

Personality traits in neurologists, neurosurgeons and psychiatrists

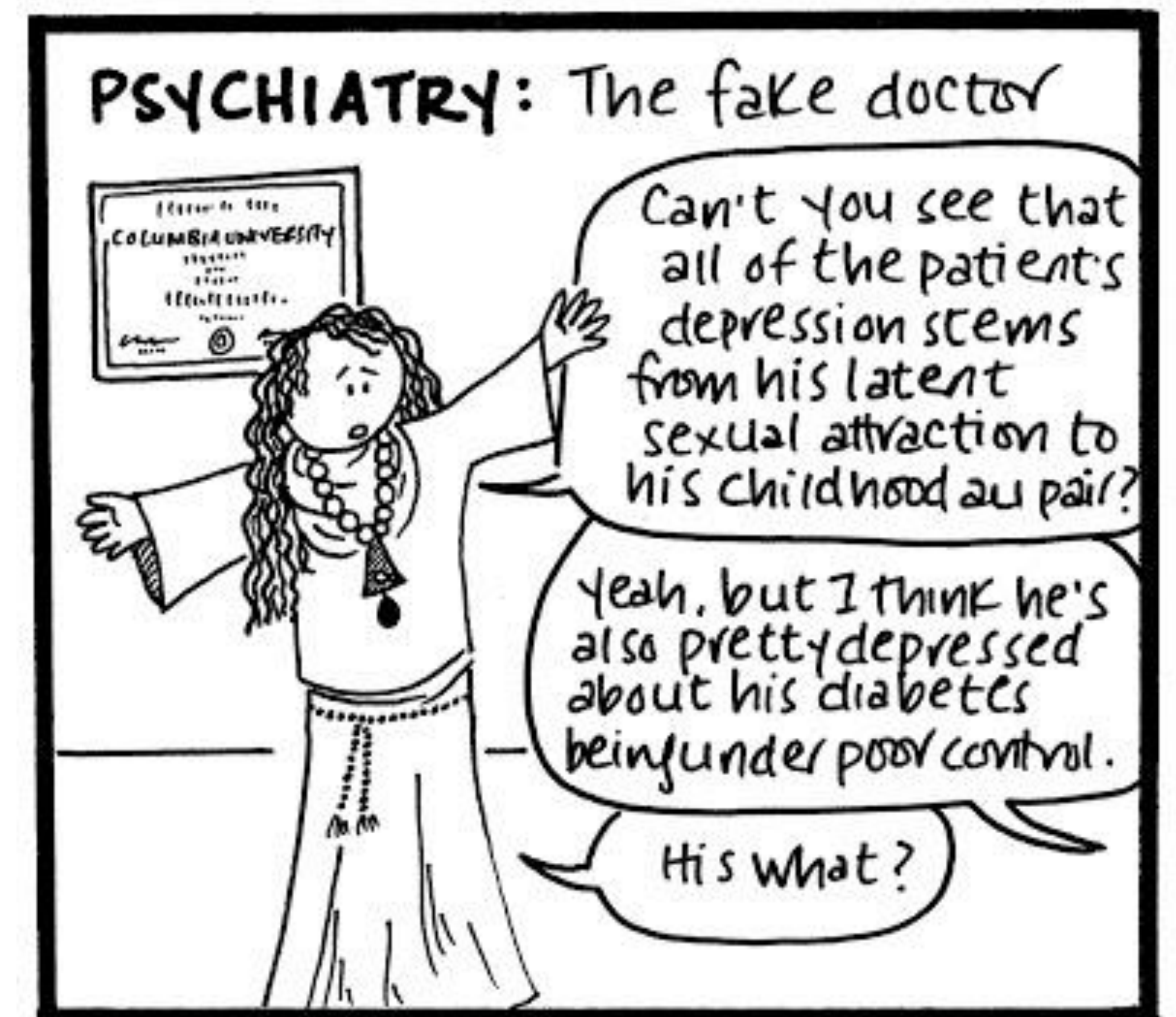
