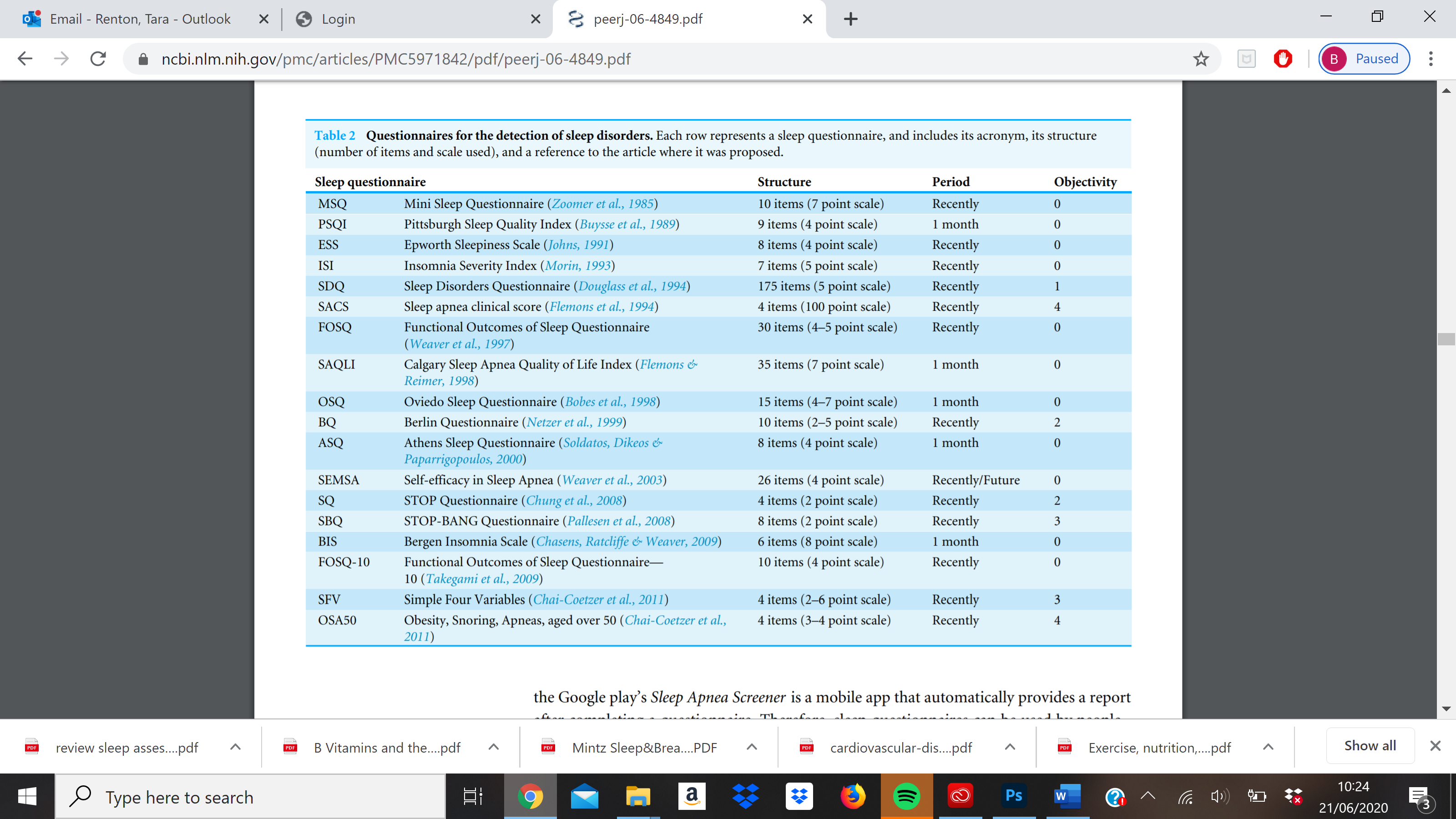
Overview of Sleep questionnaire tools

Tara Renton

Recent reviews attached ([Vanessa Ibáñez](https://www.ncbi.nlm.nih.gov/pubmed/?term=Ib%26%23x000e1%3B%26%23x000f1%3Bez%20V%5BAuthor%5D&cauthor=true&cauthor_uid=29844990),corresponding author1 [Josep Silva](https://www.ncbi.nlm.nih.gov/pubmed/?term=Silva%20J%5BAuthor%5D&cauthor=true&cauthor_uid=29844990),2 and [Omar Cauli](https://www.ncbi.nlm.nih.gov/pubmed/?term=Cauli%20O%5BAuthor%5D&cauthor=true&cauthor_uid=29844990)3 **A survey on sleep assessment methods.** [PeerJ](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5971842/). 2018; 6: e4849. 2018 May 25. doi: [10.7717/peerj.4849](https://dx.doi.org/10.7717%2Fpeerj.4849))

