RUNNING HEAD: SCHIZOYPY AND HiTOP

Conceptualization of Schizotypy within the Hierarchical Taxonomy of Psychopathology and other Nosologies

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Abstract

 Schizophrenia spectrum disorders are thought to exist on a continuum. Schizotypy refers to traits or symptoms on the lower end that reflect a risk for the development of more severe psychotic symptoms. This chapter will examine the placement of schizotypy within the Hierarchical Taxonomy of Psychopathology (HiTOP) and traditional nosologies. The term “schizotypy” does not appear in the HiTOP model, Diagnostic and Statistical Manual of Mental Disorders (DSM), or International Classification of Diseases (ICD). However, HiTOP includes positive and disorganized schizotypy constructs (e.g., cognitive/perceptual dysregulation, unusual beliefs and experiences, eccentricity) as traits within the thought disorder domain. Negative schizotypy is included within the HiTOP detachment domain with constructs such as anhedonia, intimacy avoidance, suspiciousness, withdrawal, and interpersonal passivity. In the DSM, schizotypy constructs appear in the Schizophrenia Spectrum and Other Psychotic Disorders chapter, the Personality Disorders chapter of Section II, and the Alternative Model of Personality Disorders and Conditions for Further Study in Section III. Positive and disorganized schizotypy are similarly represented in the ICD-11 in the Schizophrenia or Other Primary Psychotic Disorders Section. Despite not being explicitly included within these nosologies, schizotypy constructs are central to each system’s conceptualization of the psychosis spectrum.

Keywords: Diagnostic and Statistical Manual of Mental Disorders (DSM); International Classification of Diseases (ICD); Hierarchical Taxonomy of Psychopathology; Nosology; Diagnosis.

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Schizotypy refers to traits or symptoms similar to schizophrenia, but in a diminished form, and schizotypy represents a risk for the future development of schizophrenia-spectrum disorders (Meehl, 1962). Schizophrenia spectrum disorders are thought to exist on a continuum with schizotypy on one end of the spectrum and full-blown psychosis on the other end (Kwapil & Barrantes-Vidal, 2015). Modern conceptualizations of schizotypy suggest that it is multidensional and composed of at least three different dimensions including positive, negative, and disorganized schizotypy (REF). Positive schizotypy includes delusion-like and hallucination-like experiences commonly termed magical ideation and persceptual aberration, respectively (REF). Negative schizotypy is similar to the negative symptoms of schizophrenia and is commonly operationally defined as physical and social anhedonia (REF). Disorganized schizotypy is similar to disorganized symptoms of schizophrenia and includes odd and unusual thought, speech, and behavior (REF). Although similar to many constructs used clinically, schizotypy is primarily a research construct and does not explicitly appear in traditional or alternative taxonomies of psychopathology.

The Hierarchical Taxonomy of Psychopathology (Kotov et al., 2017) is an international consortium of psychopathology nosologists that aims to improve upon the well-known limitations of traditional nosologies such as the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013) and International Classification of Diseases (World Health Organization, 2004). These limitations include 1) excessive comorbidity among disorders, 2) arbitrary borders between what is considered psychopathology and what is considered normal, 3) lack of consistency and stability among diagnoses, 4) heterogeneity in symptoms among people diagnosed with the same disorder, and 5) and inability to account for subthreshold cases. HiTOP addresses these limitations by accounting for psychopathology dimensionally and hierarchically.

1. Limitations of traditional nosologies:
	1. Comorbidity
	2. Arbitrary Boundaries
	3. Diagnostic instability
	4. Heterogeneity among symptoms
	5. Inability to account for subthreshold cases
2. How HiTOP addresses these issues
	1. Dimensions rather than categories
	2. Organized Hierarchically
3. How dimensional and hierarchical approach addresses the issues
	1. Comorbidity
		1. Related conditions are assigned to the same spectra
	2. Arbitrary boundaries
		1. Embraced by the dimensional nature of the system
	3. Heterogeneity of symptoms
		1. Group related symptoms together
		2. Assign co-occurring symptoms to other spectra
	4. Subthreshold cases
		1. Individuals who would not meet criteria in the DSM or ICD receive a dimensional score in HiTOP which can be used for treatment planning
	5. Diagnostic instability
		1. Dimensional diagnoses have higher reliability
4. Describe HiTOP
	1. 6 higher order spectra
	2. 3 super-spectra
	3. P-factor

As the name implies, HiTOP organizes psychopathology hierarchically with the p-factor, which represents the commonalities of all psychopathology at the top of the hierarchy (see Figure 1). Under the p-factor are the psychosis, internalizing, and externalizing superspectra. Superspectra are further divided into spectra including thought disorder, detachment, internalizing, somatoform, antagonistic externalizing, and disinhibited externalizing. Below the spectra are subfactors, syndromes/disorders, symptom components and maladaptive traits, and signs and symptoms.

