to neglect COVID-19 safety protocols and underestimate the possibility of getting infected by the virus.

- The Peltzman effect can be used to explain the increased risk-taking of people post vaccination. According to this theory, when safety measures are mandated, people develop a tendency to engage in risky behaviors and make more unsafe decisions. The perceived safety brought by vaccination makes people forgo all other safety measures such as mask-wearing, social distancing, and hygiene, thereby making them more susceptible to infection.

- The terror management theory suggests that people experience anxiety and fear when they become aware of the inevitability of death. This mortality salience spread as COVID-19 cases and the death rates increased. To reduce this anxiety, people engage in compensatory hedonic behaviors to gain a sense of control.5 Risk-taking can be considered as a self-indulgent behavior that results in the development of an internal locus of control over death due to COVID-19.

Mental health professionals should consider these factors while providing psychological intervention. Some suggestions for efficient management of the possible negative effects of increased risk-taking behavior are given in Figure 1. This will ensure that global and national efforts to combat the spread of the virus will not go in vain.

Disclosure

The authors report no conflicts of interest.

How to cite this article: Mackolil J, Mackolil J. Increased risk-taking behavior during the COVID-19 pandemic: psychological underpinnings and implications. Braz J Psychiatry. 2021;43:559-560. http://dx.doi.org/10.1590/1516-4446-2021-2039

References

1. Ornel F, Schuch JB, Sordi AO, Kessler FH. “Pandemic fear” and COVID-19: mental health burden and strategies. Braz J Psychiatry. 2020;42:232-5.
2. Trogan B, Caplan A. Risk compensation and COVID-19 vaccines. Ann Intern Med. 2021;174:858-9.
3. Solomon RL, Corbit JD. An opponent-process theory of motivation: I. Temporal dynamics of affect. Psychol. Rev. 1974;81:119-45.
4. Webster RK, Brooks SK, Smith LE, Woodland L, Wessely S, Rubin GJ. How to improve adherence with quarantine: rapid review of the evidence. Public Health. 2020;182:163-9.
5. Liu Y, Lu X, Tang Z. The impact of mortality salience on quantified self behavior during the COVID-19 pandemic. Pers Individ Dif. 2021;180:110972.

Translation and validation of the Structured Interview for Prodromal Syndromes (SIPS) to Portuguese

In the past three decades, there has been increasing interest in the study of the ultra-high risk state for psychosis (UHR).1 Originally proposed as “at-risk mental state” by Yung et al.,2 this state represents wide and heterogeneous modifications of an individual’s perception and/or behavior which can precede full-blown psychotic episodes, with some studies showing a transition rate of 18% after 6 months and 36% after 3 years.1

This prodrome can be separated into three major syndromes:2 attenuated positive symptoms syndrome, brief intermittent psychotic symptoms syndrome, and genetic risk and deterioration syndrome. Many instruments have been developed to assess these phenomena. One such instrument, the Structured Interview for Prodromal Syndromes (SIPS), has been used for more than 17 years, with good indicators of its reliability and validity.3

The SIPS is a structured interview that diagnoses and measures the severity of the UHR state.4 It consists of the Scale of Psychosis-Risk Symptoms (SOPS), a 19-item scale subdivided into four domains (positive, negative, disorganization, general); the Schizotypal Personality Disorder Criteria; the Global Assessment of Functioning Scale; a family history questionnaire; and two operational definitions – the Criteria of Prodromal Syndromes and Presence of Psychotic Syndrome – used for determining the three prodromal syndromes and a full-blown psychosis, respectively.

This letter provides a brief overview of the process of translation and cross-cultural validation of the SIPS for Brazilian Portuguese. Five bilingual researchers specialized in psychosis translated the original questionnaire from English to Portuguese. Then, two independent bilingual researchers proficient in English did the back-translation. The back-translated version was reviewed and given final approval by Prof. Scott W. Woods and Prof. Barbara Walsh, who first developed the original SIPS. The final Portuguese version of the scale was applied to 24 UHR subjects (recruited for the ongoing Subclinical Symptoms and Psychosis Prodrome Project5) and to 10 individuals with schizophrenia (inpatients from the Institute of Psychiatry, Universidade de São Paulo).

We then sought to verify if the Portuguese version of the SOPS would be able to differentiate between the UHR and schizophrenia groups with statistical significance.
Analysis of variance (ANOVA) with Bonferroni post-hoc correction was conducted for SOPS items to assess the difference between scores in the UHR and the diagnosed schizophrenia group. Cronbach’s alpha was calculated for SOPS items to check for the scale’s internal consistency.

To evaluate the instrument’s validity in Portuguese, the SIPS questionnaire was applied to both groups and the total SOPS score was compared using a receiver operating characteristic (ROC) curve.

The analysis of SOPS scores between groups is shown in Table 1, as well as data regarding the sex and age of the individuals in each group. Cronbach’s alpha coefficient was 0.875. This value remained stable after removal of any SOPS item. The comparative analysis of the total SOPS scores of both groups using the ROC curve showed a high area under the curve of 0.917.