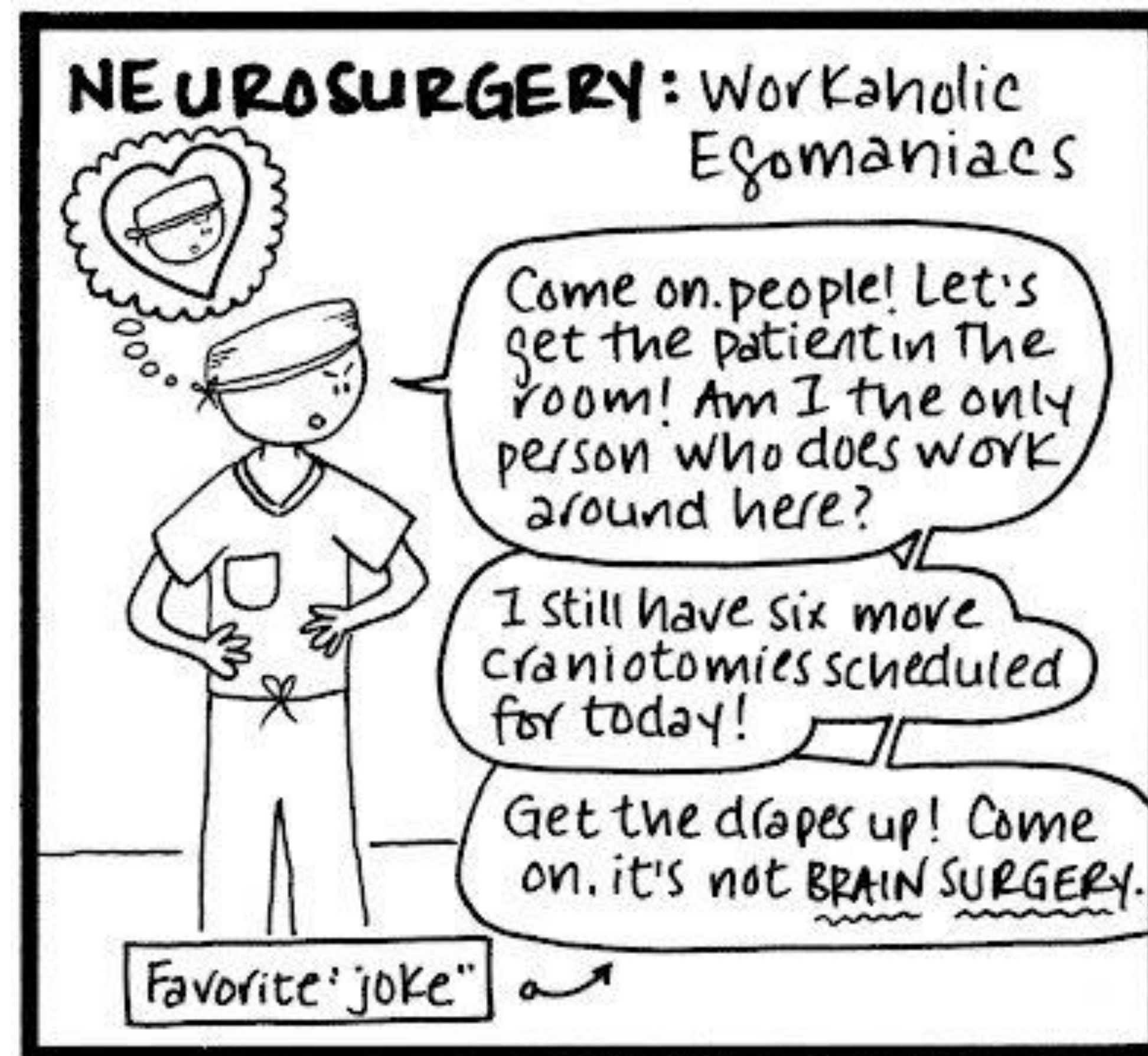
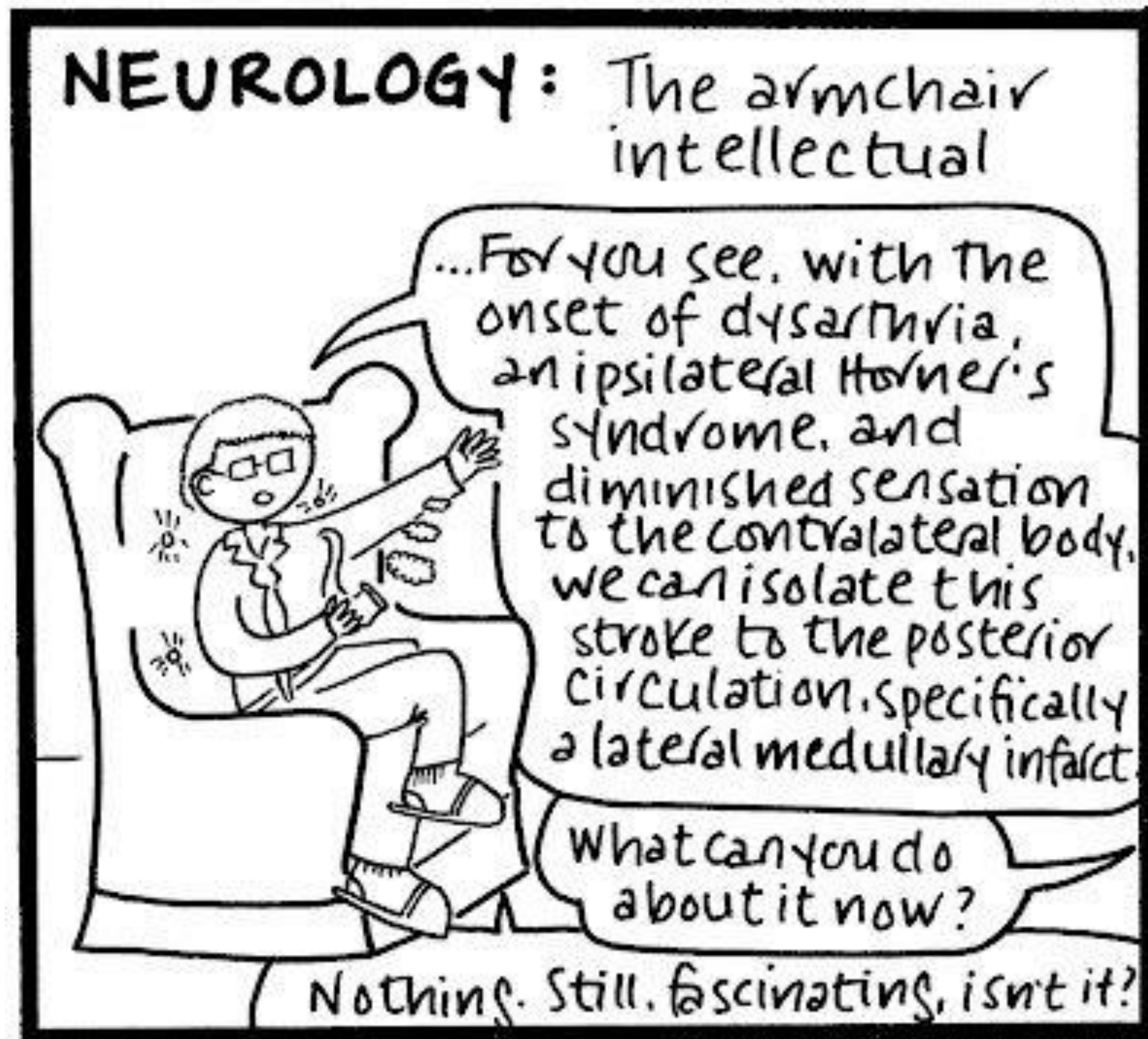
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the underwear drawer. Posted by Michelle Au. 03/2011

