### Does knowledge explain trust behaviors and outcomes?

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### Abstract

This paper examines the influences of initial and experiential knowledge on trust behaviors and outcomes, respectively, at an interpersonal level. Two alternative hypotheses are developed to test the effect of initial knowledge on the behaviors displayed by agents in interpersonal trust interactions, and that of experiential knowledge on the outcomes emerging from such interactions. These hypotheses are analyzed with data from an experimental dynamic trust game. The results reveal that (a) the initial knowledge existing between trustors and trustees *a priori* helps explain the trustors' trust behaviors towards such trustees, and (b) the experiential knowledge gained directly by trustors in the specific processes of trust interactions with trustees influences the type of trust outcomes.

**Key words**: initial knowledge; experiential knowledge; trust behavior; trust outcome; interpersonal trust.

**JEL Codes**: C12, C91.

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# Introduction

Over the last two decades, the 'central, superficially obvious but essentially complex' (Blois 1999, p. 197) concept of trust has been recognized as a key construct in the human resource management literature (Redman et al. 2011; Wong, Wong and Ngo 2012). Analyses about the influence of trust on the levels of human resource consistency (Nambudiri 2012), the level of trust in the employer (Searle et al. 2011), and the judgments about the trustworthiness of the other individuals (Six and Skinner 2010) constitute some illustrative examples of the considerable research attention received by trust from academicians and managers. Trust may be defined as a 'psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behavior of another' (Rousseau et al. 1998, p. 395). A trust relationship is made up of two agents: a trusting party (trustor) and a party to be trusted (trustee). The trustor is the party who places him or herself in a vulnerable situation under uncertainty. The trustee is the party in whom the trust is placed, who has the opportunity to take advantage of the trustor's vulnerability (Laeequddin and Sardana 2010). The literature on trust proposes that decisions made by certain people (i.e. the trustors) involve a risk level that depends on other people to whom the decision is related (i.e. the trustees). Thus, trustors are prepared to act—to place some trust in the trustee—if they perceive that trustees present a sufficient degree of trustworthiness (i.e. a sufficient degree of ability, integrity, and benevolence) for the trustor to assess the decision's inherent risk as lower than the potential benefits (Mayer, Davis and Schoorman 1995; Schoorman, Mayer and Davis 2007). Thus, from this viewpoint, trust depends on how trustworthy the trustee is and on the trustor's capacity to assess the trustworthiness of trustee (Laeequddin and Sardana 2010).

However, trustors face problems in evaluating the trustworthiness of completely unknown trustees (or of trustees with whom he or she has a very limited history or no history of interactions). Indeed, Lewicki, Tomlinson and Gillespie (2006, p. 994) state that 'trust begins at zero when no prior information is available about the trustees'. Thus, knowledge plays a crucial role in contexts involving interpersonal trust (Camén, Gottfridsson and Rundh 2011). In this sense, trust theorists propose that a trustor's knowledge about a trustee constitutes a key issue in the occurrence of trust interactions between them because it increases trustors' ability to predict trustees' behavior (Gefen, Karahanna and Straub 2003; Lewicki and Bunker 1995).

Furthermore, the literature has generally assumed symmetry in the agents' behavior. Researchers have not only taken for granted that if A trusts B, then B must trust A (Castelfranchi 2008), but they have also assumed that each party has approximately the same level of trust for the other party; that is, counterparts display equivalent trust behaviors toward each other (Serva, Fuller and Mayer 2005) that are common knowledge for both. The symmetry assumption holds that trustors build their trust expectations about trustees on the basis of the trustors' own trust behaviors. Under this framework of analysis, trustors' expectations and trustees' trust behaviors must meet, and thus, full reciprocity—i.e. equality between expected trust behaviors and those actually displayed-between counterparts is the only possible trust outcome. Most management research focuses on expectations of reciprocity (Cropanzano and Mitchell 2005), while the analysis of trust outcomes has not received any attention. However, recent studies have highlighted that trust is not necessarily symmetrical, meaning that the members of a given dyad do not necessarily exhibit the same level of trust toward each other (Cropanzano and Mitchell 2005). Hence, expectations are not necessarily built on the basis of common knowledge symmetrical trust behaviors among the members of a dyad.

