Advances in Social Sciences Research Journal – Vol. 12, No. 12
Publication Date: December 16, 2025
DOI:10.14738/assrj.1212.19478.
Weissler, K., Zelevich, O., & Kreitler, S. (2025). Psychological and Psychiatric Correlates of Herpes Labialis. *Advances in Social Sciences Research Journal*, *12(12).* 149-161.

Psychological and Psychiatric Correlates of Herpes Labialis

Dr. Kinneret Weissler
Department of Communication Disorders
Achva Academic College

Dr. Orly Zelevich
Department of Nursing,
Lev Academic Center, Jerusalem

Professor Shulamith Kreitler
School of Psychological Sciences
Tel-Aviv University, Ramat-Aviv, Tel-Aviv

ABSTRACT

Herpes labialis (HL) has been studied very little from a psychological point of view despite its interest as a relatively nonsevere affliction and a cognate disorder to herpes genitalis, that has been studied extensively. The purpose was to study the psychological correlates of HL in several domains so as to establish whether there is a psychological profile characteristic for HL. The subjects were 89 HL patients recruited from three outpatient clinics and 92 controls matched in demographic characteristics to the HL patients. The subjects were administered instruments assessing personality dimensions (the Eysenck Personality Inventory), emotional tendencies (the Profile of Mood States and the Schalling-Sifneos scale of alexithymia) and psychiatric features (the Brief Symptom Inventory by Derogatis). The results showed that HL patients differed from controls in scoring significantly lower on anxiety and psychoticism (each according to two instruments), obsessive-compulsive tendencies, interpersonal sensitivity (inferiority) and alexithymia and in scoring higher on defensiveness, and the emotions of anger, vigor and interest. A discriminant analysis with the psychiatric scales as predictors enabled correct identification of 73% ($p < .001$) of the subjects. The conclusions are that there is a psychological profile chracteristic of HL, that it differs from that identified for herpes genitalis and that it is characterised by better mental health features than in the controls.

Keywords: Herpes labialis, alexithymia, anxiety, psychoticism, emotions.

PSYCHOLOGICAL AND PSYCHIATRIC CORRELATES OF HERPES LABIALIS

The recent interest in studying the role of psychological factors in regard to different dermatologic afflictions has skipped herpes labialis (HL) almost completely. A computer search of the literature has yielded only very few studies dealing specifically with HL. Luborsky et al.[1] found that first year nursing students with HL judged themselves as typically unhappy and had more illnesses and psychological complaints than students with no HL although there were no specific moods preceding outbreaks of HL. Schmidt et al[2] found that outbreaks of HL tended to be preceded (a week earlier) by increased daily hassles, more stressful life events and higher state anxiety but were unrelated to changes in social support, coping ability and type A scores.

Libikova et al[3] found the presence of antibodies against herpes simplex Type I virus in persons with psychic disturbances especially schizoid and senile dementias and in a criminal population, especially with low IQ. Of particular interest are studies linking psychological factors to antibody levels of the herpes simplex Type I. Thus, Halonen et al[4] found more k-values of the simplex Type I herpes virus in psychiatric patients. In one of the best known studies in this field Glaser et al[5] found that exam stress and loneliness decreased the antibody levels of the herpes virus Type I and thus increased the likelihood of a herpes outbreak.

The dearth of material about the psychological aspects of the herpes virus Type I is particularly striking in view of the wealth of material about the herpes genitalis virus, which has been studied in relation to personality[6-10], emotional factors[11-13], psychiatric aspects[14] and dysfunction[9], social support[9,10,15], progressive muscle relaxation[16], life events[10], and loneliness[5,13]. It is likely that herpes genitalis has evoked a great interest because of its medical implications and the psychological stress it involves[17,18]. However, it is precisely these factors that might affect and thus both blur and bias findings about the relation of the skin disorder per se to psychological correlates. Herpes simplex Type I which mostly does not involve intense physical distress or serious consequences provides a much better model for studying the psychological correlates of the dermatological disorder.

Thus, the major purpose of the study was to examine the psychological correlates of HL. We expected the study to provide information about HL which would also enable to assess whether it tends to differ psychologically from herpes genitalis.

The domains examined in this study were personality traits, emotional tendencies and psychiatric characteristics. These domains represent major aspects of psychological correlates and hence may provide an overall view of the psychological characteristics of HL.

