Abstract

The presented work is devoted to study the validity of overclaiming technique (OCT) as a measure of response (positivity) bias. Three main aims of the analyses performed were: a) assess methods’ utility to enhance predictive validity of self-report by accounting for response biases, b) investigate proposed mechanisms of overclaiming, c) expand nomological network of the method by presenting a wide set of both individual-level and cluster-level (school) correlates.

The obtained results pointed that OCT can be used in order to account for response biases in self-report data. Important differences regarding use and interpretation of the different OCT scoring systems were found and commented. Two systems, one based of signal detection theory (SDT), other on item response theory model (IRT), were proposed as viable scorings of OCT. Choice between them is not trivial as it influences results’ interpretation and model specification.

Three possible mechanisms of overclaiming were tested: a) motivated response bias (self-favouring bias, socially desirable responding), b) memory bias (overgeneralised knowledge or faulty memory control) and c) response styles and careless responding. The results pointed that all three mechanisms are probable and that overclaiming is most probably a heterogenous phenomenon of multiple causes. However, the analyses pointed out that one of the memory bias hypotheses, the overgeneralised knowledge account, does not hold and that there is much more evidence for the competitive metacognitive account. It is to said that overclaiming is at least partially attributable to insufficient monitoring of one’s knowledge. Evidence for a relation between careless responding and overclaiming was also obtained, indicating that at least some of the overclaimed responses can be attributed due to inattentive responding. Obtained results on the relations between response styles and overclaiming were complicated; they warrant further studies as the results here probably greatly depend on the technical details of analysis, e.g. response style definition and coding adopted.

The analysed cluster-level covariates demonstrated that only very limited portion of OCT variance can be ascribed to the school-level of analysis. Gender, socio-economic status and locus of control proved to be significantly related to overclaiming among the individual-level correlates assessed. Boys yielded higher overclaiming bias than girls and students of external locus of control were more biased in their self-reports in comparison to students of internal locus of control.

The work comprises also analysis of the PISA’s OCT latent structure. The results evidenced bifactor structure of the scale, with the general factor interpreted as math ability while the two specific factors were given a tentative explanation concentrated around item difficulty (one specific factor emerged for easy items, one for hard items). These findings point to a multi-dimensional character of OCT and a large role played by domain ability in OCT responding.

Moreover, latent class analysis (LCA) performed identified an “overclaiming” group among the participants which was characterised by high overclaiming and unwarrantedly high self-report profile regarding math-related abilities and social life. However, this group counted only around 9% of the total sample.

Implications of these findings are commented in the work, along with theoretical integration and ideas for future studies with the use of OCT.