Within the literature on trust, recent studies have highlighted as promising areas of research the analysis of (1) the role of different sources of knowledge in trust interactions (Holsapple and Wu 2008), and (2) the final trust outcomes emerging from trust interactions (Schoorman et al. 2007). Accordingly, our analysis considers trust as not necessarily symmetrical to investigate the influences of initial knowledge and experiential knowledge on trust behaviors and trust outcomes, respectively.

There are two contributions that our work offers. First, most of the relatively scarce literature on trust outcomes has relied on calculative approaches where trust outcomes are often delimitated by benevolent satisfaction (or not) of economic interests. In contrast, we present a more general approach highlighting the role of trustors' expectations and how well they are ultimately fulfilled (i.e. the trust outcome). Thus, we are also helping to understand better the distinctions between trust behavior and trust outcomes. Second, we complement literature on trust by using a dynamic approach to propose a different role for the knowledge accumulated by trustors before a trust interaction (i.e. initial knowledge) and for the knowledge gained by trustors throughout a trust relationship with a trustee (i.e. experiential knowledge). Whereas initial knowledge predicts well the trustors' trust behavior, experiential knowledge predicts the type of trust outcome.

The remainder of this paper is organized into five sections. In the second section, we provide a brief review of the literature on trust behavior and trust outcomes. Section three addresses the literature about initial and experiential knowledge as well as presenting the research hypotheses under study. In the fourth section, we describe the methodology applied to carry out the empirical study and the measures used. Section five presents the results obtained. Finally, in the sixth section, we discuss the conclusions drawn from of our analysis, as well as some limitations of this study and directions for future research.

### Theoretical points of departure: Trust behavior and trust outcomes

Rousseau et al. (1998, p. 395) defined trust as a 'psychological state that includes the intention to accept vulnerability based on positive expectations about the intentions or behavior of another'. Every trust interaction implies the participation of two parties, a trustor and a trustee. One party, the trustor, makes him or herself vulnerable, i.e. takes a course of action creating incentives for the other party, the trustee, to exploit him. Such behavior is commonly referred to as 'trust' and it is assumed that the trustor would not choose the risky course of action if he did not expect the trustee to honor trust (Ashraf, Bohnet and Piankov 2006). Therefore, trust reduces the doubts, worries, and anxieties about being exploited in a social exchange relation (Than et al. 2007).

Trust would be unnecessary if actions could be undertaken without risk (Pesämaa and Hair 2007). Risk is the perceived probability of loss from the perspective of the agent who has to decide (Chiles and McMakin 1996). The losses may not only be economic ones but also affect many other factors, such as trustor's time, reputation, and social relations (Resnick et al. 2006). Trust is also interdependent because the interests of one party cannot be achieved without relying on the other.

Most of the studies in this area have focused on determining the factors that influence a person's willingness to make a trust decision (Svensson 2001), knowing that the final benefits depend on the behavior or attitudes of other people (Mayer et al. 1995; Schoorman et al. 2007). According to neoclassical economics, people should trust others if and only if it is in their material interest to do so, ultimately meaning that people should trust only when it is also in the self-interest of the person being trusted to respond in a mutually rewarding manner (Kramer 1998). Nonetheless, the trust literature has shown many situations where people trust others even when there is no guarantee that the trustee will respond benevolently, highlighting the fact that trust implies an awareness of being vulnerable to and dependent on

the trustee (Fetchenhauer and Dunning 2009). Doney and Cannon (1997) state that trust requires an assessment of the other party's credibility and benevolence, and consequently, one party must have information about the other party's past behavior and promises. According to this perspective, trust is all about how trustworthy the trustee is and is also partly a product of the trustor's capacity to assess the trustworthiness of trustee. Based on such an assessment, trustors display different trust behaviors towards trustees. Thus, trust behavior is the level of trust placed by a trustor in a given trustee.

