

Role of Early Maladaptive Schema on Mental Health of Persons with Eczema

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ABSTRACT

Background: Skin conditions are taking on greater significance. When an individual has an inflammatory eczema reaction, the skin and brain communicate with each other through a variety of sensations that might ultimately result in mental health problems. The present study attempted to examine the role of early maladaptive schemas in predicting mental health, in persons with eczema.

Method: In the present study 108 eczema patients were included, using the purposive sample method. To measure the relationship between variables the correlation coefficient was used. Multiple regression analysis was conducted in which early maladaptive schemas was treated as predictor and mental health as the criterion variable.

Result: result of the present study revealed that early maladaptive schemas are significantly positively associated with mental health in persons with eczema. Positive correlation denotes poor mental health as high score on GHQ-28 indicates poor mental health and high score on YSQ-S3 indicates higher maladaptive schemas. The observed positive association suggests that increase in early maladaptive schemas is associated with poor mental health. The findings of the study revealed the relative significance of various maladaptive schemas in predicting mental health.

Conclusion: The findings of the present study revealed the impact of maladaptive schemas on mental health in eczema patients. Maladaptive schemas become defining traits of how people think about themselves and significant others over time. Maladaptive schema and the maladaptive coping mechanisms that patients learn to adopt to deal with them commonly contribute to symptoms including anxiety, depression, drug abuse, and psychosomatic illnesses.

Keywords: Eczema, Mental Health, Early Maladaptive Schemas.

INTRODUCTION

Eczema is widely referred to by the phrase "itch which rashes" because of the dryness in the skin that causes rashes when rubbed.^[1] The barrier function of our skin, which is in charge of retaining moisture and safeguarding the body from external factors, is weakened by this disease.^[2] Eczema is persistent and occasionally flares up. While

it is not transmissible, it can be unpleasant.^[3] The synonymous term for eczema is dermatitis.^[4] The signs and symptoms of eczema can arise on any part of the body and differ greatly across individuals.^[3] One might experience eczema symptoms from the head to the soles of the feet. But, the adult's hands, the insides of their elbows or knees

and the back of their neck are often where the symptoms appear.^[5]

Living with eczema may be extremely difficult on our emotional health, from its red, scaly-like look to the constant itching and restless nights. According to the study conducted by the National Eczema Association (2016), more than 30% of eczema sufferers had anxiety or depression diagnoses.^[6] More studies are being published that highlight the link between mental health problems and dermatological conditions like eczema. Adults with AD are 2.5 to 3 times more likely to experience anxiety or depression, and this risk rises with the severity of the illness (Cheng, Silverberg, 2019; Chiesa Fuxench, Block, Boguniewicz, et al., 2019; Silverberg, Gelfand, Mangolis, et al., 2019; Yu, Silverberg, 2015).^[7-10]

Early maladaptive schemas are wide, self-sustaining, and harmful life concepts that develop as a result of recurrently negative relationship experiences with significant persons during infancy and adolescence (Young, Klosko, & Weishaar, 2003).^[11] Young et al. (2003) defined an early maladaptive schema as a broad, widespread concept or pattern that includes memories, feelings, thoughts, and bodily sensations about oneself and one's relationships with others. The concept or pattern is formed during childhood or adolescence, elaborated across one's lifetime, and is significantly dysfunctional.^[11]

Maladaptive schemas have only recently had a role in how we see dermatological patients. In a pioneering investigation, people who suffered from psoriasis and atopic eczema were evaluated for the existence of maladaptive schemas and their connections to suffering from psychological disorders. Results revealed that early maladaptive schemas (EMS) are related to psychological problems in individuals with psoriasis and atopic dermatitis. The two EMS that predicted psychological distress were vulnerability to harm and defectiveness/shame for anxiety, and vulnerability to harm and social isolation for depression (Mizara, Papadopoulos,

McBride, 2012).^[12] Living with eczema may be quite stressful for our mental health. In a survey by the National Eczema Association (2016), the majority of participants reported that itching was bothering their ability to sleep and that it also caused them to experience stress and anxiety symptoms.^[6] An important study found that Early Maladaptive Schemas (EMS) are related to psychological distress in people with atopic eczema (Mizara, Papadopoulos, & McBride, 2012).^[12] There is a lack of research concerning the presence of maladaptive schemas and their relationship with mental health in skin patients, particularly in the Indian context. So, this present study has been planned to examine the maladaptive schemas and determine their relationship with mental health in eczema patients more precisely.