Summary of medical, questionnaire and App sleep assessment tools

Questionnaires assessed included



**We use the** **Chronic pain sleep inventory CPSI not on this list!**

**0 – 100**

**never always**

CPSI 1 Trouble falling asleep because of pain

CPSI 2 Needed sleep medication to help you fall asleep

CPSI3 Awakened by pain during the night

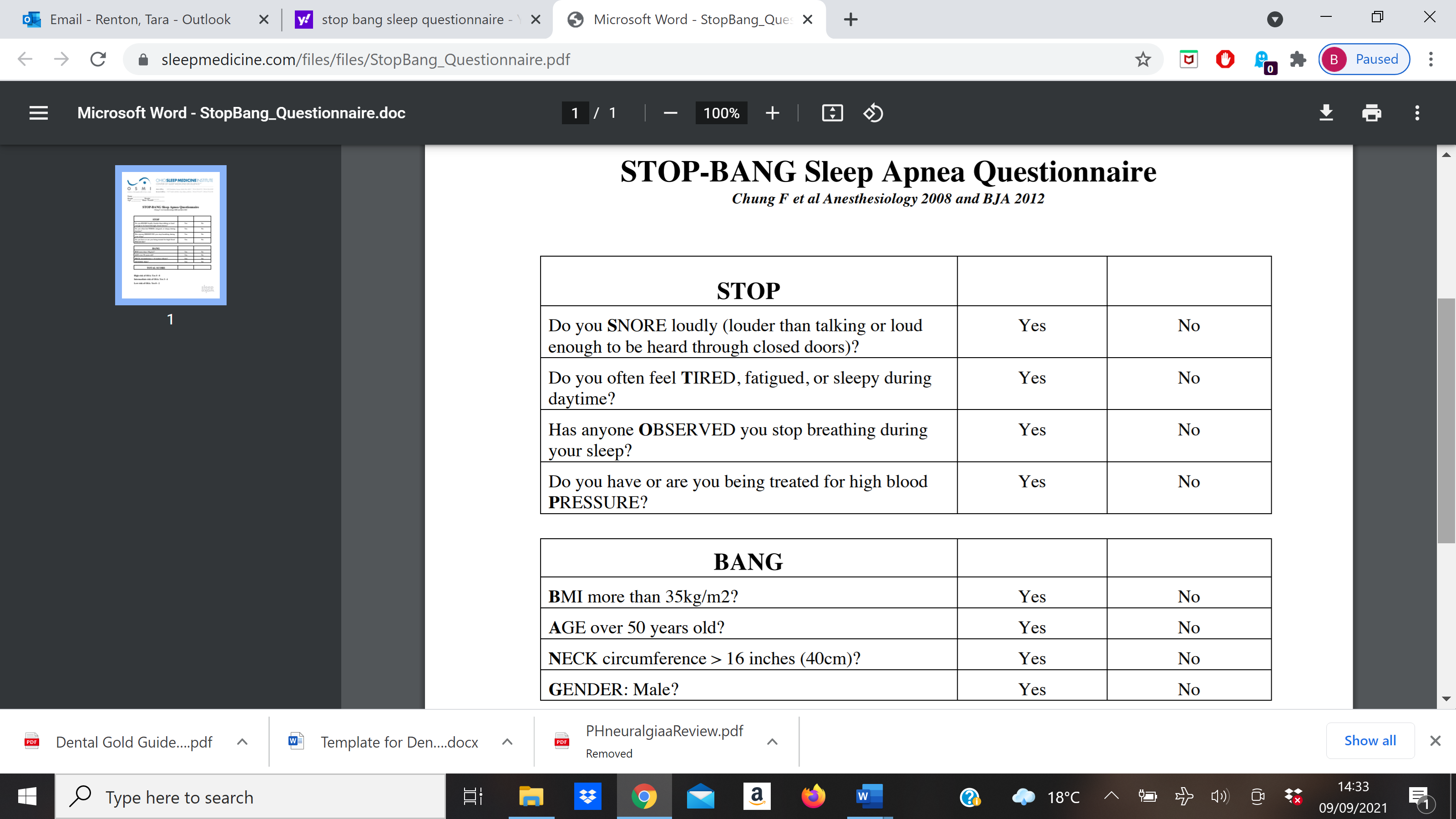
CPSI4 Awakened by pain in the morning

CPSI5 Rate overall quality of your sleep

Other commonly used are

Stop bang

The STOP-Bang questionnaire is an established clinical screening tool to identify the risk of having mild, moderate or severe obstructive sleep apnoea using eight variables. It is unclear whether all eight variables contribute equally to the risk of clinically significant obstructive sleep apnoea.



Scoring the STOP BANG questionnaire

**For general population**  
OSA - Low Risk : Yes to 0 - 2 questions  
OSA - Intermediate Risk : Yes to 3 - 4 questions  
OSA - High Risk : Yes to 5 - 8 questions  
or Yes to 2 or more of 4 STOP questions + male gender  
or Yes to 2 or more of 4 STOP questions + BMI > 35kg/m2  
or Yes to 2 or more of 4 STOP questions + neck circumference 16 inches / 40cm

