Developing trust: First impressions and experience

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ABSTRACT

Using the repeated Trust Game, we investigated how first impressions and experience affect trusting dispositions, beliefs, and behaviors. As in previous research, trusting beliefs and trust-related behaviors were greater at the start of the game for partners with trustworthy faces; and higher later in the game for partners who reciprocated. Three additional findings extended beyond the previous research. First, by measuring the discrete components of trusting beliefs rather than an umbrella "trustworthiness" measure, we confirmed that first impressions and experience influence judgments of competence, benevolence, and integrity. Moreover, we found suggestive evidence that perceptions of benevolence and integrity updated more quickly with experience than perceptions of competence. Second, by looking at trusting beliefs at the start of two consecutive repeated Trust Games, we found that judgments of competence, benevolence, and integrity continue to be influenced by trustworthy facial appearances, even after previous beliefs based on facial appearances were disconfirmed. Third, we found increased investment with a partner at the start of a second repeated Trust Game, even when participants expected their partners to betray them. Overall, our results clarify our understanding of how first impressions and experience influence trusting beliefs; provides evidence that changes in the repeated Trust Game represents learning about a specific partner rather than revisions of trusting dispositions; and highlights important distinctions between trusting beliefs and trust-related behaviors.

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1. Introduction

"You can't judge a book by its cover." This famous figure of speech has often been applied to interpersonal contexts, warning individuals not to judge others by simply relying on their external appearances. On the other hand, people frequently rely on facial appearance to draw trait inferences about others and subsequently use these judgments to guide their own behavior. For example, extensive reviews of research on physical attractiveness reveal that people attribute positive characteristics such as intelligence, competence, leadership skills, and trustworthiness to attractive persons (Eagly, Ashmore, Makhijani, & Longo, 1991; Feingold, 1992). Beyond influencing positive beliefs, physical attractiveness also results in obtaining better outcomes in most domains of life (Hamermesh & Biddle, 1994; Zebrowitz, 1999). Facial appearance has

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also been used to judge trustworthiness in others (van 't Wout & Sanfey, 2008). Interestingly, people are able to judge the trustworthiness of faces very quickly (within 100 ms) and this judgment is robust even when more time is provided (Willis & Todorov, 2006). In addition to influencing beliefs, facial appearance has been shown to be predictive of trusting behaviors as assessed by the Trust Game (Campellone & Kring, 2013; Chang, Doll, van 't Wout, Frank, & Sanfey, 2010; DeBruine, 2002; Eckel & Wilson, 2003; Scharlemann, Eckel, Kacelnik, & Wilson, 2001; van 't Wout & Sanfey, 2008). Overall, this work suggests that people often rely on facial appearance to assess the trustworthiness of their opponent and use their subjective perceptions to guide their decisions regarding whether or not to invest with this opponent.

However, facial appearance is not the only predictor of trust. Previous research has found that facial appearances often determine *initial* judgments of trustworthiness and trust-related behavior, while later judgments and behaviors are dictated by the participant's experiences with a specific trust partner (Campellone & Kring, 2013; Chang, Doll, van 't Wout, Frank, & Sanfey, 2010). As such, trust is initially influenced by first impressions – snap judgments made based upon facial appearances – and subsequently determined by the interactive experience with a particular partner.

Unfortunately, these previous studies often measured trust using either an umbrella measure of "trustworthiness" or using trust-related behaviors. Such high-level measures provide only a partial understanding of trust (Ben-Ner & Halldorsson, 2010). In contrast, more precise models of trust that view judgments of competence, benevolence, and integrity as discrete components of trusting beliefs have been developed (Mayer, Davis, & Schoorman, 1995; McKnight & Chervany, 2001). Moreover, these components have been shown to differ in their causes and effects. For example, perceptions of competence were shown to influence the acceptance of tacit knowledge, i.e., knowledge that is difficult to articulate (Levin & Cross, 2004), and research on trust repair suggests that different interventions are required to address perceptions of low benevolence and integrity compared to perceptions of low competence (Kim, Dirks, Cooper, & Ferrin, 2006; Xie & Peng, 2009). Trust-related behaviors also depend not only upon characteristics of the person being trusted but the person offering their trust. Individuals who might offer their trust may differ in the degree to which they believe the competence, benevolence, and integrity of people *in general*. They may also use strategic or rule-based considerations to guide whether or not they want to offer their trust (McKnight & Chervany, 2001). Thus, while previous research suggests that facial appearance and experience can influence trust, the exact nature of their influence remains unclear.

In this paper, we investigate how first impressions and experience affect trust in a repeated Trust Game. First impressions refer to the snap judgments made regarding a person's trustworthiness based upon their facial appearance. Experience refers to repeated interactions with a partner, including feedback on whether the partner tends to reciprocate or betray trust. Trust is evaluated along three dimensions, including [1] *trusting beliefs*, i.e., perceptions of the competence, benevolence, and integrity of a specific partner; [2] *trust-related behaviors*, i.e., actions that make oneself more vulnerable to others for a potential benefit; and [3] *trusting dispositions*, i.e., attributes of the person engaging in trust that influence perceptions of the competence, benevolence, and integrity of others in general (faith in humanity) or strategic and rule-based decisions to engage in trust-related behaviors (trusting stance). This specification of trust is adapted from a model developed by McKnight and Chervany (2001, 2002), which consolidated different interpretations of trust that had been used across psychology, economics, sociology, political science, management, and communications. In contrast to previous research, our paper focuses on changes in the perceptions of competence, benevolence, and integrity (Study 1 and Study 2) rather than an umbrella measure of "trustworthiness." In considering trusting dispositions, we move beyond the previous research by asking whether experience influences only trusting beliefs in individual partners or influences general dispositions towards others (Study 2).

1.1. Trust model

McKnight and Chervany's trust model was developed to clarify and connect different dimensions of trust that had been investigated in earlier research (McKnight & Chervany, 2001). In our paper, we focus on a subset of their model that influences interpersonal trust – trusting dispositions, trusting beliefs, and trust-related behaviors. Trusting dispositions reflect a person's general approach towards trust across multiple contexts. Trusting beliefs reflect a person's perceptions of the trustworthiness of a specific individual. Trust-related behaviors reflect actions that a person may take to obtain a potential benefit by becoming vulnerable to another person. Trusting dispositions influence trust-related behaviors both directly and through changes in trusting beliefs. This abbreviated model is provided in Fig. 1.

As noted, trusting dispositions reflect a person's trait-like tendencies towards trusting others. Trusting dispositions are comprised of two dimensions: faith in humanity and trusting stance. *Faith in humanity* reflects a person's general belief about another person's competence (a person's ability to achieve her goals), benevolence (the degree to which a person cares about others), and integrity (a person's adherence to prescriptive norms). If a person generally believes that others are high in competence, high in benevolence, and high in integrity, they will use these beliefs to guide their initial interactions with new people. *Trusting stance* reflects general strategies or principles that may guide a person's trust-related behavior. For example, a person may engage in trust-related behaviors strategically to gather information about another person's trustworthiness. Alternately, a person may simply adhere to philosophies that proscribe trust-related behavior, e.g., "do unto others" or "everyone deserves a second chance." Both faith in humanity and trusting stance are likely to determine initial trust-related behavior with strangers. However, faith in humanity produces trust-related behavior based upon the expectation that trust will be reciprocated, whereas trusting stance produces trust-related behavior based upon rules that do not require expectations of reciprocity. Trusting dispositions are represented on the left of the diagram in Fig. 1.