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Investigation of schema modes currently activated in patients with psychiatric disorders

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Abstract

Objectives: To investigate schema modes currently activated in individuals with psychiatric disorders and to attain a greater understanding of healthy and dysfunctional schema modes in this population. Furthermore, we wish to ascertain if individuals who fulfil criteria for clinical (psychiatric) disorders with the Minnesota Multiphasic Personality Inventory (MMPI), also manifest dysfunctional modes and weaker healthy modes on the Schema Mode Inventory (SMI).

Method: Fifty individuals were administered the MMPI and SMI during routine psychological assessments between September 2008 and June 2010.

Results: Both healthy schema modes (Happy Child (HC) and dysfunctional schema modes (Compliant Surrender (CS), Detached Self-soother (DSS) and Demanding Parent (DP)) were evident in this population. Positive correlations were noted between several dysfunctional schema modes from the Child, Maladaptive Coping and Maladaptive Parent domains of the SMI and several scales of the MMPI including: Depression (D), Psychopathic deviate (Pd), Masculine feminine (Mf), Paranoia (Pa), Psychasthenia (Ps), Mania (Ma), Schizophrenia (Sc), and Social introversion (Si) ($p < 0.001$). A negative correlation ($p < 0.001$) was found between the Healthy Adult (HA) and Happy Child (HC) schema modes of the SMI and the Hypochondriasis (Hs), Depression (D), Psychopathic deviate (Pd), Psychasthenia (Pt), and Social introversion (Si) scales of MMPI.

Conclusion: This study demonstrates the presence of several dysfunctional schema modes in individuals with a wide range of clinical (psychiatric) disorders and a strong correlation between dysfunctional schema modes and clinical disorders of the MMPI. The SMI can aid in the assessment and understanding of individuals with a wide range of psychiatric disorders and can also form the basis for Schema Focused Therapy (SFT), a therapy showing promise for a number of clinical conditions, particularly borderline personality disorder.

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Introduction

Schema modes describe an individuals' current predominant emotional state. Schema modes incorporate our coping responses, and are often triggered by life situations or scenarios to which people are oversensitive.[1] An accepted definition for schema modes states that "a schema mode represents those schemas, coping responses or healthy behaviours that are currently active in an individual".[2] Schema modes become activated when particular schemas or coping responses develop into strong emotions that significantly influences an individual's functioning.[3]

There are several identified schema modes, which can be grouped into four general categories or domains: Child, Maladaptive Coping, Dysfunctional Parent, and Healthy Adult modes, and the 14 best identified and described schema modes are detailed in *Table 1*.[4,5] Schema modes develop early in childhood and are shaped by the selective filtration of incoming experiences and continue to mature and change throughout one's lifetime.[4] Most individuals operate several different schema modes,[2] however the utilisation of some schema modes are maladaptive (Angry child, Impulsive/undisciplined child, Compliant surrender, Detached protector, Over-compensator, Punitive parent, and Demanding parent) *(see Table 1)*.[6]

Individuals frequently change schema modes in response to situational changes with different schemas modes becoming activated.[2] Indeed, most healthy individuals exhibit several different schema modes and change schema modes frequently.[7] However, individuals with a range of psychopathology including Axis-I and Axis-II psychiatric disorders are often dominated by excessive utilisation of a single maladaptive schema mode,[4,7,8] often stick rigidly to these maladaptive schema modes,[9,10] have difficulty utilising different schema modes simultaneously,[1] and consequently may engage in maladaptive coping behaviours,[2,8] and rigid coping styles.[11]

To date, there is limited research into schema modes and their association with psychiatric illness. Some preliminary evidence suggests that dissociation between schema modes increases with increased severity of psychopathology leading to an imbalance between schema modes,[11] and a sudden and abrupt schema mode change (mode switching).[1]