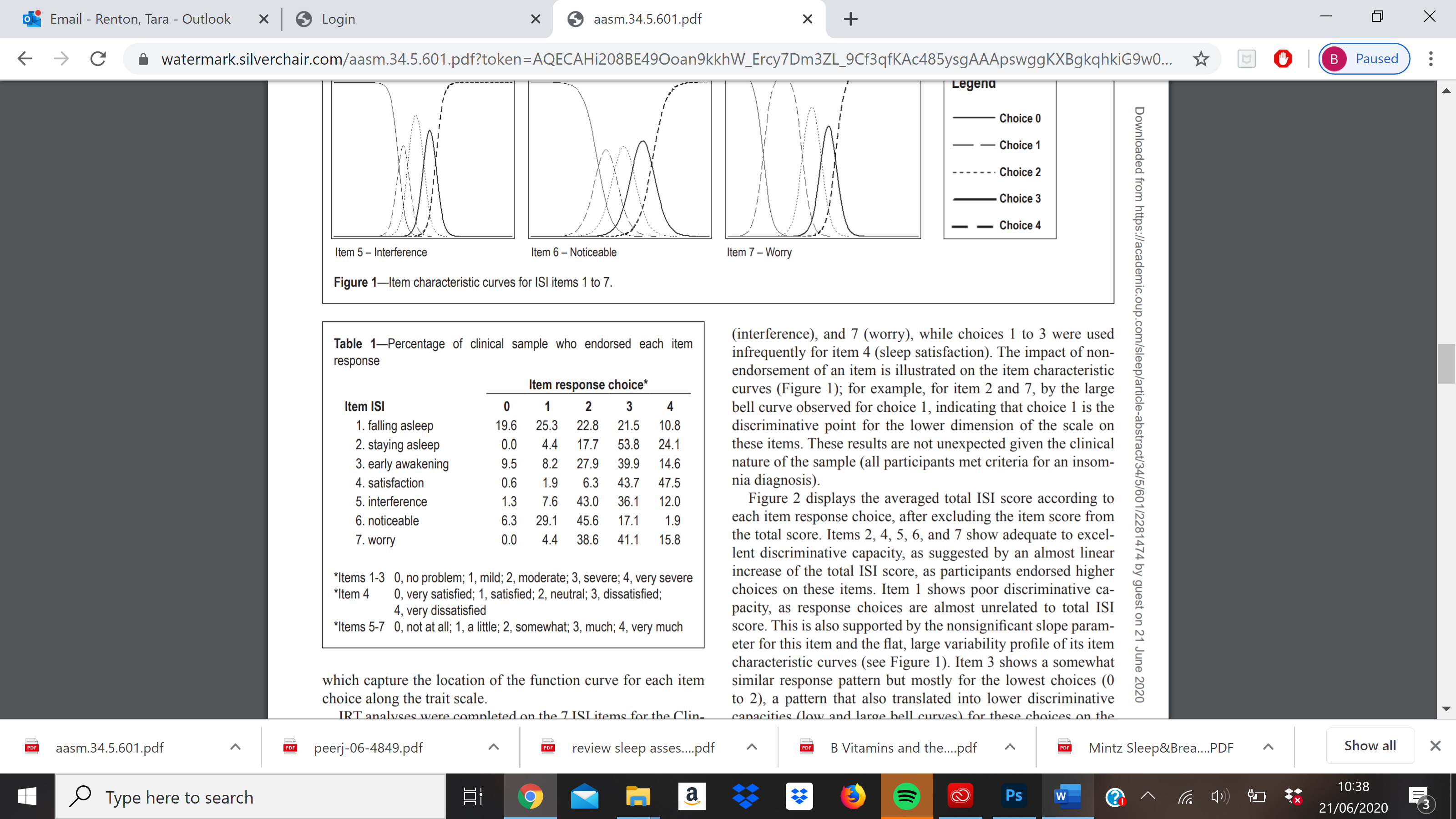
**Insomnia Severity Index (ISI)**

See attached paper (Morin CM; Belleville G; Bélanger L; Ivers H. The insomnia severity index: psychometric indicators to detect insomnia cases and evaluate treatment response. SLEEP 2011;34(5):601-608.)

The ISI is a 7-item self-report questionnaire assessing the nature, severity, and impact of insomnia.11,24 The usual recall