Background

A key factor for success in a professional career is how personality traits (PT) fit the characteristics of the chosen profession¹. Thus, personality has attracted growing research interest in various professional fields, including medical training, with the aim to improve career counseling, selection processes and training strategies². In the present work, we set out to describe, for the first time, the personality profiles of the three main medical disciplines in clinical neuroscience: neurology, neurosurgery, and psychiatry.

Method

Online survey containing the Ten-Item Personality Inventory (TIPI), an internationally validated measure of the Five Factor Model of personality dimensions³, distributed to board-certified physicians, residents and medical students in several European countries and Canada⁴. Differences in personality profiles were analysed using multivariate analysis of variance and Canonical Linear Discriminant Analysis on age-standardised and sex-standardised z-scores of the personality traits. Single personality traits were analysed using robust t-tests.

Results

723 complete responses were obtained indicating the specialty neurology, neurosurgery or psychiatry (Table 1).

	Neurologists	Neurosurgeons	Psychiatrists
All	264	197	217
Board certified specialists	109	84	99
Residents	98	87	81
Medical students	57	26	37

Table 1: Participants

Neurosurgeons scored lower on the item neuroticism than both neurologists ($p < 0.001$) and psychiatrists ($p < 0.01$). Extraversion was highest in neurosurgeons, followed by neurologists and psychiatrists with neurosurgeons and psychiatrists differing significantly ($p < 0.05$). Psychiatrists scored lower on the item conscientiousness than both neurologists ($p < 0.001$) and psychiatrists ($p < 0.001$).

On the other hand, agreeableness was highest in psychiatrists followed by neurologists and neurosurgeons with psychiatrists and neurosurgeons, as well as neurologists and neurosurgeons differing significantly ($p < 0.01$ and $p < 0.05$ respectively). There were no significant group differences in the degree of openness to experience (Figures 1-3). These observations were stable across levels of training.