In addition, our selection of variables was also guided by existing information about herpes genitalis. We examined the basic personality dimensions assessed by Eysenck's Personality Inventory: extraversion, neuroticism, psychoticism and social desirability or the Lie score. Notably, these personality dimensions were not identified as risk factors for the duration to first recurrence of herpes genitalis[7.] Further, we examined various emotional tendencies because depression, guilt, anger, and anxiety were found to characterize herpes genitalis patients[12,14,17,18,19,20]. Depression occurred prior to the outbreak of herpes genitalis[21] and an increase in state anxiety was observed to precede an outbreak of HL[2]. The relevance of psychiatric tendencies is clarified by findings showing that herpes genitalis patients scored higher than controls on the Brief Symptom Inventory scales of somatization and interpersonal sensitivity[14], had lower self esteem[12] and had more psychiatric complaints[7]. Individuals with frequent rerurrences of genital herpes had stronger psychopathological tendencies as assessed by the MMPI scales of psychopathy, paranoia, psychastenia and schizphrenia[6]. Also, antibodies to the herpes genitalis virus were more frequent in patients with psychotic depression[22] and schizophrenia[23] (the latter was not confirmed in other studies concerning psychotics[24] and schizophrenics[25]). It may be recalled that a higher frequency of antibodies against herpes simplex Type 1 virus was found among persons with psychic disturbances and a criminal population[3]. Finally, alexithymia was included because it is related to tendencies for somatization and poverty of emotional responses[26,27].

Due to the difference in physiological structure and functioning of herpes viruses Type I and Type II, we expected the psychological characteristics of HL to differ at least to some extent from those reported in the literature for herpes genitalis. Further, due to the observations that several dermatological syndromes are associated with psychiatric or psychological factors[25,28], we expected that HL would be characterized by specific psychological features as compared with individuals without HL.

METHOD

Subjects. The subjects were 89 individuals with herpes simplex Type I HL and 92 subjects with no HL. Table 1 presents demographic information about both groups as well as medical information about the HL group.

Table 1: Demographic and medical information about the samples of subjects with and without herpes labialis

Demographic Variables						
The Variable	**Whole Sample**		**With Herpes**		**Without Herpes**	
	Frequency	**%**	**Frequency**	**%**	**Frequency**	**%**
Groups	181	100.00	89	49.17	92	50.83
Gender						
Men	77	42.54	37	41.57	40	43.48
Women	104	57.46	52	58.43	52	56.52
Total	181	100.00	89	100.00	92	100.00
Country of birth						
Israel	130	71.82	63	70.79	67	72.83
East Europe	17	9.39	6	6.64	11	11.96
West Europe	16	8.84	8	8.99	8	8.69
Middle East	9	4.97	7	7.86	2	2.17
North Africa	9	4.97	5	5.62	4	4.35
Total	181	100.00	89	100.00	92	100.00
Profession						
Minimal skills	19	10.50	12	13.48	7	7.61
Medium skills	75	41.44	36	40.45	39	42.39
High skills	30	16.57	16	17.98	14	15.22
None so far	57	31.49	25	28.09	32	34.78
Total	181	100.00	89	100.00	92	100.00
Marital status						
Unmarried	61	33.7	32	35.95	29	31.52
Married	82	45.3	37	41.57	45	48.91
Divorced	33	18.23	15	16.85	18	19.56
Widowed	5	2.76	5	5.62		
Total	181	100	89	100.00	92	100.00
The Variable	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Age	28.49	11.15	29.44	12.19	27.55	10.11
Immig. to Israel	16.79	15.44	15.54	16.08	18.04	14.79
Years of educ.	12.82	2.94	12.45	2.02	13.18	3.85
Medical Variables						
The Variables			**With Herpes**			

			Frequency	%		
Treatments						
Viru-merz			12	13.48		
Zovirax (Tb)			16	17.98		
Zovirax (Oin)			37	41.57		
Zovirax (Tab+Oin)			12	13.48		
Virusan			2	2.25		
No treatment			10	11.32		
Total			89	100.00		
Severity of HL						
High severity			44	49.44		
Low severity			45	50.56		
Total			89	100.00		
State at present						
Active			26	29.21		
Not active			63	70.79		
Total			89	100.00		
Resp. to treat.						
Fast			49	55.06		
Slow			31	34.83		
No information			9	10.11		
Total			89	100.00		
The Variable			**Mean**	**SD**		
Duration of HL			11.22	5.7		

Instruments

Each subject was administered the following 5 questionnaires:

(a) The Eysenck Personality Inventory[29], which is a self-report tool based on statements to which the subject responds as True or False. It provides scores on e, neuroticism, psychoticism and the Lie scale often construed as assessing defensiveness.

(b) The Profile of Mood States (POMS)[30], which requests the subject to check on a 5-point scale (0=Not at all, 4=Extremely) the degree to which he or she experience each of a list of emotions. It provides scores of tension-anxiety, depression-dejection, anger-hostility, vigor-activity, fatigue-inertia, and confusion-bewilderment.

