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Simplifying the Understanding and Measurement of Mental Disorders Thru a Comprehensive Framework of Psychosocial Health

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Abstract

The assessment of mental health and mental disorders has undergone extensive exploration within the field of psychology, resulting in various models and approaches. In addition to traditional ways like the Diagnostic and Statistical Manual of Mental Disorders, psychologists have proposed alternative perspectives for evaluating mental health. One such innovative approach is the psychosocial health model, which defines mental well-being as sexual, emotional, social, environmental, cognitive, religious, moral, and spiritual satisfaction. This paper presents four consecutive studies aimed at developing and validating a new scale, Sukoon Psychosocial Illness Scale (SPIS), to measure psychosocial illness and its sub-factors based on the model of psychosocial health. SPIS was developed and validated through four sequential studies involving 684 participants. Rigorous exploratory and confirmatory factor analyses were employed to establish content and construct validity. Convergent and discriminant validity were assessed by examining associations with psychological distress and overall psychosocial health. Reliability was evaluated using internal consistency, test-retest reliability, and item-total and item-scale correlations. The results of the study confirm the high reliability and validity of SPIS. This refined instrument consists of 21 items presented in English,

employing a 7-point Likert scale for responses. The scale comprises six distinct sub-scales, namely emotional problems, sexual problems, religious and moral problems, social problems, spiritual problems, and professional problems. SPIS emerges as a promising tool for future researchers and clinicians, offering a fresh perspective on mental disorders through the comprehensive lens of psychosocial health. This instrument contributes to the evolving landscape of mental health assessment and underscores the importance of considering diverse dimensions for a holistic understanding of psychosocial well-being.

Keywords
Psychosocial health; psychosocial wellness; psychosocial illness; psychosocial problems; mental health; mental disorders; psychological wellbeing; diagnosis; psychopathology; abnormal psychology; Sukoon psychosocial illness scale

1. Introduction

The comprehension of the constructs of mental health and mental disorders has been a subject of ongoing debate among theorists and clinicians throughout history. Clinical psychology, as a predominant scientific discipline, encompasses diverse models and approaches to comprehend and address mental health and mental disorders. Recent advancements in Positive Psychology and the Psychology of Religion & Spirituality have encouraged clinical psychologists to transcend conventional psychopathological perspectives. As a result, psychologists are increasingly inclined to adopt a more comprehensive view of mental health and mental disorders by focusing more on biological, cognitive, psychological, emotional, social, sexual, environmental, religious, moral, and spiritual dimensions. Criticism of existing methods for diagnosing mental disorders has prompted psychologists to devise new models within clinical psychology, diverging from the conventional Diagnostic and Statistical Manual of Mental Disorders [1]. The emergence of the 'psychosocial health' model [2] exemplifies a novel approach, conceptualizing mental health as the amalgamation of "sexual, emotional, social, environmental, cognitive, religious, moral, and spiritual satisfaction" in an individual. This paper presents the outcomes of four consecutive studies dedicated to developing and validating a new scale designed to measure psychological problems within the framework of psychosocial health.

1.1 Psychopathology & Diagnosis

Psychopathology refers to the pathologies of the psyche [3]. It is a fundamental segment within clinical psychology and psychiatry [4] concerned with the scientific exploration of abnormal mental states [5-7]. It also involves the grouping and typification of abnormal behaviors [8]. Psychopathology has been defined differently and has been labeled as abnormal behavior [9], statistical deviance [9], physical, mental, or behavioral deviance [10], social deviance [11], developmental deviance [12], harmful dysfunction [13], and psychobiological dysfunction [14].

The Diagnostic and Statistical Manual of Mental Disorders (DSM) stands as a widely utilized tool for diagnosing psychopathological symptoms on a global scale. Published by the American Psychiatric Association (APA), the DSM has a long history of evolution from 1918 through the

American Medico-Psychological Association. The contemporary DSM is the continuation of the 'Statistical Manual for the Use of Institutions for the Insane (1918)' and the 'Statistical Manual for the Use of Hospitals for Mental Diseases (1942)' of the same association [14]. This continuation gradually resulted in DSM-I (1952), DSM-II (1968), DSM-III (1980), DSM-III-R (1987), DSM-IV (1994), DSM-IV-TR (2000), and DSM-5 (2013). All these versions had significant modifications in the concepts of normality and abnormality. DSM has been criticized frequently for being unscientific [15], unreliable [16, 17], unnecessarily lengthy (947 pages) and not used cover to cover by a majority of mental health practitioners [14], presenting unrealistic mental conditions that are not abnormal [18-20], creating mental disorders out of nothing instead of discovering psychopathology from the real-life situations [18, 21], projecting improper classifications of mental disorder [22-25], being invalid from a cross-cultural perspective [26, 27], and giving undue financial benefits to the psychiatrists who are involved in its development [28]. Researchers have also been proposing modifications and alternatives to DSM, such as the dimensional classification system [29], the research domain criteria [30], and the hierarchical taxonomy of psychopathology [31, 32].

1.2 The Construct of Mental Health

The burden of mental disorders has been reasonably established [33]. However, mental health services are underutilized globally [34]. Despite an estimated 30% to 50% of the global population experiencing mental illness, only one-third of them seek mental health treatment [35]. The stigma associated with psychological assistance leads individuals to hesitate to consult professionals, making it a pervasive problem [36]. Mental health problems often manifest in physical symptoms, leading individuals to deny psychological issues and consult general physicians instead [37]. Additionally, insufficient mental health literacy and social stigma contribute to the reluctance to address mental disorders [38].

The understanding of psychopathology and mental disorders is not a subject of 'pure science'. Besides psychiatry's sincere efforts to establish connections between mental disorders and human neurology, there exists a general disconnect among people in both developing and developed countries. Mental health-related problems are not commonly associated with science or neurology [36, 39-46]. As the mind and mental processes cannot be examined in scientific laboratories, the knowledge and the application of mental health and mental disorders have always been based upon the diversified theories of mental health and well-being proposed by different individuals throughout history. From Aristotle to the present day, the terminology surrounding mental health, such as happiness, satisfaction with life, quality of life, mental well-being, mental wellness, psychological well-being, psychological wellness, and more, has been used interchangeably. [47-50]. The construct of mental health has always been confusing [51] and has often been defined predominantly as the absence of psychopathologies [52].

