Participants and Methods: Participants included 755 pre-pandemic onset (51.3 % men, M = 59.54 years, SD = 17.23) and 838 (51.7% men, M = 60.63 years, SD = 16.71) post-pandemic onset outpatients from a large academic medical center in the Midwest. Performance was compared on selected assessments characterized by visual function (WAIS-IV Block Design, WAIS-IV Matrix Reasoning, and the Rey-Osterrieth Complex Figure Test – Copy trial) and assessments characterized by verbal function (WAIS-IV Digit Span (DS), Rey Auditory Verbal Learning Test (AVLT) total score, and Complex Ideational Material). Secondary analyses compared performance between the groups by age: in an older group (greater than 65 years old) and a younger group (less than 65 years old).
Results: The pre-and-post pandemic onset groups did not differ with respect to age, gender, education, or clinical diagnosis. Independent Samples T-tests showed that the post-pandemic onset group performed significantly worse on two verbal tests, DS (p =.005, Cohen's d = 0.131) and the AVLT (p <.001, Cohen's d = 0.245). Within the older group, the frequency of patients with dementia (54.1 vs 54.8 percent), and all other diagnoses, was comparable pre-and-post pandemic onset. The younger group also had comparable rates of clinical diagnoses at each time point. Secondary analyses showed that the older group was the only group to perform significantly worse on the two verbal tests post-pandemic onset: DS (p =.004, Cohen's d = 0.20) and AVLT (p <.001, Cohen's d = 0.39). The younger group had no differences in their performance on any of the verbal tests. For both the primary and secondary analyses, none of the groups had a significant change in performance on the tests that were characterized by visual function.
Conclusions: These results suggest that mask use during neuropsychological assessment may hinder performance on tests that require close attention to verbal output in older patients. This finding is not otherwise explained by demographic or clinical differences. In fact, these patients had nearly identical rates of dementia before and after the onset of the pandemic. In contrast, performance on tests that rely mainly on visual function was not affected. Attending to masked speech may be more cognitively demanding for older individuals, thus influencing their performance during testing. This may be particularly relevant for neuropsychologists working in geriatric settings.

Neuropsychologists performing assessments in-person, with masks, should be aware that patient scores on certain tests may be artificially deflated for reasons unrelated to cognition or clinical condition.

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3 Validity of the tele-administered Montreal Cognitive Assessment for identifying geriatric neurocognitive disorders

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Objective: With the emergence of the coronavirus 2019 pandemic, investigating the validity of tele-screenings for neuropsychological status has become increasingly necessary. While the telephone version of the Montreal Cognitive Assessment (MoCA-T) has been validated for use in patients with Parkinson's and stroke/cerebrovascular disease, the clinical utility of this instrument in geriatric patients with other suspected cognitive disorders has yet to be determined. Thus, the present study aimed to examine the classification accuracy of the MoCA-T in a mixed clinical sample of patients with mild cognitive impairment (MCI) or dementia.
Participants and Methods: Ninety-one older adults were administered the MoCA-T via videoconferencing technology as part of a comprehensive neurocognitive evaluation performed by a multidisciplinary treatment team within a dementia specialty clinic. Based on this evaluation, 51 (56.0%) patients were diagnosed with dementia, 27 (29.7%) with MCI, and 13 (14.3%) with no neurocognitive diagnosis (i.e., subjective cognitive complaints). In addition to MoCA-T total and item scores, we also computed subscale scores for between-group comparisons as the sum of items assessing

orientation, language, attention/executive function, and memory. ANOVA/ANCOVA and ROC curve analyses were used to examine between-group differences on the MoCA-T and its psychometric properties in discriminating patients with MCI or dementia, respectively.
Results: Participants had a mean age of 74.3 ± 8.7 and education of 16 ± 2.9 years. Patients with dementia were significantly older than those with MCI and no diagnosis, but there were no other significant between-group differences in clinical characteristics. MoCA-T total [$F(2,86)=28.5$, $p<0.001$] and all subscale scores ($p<0.01$) differed significantly between groups and in the expected direction (dementia<MCI<no diagnosis) even after controlling for age. The only exception was language for which there was initially a statistical trend ($p=0.06$) that reached significance ($p<0.05$) after controlling for age. In terms of individual items, abstraction, fluency, orientation to place/city, and category cued recall were the only items that did not differ significantly between groups. ROC curve analyses revealed -5 points to be the optimum cut-off for distinguishing between cognitively normal individuals from patients with MCI (Sensitivity=0.67; Specificity=0.77; AUC=0.78), and a cut-off of -8 points optimally distinguished between patients with MCI and dementia (Sensitivity=0.77; Specificity=0.74; AUC=0.81).
Conclusions: The current study provides further evidence for the clinical utility of the MoCA-T as a screening instrument for neurocognitive disorders in older adults and extends prior work to include administration via videoconferencing technology. While previous studies have focused on the use of MoCA-T in specific patient populations, here, we demonstrate the validity of this screening tool in a mixed-clinical sample, which suggests its broader use in clinical settings for distinguishing between neurocognitive disorders, regardless of the underlying etiology.

Categories:
Assessment/Psychometrics/Methods (Adult)
Keyword 1: cognitive screening
Keyword 2: teleneuropsychology
Keyword 3: neuropsychological assessment
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4 Assessing Visuospatial Skills in Parkinson's Disease Using the Identi-Fi

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Objective: Patients with Parkinson's disease (PD) commonly show deficits on tests of visuospatial functioning. The Identi-Fi is a new measure of visual organization and recognition composed of two components. The Visual Recognition (VR) subtest asks persons to identify an object that has been broken its pieces and rearranged, akin to the Hooper Visual Organization Test, but using updated and colorful pictures. The Visual Matching (VM) subtest involves showing the same stimuli, but the examinee must select the correct response from among five choices (1 correct and 4 foils), placing greater demand on visuospatial discrimination. Together, the two subtests comprise the Visual Organization Index (VOI), reflecting overall visual processing and organization ability. The present study examined performance on the Identi-Fi in patients with PD and its association with other aspects of cognition.
Participants and Methods: Participants were 23 patients with PD (95% male; mean age = 69.7 years [SD = 7.8], range = 47–79) and 12 patients with cognitive concerns (CC) who were intact on neuropsychological testing (excluding consideration of Identi-Fi scores; 50% male, mean age = 71.08 [SD = 6.27], range = 60–78) seen for a neuropsychological evaluation at a large Northeastern medical center. As part of a larger battery, patients completed the Identi-Fi, Trail Making Test (TMT), Category Fluency, Test of Premorbid Functioning (TOPF), and Brief Visuospatial Memory Test, Revised (BVMT-R).
Results: The PD group performed significantly worse than the CC group on VR and VM, as well as VOI, of the Identi-Fi ($p < .001$). Within the PD group, poorer VR, VM, and VOI performance was associated with lower scores on the TOPF ($p < .05$), BVMT-R learning ($p < .05$) and delayed recall ($p < .05$), as well as TMT Parts A and B ($p < .05$). VR was significantly correlated with Category Fluency ($p < .05$), while a trend was seen for the association between VOI and Category Fluency ($p = .094$).
Conclusions: Identi-Fi performance was worse in the PD group than the CC group, which is