Comment on: Responsible Research Assessment I and Responsible Research Assessment II

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A long-term personnel policy in filling professorships, aimed at remedying deficits in psychological research, should be able to significantly improve the scientific quality of psychology: "The main reason is that the hiring and promotion of such researchers is most likely to contribute to the emergence of a credible scientific knowledge base" (Gärtner et al., in press).

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There are three fundamental criteria for selecting individuals for professorships: a general criterion relates to the state of the scientific discipline of psychology. It should be derived from criticism of the discipline and rewards perceived as inadequate. According to this criterion, preference was given to those applicants who were least oriented towards the inappropriate criteria. The main goal is the positive development of the subject in the future.

The second criterion refers to the needs of the institute as a smaller concrete unit. There are tasks that a person must fulfill as a professor. By focusing on research, existing priorities can be identified, which can be considered when filling the professorship. The selection serves the positive scientific development of the institution.

The third criterion then relates specifically to the person of the applicant. In the previous activity of the applicant, indicators of cognitive competence, motivational perseverance and implemented actions are sought. In this context, superficial success is not the best indicator, because high-quality research is based on innovations that initially meet with rejection. There are enough examples from the history of science. Physics provides prominent examples with the special and general theories of relativity. However, there are also much more mundane innovations that have taken a similar path from rejection to full acceptance (Witte, 1994). Therefore, special attention should be paid to indicators that can be judged as a deviation from normal science. This also rewards the individual risk that every research development needs. This can be recognized by the negative correlation of usual indicators with research quality, as described in the original article.

If one starts from these three levels of reference, then the four principles still seem too little related to the different three levels and determined by the subjective view of the authors. If, in addition to publications, one also uses the creation of data collections and software developments, then this is unsuitable for a general evaluation basis for professorships. Here, specialization is applied and continuous support by a methods professorship or by external institutions is a better solution. The development and maintenance of software as well as the building up of data collections should not be tied to every professorship, because this is a full-time activity beyond the content research if the quality is high. This cannot and should not be done on the side, because then substantive research can easily fall short. This is where psychology needs to build its own focus, as it is doing. Therefore, I would leave these two aspects (data collection and software development) out of the evaluation criteria for a non-methodological professorship.

The idea now is to look at the instantaneous scientific status of psychology and to derive criteria from the identified deficient developments that can reward high quality research by appropriate evaluation criteria. The discussion of misguided reward criteria that have brought about this state of affairs is extensive (Witte, 2023). This insight can now be used to highly value precisely those criteria that work against the deficits. Three deficits are unmistakable: First, the lack of replication of empirical results from individual studies; second, the small but still homogeneous effects in a larger research context (meta-analyses); and the almost complete lack of theory building. These three central deficits are not independent, because only a well-confirmed theory leads to large homogeneous effects and high replication rates. This leads to the main criterion for research quality, namely theory building. This includes the empirical testing of theoretical assumptions with studies of high quality and the integration of several studies into
one research program. If this integration is also done internationally, then this is particularly high-quality research. Not only confirmations are to be evaluated positively, but also clear rejections. The result must be transparent with respect to the theoretical assumption. On this background, one can recognize the inferential statistical quality of the empirical studies (power, statistical integration) and the quality of the empirical settings used (objectivity, reliability, validity). By the way, because of the innovative and therefore risky research project, the publication that took place cannot make the evaluation. It is conceivable that an opinion of a research provisionally published on the web is obtained from an independent international body. Indeed, rejections by editors also use economic criteria with the impact factor of the journal, which then correlates negatively with quality. The standard peer review process is also not a satisfactory solution. We probably would not have found the Higgs boson by today.

This concentration of evaluation criteria for professorships from the field of research will very quickly reduce the number of applicants to a manageable size. One then evaluates only the applicant's own theory and its empirical tests as a selection criterion. If one focuses on this, I think it is conceivable that no application will meet the requirements, in contrast to the flood of applications in the instantaneous standard procedure. This is an empirical question that can be gleaned from past applications if one analyzes the files.

The second criterion relates to the institution where the professorship is located. Globally, one can go for homogenization or diversity at the institution. Obviously, there are no general criteria here that could be derived from psychology. So, these criteria must be developed specifically by the researchers on site. The goal now is not research quality, but the development of an institute in research. What do we want, what do we need necessary, what helps us? That is what the institute must determine. This is a secondary criterion because it only indirectly increases the quality of research.

The third criterion is related to the person. One looks at the indicators for three aspects: the cognitive competence, the motivational perseverance and the actions shown. Behind this is the search for a researcher personality that can advance psychology scientifically. One will be able to derive the cognitive competence from the methodological foundation of the conclusions by looking at the critical reflection of the statistical methods used, the scientific-theoretical foundation of one's own approach and the formalization of theoretical statements. Connections to neighboring disciplines and to a historical perspective can also be beneficial. The motivational stamina to penetrate a field of research, of course depending on one's age, can be recognized by whether someone has written a non-cumulative dissertation and a non-cumulative habilitation (opus magnum). If there is a high-quality monograph, then one can assume that someone is intrinsically motivated for research. (Books are not mentioned at all as subjects of evaluation in the proposal made).

For actions in the research context, one would look at active attendance at congresses, participation in international groups, own initiatives (writing research reports, conducting workshops, etc.), and obtaining external funding. In this context, the approval of external funding depends on many factors, but the application is one's own initiative. So, one should not use the approved amount as a criterion, but only the application process.

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I am the single author.

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