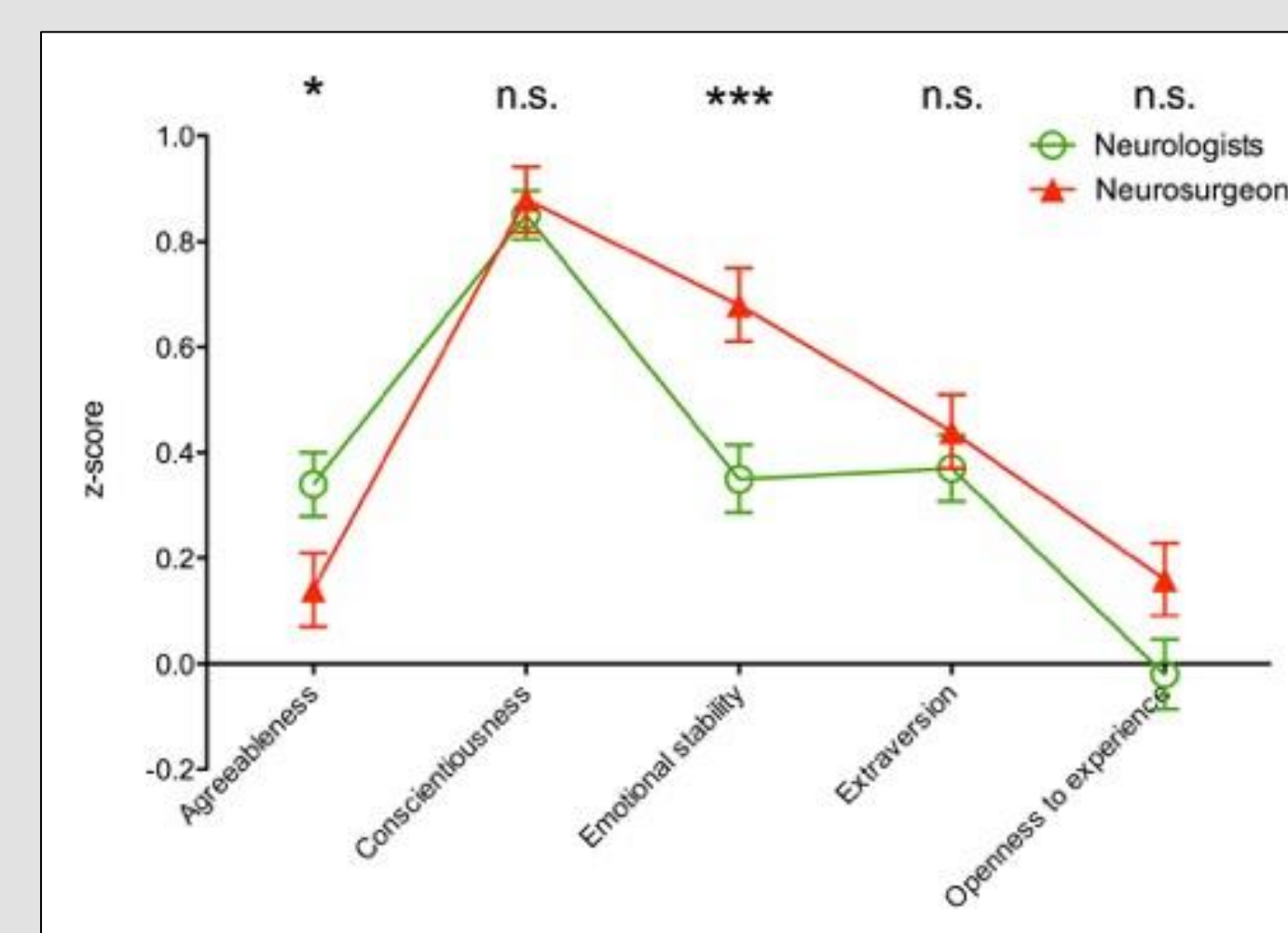


Figure 1: Neurologists vs. Neurosurgeons

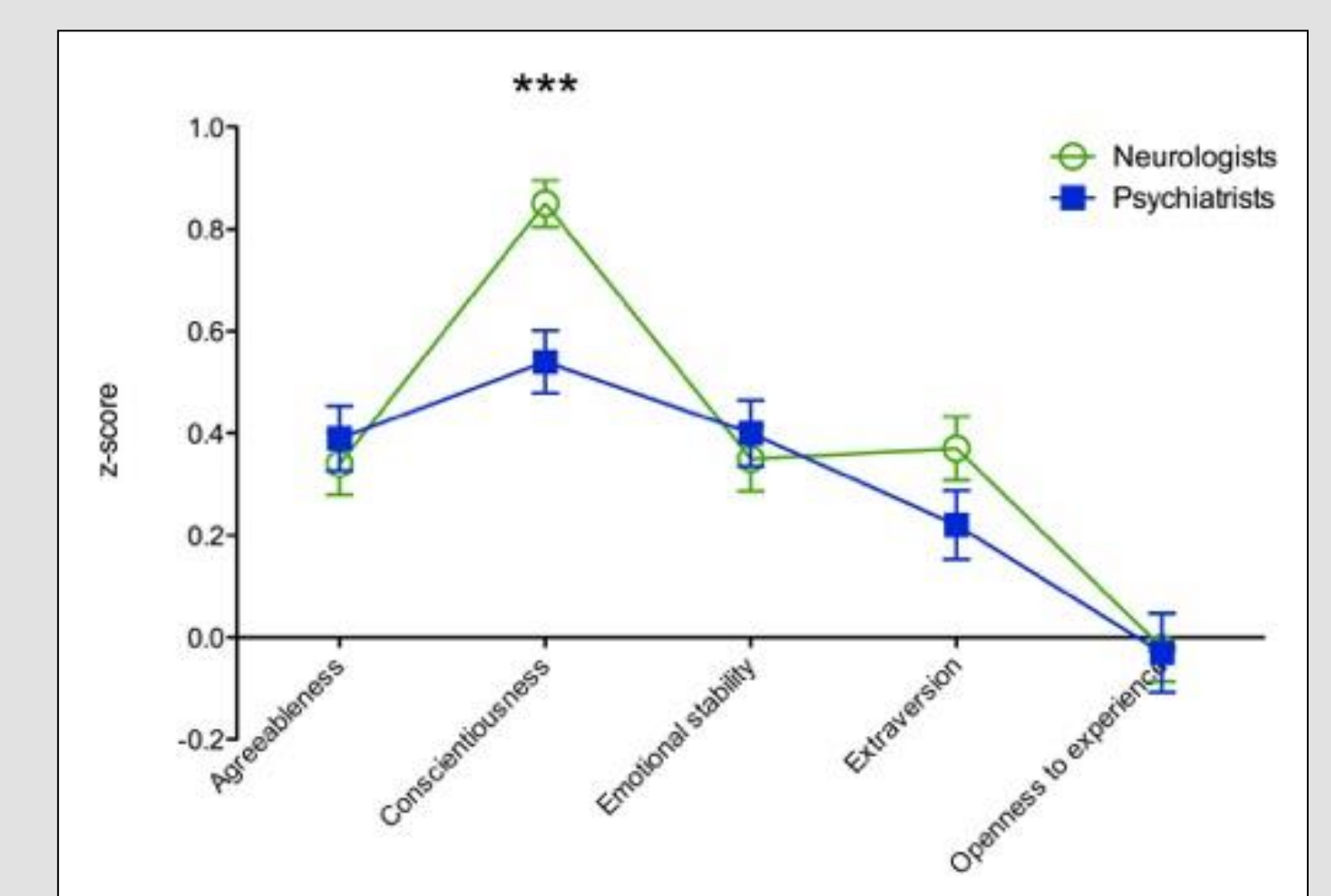


Figure 2: Neurologists vs. Psychiatrists

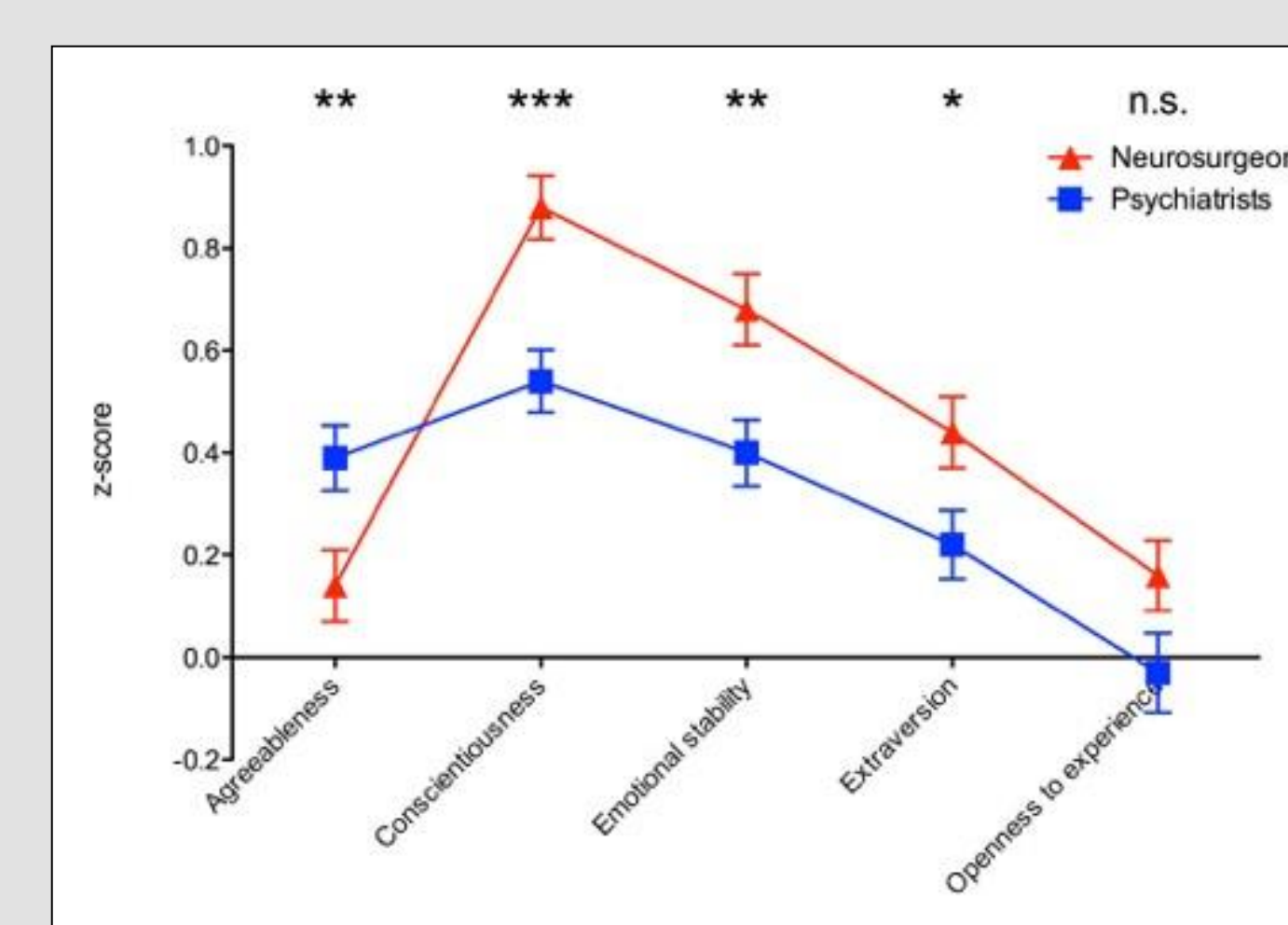


Figure 3: Neurosurgeons vs. Psychiatrists