This study explores schema modes currently activated in individuals with psychiatric disorders to attain a greater understanding of both healthy and dysfunctional schema modes operating in this population. Individuals diagnosed with a range of psychiatric disorders using ICD-10 criteria, had both the Minnesota Multiphasic Inventory (MMPI) and the Schema Mode Inventory (SMI) administered. In addition

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Table 1: A description of SMI (Schema Mode Inventory) Modes

Domains	Modes	Description of emotions
Child	Vulnerable (VC)	Includes feelings of loneliness, isolation, sadness, being misunderstood, unsupported, defective, deprived, overwhelmed, incompetent, doubting self, needy, helpless, hopeless, fear, anxiety, victimization and exclusion, unloved, fragile, and pessimistic
	Angry (AC)	Intense feelings of anger and frustration with impatience as the core emotional (or physical) needs not being met are present.
	Enraged child (EC)	Experiences intense feelings of anger and impulsivity that may result in individuals causing harm to objects or other people.
	Impulsive child (IC)	Acts on non-core desires or impulses in a selfish or uncontrolled manner to get their own way and often has difficulty delaying short-term gratification.
	Undisciplined child (IC)	Often feels intensely angry, frustrated and impatient when non-core desires or impulses cannot be met. Individuals may also appear 'spoiled' and fails to complete routine tasks.
	Happy (HC)	Feels loved, content, satisfied, fulfilled, protected, accepted, praised, worthwhile, nurtured, understood, self-confident, competent, safe, resilient, strong, in control, adaptable, optimistic and spontaneous.
Maladaptive coping	Compliant surrender (CS)	Acts in a passive, subservient, submissive, approval-seeking, or self-deprecating way around others due to fear of conflict or rejection. Can engage in behaviours that directly maintain this self-defeating schema-driven pattern.
	Detached protector (DPt)	Cuts off needs and feelings, detaches emotionally from people and often rejects their help. Can feel withdrawn, distracted, depersonalised, bored and pursues distracting, self-soothing or self-stimulating activities in a compulsive way or to excess. May adopt a cynical, aloof or pessimistic stance to avoid people or activities.
	Detached self-soother (DS)	Shut off emotions by engaging in activities that can soothe, stimulate or distract them from feelings. These behaviours are usually undertaken in an addictive or compulsive way, which include excessive working, gambling, involvement in dangerous sports, overeating, fantasizing, promiscuity and drug abuse.
	Self-aggrandiser (SA)	Feels and behaves in an inordinately grandiose, aggressive, dominant, competitive, arrogant, haughty, condescending, devaluing, over-controlled, rebellious, manipulative, exploitative, attention-seeking, or status-seeking way. These feelings or behaviours originally developed to compensate for or gratify unmet core needs
	Bully and attack (BA)	Directly harms other people in a controlled and strategic way emotionally, physically, sexually, or verbally. The motivation may be to overcompensate to preventing harm to them or to avoid humiliation.
Maladaptive parent	Punitive (PP)	Believes oneself or others deserves punishment or blame and often acts on these feelings by being blaming, punishing, or being abusive towards self (eg. self-mutilation) or others.
	Demanding (DP)	Feels one should strive for perfection, avoids time wasting and expressing one's feelings spontaneously, likes order, and believes one should strive for high status, be humble and put others needs before one's own This mode refer to the nature of the internalised high standards and strict rules, rather than the style with which these rules are enforced.
Healthy adult	Healthy adult (HA)	Nurtures, validates and affirms the vulnerable child mode. Sets limit for the angry and impulsive child modes and promotes and supports the healthy child mode. Combats and eventually replaces the maladaptive coping modes and neutralises or moderates the maladaptive parent modes. Performs appropriate adult functions such as working, parenting, taking responsibility, and pursues pleasurable adult activities such as sex, intellectual, and cultural interests, health maintenance and athletic activities.

to ascertaining which schema modes were activated at the time of interview in this population, we also wanted to ascertain if individuals who demonstrated abnormal or pathological scores with the well established MMPI also demonstrated dysfunctional schema modes or weaker healthy schema modes on the SMI.

