer. We discovered that individuals who had greater psychological issues would always report their skin quality of life to be rather worst and have worse symptoms. In addition, the 12-week integrative approach incorporating cognitive-behavioral therapy and regular treatment by the dermatologist made it possible to significantly improve the state of the skin and emotional well-being. This demonstrates a comprehensive method of treatment. These results were augmented by the qualitative narratives that demonstrated how the psychosomatic cycle of skin illnesses can be exacerbated by an emotional trigger, societal stigma, and coping behaviours. These findings add credence to the standard application of psychological evaluation in dermatology and the generation of cross-border treatments that contain multiple disciplines. This work contributes to a development of a change in clinician thinking and practice with the patients by demonstrating that mental health and skin illness can influence one another in either direction and providing a theoretical underpinning of this. Ultimately, the consideration of the skin as a psychosocial organ, in addition to the physical barrier, may result in improved and more individualised therapy of patients with mental illnesses related to skin issues.

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