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EDITORIAL

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Why do patients with rhinitis report symptoms?

M. E. Hyland
School of Psychology, University of Plymouth, Drake Circus, Plymouth, UK

There is a long history of research showing that symptom reporting across a wide range of symptoms and diseases is correlated with psychological variables [1, 2]. The paper in this issue, Graif et al. [3] could easily be interpreted as just another such paper but on the topic rhinitis. However, there are two unusual features which make this paper particularly interesting.

The first is that the authors failed to find a significant correlation between a skin prick for common aeroallergens and symptom severity. Of course, failure to find a significant correlation is not the same as finding no correlation, and inspection of their Table 2 shows a correlation between these two variables of 0.13 – which would be significant with a larger sample. However, even if there were a significant correlation with a larger sample, it would be a very low correlation, and certainly far lower than normal for symptoms which have a pathophysiological basis. These data may be because the skin prick test (SPT) measures only part of the pathophysiology underlying rhinitis. This possibility is consistent with their data on allergic vs. non-allergic asthma. As expected, patients with a positive reaction to a specific allergen reported intensification of symptoms on exposure to that allergen. However, non-allergic and allergic patients also reported symptom intensification to allergens for which there was no specific reaction. For example, the mean response for house dust mite for non-allergic patients was rated between 'intensified to a small extent' and 'intensified to a moderate extent.' It would therefore seem that the SPT is not always able to detect the perceived response of rhinitis to an aeroallergen, and in addition does not correlate with symptom reporting.

The second unusual feature of their data is that they find that hypochondriasis and somatic awareness correlate with symptom reporting but not neuroticism. It is this latter failure which is surprising, and even if their non-significant correlation between symptom reporting and neuroticism of 0.14 were to become significant with a larger sample, again the size of the correlation is far lower than normal for this variable [4], and the reason for this remains unclear.

In sum this paper shows that psychological factors but not this SPT predicts symptoms of rhinitis. The best interpretation of these data is not that rhinitis symptoms are purely psychological but rather that we know surprisingly little about the cause of symptom reporting for this disease. Although psychological factors are relevant, even the psychological correlations are low. By far the greater proportion of variance of symptom reporting remains unexplained. The unexplained variance is difficult to estimate from the data they present, but is likely to be in the order of 90–95%.

References

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Correspondence:
Prof. Michael E. Hyland, School of Psychology, University of Plymouth, Drake Circus, Plymouth, PL4 8AA, UK. E-mail: mhyland@plymouth.ac.uk