1.3 Goals of Mental Health

Theorists have proposed diversified goals of mental health, such as the fulfillment of the purpose of life [53, 54], the gratification of human needs [55, 56], a match between hoped-for and achieved goals [57], a comparison between goals and accomplishments [58], the fulfillment of a person's essential desires [59], the gratification of a person's needs [60], an achievement of a person's life expectations [61], the possession of a suitable living environment [62], an evaluation of the life as a

whole [63], an adequate social status [64], the effective functioning in a social context [65], the possession of higher levels of positive personal attributes and lesser levels of adverse behaviors [66], and a subjective criterion of happiness [67-70]. Mental health is also regarded as a multi-dimensional framework above the mere absence of psychological problems [47, 52]. It has been considered as the capacity of a person to attain total growth, to work effectively and creatively, to build strong, positive relationships, to adapt socially well, and to serve the community [38, 50, 71-73]. It is more a process than an outcome [74].

1.4 Factors Involved in Mental Health

The attainment of mental health has also been linked with diversified factors such as physical health of a person [75], healthy family relations [76, 77], extraversion in personality [78], optimism for the future [79], being married [80, 81], sexual satisfaction [82], body image [83], financial stability and job satisfaction [84-91].

1.5 Models of Mental Health

Besides the interactive nature of these concepts, several theorists have elaborated on the components and models of psychosocial well-being and mental health. These models include sets of elements or domains involved in understanding the broader concepts of psychosocial well-being such as zest, resolution, congruence, self-concept, mood-tone [57], self-acceptance, positive relations with others, personal growth, purpose in life, environmental mastery, and autonomy [92], happiness, quality of life, positive affect, self-acceptance, personal growth, purpose and meaning, environmental mastery, personal control, positive relations, and morale [93], satisfaction of human needs [94], competence, relatedness, and autonomy [74], mental, physical, social, and environmental well-being [95], mental, emotional, social, physical, economic, cultural and spiritual health [96], positive affect, emotional awareness and regulation, interpersonal communication, and personal adaptation [97], inter and intra-personal domains [73]. Each model provides a unique lens to examine and understand the multifaceted nature of psychosocial well-being and mental health.

The globalized landscape and widespread adoption of information technology have significantly altered the dynamics of human socialization. With increased connectivity, people are more engaged and intertwined with each other, leading to profound effects on psychological well-being and mental health. Various social factors play crucial roles in shaping mental health, including social comparison, public opinion, self-evaluation, inferiority and superiority complexes, quality of relationships [98, 99], social environment [100, 101], social events [102, 103], social integration [104, 105], social acceptance, social actualization, social coherence, social contribution [106], social satisfaction [107], and fear of missing out in social media engagement [108]. Religion, moral values, and spirituality contribute to an individual's subjective well-being [54, 92, 109-122]. Recently, a new model of mental health has been proposed and validated, introducing the concept of psychosocial health [2]. This model defines psychosocial health as the "sexual, emotional, social, environmental, cognitive, religious, moral, and spiritual satisfaction" of an individual [2]. This comprehensive framework acknowledges the diverse dimensions of human experience that collectively contribute to mental well-being [2].

1.6 Previous Scales Measuring Mental Health and Psychopathology

Previous scales measuring mental health and psychopathology are not versatile and are intended to screen specific aspects of mental health or specific mental disorders. Life satisfaction index-A [57], affectometer [123], profile of mood states-short [124], Nottingham health profile [125], satisfaction with life scale [68], Kellner's symptom questionnaire [126], general health questionnaire [127], happiness measures [128], positive and negative affect scale [129], mental health inventory-5 [130], 15-dimensional measure of health-related quality of life [131], Goteborg quality of life instrument [132], inventory of positive psychological attitudes [133], life satisfaction questionnaire-9 [134], older adult health and mood questionnaire [135], Snaith-Hamilton pleasure scale [136], Chinese happiness inventory [137], quality of wellbeing self-administered [138], state-trait cheerfulness inventory [139], subjective vitality scale [140], temporal satisfaction with life scale [141], assessment of quality of life [142], subjective happiness scale [143], questions on life satisfaction [144], multidimensional personality questionnaire-brief [145], Oxford happiness questionnaire [146], basic psychological needs scale [147], CASP-19: control, autonomy, self-realization, and pleasure [148], depression-happiness scale-short [149], health and well-being assessment [150], orientations to happiness [151], social production function-IL [152], well-being picture scale [153], meaning in life questionnaire [154], psychological general wellbeing index [155], EUROHIS-QOL [156], Memorial University of Newfoundland scale of happiness [157], Warwick-Edinburgh mental well-being scale-short [158], salutogenic health indicator scale [159], scale of positive and negative experience [160], ICECAP-A [161], BBC subjective wellbeing scale [162], ontological well-being scale [163], physical mental and social wellbeing scale [164], positive functioning inventory [165], functional well-being scale [166], and ICOPPE interpersonal, community, occupational, physical, psychological, and economic well-being [167] are the examples of the earlier measures that tried to be general in exploring mental health or psychopathology. Some other scales focused on a single component of psychosocial well-being such as emotional well-being [168], spiritual well-being [169], social well-being [170], multiple affect adjective check list-revised [171], quality of life index-generic [172], quality of life inventory [173], Ryff's scales of psychological well-being [174], perceived wellness survey [175], mental physical spiritual well-being scale [176], self-evaluated quality of life questionnaire [177], the spiritual well-being questionnaire [178], spirituality index of well-being [179], authentic happiness index [180], personal well-being index-adult [181], the spirituality scale [182], mental health continuum-short form [183], Steinhauser spiritual concern probe [184], biopsychosocialspiritual inventory [185], serenity scale-brief [186], valued living questionnaire [187], questionnaire for eudaimonic well--being [188], multicultural quality of life index [189], positive mental health instrument [190], purpose in life test-short form [191], public health surveillance well-being scale [192], and WHO-brief spiritual, religious and personal beliefs [193].