Method

Subjects

Subjects included all new referrals received by the Psychology Department in Roscommon County Hospital from September 2008 to June 2010. All of these individuals were adults (> 16 years) who were referred by consultant general adult psychiatrists attached to the Department of Psychiatry, Roscommon County Hospital for diagnostic assessments. Of the 115 individuals referred during this time, 21 individuals were referred for dementia screening and were excluded from the study. Of 94 remaining individuals 72 attended for testing. Fifty individuals completed both the Minnesota Multiphasic Personality Inventory (MMPI) and Schema Mode Inventory (SMI) and were included in the study.

Instruments

Minnesota Multiphasic Personality Inventory (MMPI)

The MMPI is a psychometric instrument designed to examine the predominant patterns of personality and emotional disorders. It contains 567 items and includes three validity scales and nine clinical scales (Hypochondriasis (Hs), Depression (D), Hysteria (Hy), Psychopathic deviate (Pd), Masculine and feminine (Mf), Paranoia (Pa), Psychasthenia (Pt), Schizophrenia (Sc), Mania (Ma), and Social introversion (Si) scale. The MMPI is easy to administer and can be applied in various assessment settings.[12]

Schema Mode Inventory (SMI)

This short version of the SMI contains 124 items scored on a six-point Likert scale ranging from 'never or almost never' to 'always'. This short version comprises four domains (Child,

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Maladaptive Coping, Maladaptive Parent, Healthy Adult) and includes 14 schema modes *(see Table 1)*. The SMI has good discriminate validity and moderate convergent validity,[13] and has good internal consistency for all sub scales (Cronbach's α range 0.76-0.96, mean = 0.86).[4]

Procedure

No identifying data relating to the subjects was included in the study and ethical approval was secured from the hospital ethics committee. Demographic and diagnostic data (ICD-10 criteria) and MMPI and SMI scores were attained for each subject. We examined MMPI and SMI scores for the entire group and also for those individuals with a diagnosis of recurrent depressive disorder (RDD) or a 'neurotic disorder' alone. We were unable to examine other diagnostic groups, or to examine individual neurotic (anxiety) disorders due to a lack of power.

All statistical analysis was performed using the Statistical Package for Social Sciences 15.0 for Windows (SPSS 15.0 for Windows, SPSS Inc, Chicago, Illinois, and USA). We used Pearson's Product Moment Correlation (r) to determine the correlation between MMPI and SMI data.

Results

All demographic and clinical data are presented in *Table 2*. The mean age of individuals in this study was 36 (SD = 12) and the most common diagnosis was RDD (n = 23 (46% of sample)). No individuals had an Axis II disorder (personality disorder) diagnosed. There were no differences in demographic or clinical data between those 50 individuals that were included in the study and the 22 individuals that were excluded due to non-completion of both psychometric instruments (SMI and MMPI).

In *Table 3(a) and (b)*, we present the SMI and MMPI data for the group as a whole, and also for those individuals with RDD or a neurotic disorder (generalised anxiety disorder, social phobia and obsessive compulsive disorder). The predominant schema modes for the total group were Happy Child (HC), Compliant Surrender (CS), Detached Self-Soother (DSS), and Demanding Parent (DP). Individuals with RDD predominantly utilised the schema modes CS, DSS, DP and Healthy Adult (HA), and individuals with anxiety disorders predominantly utilised the schema modes HC, CS, DP and HA. The MMPI data demonstrated several clinical scales suggesting pathology (mean scores above threshold) including Depression (D), Hysteria (Hy), Psychopathic deviate (Pd), Masculinity/femininity (Mf), Psychasthenia (Pt), Schizophrenia (Sc) and Social introversion (Si) for the entire group; D, Hy, Pd, Pa, Pt, Sc and Si for individuals with RDD; and D, Hy and Si for individuals with neurotic disorders.