Previous works have separately analyzed some of the trust outcomes emerging from the relationship between trustor and trustee (e.g. Cropanzano and Mitchell 2005; Elangovan and Shapiro 1998; Serva et al. 2005). Based on this literature, we define a trust outcome as the difference between the trustor's expectations about the trustee and the trust behavior with which the trustee responds. By comparing these two concepts, it is possible to distinguish three broad categories of trust outcomes: reciprocity, betrayal, and reward. We now delineate each of the three trust outcomes.

Reciprocity occurs when the trustor's expectations about the trustee's trust behavior are equal to the behavior ultimately displayed by the trustee. The assumption of reciprocal trust has been especially widespread within the study of leader-subordinate relationships (e.g. Graen and Uhl-Bien 1995).

Trust betrayal is, in essence, the failure of one party to fulfill the trust expectations of the other. Elangovan and Shapiro (1998) define betrayal as a voluntary violation of the trustor's expectations by the trusted party (trustee), which has the potential to threaten the well-being of the trustor. Other recent works have used different terms to refer to this concept, such as 'negative reciprocity' or 'unkind action' (Dohmen et al. 2008; Falk and Fischbacher 2006). Betrayal occurs quite frequently within and between organizations (Kim et al. 2004), as well as at the interpersonal level (Bohnet and Zeckhauser 2004; Caldwell, Davis and Devine

2009). Despite growing interest, there is little theory and only a few empirical studies on trust damage (Janowicz-Panjaitan and Krishnan 2009; Laeequdin and Sardana, 2010). In this paper, we consider betrayal to occur when a trustor's expectations about a trustee's trust behavior exceed the behavior ultimately shown by the trustee during the trust relationship.

Finally, a rewarding outcome occurs when a trustor's expectations about a trustee's trust behavior are overtaken by the final behavior of the trustee during the trust relationship. Some authors have used other terms to refer to this concept, such as 'positive reciprocity,' 'kind action,' or 'honor-trust' (Dohmen et al. 2008; Hotho and Champion 2011). Our definition is consistent with the previous literature that analyzes rewarding behavior (Cropanzano and Mitchell 2005), but it goes beyond this definition by incorporating the agent's expectations.

# Hypotheses

We propose an analysis to explain the linkage between a trustor's initial and experiential knowledge about a trustee and the trust behavior and outcomes emerging from trust interactions between them, respectively. In this context, knowledge can be defined as a fluid mix of framed experiences, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers (Davenport and Prusak 1998). We distinguish between *a priori* knowledge, or initial knowledge, existing between a trustor and a trustee prior to the first interaction under analysis, and experiential knowledge, gained directly by a trustor in the specific process of trust interactions with a trustee.

The relevance of initial knowledge relies on its capacity to provide useful information for predicting a trustee's trust behavior. According to Luhmann (1979), knowledge is a precondition for trust because it creates a framework and understanding of the environment and the trusted party within which the expectations of trust can be applied. We contend that

initial knowledge constitutes a complexity-reduction method, i.e. an element through which people subjectively reduce uncertainty and simplify their relationships with others.

Prior literature suggests that trust initiators should be careful, because trust involves risk (Abele, Bless and Ehrhart 2004; Derfler-Rozin, Pillutla and Thau 2010; Rempel, Holmes and Zanna 1985). Thus, it is wise for trustors to take relatively small risks when facing interactions involving uncertainty (Pillutla, Malhotra and Murnighan 2003). Previous studies have mostly analyzed the linkage between knowledge and trust behavior among individuals known to each other; the relationship between the different levels of initial knowledge and trustors' trust behavior has not yet been addressed. Trust may develop more effectively when trustors can discriminate among different kinds of recipients (Lount and Pettit 2012; Pillutla et al. 2003). As people become more acquainted with specific others, their personal knowledge of others becomes the primary driver of their thoughts and actions (Bigley and Pierce 1998). Therefore, the existence of a certain level of initial knowledge between trustors and trustees leads to a lower uncertainty faced by trustors when trying to predict the trustees' behavior in strategic situations and, thus, leads to more trust.

We claim that the level of initial knowledge existing between a trustor and trustee determines the trustor's capacity for elaborating accurate guesses about how the partner will behave during future interactions, and therefore, the initial level of knowledge has an impact in the trust placed by the trustor in the trustee. Thus, we propose that the levels of initial knowledge between trustors and trustees may serve to predict the trustors' trust behaviors:

*Hypothesis 1:* The initial knowledge between a trustor and a trustee influences the trust behavior displayed by such a trustor towards the trustee.

