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Selection committee membership: Service or self-service

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ABSTRACT

Project funding is an increasingly important mode of research funding. The rationale is that through project funding new fields and new themes can be supported more effectively. Furthermore, project funding improves competition, which is expected to select the better research projects and researchers. However, project funding has a price, as it requires researchers to invest time in reviewing proposals, and to participate in selection committees. In that perspective, selection committee membership can be seen as a service to the scholarly community.

However, what do committee members themselves get from membership? In this paper we show that committee members in average are more successful in grant applications than other principle investigators, and this is not explained by performance differences. The findings suggest that committee membership is not only service, but also self-service.

1. Introduction

Project funding is an important part of total research funding – for fundamental research, as well as for strategic and application oriented research. The following arguments are generally used for project funding. Firstly, it is easier to direct resources to priority areas, and to new fields and themes. Secondly, project funding is competitive, which may increase quality. Researchers submit applications, and through peer review it is expected that the best researchers and the best proposals are selected. Over the last decades, the share of project funding in total research expenditures has increased and still is increasing, although the levels are rather different between countries (CBS, 2011; Lepori et al., 2007; Van Steen, 2012).

Project funding requires organized decision-making, leading to the selection and rejection of proposals. Peer review is a crucial aspect of this, and it is considered the basis of merit based funding. Although shortcomings of peer review are well known (Thorngate, Dawes, & Foddy, 2009), peer review is generally conceived as the best method available (ESF, 2006; RIN, 2010). Over time, decision-making about research proposals has become a committee activity and often peer reviewers are not members of the committee. Peer review is one of the inputs in the decision-making process (Chubin & Hackett, 1990; Hansson & Monsted, 2012; Van Arensbergen & Van den Besselaar, 2012), and should provide a threshold: a good review is necessary to be eligible for funding. Research indicates several problems related to committee based grant decision-making:

- Firstly, the way the decision-making process is organized does significantly influence the outcomes (Langfeldt, 2001, 2004; Van Arensbergen & Van den Besselaar, 2012), indicating the contextuality of the decision-making.
- Secondly, that competitive project funding results in supporting the better researchers has been disputed. Selection procedures may succeed in filtering out the lower half of the applications. But within the set of good researchers, it is hardly

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possible to select performance based (Bornmann, Leydesdorff, & Van den Besselaar, 2010; Melin & Danell, 2006; Van den Besselaar & Leydesdorff, 2009). Furthermore, researchers with more competitive project funding do not seem to outperform others (Van der Weijden, Verbree, & Van den Besselaar, 2012). Even stronger, committees do not select the best researchers but 'produce' them: *After* being selected for a grant, performance differences between the granted researchers and the non-granted researchers emerge, because of the more abundant resources of the former (Melin & Danell, 2006; Sandström, 2012).

- Finally, evidence exists that nepotism and sexism play a role in grant allocation (Wenneras & Wold, 1997). Whether this still holds for sexism is disputed (Bornmann, Mutz, & Daniel, 2007; Ceci & Williams, 2011; Marsh & Bornmann, 2009; Marsh, Jayasinghe, & Bond, 2008), but nepotism is still visible (Sandström & Hällsten, 2008).

The issue of nepotism has a few dimensions. Firstly, nepotism may play a role when a grant applicant has committee members in his/her direct social network, where other applicants lack such strong ties. Secondly, committee members themselves may be involved in a grant proposal, e.g., as applicant, as co-applicant, or as a direct colleague of an applicant. In cases where committee members are involved in one of the applications, we speak of 'conflict of interests'. The common solution for this is that committee members leave the meeting when the proposal they are involved in is discussed. The other committee members can discuss and decide on the proposal, without interference of the involved committee member. However, no evidence exists which shows that this solution is sufficient. Membership may influence the other committee members, even when the involved person has left the room.

2. Research question

Here we generalize this question. Does membership of committees of a funding agency has an effect on success in grant applications? We consider all committee membership, not only membership of the specific committee that decides about one's own proposal. Why might such an effect exist? Firstly, membership of committees of a funding agency may lead to an information advantage. Committee members may have better knowledge about what funding opportunities exist or will be open in the future, and therefore may have a more active application behavior. They may also have better application skills, as they have seen many proposals and have learned how the proposals are assessed. Secondly, committee membership may lead to (and be the result of) a stronger network and more social capital, and this may result in nepotism. Decision makers may be inclined to favor their strong ties, such as fellow committee members. Thirdly, committee membership may result in reputation that positively influences the probability of getting funds. However, if this reputation correlates with scholarly performance, the committee members may in fact be the better scholars.

In this paper we aim at filling the knowledge gap by answering the question whether committee members score better than other applicants, and if so, by identifying how strong the effect is. In the rest of the paper, we use CMs for committee members and NCMs for the other applicants, who are not members of one of the committees of the council. Specifically, the following questions will be answered:

(1) Does application behavior of CMs and NCMs differ, possibly caused by an information advantage?
(2) Do CMs and NCMs differ in success rate, possibly reflecting better networks and social capital?
(3) If we find differences, can these be explained by performance differences?

3. Data and methods

The case analyzed in this paper is a biomedical research funding agency (FA) in the Netherlands. Data were collected through a survey among all principle investigators (PIs) in the discipline (NOD, 2007). Data about the number of applications and grants were obtained from the FA, covering a three years' period. As we control for performance, we also retrieved for all PI's in the population the number of publications in the period under consideration. Author disambiguation was done manually. The number of citations to these papers was retrieved, two years after the end of the three years period. The survey study had a response rate of somewhat smaller than 30%, which resulted in a sample of some 200 PIs. We tested the non-response, which is similar to the respondents in terms of distribution over universities and over subfields within the discipline. Also performance levels are equal in the respondents group and the non-respondents group.

Of these PIs, some 116 applied at least once for funding during this three years period. Applicants can have different roles, but most of them (86) are main applicant in at least one application. The majority of applicants also take up other roles within some applications, such as co-applicant, or PhD supervisor.[1]

The data set for this study included the following variables: age, gender, group size, the number of applications submitted to the FA, the number of grants awarded by the FA, committee membership, reviewer activity, and several performance indicators. Performance was measured over the same three years period, and therefore covers recent performance and not the whole researchers' history. The following performance metrics was used: (1) the number of publications in the

[1] Not all applicants can act as formal PhD supervisor. In that case, the applicant has to engage a full professor as co-applicant who takes up that role.