(c) The Positive Emotions Check List (PECL)[31], which assesses in a format similar to that of the POMS, four positive emotions: love-affection, joy-happiness, interst-curiosity and contentment-satisfaction. Together the POMS and the PECL provide 5 scores of negative emotions (all those in the POMS except vogor-activity) and 5 scores of positive emotions (i.e., all those in the PECL and vigor-activity of the POMS).

(d) The Brief Symptom Inventory (BSI)[32], which assesses psychopathology in both psychiatric and medical outpatients, is a shortened form of the SCL-90[33]. It includes 53 items to which the subject responds by rating each on a 5-point scale of distress (0=not at all, 4=extrememly). It provides scores on the following 9 primary symptom dimensions: somatization, obsessive-compulsive, interpersonal sensitivity (inferiority), depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism (alienation). In addition, it yields 3 global indices of pathology: global severity index (combines information on the number of symptoms and intensity of distress), positive

symptom distres index (presents only the intensity of distress) and positive symptom total (pressents only the number of symptoms).

(e) The Schalling-Sifneos Personality Scale[34], which is the commonest tool for assessing alexithymia (i.e., dearth of overt emotional expressions and tendency for somatization). This self-report questionnaire includes 20 statements to which the subject responds on a 4-point scale ranging from 'not at all true' to 'very true'. It yields one score.

Procedure

The subjects with HL were recruited in 3 outpatient clinics and the HL diagnosis was established on the basis of clinical examination by a dermatologist supplemented by laboratory tests in cases of doubt. The rate of rejection was lower than 2%. All returned questionnaires were filled completely. The control subjects were recruited from highschool or college students and workers, who were asked to participate in a study on dermatological phenomena. Refusal rate was lower than 2%. A dermatologist verified by clinical examination and anamnestic inquiry that the individual did not have HL at present or ever in the past. All 5 questionnaires were administered together, in random order.

RESULTS

Control Analyses

Control analyses showed that the HL and control groups did not differ significantly in any of the demographic variables (Table 1). Hence, any differences that would be found between the groups in any of the examined psychological variables could not be attributed to differences in the demographic characteristics. Further, no differences on the psychological variables were found in the HL group among patients from the 3 clinics, so that all three subsamples could be combined.

Psychiatric Characteristics

Table 2 presents mean comparisons between the groups in the psychopathological variables. It shows that the subjects with HL scored significantly lower than those without HL on the scales of obsessive-compulsive, interpersonal sensitivity, anxiety and psychoticism, as well as on the summative indices of the positive symptom total and global severity. There was a tendency for HL subjects to score lower also on depression, but the finding was only of borderline significance. The number of scales that yielded significant differences between the groups deviates significantly from the 5% expected by chance (CR = 2.47, $p < .05$). Further, by the Bonferroni[35] criteria, when 12 comparisons are done the significance level corresponding to the .05 level is p=.05/12=.00416, namely $p < .01$. The findings concerning the scales of obsessive-compulsive, anxiety, psychoticism and the global severity index pass the Bonferroni criteria, whereas the findings concerning interpersonal sensitivity, and the positive symptom total have to be interpreted with some caution.

Table 2: Means, SDs and mean t-tests of psychiatric, personality and emotional variables in the groups with and without herpes

The Variables	With Herpes		Without Herpes		
	Mean	SD	Mean	SD	t
BSI: Somatization	10.85	4.08	10.92	4.08	0.11
BSI: Obsessive-compulsive	11.53	4.11	8.28	2.83	3.49***
BSI: Interpers. sensitivity	7.34	3.19	8.28	2.83	2.10*

BSI: Anxiety	10.65	3.36	13.08	4.10	1.82
BSI: Anxiety	10.65	3.36	12.42	4.35	3.02**
BSI: Hostility	8.55	2.93	8.26	2.89	0.67
BSI: Phobic anxiety	5.22	1.48	5.24	1.73	0.06
BSI: Paranoid ideation	8.37	3.25	8.20	2.89	0.46
BSI: Psychoticism	7.34	2.85	8.76	3.29	3.04**
BSI: Pos. symp. distress index	1.76	0.59	1.84	0.50	0.89
BSI: Positive symptom total	0.43	0.21	0.50	0.20	2.24*
BSI: Global severity index	22.06	9.73	26.45	10.67	2.89**
EPQ: Extraversion	12.91	4.85	11.25	4.30	0.36
EPQ: Neuroticism	10.85	5.13	11.25	5.10	0.54
EPQ: Psychoticism	12.82	3.27	13.74	2.78	2.03*
EPQ: Lie scale	16.38	5.48	13.96	5.30	3.02**
Alexithymia	53.11	6.81	55.69	7.80	2.37*
POMS: Tension-anxiety	21.05	5.84	22.89	6.35	2.02*
POMS: Depression-dejection	30.84	11.51	31.04	10.94	1.67
POMS: Anger-hostility	29.58	7.06	27.82	10.94	1.67
POMS: Vigor-activity	27.35	5.02	25.88	4.93	1.98*
POMS: Exhaustion-apathy	14.96	5.94	14.86	5.38	0.14
POMS: Confusion-bewilderment	17.79	5.39	17.22	4.90	0.74
PECL: Love-affection	27.14	4.67	26.80	4.79	0.47
PECL: Interest-curiosity	28.17	5.59	26.48	5.34	2.08*
PECL: Joy-happiness	30.17	4.01	29.31	4.87	1.29
PECL: Contentment-satisfac.	25.00	4.95	24.59	5.13	0.55