period is the “last month” and the dimensions evaluated are: severity of sleep onset, sleep maintenance, and early morning awakening problems, sleep dissatisfaction, interference of sleep difficulties with daytime functioning, noticeability of sleep problems by others, and distress caused by the sleep difficulties.

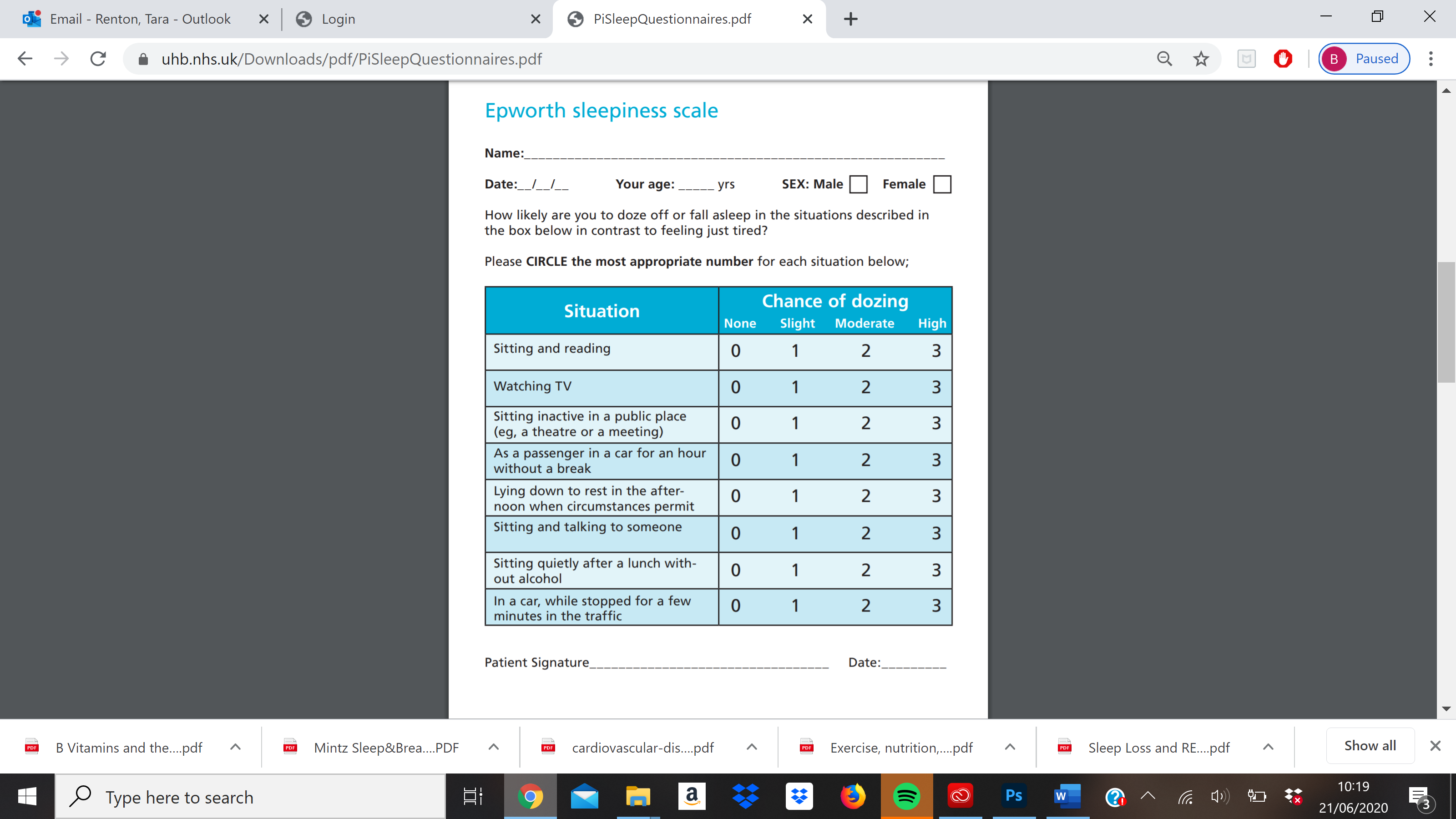
A 5-point Likert scale is used to rate each item