Objective of the study:

- To determine the relationship between early maladaptive schemas and mental health in persons with eczema.
- To examine the role of early maladaptive schemas as a predictor of mental health in persons with eczema.

Hypothesis of the study:

- There would be an association between early maladaptive schemas and mental health in persons with eczema.
- Certain types of early maladaptive schemas would predict mental health in persons with eczema.

METHODOLOGY

Sample:

The present study was carried out with 108 patients diagnosed with eczema and 112 normal people aged range 18-63 years (mean age=35.89, SD=10.36) by using the purposive sample method.

Research design:

The correlation coefficient was used to measure the relationship between different variables. Multiple regression analysis was used in which early maladaptive schemas

were treated as predictors and mental health as the criterion variable.

MEASURES

The tools utilized in the present study are as follows:

- 1. General Health Questionnaire (GHQ-28):** This scale was developed by Goldberg and Hillier (1979). In the present study Hindi version of GHQ-28 (Singh and Arora, 1998) was used. The GHQ-28 was used to measure mental health. It is a 28 items scale divided into four dimensions: somatic symptoms, anxiety & insomnia, depression and social dysfunction. Each dimension consists of 7 items. The degree to which a subject believes that his or her current condition differs from their usual state is measured by this pure state measure. This is a four-point scale, with each item recorded from 0 to 3 (0=never, 1=some times, 2=often, 3=always). A high score indicated poor mental health, whereas a low score indicated good mental health.^[13]
- 2. Young Schema Questionnaire – Short Version (2005) (YSQ-S3):** Developed by Jeffrey Young in 2005, the YSQ-S3 is a 90-item self-report questionnaire that assesses 18 schemas, viz., emotional deprivation, abandonment, mistrust/abuse, social isolation, defectiveness/shame, dependence, failure to achieve, vulnerability to harm,

enmeshment, entitlement, insufficient self-control, subjugation, self-sacrifice, approval-seeking, emotional inhibition, unrelenting standards, pessimism/negativity, self-punitiveness, each consisting of 5 items. Participants are asked to rate each statement on a 6-point scale (from 1= completely untrue of me to 6= describes me exactly). The mean of the five items in each sub-scale is used to determine the overall score for that sub-scale. Higher scores reflect more maladaptiveness along with the endorsement of the schema.^[14]

Analysis of data

Analyses of the coefficient of correlation were performed to investigate the relationship between predictor (early maladaptive schemas) and criterion variables (mental health) for persons with eczema. Stepwise regression analysis was done to test whether early maladaptive schemas predict mental health, and also to check the partial effect or percentage of variation of predictors on the criterion.

RESULT

To highlight the relationship between early maladaptive schemas and mental health in persons with eczema, correlational analysis was performed. The results of the correlational analysis are displayed in table 1.

Table 1: Summary of the correlational analysis between various schemas and dimensions of mental health in persons with eczema (N=108).

Maladaptive Schemas	Dimensions of mental health				
	Somatic symptoms	Anxiety/Insomnia	Social dysfunction	Severe depression	Total GHQ-28
Emotional deprivation	.545**	.682**	.679**	.683**	.717**
Abandonment	.584**	.754**	.711**	.725**	.771**
Mistrust/Abuse	.567**	.646**	.673**	.692**	.713**
Social isolation	.578**	.669**	.746**	.697**	.741**
Defectiveness/Shame	.562**	.711**	.725**	.680**	.740**
Failure to achieve	.402**	.518**	.571**	.551**	.563**
Dependence/Incompetence	.492**	.614**	.663**	.631**	.662**
Vulnerability to harm	.586**	.679**	.619**	.661**	.708**
Enmeshment	.435**	.609**	.544**	.536**	.591**
Entitlement	.557**	.617**	.630**	.602**	.664**
Insufficient self-control	.253**	.255**	.266**	.263**	.286**

