LETTERS TO THE EDITORS

Digital psychopathology: a not yet explored frontier in mental status examination

Psychopathology is the source of objective signs for characterization of mental disorders.[1] Despite extensive research into neuroimaging and biomarkers, we still use almost the same definitions of ''pathological behavior'' first described more than a century ago to assess mental disorders.[2] Almost the same occurs with physical examination in general medicine, but their laboratory tests and image techniques thrived, improving clinical description in a way not yet developed by mental sciences.

Mental status examination (MSE) is the tool of choice for assessment of psychopathological signs.[3] It was developed by psychopathologists of the past, essentially through direct and indirect interaction with patients.[1] Except for the development of questionnaires to record the presence of observed signs, as it is with psychopathology, MSE has not changed significantly during the last century. However, we should be aware that technological evolution brings other ways of interaction and, consequently, new fields for behavior observation.

Telemedicine (including telepsychiatry) has expanded manifold during the COVID-19 outbreak, expanding clinical experience with MSE through digital media.[4,5] Video medical appointments, text and audio messaging apps, and even social media expanded our patient observation horizons, but psychopathologists have not yet explored this new field. After years of telemedicine practice in care and research, the field that we are calling digital psychopathology has received almost no attention. In this letter, we present some observations carried out during the last months, discussed among peers like medical folk knowledge, which can seed some ideas for future research.

Psychopathological signs observed through digital interaction were classified by us into three categories: 1) classical signs of classical psychopathology; 2) new presentations of classical psychopathology; and 3) digital psychopathology. The first includes all classical psychopathological disturbances assessable by video consultation. The second is a group of previously described disturbances ''dressed in new clothes'' or viewed ''through a new lens,'' due to telemedicine use or which would otherwise not be accessible at office or inpatient evaluation. Digital psychopathology, in turn, is an entirely new field, where behavior (and possibly new psychopathological signs) manifests in a way not yet described, since it only happens through digital interaction.

We have attached a box with some examples using MSE segments (Box 1), clinically observed by us, as a guide. Since mental disorders still lack laboratory and image tests, psychopathologists should not close their eyes to new observable findings which could improve disease descriptions. We hope that our call to action will promote discussion among clinicians, and be answered by other researchers observing new psychopathological patterns, so the field can thrive with future research.

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Box 1 Mental status examination signs in telepsychiatry

MSE category/sign	Description	Digital psychopathology category
Appearance		
Messy surroundings	Dirty, unkempt, or otherwise disorganized living quarters	New presentation of classical psychopathology
Unkempt or inappropriate appearance	Odd appearance, poorly shaven, inappropriate clothing	Classical psychopathology sign
General behavior		
Paranoid attitude	Refuses telemedicine or imposes restrictions (e.g., no video) for unknown reasons	Digital psychopathology
Uninhibited attitude	Doesn't care or even prefers telemedicine consultation to take place in non-private settings	Digital psychopathology
Perception		
Unprovoked giggling	Giggles, interact with empty space	Classical psychopathology sign
Earphone soliloquy	Subject speaks, discusses, or openly argues while wearing a headset, but is not on a call	New presentation of classical psychopathology; usually a patient with some insight; but unable to avoid answering hallucinations
Language		
Pressured texting	Sends half-written messages or with incomplete meaning, resulting in dozens of messages for a single sentence	Digital psychopathology
Obsessive or super-inclusive texting	Writes huge, overcorrected, over-reflected, or otherwise non-spontaneously generated texts	Digital psychopathology
Thinking		
Loud background sounds	Subject keeps loud sounds on in the background (e.g., music, TV) during a telemedicine appointment to avoid being heard by others	New presentation of classical psychopathology (delusion)
Bizarre texting	Subject replaces text spaces with periods, commas, or other symbols during psychotic states	Digital psychopathology
Intelligence		
Inability to comprehend interaction through camera/screen	Subject interprets the clinician as a TV show	Digital psychopathology
Psychomotricity		
Hyperactivity	Subject interrupts or constantly walks during the consultation due to difficulty staying still	New presentation of classical psychopathology
Self-disorder		
Can't look at the camera/screen	Subject avoids looking at the camera or at the screen due to difficulties dealing with self-image or maintaining eye contact with examiner	New presentation of classical psychopathology
Television Fregoli phenomenon	Subject insists that a character in a TV show is a disguised family member or friend	New presentation of classical psychopathology

MSE = mental status examination.

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