In *Table 4(a)* we present correlation data between the MMPI clinical scales and the SMI schema modes. Positive correlations ($p < 0.001$) occurred between several dysfunctional schema modes from the Child, Maladaptive Coping and Maladaptive Parent Domains of the SMI and several scales of the MMPI including: Depression (D), Psychopathic deviate (Pd), Masculinity/femininity (Mf), Paranoia (Pa), Psychasthenia (Pt), Mania (Ma), Schizophrenia (Sc), and Social introversion (Si). Several negative correlations ($p < 0.001$) were found between the Healthy Adult (HA) and Happy Child (HC) Schema modes of the SMI and the D, Pd, Si, Pt and Hypochondriasis (Hs) scales of MMPI. When we examined the RDD and neurotic disorder subgroups, we noted that the RDD group demonstrated stronger positive correlations between dysfunctional schema modes with D, Pd and Hs than the entire group *(see Table 4(b))*, and that the neurotic disorder group demonstrated stronger positive correlations with Mf, Pt, Pa, Sc and Si than the entire group *(Table 4(c))*. Negative correlations ($p < 0.001$) between either HA and HC were noted with D (RDD group and neurotic disorder group) and Mf, Si and Pa (neurotic disorder group) at higher levels compared to the entire group.

Table 2: Demographic and clinical data

Variable	N (%)
Gender	
Male	26 (52)
Female	24 (48)_
Employment status	
Employed	18 (36)
Unemployed	22 (44)
In full-time education	10 (20)
Relationship status	
Single*	33 (66)
Married	15 (30)
Separated/Divorced	2 (4)
Psychiatric diagnosis**	
Schizophrenia	1 (2)
Bipolar disorder	3 (6)
Recurrent depressive disorder	23 (46)
Anxiety disorder	13 (26)
Obsessive compulsive disorder	6 (12)
Eating disorder unspecified	2 (4)
Alcohol dependence or harmful use	2 (4)

** Eight of these individuals were in a relationship*
*** Only the primary psychiatric diagnosis is described above*

Discussion

In this study, we noted both functional schema modes (Happy Child (HC) and Healthy Adult (HA)) and dysfunctional schema modes (Compliant Surrender (CS), Detached Self-Soother (DSS) and Demanding Parent (DP)) in individuals with mental health disorders. The RDD or neurotic disorders groups did not differ significantly from the entire group, although the Healthy Adult (HA) schema mode was utilised more frequently in those individuals with neurotic disorders.

The Compliant Surrender (CS) schema mode suggests that individuals act in a passive fashion, have a fear of rejection and engage in behaviours that are self-defeating *(see Table 1)*. This was particularly evident in the RDD group and supports findings from cognitive theories of depression.[14]

The Detached Self-Soother (DSS) schema mode suggests that individuals shut off their emotions by engaging in activities such as substance or alcohol misuse,[15,16] fantasising and gambling to distract them from their unwanted emotions. These behaviours are all well known to be increased in individuals with RDD and a variety of neurotic disorders,[17] with some evidence suggesting that co-morbidity of these difficulties is related to a reciprocal pathway between the disorders

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Table 3 (a): SMI mean scores