We have evidence that the Portuguese version of the SOPS can be used to assess the prodromal symptoms of psychotic disorders. With this instrument available in the Portuguese language, we expect that UHR research in Brazil can move further.

Table 1 Sociodemographic data; SOPS domains and item scores

| Sociodemographic variables       | UHR          | Schizophrenia | p-value |
|----------------------------------|--------------|---------------|---------|
| Age (mean, SD)                   | 27.33 (3.9)  | 48.5 (21.61)  |         |
| Gender                           |              |               |         |
| Male (n, %)                      | 7 (29.17%)   | 6 (60%)       |         |
| Female (n, %)                    | 17 (70.83%)  | 4 (40%)       |         |
| Domain (mean, SD)                |              |               |         |
| Positive                         | 8.04 (4.13)  | 15.20 (6.03)  | < 0.001 |
| Negative                         | 6.46 (5.47)  | 17.50 (5.62)  | < 0.001 |
| Disorganization                  | 2.29 (1.60)  | 4.30 (2.98)   | 0.015   |
| General                          | 6.00 (3.90)  | 7.90 (6.54)   | 0.300   |
| Items score (mean, SD)           |              |               |         |
| P1 – Unusual thought content     | 2.17 (1.40)  | 3.1 (2.18)    | 0.145   |
| P2 – Suspiciousness              | 2.67 (1.20)  | 4 (2.4)       | 0.038   |
| P3 – Grandiose Ideas             | 0.29 (0.69)  | 1.8 (2.57)    | 0.011   |
| P4 – Perceptual Abnormalities    | 2.42 (1.77)  | 4.4 (1.95)    | 0.007   |
| P5 – Disorganized Communication | 0.5 (0.88)   | 1.9 (1.73)    | 0.004   |
| N1 – Social Anhedonia            | 1.54 (1.82)  | 3.3 (1.7)     | 0.013   |
| N2 – Avolition                   | 1.33 (1.63)  | 2.2 (2.2)     | 0.213   |
| N3 – Expression of Emotion       | 0.54 (1.02)  | 2.3 (2.21)    | 0.003   |
| N4 – Experience of Emotions and Self | 0.92 (1.25) | 2.7 (2.31) | 0.006 |
| N5 – Ideational Richness         | 1.29 (1.46)  | 2.5 (2.32)    | 0.075   |
| N6 – Occupational Functioning    | 0.83 (1.24)  | 4.5 (2.32)    | < 0.001 |
| D1 – Odd Behavior or Appearance  | 0.25 (0.61)  | 0.3 (0.48)    | 0.819   |
| D2 – Bizarre Thinking            | 0.09 (0.29)  | 1.6 (1.65)    | 0.001   |
| D3 – Trouble with Focus and Attention | 1.96 (1.4) | 1.9 (2.23) | 0.927 |
| D4 – Impairment in Personal Hygiene | 0 (0)      | 0.5 (1.08)   | 0.027   |
| G1 – Sleep Disturbance           | 1.71 (1.78)  | 0.9 (1.73)    | 0.233   |
| G2 – Dysphoric Mood              | 2.25 (1.48)  | 3.9 (2.42)    | 0.020   |
| G3 – Motor Disturbances          | 0.25 (0.44)  | 1.3 (2)       | 0.019   |
| G4 – Impaired Tolerance to Normal Stress | 1.79 (1.56) | 1.8 (1.75) | 0.989 |

Bold type denotes statistical significance. SD = standard deviation; SOPS = Scale of Prodromal Symptoms; UHR = ultra-high risk state for psychosis.

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How to cite this article: Diniz GN, Santos PAMF, Andrade JC, Alves TM, Hortêncio L, van de Bilt MT, et al. Translation and validation of the Structured Interview for Prodromal Syndromes (SIPS) to Portuguese. Braz J Psychiatry. 2021;43:560-562. http://dx.doi.org/10.1590/1516-4446-2021-2056
References
1 Fusar-Poli P, Borgwardt S, Bechdolf A, Addington J, Riecher-Rössler A, Schulte-Lutter F, et al. The psychosis high-risk state: a comprehensive state-of-the-art review. JAMA Psychiatry. 2013;70:107-20.
2 Yung AR, McGorry PD, McFarlane CA, Jackson HJ, Patton GC, Rakkar A. Monitoring and care of young people at incipient risk of psychosis. Schizophr Bull. 1996;22:283-303.
3 Miller TJ, McGlashan TH, Rosen JL, Cadenhead K, Cannon T, Ventura J, et al. Prodromal assessment with the structured interview for prodromal syndromes and the scale of prodromal symptoms: predictive validity, interrater reliability, and training to reliability. Schizophr Bull. 2003;29:703-15. Erratum in Schizophr Bull. 2004;30: following 217.
4 Miller TJ, McGlashan TH, Woods SW, Stein K, Driesen N, Corcoran CM, et al. Symptom assessment in schizophrenic prodromal states. Psychiatr Q. 1999;70:273-87.
5 Loch AA, Freitas EL, Hortêncio L, Chianca C, Alves TM, Serpa MH, et al. Hearing spirits? Religiosity in individuals at risk for psychosis—results from the Brazilian SSAPP cohort. Schizophr Res. 2019;204: 353-9.