* p < .05 ** p < .01 *** p < .001

Further, we compared the psychiatric tendencies within the herpes group between those with herpes in an active state and those with herpes in a nonactive state at the time the study was conducted. Table 3 shows that when herpes was in an active state, the obsessive-compulsive tendencies of the subjects were lower than when herpes was in a nonactive state. Again, in subjects whose herpes was assessed as of high severity psychoticism was lower than in those whose herpes was of light severity. Thus, the state of the disorder and its severity enhanced the tendencies noted for HL subjects in comparison with controls.

Table 3: t- Test for Significant differences in psychiatric, personality and emotional variables between subsamples of subjects with herpes: State at present (active vs inactive), and severity of herpes (high vs low)

	Subsamples of Subjects with Herpes				
The Variabels	**Herpes: Active (n=26)**		**Herpes: Inactive (n=63)**		
	Mean	**SD**	**Mean**	**SD**	**t**
BSI: Obsess.-compuls.	9.57	3.23	12.34	4.24	3.34**
POMS: Tension-anxiety	17.65	5.92	22.46	5.79	3.51**
PECL: Interest-curios.	32.16	5.62	26.52	5.92	4.24***
	Herpes: Severe (n=44)		**Herpes: Light (n=45)**		
	Mean	**SD**	**Mean**	**SD**	**t**
BSI: Psychoticism	6.25	2.18	8.40	3.17	3.75**

** p < .01 *** p < .001

In order to analyze the psychiatric tendencies of HL subjects in greater detail a stepwise discriminant function analysis was done with the nine BSI scales as predictors and the groups of HL and non HL subjects as dependent variable. Table 4 shows that the BSI scales enabled a correct classification of the subjects in 72.93% of the cases, which deviates significantly from the 50% expected by chance (CR = 4.487, $p < .001$). Notably, identifying the cases of the HL group was slightly better than identifying the cases of the non HL group (23.6% error vs 30.4% error, respectively). The major predictors, in descending order, were (according to the standardized canonical discriminant function coefficients), interpersonal sensitivity, psychoticism, obsessive-compulsive and anxiety. However, the analysis showed that phobic anxiety, somatization and depression also played a role in differentiating between the two groups, with the herpes patients scoring lower on these scales than the controls.

Table 4: Stepwise discriminant function analysis with the BSI scales as predictors and the two groups - with and without herpes - as dependent variable

Summery Table	**Eigen value**	**Canonical Corr.**	**Wilks' Lambde**	**% Correct Classif.: Herpes**	**% Correct Classif.: Non-Herpes**	**% Correct Classif.**	**Chi-square**	**p**
	0.26	0.46	**0.79*** **	72.40	69.60	72.93	4.49	<.001
Stepwise	**Disc.Func. Coeffi.**							
Inter. sens.	-1.045							
Psychoticism	1.035							
Obs.-comp.	0.731							
Anxiety	0.574							
Phobic anxiety	-0.476							
Somatization	-0.474							
Depression	-0.324							

Further analyses revealed that the rank order of the scores of the BSI scales in the two groups was similar (the Spearman rank correlation coefficient was $r_s = .83$, $p < .01$), but the structure and interrelations of the scales, as revealed by factor analyses, differed in the two groups. Table 5 shows that in the HL group the scales defined two factors, the first and major one saturated mainly by the more 'emotional' scales (interpersonal sensitivity, anxiety and phobic anxiety), the secondary one by the more 'symptomatic' scales (obsessive-compulsive, paranoid ideation and psychoticism). In contrast, in the non HL group almost all acales (8 f the 9) were saturated highly on one and the same factor, which suggests less differentiation among the scores in the control group.

