

Are there reporting differences at screening on the Montgomery-Åsberg Depression Rating Scale (MADRS) between older and younger adults when using remote assessments?

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Introduction

We noted anecdotally that within a study assessing symptoms of depression using the Montgomery-Åsberg Depression Rating Scale (MADRS) that older adults were endorsing fewer symptoms and at lower severity levels than younger adults in the same study. It was also noted that this patient group felt less comfortable divulging confidential information by phone to clinicians that they were not familiar with. Fiske et al. (2009) found in many older adults underreporting of affective symptoms of depression. Gallo et al. (1994) also reported “older adults are less likely to endorse cognitive-affective symptoms of depression including dysphoria and worthlessness/guilt than are younger adults.” The literature around the equivalence of remote versus face-to-face interviewing is clear for the assessment of depression, and in particular the use of the MADRS (Kobak et al, 2008, Yavorsky & Williams, 2009). That said, there is little in the literature regarding differences related to age. In this study we aimed to address whether there were statistically meaningful difference between age groups of older adults (>64) and younger adults (<64) at screening visits for a clinical trial evaluating a depression treatment.

Objectives

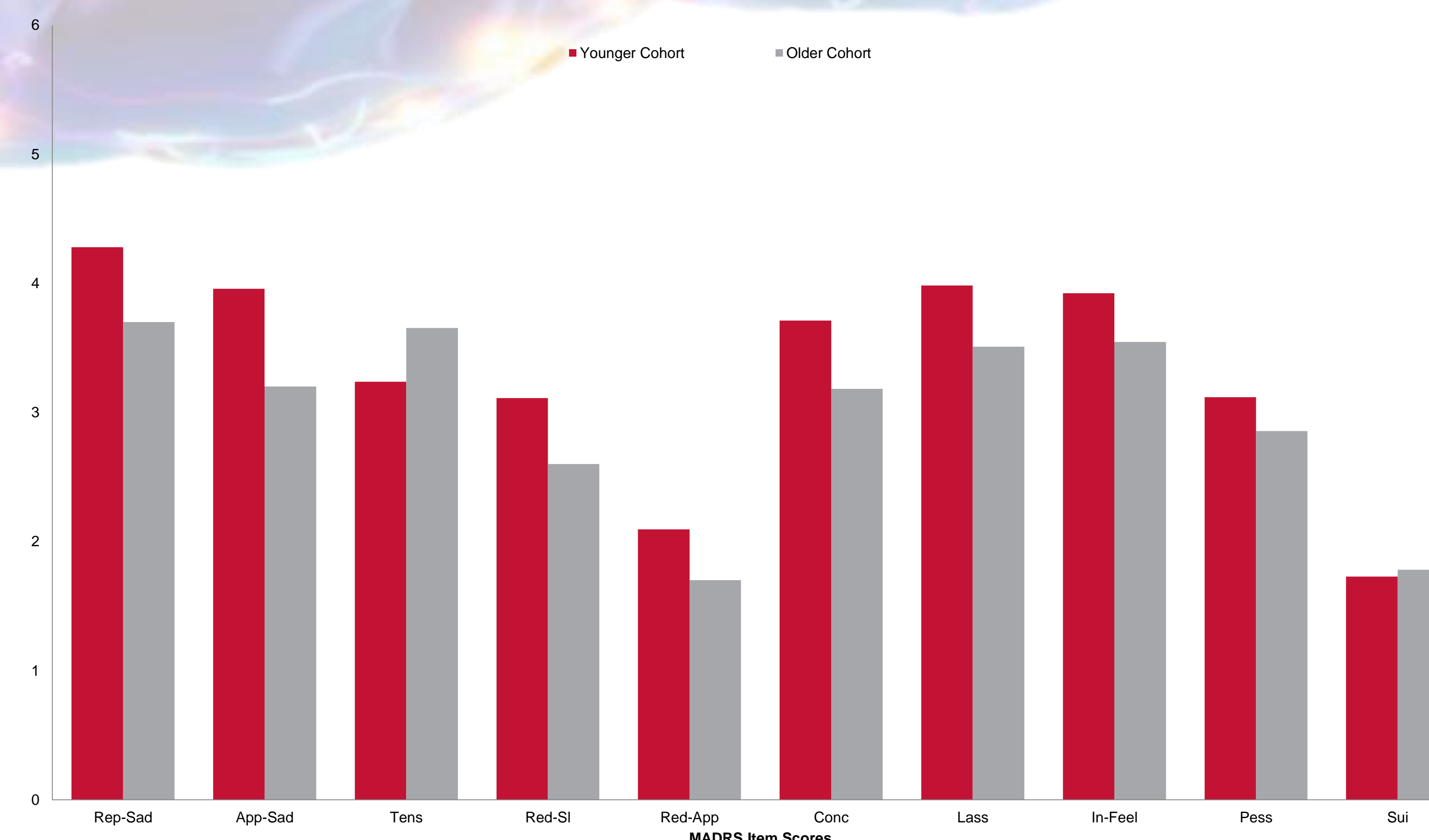
To assess whether differences exist between two age groups of patients (older adults and younger adults) at screening by comparing mean MADRS scores and individual item differences.

Methods

An independent samples t-test was performed to compare means at screening for the two age groups (younger adults and older adults). Analysis was conducted using SPSS 21.0 for Windows. Specific item analysis was also conducted to determine if there were effects related to symptom domain.

Results

There was a significant difference $t(55) = 51.45, p < .0001$ between the two groups, with the younger patient cohort (n=50) having significantly higher scores at screening than the older patient cohort (n=50). Gallo et al. (1994) reported “older adults are less likely to endorse cognitive-affective symptoms of depression including dysphoria and worthlessness/guilt than are younger adults.” This did not appear to be a significant factor in these samples with the younger and older patient cohorts having very similar mean reported sadness. There was no other evidence of significant systematic variation by item as can be seen in the table below.



Conclusion

There were significant differences between older and younger patient cohorts at screening with older adults reporting less severity than younger adults. There is a paucity of research around phone versus face-to-face interviewing in older adults in terms of rapport and acceptability. It is also important to note that the factor loading of items between geriatric patients and the general population differ significantly. Parker et al., 2003 found that inner tension formed the basis for a distinct factor alongside pessimistic and suicidal thoughts while in the general population the factor including inner tension usually accompanies the sleep and appetite items as a somatic nexus. These findings suggests there may be real differences that merit further study to determine if the effect is related to characteristics of the geriatric depression population or the methods and expectations about telephone interviewing in this patient group. If indeed it is a population characteristic it will be important for the industry to understand how this may impact clinical trial recruitment and retention.

References

- Fiske A, Loebach J, Gatz M. Depression in older adults. *Annu Rev Clin Psychol.* 2009; 5: 363-389.
- Gallo F, Anthony J, Muthen B. Age differences in the symptoms of depression: A latent trait analysis. *J Gerontol.* 1994;49:251-264.
- Kobak K, Williams JB, Jeglic E, Salvucci D, Sharp I. Face-to-face versus remote administration of the Montgomery-Asberg Depression Rating Scale using videoconference and telephone. *Depress Anxiety.* 2008; 25(11):913-9.
- Parker R, Flint E, Bosworth H, Pieper C, Steffens D. A three-factor analytic model of the MADRS in geriatric depression. *Int J Geriatr Psychiatry.* 2003 Jan;18(1):73-7.
- Yavorsky C, Williams J. Assessment of depression diagnosis and severity: Comparison of telephone and in-person interview. Poster presented American Psychiatric Association 162nd Annual Meeting, San Francisco CA (May 2009).