* $P < 0.05$
** $P < 0.01$
*** $P < 0.001$

For gender differences within each discipline see Figure 4.

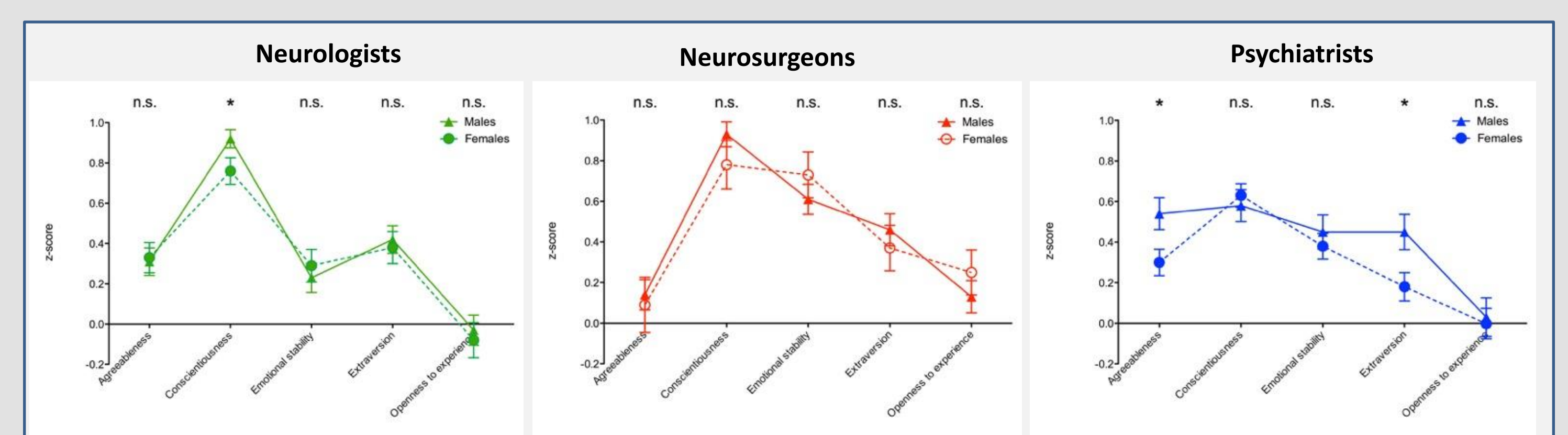


Figure 4: Males vs. Females

Conclusion

Small but significant differences in personality traits between neurologists, neurosurgeons and psychiatrists indicate a link between personality and the choice of a specific medical career within clinical neuroscience.

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References

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