	Total group	Recurrent depressive disorder	Neurotic disorders
VC (10-60) Mean (SD)	32.08 (10.87)	36.19 (10.55)	28.42 (9.72)
AC (10-60) Mean (SD)	27.02 (9.55)	27.52 (9.97)	22.92 (7.06)
EC (10-60) Mean (SD)	21.36 (10.56)	19.95 (6.92)	16.75 (5.74)
IC (9-54) Mean (SD)	26.02 (11.06)	25.24 (10.10)	20.42 (7.20)
UC (6-36) Mean (SD)	19.48 (5.71)	20.71 (5.90)	17.83 (5.47)
HC (10-60) Mean (SD)	32.14 (10.20)	30.00 (7.94)	36.25 (10.06)
CS (7-42) Mean (SD)	24.00 (5.60)	24.29 (5.33)	25.08 (6.50)
DPt (9-54) Mean (SD)	25.00 (8.82)	28.57 (8.12)	20.58 (7.90)
DSS (4-24) Mean (SD)	14.18 (3.56)	14.38 (3.67)	13.67 (3.94)
SA (10-60) Mean (SD)	25.86 (7.04)	27.05 (7.13)	23.08 (6.32)
BA (9-54) Mean (SD)	19.04 (7.52)	20.05 (8.85)	17.00 (5.39)
PP (10-60) Mean (SD)	24.24 (8.32)	25.52 (7.09)	22.25 (6.38)
DP (10-60) Mean (SD)	37.40 (7.75)	39.14 (7.66)	38.83 (7.46)
HA (10-60) Mean (SD)	37.62 (8.63)	38.95 (8.08)	40.58 (9.50)

All 124 items are scored from 1-6 on a Likert Scale. The range of scores possible for each schema mode is provided in parenthesis under their heading

Table 3 (b): MMPI – Clinical Scales mean scores

Range*	Hs (5-40) Mean (SD)	D (10-55) Mean (SD)	Hy (10-50) Mean (SD)	Pd (15-50) Mean (SD)	Mf (20-55) Mean (SD)	Pa (5-30) Mean (SD)	Pt (20-55) Mean (SD)	Sc (15-65) Mean (SD)	Ma (10-40) Mean (SD)	Si (10-65) Mean (SD)
Total Group	17.50 (5.41)	32.36 (7.07)	28.28 (5.32)	28.22 (5.09)	29.20 (7.24)	14.84 (4.72)	35.26 (8.22)	36.64 (10.82)	20.34 (4.63)	39.32 (11.30)
Recurrent Depressive Disorder	17.67 (5.97)	34.43 (5.45)	28.76 (5.73)	28.86 (4.82)	31.76 (5.54)	15.62 (4.71)	37.14 (7.48)	38.95 (10.24)	19.76 (4.67)	42.95 (9.10)
Neurotic Disorders	19.00 (3.93)	34.17 (6.04)	31.00 (3.20)	24.08 (4.32)	29.17 (7.50)	13.42 (3.70)	31.92 (8.91)	31.92 (11.91)	19.58 (3.94)	39.75 (12.48)

The range of scores possible for each clinical scale is provided in parenthesis under their heading.
The cut off score suggesting pathology for each of the MMPI scales are: Hs = 18, D = 25, Hy = 27, Pd = 29, Mf = 34, Pa = 14, Pt = 33, Sc = 35, Ma = 25, Si = 37

(problems) and that one engages in these behaviours to escape the distress they may be suffering.[18,19]

The Demanding Parent (DP) schema mode suggests that individuals strive for perfection, like order and put others' needs before their own. Unsurprisingly this schema mode is common in individuals with anxiety disorders and RDD, due to the significant cross over with obsessional symptoms and this schema mode.

The presence of both Happy Child (HC) and Healthy Adult (HA) schema modes suggest that individuals with psychiatric disorders often also use appropriate and functional schema modes which demonstrate resilience, optimism, taking responsibility, pursuing pleasurable and healthy interests and activities, all of which are beneficial for psychological well-being.

Several moderate to strong correlations were noted between several dysfunctional schema modes and clinical scales of the MMPI including: Depression (D), Psychopathic deviate (Pd), Masculinity/femininity (Mf), Paranoia (Pa), Psychasthenia (Ps), Mania (Ma), Schizophrenia (Sc), and Social introversion (Si). These findings suggest that dysfunctional schema modes are also associated with similar pathological clinical findings on the MMPI and that the SMI can be viewed as a viable alternative to the MMPI for understanding an individual's psychological problems.