Beyond initial knowledge, the experiential knowledge gained directly by a trustor in the specific process of a trust interaction with a trustee may also act as a complexity-reduction method to decrease the uncertainty involved in interpersonal trust interactions. Experiential

knowledge provides individuals with an understanding, based on previous interactions, experiences, and learning of what, why, where, and when others do what they do (Luhmann, 1979). Thus, experiential knowledge may help agents understand what is happening. Previous scholars have stated that social interaction –such as that occurring in dyads of trustors and trustees- supports the accumulation of knowledge among individuals (Alge, Wiethoff and Klein 2003; Tregaskls et al. 2010). Experiential knowledge also reduces misunderstandings about what the trustee is doing and thus reduces perceptions of being unfairly taken advantage of, which are beliefs that would otherwise reduce trust in the trustee (Gefen and Straub 2004). The belief that the other party can be trusted reduces social complexity with assumptions about the future behavior of the trusted party (Luhmann 1979).

When interacting more than once with the same trustee in a trust relationship, the trustor collects more accurate information and knowledge about the behavior of the trustee. This trust is grounded in knowledge about another party and is developed through repeated interactions (Gefen et al. 2003; McKnight, Cummings and Chervany 1998). It correlates highly with the ability to predict the behavior of another party based on prior experience (Gulati 1995; Husted 1998). Thus, it involves a process in which information essential to the predictability of another's behavior is obtained and accumulated by the trustor (Gulati 1995; Husted 1998).

In this sense, experiential knowledge not only provides a framework for future expectations, but it also lets people create concrete predictions of what to expect based on previous interactions. Because, in many cases, prior experience is the basis for trust (Kumar 1996), knowledge emerging from prior interactions can either create trust, when the experience was favorable, or destroy it, when it was not. Although another party's previous behavior cannot guaranty that that party will behave as one expects, successive interactions in which a party behaves as expected increase trust—that is, the belief that the other will behave as one anticipates. For example, a trustor having a certain level of experiential knowledge about a trustee has probably previously trusted such a trustee and in the process has likely noticed that the trustee behaved in accordance with the trustors' favorable expectations. Because behavior, in accordance with favorable expectations, builds trust (Luhmann 1979), the more experiential knowledge a trustor accumulates about a trustee, the more the trustor's favorable expectations are likely to have been confirmed.

We argue that experiential knowledge provides extra knowledge to the trustor regarding how the trustee has behaved in the specific process of a trust interaction (i.e. the trustee's pattern of behavior). This knowledge, emerging from previous interactions in the same relationship with the trustee, allows the trustor to more accurately evaluate how the trustee will act during future interactions and therefore more accurately set expectations in relation to the trustee's future trust behavior. If trust outcomes are viewed as resulting from the comparison of trustors' expectations with trustee's behavior, then both adjustments, considered together, influence the type of trust outcome that will emerge in future interactions. Thus, we propose that experiential knowledge gained from previous interactions between a trustor and a trustee may influence the trust outcomes emerging from future trust interactions between them. This leads to the following hypothesis:

*Hypothesis 2:* The experiential knowledge accumulated by a trustor from past interactions with a trustee influences the type of trust outcome obtained by this trustor.

### Methodology and measures

## **Experimental procedures**

The experimental design is particularly appropriate for our objectives because it allows us to obtain relevant and very precise information, which is not easily available in the market, with full control of surrounding characteristics. Specifically, we use an experimental methodology based on the trust game (Berg, Dickhaut and McCabe 1995). Figure 1 illustrates the structure of the traditional trust game.