Subjugation	.495**	.589**	.703**	.617**	.659**
Self-sacrifice	.485**	.516**	.533**	.565**	.581**
Approval seeking	.388**	.465**	.414**	.483**	.488**
Emotional inhibition	.397**	.484**	.528**	.516**	.531**
Unrelenting standards	.494**	.535**	.584**	.510**	.584**
Pessimism/Negativity	.497**	.632**	.652**	.628**	.666**
Self-punitiveness	.495**	.697**	.550**	.612**	.660**
Total YSQ-S3	.592**	.721**	.734**	.722**	.766**

*p<.05, **p<.01

(Note: Positive correlation denotes poor mental health as high score on GHQ-28 indicates poor mental health and high score on YSQ-S3 indicates higher maladaptive schemas.)

It is evident from the table 1 that early maladaptive schemas are significantly and positively correlated with domains of mental health.

To identify the relative contribution of the various schemas in predicting mental health,

a series of stepwise multiple regression analyses were conducted using various schemas as predictor and dimensions of mental health as criterion. The obtained findings have been summarized in Table 2.

Table 2: Summary of stepwise multiple regression analysis using maladaptive schemas as predictor and dimensions of mental health as criterion.

Predictors	R	R ²	R ² Change	F Change	Sig. of F Change	Beta	t-value
Somatic symptoms (criterion)							
Vulnerability to harm	.586	.344	.344	55.468	.000	.497	3.52**
Self-punitiveness	.619	.383	.040	6.743	.011	.203	2.23*
Failure to achieve	.672	.452	.041	7.684	.007	-.481	3.45**
Defectiveness/shame	.690	.476	.024	4.612	.034	.320	2.14*
Anxiety/insomnia (criterion)							
Abandonment	.754	.569	.569	139.963	.000	.631	6.79**
Self-punitiveness	.798	.637	.068	19.697	.000	.371	4.74**
Approval-seeking	.808	.653	.015	4.636	.034	-.176	2.15*
Social dysfunction (criterion)							
Social isolation	.746	.556	.556	132.792	.000	.536	5.60**
Pessimism/negativity	.766	.586	.030	7.625	.007	.367	4.00**
Approval-seeking	.801	.641	.029	8.436	.005	-.242	2.90**
Severe depression (criterion)							
Abandonment	.725	.526	.526	117.444	.000	.483	5.77**
Self-punitiveness	.788	.621	.020	5.355	.023	.189	2.31*
Mental health (composite score) (criterion variable)							
Abandonment	.771	.594	.594	155.009	.000	.632	6.96**
Self-punitiveness	.817	.667	.029	9.212	.003	.250	3.30**
Approval-seeking	.825	.681	.014	4.403	.038	-.166	2.09*

*p<.05, **p<.01; Higher scores on GHQ-28 denote poor mental health

It is evident from the table 2 that vulnerability to harm emerged as the best predictor of somatic symptom which is contributing 34.4% in the total variance (R² change = .344) whereas the contribution of the other remaining predictors are as follows: self-punitiveness 4.0% (R² change = .040), failure to achieve 4.1% (R² change = .041), defectiveness/shame 2.4% (R² change = .024).

Results further reveal that abandonment emerged as the best predictor of anxiety/insomnia which is contributing 56.9% in the total variance (R² change = .569) whereas the contribution of the other remaining predictors are as follows: self-punitiveness 6.8% (R² change = .068), approval seeking 1.5% (R² change = .015). Results further point out that social isolation emerged as the best predictor of social dysfunction in persons with eczema which is

contributing 55.6% in the total variance (R^2 change = .556) followed by pessimism/negativity, and approval seeking which contributed 3.0%, and 2.9% respectively (R^2 change = .030, R^2 change = .029 respectively).

