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Signaling cooperation☆

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ABSTRACT

We examine what an applicant's vita signals to employers about her willingness to cooperate in teams. Intensive social engagement may credibly reveal that an applicant cares about others and is less likely to free-ride in teamwork situations. We find that contributions to a public good strongly increase in a subject's degree of social engagement as indicated on her résumé. In a prediction experiment with human resource managers, we find that employers use résumé content effectively to predict relative differences in subjects' willingness to cooperate. Thus, a young professional's vita signals important behavioral characteristics to potential employers. Our results complement the findings from recent studies which analyze the effects of social engagement on wages and job market prospects.

"Volunteers don't necessarily have the time; they just have the heart."

Elizabeth Andrews

1. Introduction

An increasing share of productive activities take place in teams (e.g., Lazear and Shaw, 2007). Working in teams allows complementary knowledge and skills to be combined, which can result in outcomes a single person would not achieve. However, since individual contributions to the team output are typically not verifiable, effective teamwork may be impeded by free riders. Free-riding also reduces the effectiveness of team incentives (Holmström, 1982; Nalbantian and Schotter, 1997). Thus, if employees' cooperation in teams is important for an organization, it may want to hire individuals who are not free riders, but instead are willing to contribute to a common good.

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What can an organization do in order to find such employees? In job interviews and assessment centers, all applicants can cheaply pretend to be team players. Nevertheless, an applicant's vita may provide substance to such claims. For example, if an applicant voluntarily engages in activities that are primarily done to help needy individuals, this could reveal that she is not only interested in her own benefit, but also cares about the well-being of others. This characteristic may make her more likely to contribute to future teamwork, even if the goal of the teamwork project is unrelated to the cause of the volunteering activity. Thus, social engagement[1] may credibly signal an applicant's willingness to cooperate in teams to potential employers. This is the hypothesis that we test in this paper.

We conduct two experiments to detect the signaling value of social engagement and other activities, such as volunteering in students or sports associations. In the first experiment (Study 1), we collect student subjects' current résumés and measure their behavior in a linear public goods game (PGG). In the second experiment (Study 2), we ask human resource managers from different firms and industries to predict the behavior of Study 1 subjects in the PGG, based on their résumés. To identify the impact of extracurricular activities on beliefs, we randomly vary the résumé content. To elicit beliefs in an incentive-compatible manner, the managers' payoff increases in the precision of their predictions. An activity credibly signals an applicants' willingness to cooperate if both contributions in the PGG, and managers' predictions about contributions are positively related to subjects' degree of engagement in this activity.

The advantage of this experimental design is that it closely links subjects' behavior and others' beliefs about behavior. It therefore complements studies that use data on employers' hiring decisions to study how résumé content affects job market outcomes. An applicant who exhibits intensive social engagement besides her studies may not only signal a concern for others, but also that she is productive enough to perform both activities at the same time. Alternatively, employers may value the applicant's experience from the engagement. Thus, if subjects with social engagement on their résumé are more successful on the job market than others, the driver of this result would remain unclear. We avoid this problem by directly measuring human resource managers' beliefs about subjects' behavior in the PGG. The PGG has a number of advantages: it provides a clean and widely used measure for the willingness to cooperate (in contrast, field outcomes may be confounded by other behavioral motives); it is easy to explain the players' incentives in this game; and it has been shown that behavior in the PGG predicts cooperative group behavior in the field (we briefly discuss this in the next section).

Around 20% of our 347 subjects in Study 1 present some sort of social engagement on their résumé. It is one of the most commonly mentioned types of extracurricular activities (21% show engagement in student associations, 9% engagement in sports associations). Subjects are engaged in various activities that differ in tasks, frequency, time spent with the activity, type of organization, location, clients, and the hierarchical position in the organization. Some activities on the résumés may reflect only limited commitment (e.g., "three weeks volunteering project in the seniors residence XY; renovation of the house, helping seniors"), while others indicate dedicated engagement (e.g., "full-time voluntary social year in the organization XY for disabled people; providing part-time support to a family with a disabled child for 2.5 yr"). To get an objective measure for the intensity of engagement, we recruited subjects who are uninformed about the experiment and asked them to rate for a given activity the intensity of engagement. The average rating is the measure of intensity of engagement we use in our analysis. For the domain of social engagement, we call this measure the "social intensity score." For example, the social intensity score for the three-week volunteering project mentioned above is 2.36 (on a scale between 1 and 10), and 7.25 for the years of work with disabled individuals.

The data from Study 1 show that subjects' willingness to cooperate increases in their degree of social engagement. Subjects who indicate social engagement on their résumé, but are in the lowest or second-lowest quartile of the social intensity score distribution, do not behave significantly different than subjects without any social engagement. Subjects with social engagement in the third (fourth) quartile of the social intensity score distribution contribute 30% (40%) more than subjects without social engagement. Importantly, the differences in behavior can – if anything – only partly be explained by differing beliefs. On average, subjects' beliefs about their opponents' contributions equal the level of their own contributions. However, subjects in the third and fourth quartile of the social intensity score distribution expect to contribute significantly more than their opponents. In a control experiment, we replicate our main findings and rule out that they are driven by demand or priming effects through the collection of résumés.

Subjects engaged in student or sports associations do not contribute more in the PGG than non-engaged subjects. Other items on the résumé, such as age, gender, field of studies or the industry in which a subject collected professional experience, are mostly not informative about contributions in the PGG.

Employers largely anticipate the relative behavioral differences. When the human resource managers in our sample have to predict behavior based on résumé content that does not contain extracurricular activities, socially engaged subjects are expected to behave like subjects active in student associations (once we control for gender). However, if résumé content includes extracurricular activities, they expect socially engaged subjects to contribute around 30% more in the PGG than all other subjects; for subjects in the first, second, third and fourth quartile, the difference is plus 15, 25, 30 and 50%, respectively. Low-degree social engagement therefore gets an undeserved bonus. In contrast, the intensity of engagement in student or sports associations has no positive effect on beliefs. Thus, it is not extracurricular engagement in general that drives our results, but engagement that reveals caring about other people.

[1] We define social engagement as voluntary, unpaid engagement without any political context for individuals who are in difficult conditions or in special need of help and support.