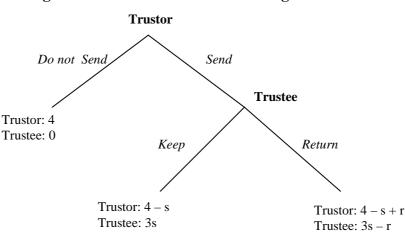


Figure 1. Extensive form of the trust game

The trust game is usually played by pairs of individuals. Each pair consists of a trustor and a trustee. Trustors are assigned an initial endowment before starting the game; this amount is the same for every trustor. Then, each trustor chooses between two actions: Send (S) or Do Not Send (D). If the trustor chooses D, trustors receive their endowment at the end of the game, whereas trustees get nothing. If the trustor chooses S, the amount the trustor passes to the trustee (*s* euros) is tripled and given to the trustee (to represent a return on an investment). The trustee then chooses between the action Keep (K) or Return (R). If the trustee chooses K, the trustee receives triple the amount that the trustor sent ( $^{3\times s}$  euros). Furthermore, the trustor receives the initial endowment minus the amount he or she passes to the trustee. If the trustee chooses R, the trustee receives triple the amount sent by the trustor, minus the amount that the trustee decided to return to the trustor (*r* euros).

We conducted a modified version of the trust game. In our setting, each trustor plays the trust game with three types of trustees: a trustor's friend, a friend of a trustor's friend, and a stranger. These three types of trustees represent different levels of initial knowledge between the trustor and the trustee: a trustee whom the trustor knows and trusts (the friend), a trustee whom the trustor does not know directly but who is referenced by a third party (the friend of a friend), and a trustee whom the trustor does not know directly and for whom the trustor does not have any reference (the stranger). Each trustor receives an initial endowment of 4 euros to allocate among each of the three trustee types; participants are allowed to send and return only whole euros.

Participants were recruited from a large pool of full-time undergraduate students in a bachelor of economics and business program. Prior to the day of the experiment, participants were required to submit the names of a maximum of four people from the class whom they considered to be their friends and four people whom they did not know (we distributed a list of the class members from which to select these names). From this information, we were able to classify participants into the three different categories.

Participants were divided into trustors and trustees and placed in two separate classrooms. It is important to note that communication between trustors and trustees was not allowed at any time in our experimental design. The game started in the trustors' room. Trustors received three envelopes (labeled 'friend', 'friend of a friend', and 'stranger'), and they were asked to write down the amounts that they wanted to send to each type of trustee and, on a separate sheet of paper, the amounts they expected to receive back from them. The instructor then collected the sheets with the trustors' expectations, and the envelopes were delivered to the trustees' room. Before distributing the envelopes, we instructed the trustees to write down the amounts that they expected to receive from each type of trustor.

Each trustee then received the corresponding three envelopes, one from each type of trustor. After reading the amounts that each trustor had sent, the trustees were asked to write down the amounts that they wanted to return to each type of trustor. The envelopes were then sent back to the trustors' room. Each trustor checked the amounts returned by the trustees, thus completing the first round of the game.

We conducted two rounds of the game, and to control the evolution of trust transfer across agents, every trustor (trustee) played the second round with the same three trustees (trustors). To fulfill the conditions required by the experimental design, we obtained a total of 99 observations. Because the experiment was run twice, the final number of observations was 198. Participants received their earnings during the week after the experiment.

#### Measures

#### Trust behavior

This variable is measured as the amount sent by trustors to each type of trustee. It enters the analysis as a dependent variable for testing hypothesis 1. We asked trustors to report how much they wanted to send to each type of trustee in each round of the game.

## Initial knowledge

This variable represents the level of knowledge a trustor has about a trustee prior to the start of the first round of the game. It is measured by a categorical variable including three different categories: low initial knowledge (i.e. when the trustor interacts with a stranger), medium initial knowledge (i.e. when the trustor interacts with a friend of a friend), and high initial knowledge (i.e. when the trustor interacts with a friend). The level of initial knowledge is the independent variable for testing hypothesis 1.

#### Trust outcome

This categorical variable reflects the type of trust outcome (i.e. betrayal, reciprocity, and reward) obtained by a trustor in the second round of the game. For the second round of the game, we measured the difference between trustors' expectations about trustees' trust behaviors (i.e. how much the trustor expects to be returned by the trustee) and the trust

behavior ultimately exhibited by the trustees towards these trustors (i.e. how much the trustee returns to the trustor). Using this calculation, we established three categories of trust outcomes: betrayal (i.e. when a trustor's expectations overcame the trustee's trust behavior), reciprocity (i.e. when a trustor's expectations were equal to trustee's trust behavior), and reward (i.e. when a trustor's expectations underestimated trustee's trust behavior). This variable enters the analysis as a dependent variable for testing hypothesis 2.