1.7 Significance and Scope of the Present Study

In contemporary clinical psychology, psychosocial health has emerged as a groundbreaking model that redefines mental health by encompassing various dimensions. This model [2], born from a synthesis of baseline studies [194-200] and the intersection of religion, morality, spirituality, and psychology [201], represents a paradigm shift in understanding mental well-being. The model of psychosocial health is distinctive, as it expands the traditional aspects of mental health, such as emotional, social, and cognitive, to include sexual, environmental, religious, moral, and spiritual

dimensions. Psychosocial health, in this model, is defined as the "sexual, emotional, social, environmental, cognitive, religious, moral, and spiritual satisfaction" of an individual, acknowledging the diverse facets of the human experience that collectively contribute to mental well-being. The rationale of the present study relates to the specific deficiencies of the traditional scales on mental health and psychopathology that have historically overlooked those crucial dimensions of mental health that have been highlighted in the recent model of psychosocial health. This limitation necessitated the development of a more comprehensive framework to understand mental health and well-being from an enhanced and holistic perspective.

The present study unfolds the culmination of four consecutive research investigations dedicated to creating and validating the Sukoon Psychosocial Illness Scale (SPIS). This self-report tool, developed within the framework of psychosocial health, aims to assess psychological problems across seven integral components: sexual, emotional, socio-environmental, professional, religious, moral, and spiritual domains. SPIS is a milestone in psychosocial assessment, thoroughly evaluating an individual's psychosocial health. Unlike earlier scales, SPIS highlights the holistic understanding of psychosocial health, offering insights from etiological and pathological perspectives. The development, validation, and presentation of SPIS in this series of studies provide a valuable resource for future researchers and clinicians. This scale enhances professionals' ability to conduct a comprehensive psychosocial health assessment, contributing to an enriched understanding of individuals' well-being. The SPIS represents a significant advancement in clinical psychology, addressing the limitations of traditional models and scales. Its comprehensive approach to evaluating psychosocial health across diverse dimensions ensures its relevance in research and clinical applications, marking a crucial step toward a more holistic understanding of individuals' mental well-being.

2. Materials and Methods

2.1 Participants

The comprehensive series of four consecutive studies involved a total of 684 participants (N = 684; Men = 297; Women = 387; Age range = 18-55 years; Mean Age = 23 years; Education range = Matriculation to Doctorate; Average education = Graduation) i.e. study 1 (N = 115; Men = 40; Women = 75; Age range = 18-55 years; Mean Age = 26 years; Education range = Matriculation to Masters; Average education = Graduation), study 2 (N = 156; Men = 57; Women = 99; Age range = 18-40 years; Mean Age = 22 years; Education range = Matriculation to Doctorate; Average education = Graduation), study 3 (N = 300; Men = 150; Women = 150; Age range = 18-43 years; Mean Age = 23 years; Education range = Matriculation to Doctorate; Average education = Graduation), and study 4 (N = 113; Men = 50; Women = 63; Age range = 18-51 years; Mean Age = 24 years; Education range = Matriculation to Masters; Average education = Graduation).

2.2 The Instruments

The Sukoon Psychosocial Illness Scale (SPIS), developed and validated in the current series of studies, comprises 21 items in the English language. The response sheet employs a 7-point Likert scale, ranging from strongly disagree to agree strongly. SPIS includes six sub-scales, each labeled to address specific areas of concern: emotional problems, sexual problems, religious & moral problems,

social problems, spiritual problems, and professional problems. Through rigorous testing conducted three times, SPIS has demonstrated reliability and validity.

The Psychosocial Health Evaluator [2] was used to establish discriminant validity in conjunction with SPIS. Convergent validity of SPIS was assessed using the Kessler Psychological Distress Scale [202]. A Demographic Information Questionnaire was also administered to gather details about participants' gender, age, and education, contributing valuable contextual information to the study. These comprehensive measures and methodologies enhance the robustness and credibility of SPIS as a tool for evaluating psychosocial health.

2.3 Procedure

The data collection process involved individual interactions with participants in various settings, including hospitals, clinics, educational institutions, and public offices. Researchers approached potential participants individually, providing information about the study's objectives and obtaining verbal consent for their participation. Participants were assured of the confidentiality of their data, and expressions of gratitude were extended for their willingness to participate in the study.

2.4 Analysis

Both exploratory factor analysis and confirmatory factor analysis were conducted to assess the reliability and validity of the Sukoon Psychosocial Illness Scale (SPIS). Additionally, statistical techniques such as the Pearson Correlation Coefficient, t-test, simple regression, and descriptive statistics were employed to analyze the data further. These comprehensive analyses contribute to ensuring the robustness and validity of the findings derived from the SPIS in evaluating psychosocial health.

The study was approved by the Departmental Ethics Review Committee of the (blinded) university. The data collection process was in accordance with the 1964 Helsinki Declaration and its later amendments.

3. Results

3.1 The Etiological Foundations for Sukoon Psychosocial Illness Scale (SPIS)

Based on the model of psychosocial health [2] that defines psychosocial health as the “sexual, emotional, social, environmental, cognitive, religious, moral, and spiritual satisfaction” of a person; a checklist was developed. This checklist (Table 1) comprised of the possible symptoms for the sexual, emotional, social, environmental, cognitive, religious, moral, and spiritual problems. The compilation of these symptoms was based on a detailed review of earlier literature, including the Diagnostic and Statistical Manual of Mental Disorders [1]. The checklist can also be used for diagnostic purposes by clinicians who would like to follow the model of psychosocial health.

Table 1 The checklist of symptoms based on the model of psychosocial health.