Table 5: factor analysis of the BSI scales

Group with Herpes			**Group without Herpes**	
BSI Scales	**Factor I**	**Factor II**	**BSI Scales**	**Factor I**
Interpers. Sensitivity	**0.844**	0.064	Anxiety	**0.859**
Anxiety	**0.702**	0.425	Psychoticism	**0.849**
Phobic anxiety	**0.637**	0.051	Depression	**0.822**
Depression	**0.530**	0.386	Obsessive-compulsive	**0.782**

Hostility	**0.471**	0.413	Paranoid ideation	**0.758**
Somatization	0.076	**0.806**	Interpers. sensitivity	**0.715**
Psychoticism	0.429	**0.656**	Somatization	**0.694**
Paranoid ideation	0.404	**0.619**	Phobic anxiety	**0.649**
Obsessive-compulsive	0.428	**0.617**	Hostility	**0.596**
Eigenvalue	4.457	0.656	**Eigenvalue**	5.092
% of variance	49.5	7.4	**% of variance**	56.6

Note: The factors were rotated according to the varimax procedure. The presented saturations are after Kaiser Normalization.

Personality Characteristics

Table 2 presents mean comparisons between the groups in the personality variables of alexithymia and the EPQ (extraversion, neuroticism, psychoticism, and the Lie scale). It shows that the subjects with HL scored significantly lower than those without HL on alexithymia, which indicates that as compared with the controls they tend to express emotions more overtly and freelyd, they have a more intense and richer internal fantasy life, and they tend less toward psychosomatic disorders.

Further, there were significant differences between the groups in two of the four EPQ scales. HL subjects scored significantly lower than the non HL subjects on psychoticism (as assessed by the EPQ), but higher on defensiveness (the Lie scale). The latter finding passes the Bonferroni criterion which for 4 comparisons is p=.05/4=.0125, namely, p < .02 for the .05 level. However, the discriminant function analysis for the EPQ variables did not yield significant results (the correct classification rate was 56.91% which is only 6.9% better than chance, CR = 1.319, ns). Further, none of the assessed personality variables varied significantly in line with the state of the disorder (active vs nonactive) or its severity (high vs low).

Emotional Characteristics.

Table 2 presents mean comparisons between the groups in negative and positive emotional tendencies.It shows that the subjects with HL scored significantly lower than those without HL on tension-anxiety, but higher on anger-hostility, vigor-activity and interest-curiosity. It is noteworthy that the only single item of the POMS or the PECL on which the groups differed significantly was the item concerning "readiness to fight" (in the sense of 'resist', 'withstand', 'struggle', 'make combat') which is subsumed under the anger-hostility scale.

Two of the scales on which the groups differed yielded significant results also within the HL group in line with the state of the disorder (Table 3). Thus, subjects with HL in an active state scored lower on tension-anxiety and higher on interest-curiosity than subjects with HL in a nonactive state when the study was conducted. Notably, the scores for HL patients with nonactive herpes for tension-anxiety and for interest-curiosity were almsot identical to the scores of the control subjects (TAble 2). Thus, again, as in the case of the psychiatric tendencies, the active state of the herpes enhanced the tendencies noted for subjects with HL.

A stepwise discriminant function analysis with the emotional scales of the POMS and the PECL as predictors and the two groups (HL vs non HL) as dependent variable (Table 6) showed that the emotional scales enabled a correct classification of the subjects in 70.16% of the cases, which deviates significantly from the 50% expected by chance (CR = 3.917, p < .001).

Identifying the cases of the HL group was slightly better than identifying the cases of the non HL group (26.97% error vs 32.61% error, respectively). The major predictors, in descending order, were (according to the standardized canonical discriminant function coefficients), vigor, anger, interest, and anxiety. Predictors playing a lesser role included depression, joy and love, whereby the HL group tended to score lower n depression and higher on joy and love than the controls.

Table 6: Stepwise discriminant function analysis with the POMS and PECL scales as predictors and the two groups - with and without herpes - as dependent variable

Table Summery	**Eigenvalue**	**Canon. Corr.**	**'Wilks Lambde**	**% Correct Classif.: Herpes**	**% Correct Classif.: Non-Herpes**	**% Correct Classif.**	**Chi-square**	**p**
	1.354	0.578	**0.862*** **	73.03	67.39	70.16	3.917	<.001
Stepwise	**Disc. Func. Coef.**							
Vigor-activity	1.544							
Anger-hostility	0.988							
Tension-anxiety	0.732							
Interest-curios.	0.632							
Depress.-dejection	0.581							
Joy-happiness	0.439							
Love-affection	0.297							