Schizotypy falls under the psychosis-superspectrum of HiTOP. This superspectra includes the thought disorder and detachment spectra. Like schizophrenia or psychotic-spectrum disorders, schizotypy is multidimensional and composed of positive, negative, and disorganized dimensions. Within HiTOP, the positive and disorganized dimensions fall under the thought disorder spectra, and the negative dimension falls under the detachment spectra. Historically,

 Traditionally, researchers have made distinctions among several distinct but related constructs including schizotypy, schizotypal personality disorder, schizotypal disorder, psychoticism, clinical high-risk, and ultra-high risk among others. Many of these terms refer to the same constructs, but several refer to conceptually distinct constructs. For example, schizotypal personality disorder in the DSM and schizotypal disorder in the ICD are similar constructs, but both are conceptually distinct from schizotypy.

1. Distinctions among constructs
	1. Schizotypy
		1. Positive
		2. Negative
		3. Disorganized
	2. Schizotypal Personality Disorder
	3. Clinical high-risk
	4. Ultra high-risk

The conceptualization of schizotypy is most closely represented with the maladaptive traits within HiTOP. Positive, negative, and disorganized schizotypy are each composed of multiple traits and symptoms. Negative schizotypy includes several different traits such as social anhedonia, physical anhedonia, constricted affect, and reduced emotional expression. Within HiTOP, these are defined as emotional detachment (i.e., the tendency to be emotionally distant and reserved), anhedonia (i.e., general deficits in positive emotions and energy levels, with diminished experience of joy and excitement, lethargy, lassitude, and psychomotor slowness), (low) exhibitionism (i.e., preference for not being the center of attention or drawing the attention of others), social withdrawal (i.e., avoidance of interpersonal interactions and a preference for being alone that is guided either by a genuine disinterest in interacting with others), and romantic disinterest (i.e., a general lack of interest in, desire for, and enjoyment of sex, eroticism, and interpersonal intimacy).

Disorganized schizotypy is similar to eccentricity which is defined as odd, unusual, or bizarre behavior, appearance and/or speech, having strange or unpredictable thoughts, or saying unusual or inappropriate dreams.

Positive schizotypy is conceptualized within HiTOP as unusual beliefs (i.e., the tendency to hold unfounded and irrational thoughts, beliefs, and ideas about the world including beleifs about the powers of oneself, others, and objects to control and influence others in the physical world) and unusual experiences (i.e., perceptual distortions that do not correspond to reality, aberrant salience, and dissociation or detachment from reality, one’s surroundings or oneself).

Researchers have often debated whether suspiciousness is a part of schizotypy or is a distinct construct (REF). For example, the DSM includes it as a symptom of schizotypal personality disorder (REF), while the Alternative Model of Personality Disorders includes suspiciousness on the detachment, rather than thought disorder, domain (REF). Within HiTOP, suspiciousness is provisionally located within the detachment domain (REF). At the same time, most factor analytic studies of schizotypy have found that suspiciousness forms a separate factor distinct from positive schizotypy (i.e., when defined at perceptual aberration and magical ideation) and negative schizotypy (REF). Thus, it is unclear whether suspiciousness belongs on the detachment or thought disorder domain. Alternatively, some research has suggested that suspiciousness does not belong with schizotypy and is more similar to antagonism than to thought disorder/positive schizotypy or detachment/negative schizotypy (REF).

HiTOP includes several other constructs that are related to schizotypy.

1. Thought Disorder
	1. Other traits
		1. Fantasy Proneness
		2. Anomalous Self-Experiences
		3. Cognitive-perceptual dysregulation
	2. Symptoms
		1. Dissociation
		2. Reality Disortion
2. Detachment
	1. Other Traits
		1. Depressivity
		2. Intimacy Avoidance
		3. Interpersonal Passivity
		4. Disafilliativeness
	2. Symptoms
		1. Inexpressivity
		2. Avolition
3. Mania
	1. Original conceptualizations of schizotypy included hypomania
	2. HiTOP provisionally includes mania cross-loading on thought disorder and internalizing
	3. Constructs
		1. Euphoric Activation
		2. Hyperactive Cognition
		3. Reckless Overconfidence

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