Domain	Symptoms
Sexual Problems	☐ Less or no interest in understanding one’s sexuality
	☐ Considering sexuality as a matter of shame

	☐ Deficiency in sexual intelligence ☐ Deficiency or absence of sexual fantasies and desire for sexual activity ☐ Men's persistent inability to attain or maintain erection ☐ Men's persistent premature ejaculation ☐ Women's persistent inability to have orgasm or an adequate lubrication-swelling response of sexual excitement ☐ Women's experience of genital pain before, during or after sexual intercourse ☐ Sexual activity with a prepubescent child ☐ Deriving sexual excitement from the physical or psychological suffering of the victim
Emotional Problems	☐ Less or no interest in understanding one's emotionality ☐ Being unwilling for emotional arousal and discharge ☐ Being unable to be emotionally assertive ☐ Deficiency in emotional intelligence ☐ Persistent or episodic exaggeration or disturbances of mood states ☐ Depressed mood or lack of interest in life ☐ Abnormalities in the amount, quality, or timing of sleep ☐ Nightmares, Sleep terror, & Sleepwalking ☐ The presence of observable physical symptoms that are indicative of a general medical condition ☐ A feeling of pain without any biological ground ☐ Pretending to have pain or being ill ☐ Fear of having or developing a severe medical disease ☐ Fear of being or getting unattractive ☐ Failure to restrain aggressive impulses, resulting in serious assaults or destruction of property ☐ Repeated failure to resist impulses to steal objects ☐ Recurrent pulling out of one's hair for pleasure, gratification, or relief of tension
Cognitive Problems	☐ Less or no interest in understanding one's mental processes and cognitive procedures ☐ Being unaware of the role of Devil in human cognition ☐ Being unaware of the valid religious beliefs on mental health ☐ Deficiency in cognitive intelligence ☐ Persistent feelings of anxiety, fear, worry, terror, and related conditions ☐ Panic attacks ☐ Avoidant behaviors in fearful situations ☐ Recurring irritating thoughts ☐ Repetitious ritualistic behavior ☐ Irritating traumatic memories ☐ Being persistently unable to recall important personal information and memories

	☐ Persistent confusions about personal identity ☐ Disconnection with reality ☐ Delusions ☐ Hallucinations ☐ Disorganized speech
Social Problems	☐ Less or no interest in understanding social and cultural norms ☐ Markable desire for social compliance and obedience ☐ Deficiency in social intelligence ☐ Unjustified distrust and suspiciousness of others ☐ Detachment from social or close relationships ☐ Violation of human rights ☐ Persistent Attention-seeking behavior ☐ Grandiosity, need for admiration, and lack of empathy ☐ Inordinate preoccupation with being disapproved of, socially rejected, or criticized ☐ Inordinate and chronic need to be taken care of, resulting in submissive clinging behavior and a fear of separation, abandonment, or rejection ☐ Extreme preoccupation with order, systematization, and organization to meet perfection
Environmental Problems	☐ Less or no interest in understanding environmental and financial aspects of life ☐ Less or no interest in understanding hygiene and nutrition ☐ Deficiency in environmental intelligence ☐ Deficiency in the struggle to generate sufficient income for self and dependents ☐ Persistent unwillingness for the cleanliness and decoration of one's surroundings
Religious Problems	☐ Less or no interest in understanding one's religion appropriately ☐ Deficiency in religious intelligence ☐ Having illogical and invalid religious beliefs ☐ Being unaware of personal intentions about religious practices ☐ Markable deficiency in performing religious practices
Moral Problems	☐ Less or no interest in understanding human virtues ☐ Deficiency in moral intelligence ☐ Being unaware or less aware of human virtues and values ☐ Markable deficiency in enhancing humanistic virtues in one's character ☐ Strong and persistent irritation due to the apparent or assigned gender and demonstration of a persistent identification with the opposite sex
Spiritual Problems	☐ Less or no interest in understanding one's spirituality ☐ Deficiency in spiritual intelligence ☐ Deficiency in the struggle to purify oneself and attain self-transcendence

	☐ Being ignorant of the Lord and marked deficiency in His remembrance
	☐ Lack of interest in meeting with The Lord

3.2 The Psychometric Properties of Sukoon Psychosocial Illness Scale (SPIS)

The initial item-pool for SPIS consisted of 107 items. These items were based on the checklist of symptoms (Table 1), as mentioned earlier. SPIS was initially observed by a panel of 5 expert clinical psychologists who screened it out for appropriate face and content validity. Face or content validity is vital in scale development [203, 204]. After reviewing the 107 initial items, the panel agreed upon all the items to be valid for the construct of psychological problems based on the model of psychosocial health. The panel's ratings were also obtained through a 5-point Likert scale, i.e. strongly disagree to agree strongly. Significant positive correlations were found between the ratings of all five experts for all the items.

To establish the construct validity of SPIS, principal component analysis (study 1), exploratory factor analysis (study 2), and confirmatory factor analysis (study 3) were conducted. These analyses reveal different dimensions available within a scale and determine the factorial validity. Principal component analysis was employed for extraction each time. The rotation method was varimax. Sampling adequacy, by using Kaiser-Meyer-Olkin's values [205], was found meritorious (Table 2) in study 1 (KMO = 0.801), study 2 (KMO = 0.800), and study 3 (KMO = 0.861). Bartlett's test of sphericity [206] was used to analyze the adequacy of correlations between items. It was found to be highly significant (Table 2; $p = 0.000$) in the principal component analysis (PCA), the exploratory factor analysis (EFA), and the confirmatory factor analysis (CFA). During PCA, 86 items were discarded for projecting unacceptable values for extraction (i.e. <0.4). The factor structure of SPIS reported 6 factors in PCA (Emotional Problems, Sexual Problems, Religious & Moral Problems, Social Problems, spiritual Problems, & Professional Problems), which were similar to the EFA and CFA (Table 3). The differences between the factor loadings and cross-loadings ranged from a minimum difference of -0.502 to a maximum difference of 0.833 and were above 0.2 for all the items (Table 3). Furthermore, the average factor loadings in each of the 6 factors in PCA, EFA, and CFA were greater than 0.7 (Table 3). The communalities for all the PCA, EFA, and CFA items ranged between 0.481 to 0.898 (Table 4), thus acceptable as all were above 0.4 [207].