(e.g., 0 = no problem; 4 = very severe problem), yielding a total score ranging from 0 to 28. The total score is interpreted as follows: absence of insomnia (0-7); sub-threshold insomnia (8- 14); moderate insomnia (15-21); and severe insomnia (22-28). Three versions are available—patient, clinician, and significant others—but the present paper focuses on the patient version only.



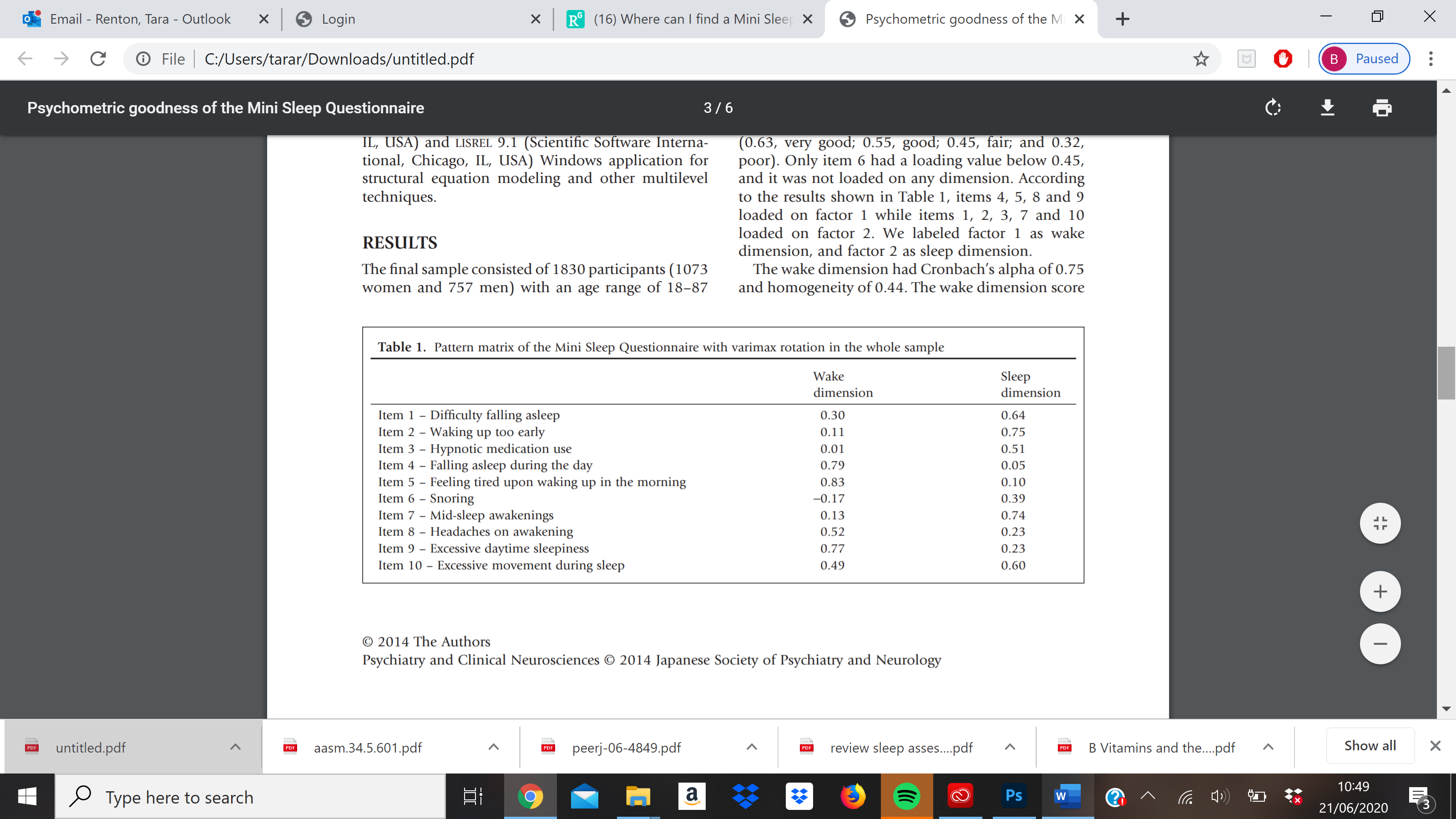
Epworth sleep questionnaire

[Kosinski M](https://emea01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F%3Fterm%3DKosinski%2520M%255BAuthor%255D%26cauthor%3Dtrue%26cauthor_uid%3D18164922&data=01%7C01%7Ctara.renton%40kcl.ac.uk%7Cec157261e9f24a8a2f6d08d455bbc18d%7C8370cf1416f34c16b83c724071654356%7C0&sdata=GBW%2BuTDR7DZrLk6eqw9gYWKZiHCjMaiSdkWxNAmAJsQ%3D&reserved=0)1, [Janagap CC](https://emea01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F%3Fterm%3DJanagap%2520CC%255BAuthor%255D%26cauthor%3Dtrue%26cauthor_uid%3D18164922&data=01%7C01%7Ctara.renton%40kcl.ac.uk%7Cec157261e9f24a8a2f6d08d455bbc18d%7C8370cf1416f34c16b83c724071654356%7C0&sdata=CbHwMeCNIwYe4iOX%2ByIb4%2BfEXaeGiRdVgTv0mLF%2BvUU%3D&reserved=0" \t "_blank), [Gajria K](https://emea01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F%3Fterm%3DGajria%2520K%255BAuthor%255D%26cauthor%3Dtrue%26cauthor_uid%3D18164922&data=01%7C01%7Ctara.renton%40kcl.ac.uk%7Cec157261e9f24a8a2f6d08d455bbc18d%7C8370cf1416f34c16b83c724071654356%7C0&sdata=kGmKqYrwP4kxbxKyxFIaSr1tKCFe0Wb6BMKcIMF7i0g%3D&reserved=0" \t "_blank), [Schein J](https://emea01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F%3Fterm%3DSchein%2520J%255BAuthor%255D%26cauthor%3Dtrue%26cauthor_uid%3D18164922&data=01%7C01%7Ctara.renton%40kcl.ac.uk%7Cec157261e9f24a8a2f6d08d455bbc18d%7C8370cf1416f34c16b83c724071654356%7C0&sdata=WrAS3eh3eJIj0gY6HKZoyRL5iWs1QJKolX25ZpurdR8%3D&reserved=0). Psychometric testing and validation of the Chronic Pain Sleep Inventory (CPSI) [Clin Ther.](https://emea01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncbi.nlm.nih.gov%2Fpubmed%2F18164922&data=01%7C01%7Ctara.renton%40kcl.ac.uk%7Cec157261e9f24a8a2f6d08d455bbc18d%7C8370cf1416f34c16b83c724071654356%7C0&sdata=Dlm8maithK5JwMNhsMq44MoC%2Frh%2BWAtjRPrCZZl3tzo%3D&reserved=0) 2007;29 Suppl:2562-77. doi: 10.1016/j.clinthera.2007.12.001.