DISCUSSION

The study showed that HL patients differ from healthy controls in a number of psychological characteristics. As compared to controls, HL patients tend to have lower tendencies for obsession-compulsion, lower sense of inferiority, lower anxiety, lower psychoticism, lower degree of psychopathology--as reflected both in a low frequency of symptoms and their severity--lower alexithymia, and higher tendencies for defensivess, vigor-activity, anger-hostility and interes-curiosity. The findings delineate a type of person who is mentally healthy above the average, has a good sense of his or her own worth, has a firm grasp of reality (viz. low psychoticism), low obsessiveness, low anxiety, and there is also some evidence for only low tendencies toward phobia, somatization, and depression. In addition, the HL type is characterized by a rich emotional and internal life (low alexithymia), a sense of vigor and energy, interest and curiosity, and overt expression of anger (which includes also resistance to unacceptable states and readiness to fight for what one considers one's due). The finding about high defensiveness (in the sense of warding off psychologically unpleasant experiences or thoughts) may seem surprising but actually should not be when we recall that the combination of high defensiveness and low anxiety--as in the case of HL patients--define repressiveness[36], which was shown to be related to good physical and mental health[37,38].

It appears that the major characteristics of the HL type fall into two major clusters--the psychopathological and emotional--which in the HL type are more differentiated than in the controls (see the results of the factor analyses). It may be noted that also differentiation has been noted as a hallmark of the more mature and healthy type of individual[39].

The first conclusion suggested by these findings is that there is a characteristic psychological type corresponding to HL. The validity of the findings is enhanced by the fact that some of the results were obtained by two independent measures (e.g., low psychoticism, low anxiety and depression). Further, the type does not consist merely of a conglomerate of disparate traits but appears to be a coherent structure of features complementing each other. The special affinity between HL and the obtained characteristics is underscored by the finding that some of the tendencies were enhanced by the state and severity of HL.

A second conclusion is that the psychological correlates of HL differ from those identified so far for herpes genitalis. For example, whereas patients with herpes genitalis do not differ from controls on any of the personality dimensions assessed by the EPQ[7] and score high on anxiety[9], we found that HL patients differ from controls in the EPQ dimensions of psychoticism and defensiveness and score low on anxiety.

Finally, the third conclusion which might be of greatest general interest is that the specific psychological correlates of HL indicate a basically healthy personality type. The findings indicate not only a low global index of psychopathology but also weak tendencies for specific psychiatric symptoms (such as, obsession-compulsion, anxiety and sense of inferiority) and strong tendencies for specific processes or structures conducive to improved health (such as, repressiveness and differentiation between symptomatic and emotional tendencies). The latter tendencies require some explication.

As noted above, the tendency for repressiveness is the specific combination of high defensiveness and low anxiety, namely, the successful application of defensiveness for mastering anxiety. There is direct evidence that repressiveness defined in this way is correlated with fewer somatic complaints in different domains and a stronger psychological motivation for maintaining physical health as well as recovering it when impaired[40,41,42]. It is probably related to maintaining positive illusions about one's invulnerability[43] and to the kind of denial that helps overcoming the initial phases of difficult periods[44]. Indeed, repressiveness has been found by some to be related to tendencies for cancer, especially breast cancer and melanoma[45,46]. However, in these cases too there is evidence that repressiveness is a means of coping that increases specifically after getting the diagnosis of malignancy[47]. Moreover, a body of data shows that repressiveness is not a global generalized tendency but is specifically applied against negative aspects in oneself and negative emotions such as anxiety and depression, rather than against emotions in general[37]. Indeed, the HL type is low on alexithymia and scores high on a whole set of emotions, including anger and to some extent also joy and love.

Also, the differentiation between the symptomatic and emotional domains noted in HL patients may have some bearing on physical health. The differentiation may indicate a tendency to keep emotions--especially anxiety and depression--from affecting in an uncontrolled manner other domains, especially the behavioral and somatic ones, thus curbing both acting out and somatization. By keeping emotional issues from being transferred into the domain of physical health, eliciting or exacerbating physical disorders, the differentiation may be another means for maintaining health.

The conclusion that individuals with HL have psychological tendencies suggesting better psychological health is inconsistent with findings about the psychological correlates of physical

disorders[48,49] which have enhanced common expectations that impaired physical health is reflected in impaired mental health. A closer examination of these expectations suggests that they might reflect to some extent also stereotypes about harmonic relations between mind and body that may not necessarily be true or true in every casse. To the best of our knowledge, the image of better mental health as correlate to a physical disorder that we found in the case of HL is the first case of its kind. The reason may be bound to a yet unknown aspect of HL itself or to the fact that HL is usually a nonthreatening disease related to stress and anxiety less than most studied physical disorders,so that the psychological findings are not contaminated by adverse psychological reactions to the affliction, as is often the case in regard to findings in health psychology. Be it as it may, the finding is of interest not only in regard to HL but also because it underscores the need to extend the search for psychological correlates of physical disorders in general to cover the whole gamut of psychological, psychiatric and social determinants.