The SMI has the advantage of clearly demonstrating individuals' maladaptive coping styles, eg. compliance, surrender, dependence, disconnection, emotional withdrawal, counter-attack, self-sacrifice, punitive behaviour, and subjugation,[4] all of which can then be discussed and perhaps targeted for treatment or support by the clinician.[20]

One putative treatment for these difficulties is Schema Focused Therapy (SFT) which has shown some preliminary benefits when utilised for the treatment of borderline personality disorder, and is based on findings of the SMI.[21,22] The SMI is also useful as an adjunctive tool to the MMPI when a

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Table 4 (a): Correlation between MMPI clinical scales and SMI schema modes for entire group

MMPI / SMI	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
VC	0.269	0.617**	0.313*	0.348*	0.469**	0.261	0.473**	0.438**	-0.190	0.599**
AC	0.332*	0.052	0.062	0.311*	0.143	0.285*	0.307*	0.422**	0.279*	0.327*
EC	0.139	-0.163	-0.178	0.173	-0.095	0.137	0.197	0.253	0.328*	0.073
IC	0.220	0.059	0.042	0.379**	0.045	0.324*	0.442**	0.401**	0.230	0.235
UC	0.027	0.500**	-0.001	0.314*	0.255	0.216	0.452**	0.314*	-0.299*	0.575**
HC	-0.043	-0.473**	-0.203	-0.393**	-0.374**	-0.415**	-0.358*	-0.313*	0.374**	-0.478**
CS	0.089	0.249	-0.023	0.134	0.357*	0.360*	0.261	0.341*	0.009	0.493**
DPt	0.027	0.437**	0.025	0.326*	0.412**	0.261	0.399**	0.461**	-0.338*	0.658**
DSS	0.090	0.047	0.089	0.169	-0.048	0.021	0.336*	0.094	0.145	-0.105
SA	0.297*	0.173	0.248	0.331*	0.224	0.348*	0.508**	0.518**	0.138	0.415**
BA	0.083	-0.074	-0.321*	0.209	0.050	0.035	0.194	0.343*	0.161	0.136
PP	0.090	0.121	-0.026	0.123	0.284*	0.390**	0.403**	0.461**	0.167	0.250
DP	0.397**	0.293*	0.359*	-0.075	0.139	-0.013	0.275	0.120	0.108	0.200
HA	0.177	-0.124	0.034	0.323*	-0.162	-0.400**	-0.246	-0.247	0.225	-0.272

SMI scales: VC = Vulnerable Child; AC = Angry Child; EC = Enraged Child; IC = Impulsive Child; UC = Undisciplined Child; HC = Happy Child; CS = Compliant Surrender; DPT = Detached Protector; DSS = Detached Self-Soother; SA = Self Aggrandizer; BA = Bully and Attack; PP = Punitive Parent; DP = Demanding Parent; HA = Healthy Adult

MMPI scales: Hs = Hypochondriasis; D = Depression; Hy = Conversion Hysteria; Pd = Psychopathic Deviate; Mf = Masculinity-Femininity; Pa = Paranoia; Pt = Psychasthenia; Sc = Schizophrenia; Ma = Hypo mania; Si = Social Introversion.

Table 4 (b): Correlation between MMPI clinical scales and SMI schema modes for individuals with recurrent depressive disorder