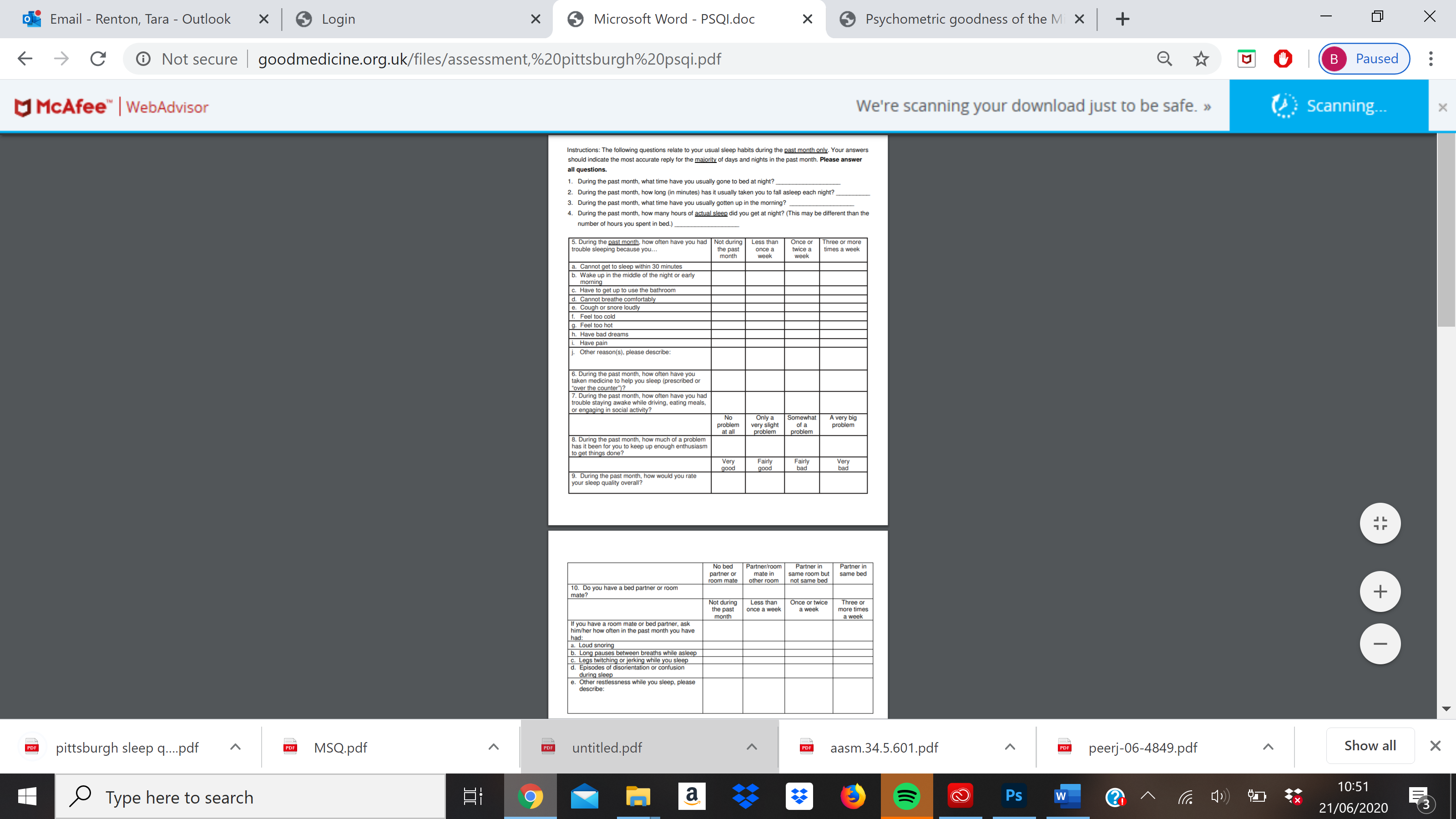
Mini sleep questionnaire

See attached paper [Vincenzo Natale](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Natale+V&cauthor_id=24447273)[1](https://pubmed.ncbi.nlm.nih.gov/24447273/#affiliation-1), [Marco Fabbri](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Fabbri+M&cauthor_id=24447273), [Lorenzo Tonetti](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Tonetti+L&cauthor_id=24447273), [Monica Martoni](https://pubmed.ncbi.nlm.nih.gov/?sort=date&term=Martoni+M&cauthor_id=24447273) Psychometric Goodness of the Mini Sleep Questionnaire. Psychiatry Clin Neurosci 2014 Jul;68(7):568-73. doi: 10.1111/pcn.12161. Epub 2014 Mar 10.



Pittsburgh sleep questionnaire

Devine, E.B., Hakim, Z. & Green, J. A systematic review of patient-reported outcome instruments measuring sleep dysfunction in adults. *Pharmacoeconomics* **23,**889–912 (2005). https://doi.org/10.2165/00019053-200523090-00003



Other questionnaires that include sleep

World Health Quality of Life (WHOQOL-bref).

The Pain and Sleep Questionnaire three-item index (PSQ-3 or PSQI): A reliable and valid measure of the impact of pain on sleep in chronic nonmalignant pain of various etiologies