Table 2 Descriptive statistics, reliability, and data accuracy for Sukoon Psychosocial Illness Scale (SPIS).

Variable	N	Items	α	M	SD	%	Range Potential	Range Actual	Skewness	Kurtosis	KMO	*p* of BTS	VE
STUDY 1 (PCA)	115										0.801	0.000	71.92%
SPIS		21	0.886	62.000	19.848	42.18	21-147	22-117	0.109	-0.526			
Emotional Problems		6	0.879	18.339	8.757	43.66	6-42	6-42	0.545	-0.633			
Sexual Problems		3	0.914	8.513	4.181	40.54	3-21	3-21	0.119	-0.845			
Religious & Moral Problems		3	0.736	5.983	3.340	28.49	3-21	3-18	1.313	1.729			
Social Problems		3	0.786	12.261	4.702	58.39	3-21	3-21	-0.154	-0.891			
Spiritual Problems		3	0.693	7.504	3.638	35.73	3-21	3-21	1.063	2.261			
Professional Problems		3	0.794	9.400	4.830	44.76	3-21	3-21	0.478	-0.574			
STUDY 2 (EFA)	156										0.800	0.000	68.31%
SPIS		21	0.854	65.686	18.806	44.68	21-147	21-107	-0.188	-0.427			
Emotional Problems		6	0.839	18.744	8.345	44.63	6-42	6-40	0.311	-0.78			
Sexual Problems		3	0.808	9.513	3.739	45.30	3-21	3-21	-0.319	-0.489			
Religious & Moral Problems		3	0.810	6.872	4.213	32.72	3-21	3-18	0.99	0.035			
Social Problems		3	0.774	12.314	5.034	58.64	3-21	3-21	-0.204	-0.927			
Spiritual Problems		3	0.702	7.994	3.734	38.06	3-21	3-19	0.645	0.033			
Professional Problems		3	0.696	10.250	4.464	48.81	3-21	3-21	0.306	-0.722			
STUDY 3 (CFA + DV)	300										0.861	0.000	69.65%
SPIS		21	0.890	64.393	20.258	43.80	21-147	21-131	0.435	0.045			
Emotional Problems		6	0.841	19.527	8.295	46.49	6-42	6-42	0.51	-0.485			
Sexual Problems		3	0.895	8.130	4.088	38.71	3-21	3-21	0.418	-0.561			
Religious & Moral Problems		3	0.837	6.240	3.891	29.71	3-21	3-21	1.672	2.458			

Social Problems	3	0.788	11.410	4.737	54.33	3-21	3-21	0.09	-0.988				
Spiritual Problems	3	0.681	8.263	3.568	39.35	3-21	3-19	0.785	0.378				
Professional Problems	3	0.814	10.823	4.900	51.54	3-21	3-21	0.066	-1.041				
Psychosocial Health	24	0.815	86.553	10.870	72.13	24-120	24-120	-1.322	6.767				
STUDY 4 (CV)	113									0.796	0.000		65.71%
SPIS	21	0.884	58.743	19.050	39.96	21-147	21-108	0.045	-0.21				
Emotional Problems	6	0.851	17.726	8.034	42.20	6-42	6-37	0.465	-0.593				
Sexual Problems	3	0.870	7.681	3.643	36.58	3-21	3-15	0.03	-1.531				
Religious & Moral Problems	3	0.766	5.673	3.214	27.01	3-21	3-15	1.34	1.026				
Social Problems	3	0.829	10.938	5.131	52.09	3-21	3-21	0.09	-1.157				
Spiritual Problems	3	0.662	7.115	3.218	33.88	3-21	3-16	0.492	-0.581				
Professional Problems	3	0.749	9.611	4.578	45.76	3-21	3-21	0.243	-0.79				
Psychological Distress	10	0.898	21.761	7.835	14.80	10-50	10-42	0.62	-0.089				

N = Number of participants; α = Cronbach's Alpha; M = Mean; SD = Standard Deviation; KMO = Kaiser-Meyer-Olkin Measure of Sample Adequacy; BTS = Bartlett's Test of Sphericity; VE = Variance Explained; PCA = Principle Component Analysis; EFA = Exploratory Factor Analysis; CFA = Confirmatory Factor Analysis; DV = Discriminant Validity; CV = Convergent Validity.

Table 3 Factor structure of Sukoon Psychosocial Illness Scale (SPIS).

Item No.	Item	Study 1						Study 2						Study 3					
		F1	F2	F3	F4	F5	F6	F1	F2	F3	F4	F5	F6	F1	F2	F3	F4	F5	F6
1	I mostly remain sad.	**0.718**	0.285	0.317	0.140	-0.105	0.151	**0.812**	0.042	0.176	0.026	0.09	0.06	**0.770**	0.158	0.088	0.145	0.106	0.082
2	I am usually tensed.	**0.827**	0.029	-0.074	0.096	0.096	-0.046	**0.747**	0.04	0.182	0.170	0.253	0.105	**0.825**	0.039	0.161	0.141	0.080	0.096
3	I stay worried all the time.	**0.795**	0.179	0.097	0.062	0.259	0.144	**0.719**	0.225	0.251	0.093	0.233	0.027	**0.625**	0.052	0.202	0.221	0.058	0.283
4	I have lost interest in life.	**0.603**	0.098	0.281	0.344	-0.063	0.124	**0.755**	0.227	0.090	0.068	-0.216	-0.049	**0.592**	0.464	0.046	0.081	0.01	0.040