MMPI / SMI	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
VC	0.396	0.714**	0.367	0.549**	0.168	-0.018	0.370	0.428	-0.164	0.452*
AC	0.574**	0.160	0.360	0.245	0.206	0.272	0.179	0.374	0.350	0.372
EC	0.520*	0.026	0.291	0.130	0.019	0.265	0.194	0.280	0.396	0.279
IC	0.565**	0.204	0.420	0.252	-0.026	0.211	0.486*	0.336	0.336	0.272
UC	0.270	0.563**	0.033	0.516*	-0.106	-0.085	0.501	0.337	-0.070	0.419
HC	-0.078*	-0.506*	-0.180	-0.350	-0.259	-0.041	-0.043	-0.180	0.209	-0.362
CS	0.086	0.214	-0.163	0.210	0.063	0.457*	0.292	0.408	0.282	0.388
DPt	0.027	0.528*	0.012	0.106	0.000	-0.210	-0.023	0.115	-0.433	0.652**
DSS	0.235	0.018	0.122	0.013	-0.105	0.016	0.420	0.143	0.070	-0.055
SA	0.594*	0.242	0.591**	0.297	-0.309	0.199	0.581**	0.413	0.226	0.371
BA	0.019	0.078	-0.332	0.279	-0.097	-0.098	0.135	0.209	0.146	0.133
PP	0.164	-0.154	0.142	-0.090	0.282	0.597**	0.152	0.404	0.329	-0.100
DP	0.503*	0.190	-0.529*	0.209	-0.036	-0.023	0.549**	0.226	0.239	0.017
HA	0.147	0.033	0.046	-0.104	0.114	-0.233	-0.040	-0.086	-0.075	-0.044

more comprehensive psychological assessment of individuals with mental health difficulties is required.

Limitations

There are a number of limitations to this study. Principally, individuals had different clinical diagnoses and we did not have sufficient power to examine individual clinical groups other than those with RDD. Similarly, individuals did not have a SCID-2 diagnostic assessment, and it is possible that whilst no individual's primary diagnosis was a personality disorder, a number of individuals may have had a co-morbid personality disorder in addition to their Axis I diagnosis. Furthermore, 22 individuals were not included in this study, as they did not have both the MMPI and SMI completed.

Conclusion

This study demonstrates for the first time, the presence

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Table 4 (c): Correlation between MMPI clinical scales and SMI schema modes for individuals with neurotic disorders

MMPI / SMI	Hs	D	Hy	Pd	Mf	Pa	Pt	Sc	Ma	Si
VC	0.207	0.581*	0.240	-0.020	0.679*	0.260	0.319	0.140	-0.296	0.620*
AC	-0.075	0.017	-0.311	0.146	0.458	0.415	0.251	0.188	-0.090	0.547
EC	0.093	-0.117	-0.204	0.188	0.064	0.591*	0.295	0.412	-0.073	0.225
IC	0.151	0.049	-0.079	0.650*	0.490	0.865**	0.534	0.699*	0.003	0.581*
UC	0.224	0.542	-0.343	0.012	0.410	0.259	0.538	0.400	-0.370	0.875**
HC	-0.216	-0.309	-0.099	-0.160	-0.659*	-0.196	-0.229	-0.215	0.246	-0.580*
CS	0.256	0.446	-0.096	0.223	0.704*	0.463	0.507	0.413	-0.339	0.821**
DPt	0.518	0.485	0.119	0.289	0.698*	0.510	0.646*	0.668*	-0.275	0.776**
DSS	-0.147	0.075	0.087	0.178	0.285	0.060	0.103	-0.053	0.330	0.087
SA	0.110	0.057	-0.086	0.487	0.537	0.663*	0.525	0.668*	-0.075	0.501
BA	-0.047	-0.368	-0.539	0.133	0.090	-0.023	0.210	0.276	-0.470	0.022
PP	0.243	0.553	-0.058	-0.219	0.401	0.257	0.518	0.361	-0.411	0.618*
DP	-0.053	0.545	0.031	-0.401	0.246	0.115	0.205	-0.107	-0.250	0.271
HA	-0.097	-0.333	-0.063	-0.343	-0.565	-0.617*	-0.426	-0.477	0.369	-0.618*

of several dysfunctional schema modes in individuals with a wide range of clinical (psychiatric) disorders and a strong correlation between dysfunctional schema modes and clinical disorders of the MMPI. The SMI can aid in both the assessment and understanding of individuals with a wide range of psychiatric disorders and can also form the basis for Schema Focused Therapy (SFT), a therapy showing promise for a number of clinical conditions, particularly borderline personality disorder.

Declaration of interest: None.

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