Regarding severe depression it has been found that abandonment is the best predictor of depression which contributed 52.6% in total variance (R^2 change = 0.526) followed by self-punitiveness 2.0% (R^2 change = .020).

Further, in relation to overall mental health issues it has been found that abandonment emerged as the best predictor of overall mental health issues in persons with eczema which is contributing 59.4% in the total variance (R^2 change = .594) followed by self-punitiveness and approval seeking which contributed 2.9% and 1.4% respectively (R^2 change = .029, R^2 change = .014, respectively).

DISCUSSION

Eczema is mostly linked to anxiety and depression. Patients with chronic skin conditions have emotional disturbances such as depression, anxiety, poor self-esteem, social disengagement, and low well-being.^[15] Even though there are number of studies that evaluate various factors in eczema patients from across the world, there are very few and low numbers of studies in India that focus on mental health. In addition, early maladaptive schema as a new variable has been less studied in persons with eczema. Thus, the present study was undertaken to explore the role of early maladaptive schemas in predicting mental health. The findings of the correlation analyses reveal that maladaptive schemas were positively correlated with mental health problems in persons with eczema. It was found that all the maladaptive schemas as well as composite indicators of maladaptive schemas are significantly positively associated with various indicators of mental health problems. The findings of the present study corroborated with previous studies (Mizara, 2007; Mizara et al., 2012; Kalaki, 2014).^[16]

^{12, 17]} Chronic Axis I symptoms including anxiety, depression, drug abuse, and psychosomatic diseases are frequently caused by early maladaptive schema and the maladaptive methods that patients learn to deal with them (Young et al., 2003).^[11] The fundamental beliefs affect psychological symptoms and may be important to understanding and treating the psychological effects of skin disease (Mizara, 2007).^[16] The findings of stepwise regression analysis showed that various types of schemas and stress had varied roles in predicting mental health issues. According to the findings of the correlation study, even if all of the schemas are less or more significant in predicting mental health issues, some schemas are comparatively more important than others in this prediction. This also implies that while the existence of all maladaptive schemas may predispose an individual to mental health issues, the vulnerability to such problems is increased in the presence of abandonment, self-punishment, and approval-seeking. Previous studies (Pinto-Gouveia et al., 2006; Mizara, 2007; Mizara et al., 2012; Kalaki, 2014; Schmidt et al., 1995; Hoffart, Sexton, Hedley et al. 2005, Renner et al., 2012)^[18, 16, 12, 17, 19-21] have also supported the differential role of different types of maladaptive schemas in predicting mental health problems.

The findings of the present study suggest that important components of the schematic structure related to mental health issues are the perception of one's situation as threatening and out of one's capability to cope with it, the expectation that one deserves negative consequences for their imperfections, the expectation that important others will be lost or leave one emotionally or physically, and the belief that one's worth or significance depends on positive attention from others. Differences between a person's perceived skin and ideal skin results in feelings of anxiety, hopelessness, worthlessness, and helplessness, as well as make the patient more susceptible to periods of depression and/or anxiety disorder than to developing a

strong sense of self (Mizara, 2007).^[16]

CONCLUSION

The finding of this study provides evidence that early maladaptive schemas are significantly associated with mental health issues in persons with eczema. Result obtained from the stepwise multiple regression analysis for various maladaptive schemas as a predictor variable and mental health as a criterion variable indicates that abandonment was emerged as the best predictor of mental health issues followed by self-punitiveness and approval-seeking. These findings suggest that eczema patients perceive their circumstances as dangerous and beyond their capacity to handle them, and they expect that important others will lose interest in them or mentally or physically leave them and they deserve negative consequences because of their imperfections. They also think that their value or significance depends on receiving positive attention from others. All these thoughts make them vulnerable to mental health problems. This pattern of the observed impact would suggest that psycho-educational strategies for eczema patients, their family members, and medical professionals may be useful to promote prevention, early diagnosis and proper intervention of mental health problems.

Declaration by Authors

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