5	I am unhappy with my life.	**0.752**	-0.040	0.434	0.110	0.091	0.07	**0.663**	0.179	-0.125	0.236	0.083	-0.043	**0.594**	0.418	0.074	0.075	0.066	0.022
6	I cannot manage my stress easily.	**0.663**	0.140	0.10	0.263	0.247	0.016	**0.549**	-0.159	0.173	-0.06	0.319	0.406	**0.619**	0.145	0.177	0.237	0.296	0.059
7	My sexual performance is unsatisfactory.	0.107	**0.921**	0.08	0.102	0.145	0.081	0.151	**0.795**	0.357	-0.046	0.071	0.011	0.246	**0.861**	0.138	0.069	0.084	0.04
8	I am unable to perform well sexually.	0.095	**0.928**	-0.052	0.043	0.108	0.032	0.064	**0.792**	0.189	0.114	0.130	0.036	0.145	**0.889**	0.111	0.038	0.066	-0.02
9	I get tensed because of my sexual performance.	0.196	**0.822**	0.060	0.131	0.190	0.108	0.193	**0.825**	0.029	0.048	0.042	0.122	0.095	**0.861**	0.201	0.143	0.092	0.09
10	My life does not have any purpose.	0.220	0.124	**0.807**	0.083	0.128	0.135	0.242	0.069	**0.817**	0.051	-0.013	0.106	0.135	0.208	**0.780**	0.102	0.112	0.202
11	I am a useless person	0.171	0.05	**0.733**	0.192	0.067	0.357	0.221	0.073	**0.850**	0.03	0.116	0.041	0.165	0.228	**0.781**	0.138	0.137	0.150
12	I don’t care about the life hereafter.	0.107	-0.095	**0.653**	-0.019	-0.071	0.171	-0.017	-0.064	**0.727**	0.051	0.115	0.255	0.242	0.108	**0.724**	0.116	0.045	0.257
13	I do not go to the places where I get afraid.	0.081	0.140	-0.114	**0.835**	0.032	0.237	0.197	-0.072	0.136	**0.785**	-0.02	0.051	0.078	0.223	0.070	**0.808**	0.104	-0.042
14	I avoid fearful situations.	0.033	0.181	0.125	**0.817**	0.096	-0.063	0.091	0.066	0.148	**0.80**	0.169	-0.067	0.088	0.097	0.071	**0.863**	-0.016	0.066
15	I do not want to meet with people who make me nervous.	0.355	0.117	0.072	**0.706**	0.20	0.096	0.130	0.052	0.170	**0.782**	0.044	0.069	0.178	-0.063	0.084	**0.758**	0.174	0.194
16	I am not interested in understanding spirituality.	0.089	0.061	0.142	0.062	**0.744**	0.059	-0.053	0.316	-0.124	0.044	**0.696**	0.235	0.035	0.270	-0.077	0.037	**0.754**	0.090

17	I don't believe in metaphysics.	-0.091	0.116	0.163	0.144	**0.740**	0.065	0.079	0.155	0.146	0.096	**0.845**	-0.068	0.147	0.084	0.081	0.089	**0.818**	0.021
18	I am not interested in thinking about my existence.	0.160	0.019	0.215	0.035	**0.758**	0.079	0.033	0.535	-0.041	0.076	**0.499**	0.145	0.247	0.401	-0.029	0.104	**0.529**	0.163
19	I don't have enough money to satisfy my family.	0.132	0.059	0.298	-0.061	0.062	**0.858**	0.07	0.061	0.240	-0.044	0.181	**0.789**	0.193	0.061	0.107	0.106	0.067	**0.837**
20	I have financial problems.	0.245	0.043	0.00	0.153	0.183	**0.80**	0.132	0.030	-0.059	0.110	0.050	**0.822**	0.235	0.083	0.06	0.030	0.032	**0.866**
21	I have problems at work.	0.253	0.241	-0.080	0.275	0.091	**0.678**	0.149	0.289	0.074	0.230	-0.036	**0.607**	0.130	0.201	0.131	0.076	0.163	**0.725**

Extraction Method = Principal Component Analysis; Rotation Method = Varimax with Kaiser Normalization; F = Factor.

Table 4 Communalities, Item-total and Item-scale correlations for Sukoon Psychosocial Illness Scale (SPIS).

Item	Study 1								Study 2								Study 3							
No.	Ext.	SPIS	F1	F2	F3	F4	F5	F6	Ext.	SPIS	F1	F2	F3	F4	F5	F6	Ext.	SPIS	F1	F2	F3	F4	F5	F6
1	0.750	0.697**	0.818**						0.693	0.567**	0.802**						0.664	0.648**	0.779**					
2	0.710	0.543**	0.765**						0.696	0.682**	0.814**						0.743	0.645**	0.808**					
3	0.766	0.730**	0.839**						0.694	0.719**	0.804**						0.567	0.632**	0.725**					
4	0.590	0.646**	0.738**						0.683	0.494**	0.726**						0.576	0.602**	0.710**					
5	0.777	0.651**	0.820**						0.552	0.514**	0.678**						0.544	0.612**	0.711**					

6	0.60	0.673**	0.756**						0.624	0.556**	0.645**						0.583	0.683**	0.745**					
7	0.898	0.521**		0.944**					0.789	0.520**		0.869**					0.833	0.553**		0.916**				
8	0.888	0.447**		0.935**					0.698	0.493**		0.841**					0.829	0.476**		0.909**				
9	0.783	0.588**		0.892**					0.738	0.481**		0.840**					0.820	0.528**		0.904**				
10	0.756	0.560**			0.866**				0.745	0.527**			0.882**				0.734	0.620**			0.879**			
11	0.736	0.558**			0.872**				0.792	0.548**			0.879**				0.750	0.651**			0.884**			
12	0.481	0.283**			0.675**				0.614	0.395**			0.791**				0.675	0.623**			0.843**			
13	0.794	0.462**				0.859**			0.681	0.469**				0.835**			0.726	0.490**				0.829**		
14	0.731	0.452**				0.829**			0.708	0.499**				0.825**			0.772	0.450**				0.869**		
15	0.693	0.637**				0.824**			0.667	0.512**				0.829**			0.686	0.505**				0.816**		
16	0.593	0.423**					0.793**		0.660	0.355**					0.823**		0.658	0.388**					0.783**	
17	0.621	0.375**					0.768**		0.779	0.416**					0.766**		0.712	0.432**					0.783**	
18	0.654	0.465**					0.803**		0.565	0.441**					0.786**		0.540	0.556**					0.780**	
19	0.853	0.553**						0.859**	0.718	0.465**						0.819**	0.768	0.564**						0.880**

20	0.759	0.606**	0.867**	0.712	0.436**	0.810**	0.815	0.540**	0.896**
21	0.672	0.614**	0.798**	0.534	0.528**	0.734**	0.632	0.571**	0.781**

**. Correlation is significant at the 0.01 level (2-tailed); Ext. = Extraction/Communalities; SPIS = Item-total reliability; F = Factor.