References

1. Luborsky, L., Minz, J., Brightman, V. J. & Katcher, A. H. (1976). Herpes simplex virus and moods: A longitudinal study. Journal of Psychosomatic Research, 20, 543-548.
2. Schmidt, D. L. et al. (1985). Stress as a precipitating factor in subjects with recurrent herpes labialis. Journal of Family Practice, 20, 359-366.
3. Libikova, H., Pogady, J., Wiederman, V., & Breier, S. (1976). Presence of antibodies against herpes simplex Type 1 virus in persons with psychic disturbances and among a criminal population. Ceskoslovenska Psychiatrie, 72, 206-210.
4. Halonen, P. E., Rimon, R., Arohouka, K. & Jantti, V. (1974). Antibody levels to herpes simplex type I, measles and rubella viruses in psychiatric patients. British Journal of Psychiatry, 125, 461-465.
5. Glaser, R., Kiecolt-Glaser, J. K., Speicher, C. E., & Holliday, J. E. (1985). Stress, loneliness and changes in herpesvirus latency. Journal of Behavioral Medicine, 8, 249-260.
6. Stout, C. W., & Bloom, L. J. (1986). Genital Herpes and personality. Journal of Human Stress, 12 (3), 119-124.
7. Goldmeier, D., Johnson, A., Jeffries, D., Walker, D. G., et al. (1986). Psychological aspects of recurrences of genital herpes. Journal of Psychosomatic Research, 30, 601-608.
8. Lacroix, J. M., & Offutt, C. (1988). Type A and genital herpes. Journal of Psychosomatic Research, 32, 207-212.
9. Silver, P. S., Auerbach, S. M., Vishiniavsky, N. & Kaplowitz, L. G. (1986). Psychological factors in recurrent genital herpes infection: Stress, coping style, social support, emotional dysfunction, and symptom recurrence. Journal of Psychosomatic Research, 30, 163-171.
10. Hoon, E. F., Hoon, P. N., Rand, K. H., Johnson, J. et al. (1991). A psycho-behavioral model of genital herpes recurrence. Journal of Psychosomatic Resarch, 35, 25-36.
11. Longo, D. J. & Clum, G. A. (1989). Psychosocial factors affecting genital herpes recurrences. Journal of Psychosomatic Research, 33, 161-166.
12. VanderPlate C. & Aral, S. O. (1987). Psychosocial aspects if genital herpes virus infection. Health Psychology, 6, 57-72.
13. McLarmon, L. D., & Kaloupek, D. G. (1988. Prospective assessment of cognitive behavioral intervention for a chronic physical disorder. Health Psychology, 7, 231-249.
14. Levenson, J. L., Hamer, R. M. Myers, T., & Hart, R. P. et al. (1987). Psychological factors predicting symptoms of severe recurrent genital herpes infection. Journal of Psychosomatic Research, 31, 153-159.
15. VanderPlate, C., Aral, S. O., & Magder, L. (1988). The relationship among genital herpes simplex virus, stress, and social support. Health Psychology, 7, 159-168.

16. Burnette, M. M., Koehn, K. A., Kenyon-Jump, R., Hutton, K. et al. (1991). Control of genital herpes recurrences using progressive muscle relaxation. Behavior Therapy, 22, 237-247.

17. Houck, E. L., & Abramson, P. R. (1986). Masturbatory guilt and the psychological consequences of sexually transmitted diseases among women. Journal of Research in Personality, 20, 267-275.

18. Keller, M. L., Jadack, R. A., & Mims, L. F. (1991). Perceived stressors and coping responses in persons with recurrent genital herpes. Research in Nursing and Health, 14, 421-430.

19. Kemeny, M. E., Zegans, L. & Cohen, F. (1987). Stress, mood, immunity and recurrence of genital herpes. Annals of the NY Academy of Sciences, 496, 735-736.

20. Drob, S. L. (1986). Psychosexual implications of genital herpes. Medical Aspects of Human Sexuality, 20, 97-104.

21. Surman, O. S. & Crumpacker, C. (1987). Psychological aspects of herpes simplex viral infection: Report of six cases. American Journal of Clinical Hypnosis, 30, 125-131.

22. Cappel, R., Gregoire, F., Thiry, L., & Sprecher, S. (1978). Antibody and cell-mediated immunity to herpes simplex virus in psychotic depression. Journal of Clinical Psychiatry, 39, 266-268.

23. Peloreno, A. L., Panndurangi, A. K., & Calabrese, V. P. (1990). Serum IgG antibody to herpes viruses in schizophrenia. Psychiatry Research, 33, 11-17.

24. Fux, M., Sarov, I., Ginot, Y., & Sarov, B. (1992). Herpes simplex virus and cytomegalovirus in the serum of schizophrenic patients versus other psychosis and normal controls. Israel Journal of Psychiatry and Related Sciences, 29, 33-35.

