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Esteem and social information: On determinants of prosocial behavior of clinicians in Tanzania☆

J. Michelle Brock[a,*], Andreas Lange[b], Kenneth L. Leonard[c]

[a] European Bank for Reconstruction and Development, London, UK
[b] University of Hamburg, Department of Economics, Von Melle Park 5, 20146 Hamburg, Germany
[c] University of Maryland, 2200 Symons Hall, College Park, MD 20742, United States

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ABSTRACT

We report experimental findings on the role of social information and esteem for prosocial behavior of clinicians in Tanzania. For this we conduct a lab experiment on variants of a dictator game, which allows us to classify types of clinicians by their responses to being chosen by their partner and to knowing more about the person they are paired with. We link this lab data to the effort exerted by the same sample of clinicians to their patients in the field. We show that clinicians who are responsive both to information and to being chosen in the lab exert more average effort in the field. Responsiveness to being chosen is also correlated with a smaller variance of effort in the field, while variance is larger for clinicians who respond to social information. Our combination of lab and field results suggests that behavioral traits identified in the lab are informative of clinician' choices in their actual workplace.

1. Introduction

Identifying why some workers perform better than others facing the same incentive system is of crucial interest to employers, particularly in settings with asymmetric information or where actions are hidden. Credence good markets such as health care bring an additional dimension: personal interactions with consumers may influence quality differently for different types of workers, creating situations where the consumers can potentially use social incentives to extract value.[1] This is especially important in the health care setting: patients have good reason to seek services that go above and beyond

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* Corresponding author.
E-mail address: brockm@ebrd.com (J.M. Brock).

[1] Credence goods are goods or services for which the supplier knows more about what the consumer needs than the consumer him or herself knows (Dulleck and Kerschbamer, 2006). Examples include progressional services such as auto repair, heating and cooling system maintenance, health care, accountancy or legal advice.

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what is incentivized by regulation, but may be limited in their ability to assess the quality of care provided to them. At the same time, we know that health workers are often prosocially motivated (see for example, Leonard and Masatu, 2006, 2010; Kolstad, 2013). Some clinicians not only care about their patients' health outcome, but also about their patients' opinion. As such, one important determinant of the quality of care provided may be driven by the desire to gain the patients' esteem.

In this paper, we examine the quality of care of a sample of clinicians in urban and suburban Arusha, Tanzania, for evidence on returns to esteem incentives. Similar to motivations modeled in Benabou and Tirole (2003) and explicitly based on Ellingsen and Johannesson (2008) (hereafter referred to as EJ), our study investigates the roles of social information and esteem in determining the quality of care provided. EJ focuses on an individual's perception of how others may see him or her and suggest that the impact of the "feeling of being esteemed" depends on the other's actual esteem and on how this other person's esteem is valued by the individual. They posit that offering to esteem somebody can motivate generosity from esteem-seeking individuals. Esteem thereby is viewed as one channel through which reciprocal behavioral can be triggered (Falk and Fischbacher, 2006; Rabin, 1993; Dufwenberg and Kirchsteiger, 2004; Cox, 2004).[2]

To test for these determinants of quality of care, we conduct a laboratory experiment with a sample of clinicians and then combine the results with data on the same clinicians' performance in the field for actual patients. With the field data we can assess the quality of care and its variance. In the lab, we investigate the behavior of these clinicians in a standard anonymous dictator game and two variants: (i) a variant where the dictator receives social information about the person with whom he or she is paired and (ii) a variant where the dictator knows that the recipient (the potential esteem giver) has chosen him or her after having received information about two dictators. Our laboratory experiment thereby allows us to classify clinicians by their reaction to social information – i.e. to knowledge of recipient identity – and to the potential provision of esteem – by reducing the dictator's anonymity and allowing recipients to choose their partner. We show that these classifications of clinicians are informative of the same clinicians' behavior in the field (their normal workplaces). Combining our field data with a laboratory experiment gives us a unique opportunity to identify categories of prosocial behavior. Both access to social information (through the personal interaction between patients and clinicians) and patients' ability to choose a clinician vary minimally in the field. Thus, there is limited scope for experimenting with these aspects without altering the workplace environment – something that many consider unethical in health care without some more compelling evidence that the intervention would "do no harm".

We find that clinicians who give more under both modifications compared to the standard dictator game provide higher effort for their patients in the field than those who do not give more in both. The classification of types in the lab are not only informative of the *level* of care in the field, but also its variance, another measure of quality. We find that those who react to the first modification provide higher variance of care in the field, which is consistent with clinicians conditioning their effort on patient characteristics. On the other hand, those who react to the second modification, i.e. to having something known about themselves and being chosen, provide lower variance of care in the field. Thus our findings are consistent with a theory that EJ style esteem is an important source of motivation for some clinicians. Other explanations for this behavior are possible, e.g. an increase of giving in response to a reduced anonymity. In its simplest form, our modifications reduce anonymity in each direction. The first modification reduces anonymity of the recipient and the second reduces the anonymity of the dictator.

Our choice of the field context is based partially on the ability to measure effort and partially on the welfare implication of increased effort. Previous work with clinicians in the same geographic area has demonstrated a significant know-do gap, suggesting that most clinicians are capable of providing significantly higher quality than they currently choose to provide (Leonard and Masatu, 2006, 2010). Thus while esteem should be important in many settings, its impact is easier to measure in this setting. We see our results as important beyond our Tanzanian setting as health care quality is a subject of significant concern to policy makers around the world. First, our results show that finding ways to enhance the value of patient esteem may generate benefits in terms of quality care, both by increasing its average level and by decreasing the variance. Second, we demonstrate that gaps in quality can be traced to heterogeneities in the individual preferences of providers, suggesting that (in similar settings) neither regulation nor markets nor innate preferences are alone sufficient to ensure quality care for patients.

We note that, even without the link to the field, our laboratory experiment also contributes to the existing literature: we study clinicians, a specific non-student population, as dictators and we match clinicians with potential patients where information may be given on multiple characteristics (age, gender, tribe, and income level). While there is a substantial literature on the role of social information and the responsiveness to social context (see Andreoni and Petrie, 2008 for a review),[3] our investigation of how decision-makers respond to the perception of being chosen by recipients is novel.[4]

[2] Closely related to the feeling of being esteemed is pride. Recent work in both economics and psychology suggests that pride can have a positive impact on other-regarding behavior (Oveis et al., 2010; Ellingsen and Ostling, 2010).

[3] Specifically, it has been shown that identity of givers and receivers can matter for other-regarding behavior (Eckel, 2007; List, 2004), public good provision (Andreoni and Petrie, 2004), effort provision in the workplace (Akerlof and Kranton, 2000, 2008) and discrimination in some labor markets (Lang and Lehmann, 2012). Several characteristics have been identified where information impacts pro-social behavior: a recipient's race (Glaeser et al., 2000), ethnicity (Fershtman and Gneezy, 2001), last name (Charness and Gneezy, 2009), level of deservedness (Eckel and Grossman, 1996) and low income (Braas-Garza et al., 2010).

[4] Related are two studies where the recipients move first: Holm and Engseld (2005) consider the partner preferences of recipients in an ultimatum game, but do not study their impact on proposers' decisions. Mohlin and Johannesson (2008) investigate the role of an initial communication by recipients with their dictator partner. They find that written communication from a recipient increases dictator giving relative to no communication, controlling for