Criterion-related validity is another technique for validating scales [208]. This is commonly measured by the convergent and predictive validity of a scale. The convergent validity of SPIS was established by significant positive correlations of psychological distress with psychosocial illnesses (Table 5; $r = 0.699$; $p < 0.01$), emotional problems (Table 5; $r = 0.703$; $p < 0.01$), sexual problems (Table 5; $r = 0.398$; $p < 0.01$), religious & moral problems (Table 5; $r = 0.475$; $p < 0.01$), social problems (Table 5; $r = 0.303$; $p < 0.01$), spiritual problems (Table 5; $r = 0.381$; $p < 0.01$), and professional problems (Table 5; $r = 0.415$; $p < 0.01$). The divergent validity of SPIS was determined thru the significant inverse correlations between psychological illness and psychosocial health (Table 5; $r = -0.270$; $p < 0.01$).

Table 5 Correlations.

	Psychosocial Illness	Emotional Problems	Sexual Problems	Religious & Moral Problems	Social Problems	Spiritual Problems	Professional Problems
Psychosocial Illness		0.854**	0.571**	0.727**	0.575**	0.587**	0.652**
Emotional Problems			0.397**	0.539**	0.330**	0.404**	0.465**
Sexual Problems				0.386**	0.225**	0.111	0.249**
Religious & Moral Problems					0.278**	0.519**	0.329**
Social Problems						0.255**	0.256**
Spiritual Problems							0.265**
Psychosocial Health	-0.270**	-0.269**	-0.132*	-0.294**	-0.044	-0.228**	-0.107
Psychosocial Distress	0.699**	0.703**	0.398**	0.475**	0.303**	0.381**	0.415**
Age	-0.136**	-0.096*	-0.123**	-0.057	-0.033	-0.070	-0.161**
Education	-0.05	-0.015	-0.021	-0.069	0.081*	-0.046	0.028

**. Correlation is significant at the 0.01 level (2-tailed)

The reliability of a scale refers to the consistency in the results by repeating it again and again. The mean scores of SPIS and its sub-scales retrieved from the four consecutive studies are consistent (Figure 1). Internal consistency or homogeneity is an important factor in the reliability of a scale [209]. Cronbach alpha is the most used measure for internal consistency reliability [210]. The Cronbach's alpha reliability of SPIS was good in all four studies (Table 1; $\alpha = 0.886, 0.854, 0.890, \& 0.884$). Item-total and item-scale correlations are also important in measuring the reliability of a scale [211]. The item-total and item-scale correlations were highly significant for all the items in all the studies (Table 4; $p < 0.01$).

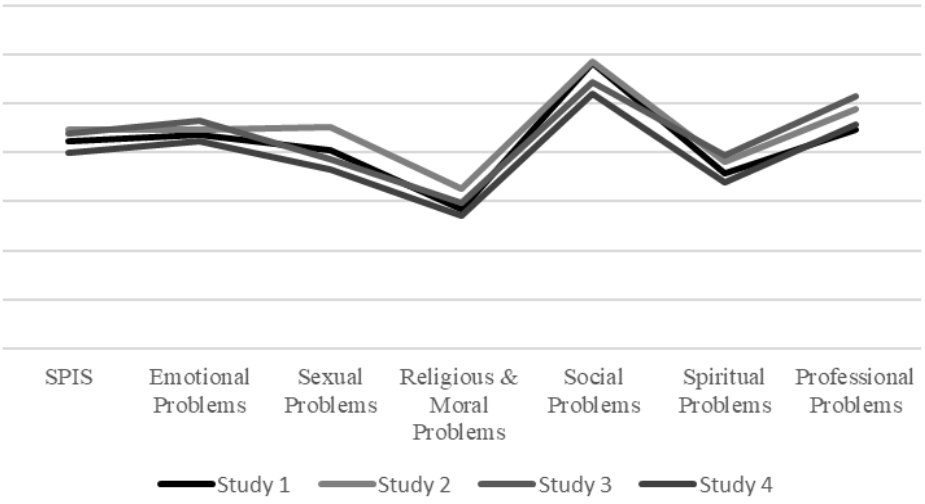

Figure 1 test-retest reliability of SPIS.

3.3 Additional Findings

The analysis revealed that women exhibited significantly higher levels of psychosocial illness (Table 6; M = 67.40 vs. 59.15; $p = 0.000$; Cohen's $d = 0.424$), emotional problems (Table 6; M = 20.40 vs. 17.36; $p = 0.000$; Cohen's $d = 0.371$), sexual problems (Table 6; M = 9.19 vs 7.43; $p = 0.000$; Cohen's $d = 0.456$), and social problems (Table 6; M = 12.72 vs 10.23; $p = 0.000$; Cohen's $d = 0.523$). Men and women did not reveal significant religious, moral, spiritual, and professional differences. Age demonstrated substantial inverse correlations with psychosocial illness (Table 5; $r = -0.136$; $p < 0.01$), emotional problems (Table 5; $r = -0.096$; $p < 0.05$), sexual problems (Table 5; $r = -0.123$; $p < 0.01$), and professional problems (Table 5; $r = -0.161$; $p < 0.01$). Education had a significant positive correlation with social problems (Table 5; $r = -0.081$; $p < 0.05$).