25. Delisi, L. E., Smith, S. B., Hamovit, J. R., Maxwell, M. E., et al. (1986). Herpex simplex virus, cytomegalovirus and Epstein-Barr virus antibody titres in sera from schizophrenic patients. Psychological Medicine, 16, 757-763.

26. Lesser, I. M. (1981). A review of the alexithymia concept. Psychosomatic Medicine, 43, 531-543.

27. Papciak, A. S., Feuerstein, M., & Spiegel, J. A. (1985). Stress reactivity in alexitymia: Decoupling physiological and cognitive responses. Journal of Human Stress, 11 (3), 135-142.

28. Folks, D. G., & Kinney, F. C. (1991). Dermatology. In Stoudemire, A. & Fogel, B. S. (Eds.), Medical psychiatric practice, Vol. 1, pp. 287-308. Washinton, DC: American Psychiatric Press.

29. Eysenck, H., & Eysenck, S. B. G. (1975). Manual of the Eysenck Personality Questionnaire (EPQ). London: Hodder & Stroughton.

30. McNair, D. M., Lorr, M., & Droppleman, L. F. (1971). EdiTS Manual: Profile of Mood States (POMS). San Diego, CA: Educational and Industrial Testing Service.

31. Kreitler, S., & Kreitler, H. (submitted). The Positive Emotions Check List (PECL).

32. Derogatis, L. R., & Spencer, P. M. (1982). The Brief Symptom Inventory (BSI): Administration, scoring and procedures manual-I. Baltimore: Authors.

33. Derogatis, L. R. (1975). The SCL-90-R. Baltimore: Clinical Psychometrics Research.

34. Sifneos, P. E. (1986). The Schalling-Sifneos Personality Scale revised. Psychotherapy and Psychosomatics, 45, 161-165.

35. Rosenthal, R., & Rubin, D. B. (1984). Multiple contrasts and ordered Bonferroni procedures. Journal of Educational Psychology, 76, 1028-1034.

36. Weinberger, D. A., Schwartz, G. E., & Davidson, R. J. (1979). Low anxious, high anxious, and repressive coping styles: Psychometric patterns and behavioral and physiological responses to stress. Journal of Abnormal pPsychology, 88, 369-380.

37. Kreitler, S. & Kreitler, H. (1990). Repression and the anxiety-defensiveness factor: Psychological correlates and manifestations. Personality and Individual Differences, 11, 559-570.

38. Singer, J. L. (Ed.), (1990). Represssion and dissociation: Implictions for personality theory, psychopathology and health. Chicago, Il.: Chicago University Press.

39. Phillips, L. & Zigler, E. (1964). Role orientation, the action-thought parameter and outcome of psychiatric disorders. Journal of Abnormal and Social Psychology, 63, 381-389.

40. Feder, C. Z. (1967). Relationship of repression-sensitization to adjustment status, social desirability, and acquiescence response set. Journal of Consulting Psychology, 31, 401-406.

41. Dziokonski, W., &Weber, S. J. (1977). Repression-sensitization, perceived vulnerability, and the fear appeal communication. Journal of Social Psychology, 102, 105-112.

42. Kreitler, S., & Kreitler, H. (1990). The pschological profile of the health-oriented individual. European Journal of Personality, 5, 1-26.

43. Taylor, S. E. (1989). Positive illusions. New York: Basic Books.

44. Filipp, S.-H., Klauer, T., Ferring, D., & Freudenberg, E. (1990). Coping with life-threatening disease: Some research problems and selected findings. In Schmidt, L. E., Schwenkmezger, P., Weinman, J. & Maes, S. (Eds.), Theoretical and applied aspects of health psychology (pp. 385-398). Chur, Switzerland: Harwood.

45. Watson, M., Pettingale, K. W., & Greer, S. (1985). Stress reactions and autonomic arousal in breast cancer patients. In M. Watson & T. Morris (Eds.), Psychological aspects of cancer (pp. 31-39). Oxford: Pergamon Press.

46. Temoshok,L. (1985). Biopsychosocial studies on cutaneous malignant melanoma: Psychosocial factors associated with prognostic indicators, progression, psychophysiology and tumor-host response. Social Science and Medicine, 20, 833-840.

47. Kreitler, S., Chaitchik, S., & Kreitler, H. (1993). Repressiveness: Cause or result of cancer? Psycho-Oncology, 2, 43-54.

48. Antonovsky, A. (1987). Unravelling the mystery of health. San Francisco, CA: Jossey-Bass.

49. Justice, B. (1988). Who gets sick. Los Angeles, CA: Jeremy P. Tarcher.