Table 6 Gender-based differences in Psychosocial Illness and its counterparts.

Variables	Men (*n* = 297)			Women (*n* = 387)			*t*	*p*	Cohen's *d*
	M	SD	%	M	SD	%			
Psychosocial Illness	59.158	20.046	40.24	67.407	18.898	45.86	5.227	0.000	0.424
Emotional Problems	17.360	7.903	41.33	20.404	8.489	48.58	4.574	0.000	0.371
Sexual Problems	7.438	4.113	35.42	9.199	3.603	43.80	5.627	0.000	0.456
Religious & Moral Problems	5.983	3.741	28.49	6.574	3.946	31.30	1.893	0.059	-
Social Problems	10.232	4.682	48.73	12.728	4.853	60.61	6.452	0.000	0.523
Spiritual Problems	8.030	3.538	38.24	7.904	3.668	37.64	0.433	0.665	-
Professional Problems	10.115	4.917	48.16	10.599	4.575	50.47	1.261	0.208	-

4. Discussion

The significance of psychosocial aspects in mental health has been integral to the history of modern psychiatry [212]. Before 1950, research on psychiatric problems involved collaboration between psychologists and sociologists, with a focus on social activism and understanding the psychosocial foundations of mental disorders [213, 214]. Many earlier theorists think that psychological problems result from adaptive failures in the psychosocial environment [215]. The recently proposed model of psychosocial health [2] defined psychosocial health as the "sexual, emotional, social, environmental, cognitive, religious, moral, and spiritual satisfaction" of a person. The composition of this model is based on the seven components of psychosocial health. Each of these seven components has been regarded as important for a person's psychological well-being. These components have been studied separately by several researchers who positively associated each of these seven components with mental health and psychological well-being. The sexual component [56, 82, 216, 217], the emotional component [56, 218], the cognitive component [219, 220], the socio-environmental component [56, 62, 92, 103], the religious component [109-113, 115-122], the moral component [93], and the spiritual component [54, 92, 96, 114], all have been regarded important contributing factors for a person's psychological well-being. What sets apart the recent model of psychosocial health [2] is its additional focus on the religious, moral, and spiritual aspects involved in mental health, along with the conventional involvement of cognitive, sexual, emotional, social, and environmental dimensions of mental health. This broader perspective contributes to a more comprehensive understanding of the complex nature of psychosocial health.

4.1 The Religious, Moral, & Spiritual Aspects of Mental Health

Traditionally, psychological advancements in Western cultures have tended to downplay the role of spirituality, ethics, and religion in mental health. In the United States, psychiatrists were historically perceived as less religious compared to the general American population [221]. However, this perspective has been evolving, particularly with the rise of Positive Psychology [222-224]. Despite past biases against religion and spirituality, many researchers have underscored the significant role of religious beliefs, spirituality, and morality in mental health and psychosocial well-being. Recent literature highlights positive associations between religiosity and psychological well-being [109-119, 121, 122, 225-235] and inverse correlations between religiosity and psychopathology [236-244]. Non-religious spirituality has also been positively correlated with mental health [120, 245]. The aspects of religiosity, morality, and spirituality cannot be neglected in psychology [246] due to their established effects on prosocial behavior and the prevention of crime and deviance [247, 248]. These three aspects are regarded as the prime sources to unite people and to bring peace, welfare, and prosperity to a society [249-252]. Moreover, these aspects are vital in finding meaning and achieving life satisfaction [253, 254]. Acknowledging these dimensions is essential for a more holistic understanding of mental health and well-being.

5. Conclusions

In the dynamic landscape of clinical psychology, the emergence of the psychosocial health model has opened a new era of understanding mental well-being. This innovative paradigm, rooted in

baseline studies and the convergence of religion, morality, spirituality, and psychology, represents a significant departure from traditional perspectives. As articulated in this model, psychosocial health goes beyond conventional parameters, encompassing emotional, social, and cognitive aspects and extending its reach to include sexual, environmental, religious, moral, and spiritual dimensions. The model eloquently characterizes psychosocial health as the "sexual, emotional, social, environmental, cognitive, religious, moral, and spiritual satisfaction" of an individual, thereby acknowledging the rich diversity of human experiences contributing to mental well-being. Historically, mental health scales and psychopathology assessments have faced limitations by excluding crucial dimensions such as sexual, environmental, religious, moral, and spiritual aspects. This inherent gap in understanding necessitated the development of a more expansive framework, prompting the present study to introduce the Sukoon Psychosocial Illness Scale (SPIS).

The SPIS is a pioneering self-report tool designed to assess psychological problems across seven integral components: sexual, emotional, socio-environmental, professional, religious, moral, and spiritual. SPIS is a testament to the commitment to holistic psychosocial assessment, reflecting a paradigm shift in understanding mental health. Unlike its predecessors, SPIS offers a holistic perspective on psychosocial health, providing insights into the origins and manifestations of psychological challenges. This depth of understanding is essential for tailoring interventions that address the multidimensional nature of psychosocial health. The development, validation, and presentation of SPIS in this series of studies extend beyond the immediate scope. SPIS serves as a promoter for future research endeavors, paving the way for new investigations into the complex interplay of sexual, emotional, socio-environmental, professional, religious, moral, and spiritual factors in psychosocial health. Its application in clinical settings promises a more enhanced approach to treatment, acknowledging the diversity of individual experiences. As a comprehensive assessment tool, SPIS holds the potential to revolutionize professional practices. Clinicians armed with SPIS can conduct more comprehensive and holistic evaluations, offering tailored interventions to their patients. In conclusion, SPIS contributes to a more profound understanding of individuals' well-being and promotes the development of holistic therapeutic strategies.

Author Contributions

Waqar Husain conceived the idea, designed the study, supervised the project, analyzed the data, and wrote the paper. Farrukh Ijaz, Muhammad Ahmad Husain, Marwa Zulfiqar, and Javeria Khalique were involved in data collection and literature review.

Competing Interests

The authors have declared that no competing interests exist.

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