#### Experiential knowledge

This variable reflects the knowledge accumulated by a trustor about a certain trustee's trust behavior, based on previous experiences with the trustee. We measure it as the difference between the trustor's trust behavior towards the trustee (i.e. the amount sent by a trustor towards a trustee) in the second round and the trustor's trust behavior towards the same trustee (i.e. the amount sent by this trustor towards the same trustee) in the first round. Experiential knowledge is the independent variable for testing hypothesis 2.

## Results

Table 1 summarizes the main descriptive statistics for the trust behavior exhibited by trustors in the first and the second rounds. We can observe that the average amounts sent by trustors increase with the level of initial knowledge between trustors and trustees in the first and second rounds. We appreciate that those trustees with whom trustors hold a high level of initial knowledge receive, on average, more than those trustees with whom trustors have a medium or low level of initial knowledge. Moreover, trustors send, on average, a larger amount to trustees with whom there is a medium level of initial knowledge than to those trustees about whom trustors have a low level of initial knowledge. These conclusions hold for both rounds.

Level of initial knowledge	Trustors' trust behavior in the			Trustor	Trustors' trust behavior in the			
	first round				second round			
	N	Mean	s.d.	Ν	Mean	s.d.		
High initial knowledge	33	3.061	1.088	33	2.606	1.638		
Medium initial knowledge	33	2.091	1.071	33	1.636	1.454		
Low initial knowledge	33	1.455	1.227	33	1.212	1.516		
Total	99	2.202	1.301	99	1.818	1.631		

Table 1. Descriptive statistics for the trustors' trust behavior inthe first and second rounds.

To check whether those observed differences in trustors' trust behaviors depending on the different levels of initial knowledge are statistically significant, we ran ANOVA analyses. Table 2 reports the results obtained for each round of the game. In the first part, we can observe that the differences presented in table 1 with respect to the trustors' average donations across the levels of initial knowledge are statistically significant for our first trust interaction. When looking at the second part of the table, we can see that the same conclusions can be also drawn for the second round. Therefore, hypothesis 1 is fully supported for both rounds.

Table 2. ANOVA for the trustors' trust behavior in the first and<br/>second rounds.

	Trus	tors' trust b	ehavior in th	ne first ro	ound		
			Sum of	df	Mean	F	Sig.
			squares		square		
Between groups	(Combined)		43.172	2	21.586	16.877	0.000
	Linear term	Contrast	42.561	1	42.561	33.275	0.000
	Trusto	ors' trust be	havior in the	second	round		
			Sum of	df	Mean	F	Sig.
			squares	, i i i i i i i i i i i i i i i i i i i	square		
Between groups	(Combined)		33.697	2	16.848	7.124	0.001
• •	Linear term	Contrast	32.061	1	32.061	13.557	0.000

We ran a multiple logistic regression to test hypothesis 2. The results of the likelihood ratio tests show that a trustor's experiential knowledge has a significant influence on the type of future trust outcomes ( $\chi^2(4) = 22.447$ , p=.000). Table 3 reports the findings regarding the parameter estimates. We compare pairs of outcome categories. We specified 'reciprocity' as the reference category. In the first part of the table, when comparing the trust outcomes of betrayal and reciprocity, we appreciate that the trustor's experiential knowledge significantly influences whether the type of future trust outcomes will be betrayal or reciprocity. When looking at the second part of the table and comparing the categories of reciprocity and reward, we observe that the trustor's experiential knowledge significantly predicts whether the type of future trust outcomes will be either reward or reciprocity.

	В	Std. error	Sig.
Intercept	-0.916	0.269	0.001
Experiential knowledge	0.899	0.312	0.004
Intercept	-1.488	0.352	0.000
Experiential knowledge	1.374	0.424	0.001
	Experiential knowledge Intercept	Experiential knowledge0.899Intercept-1.488	Intercept         -0.916         0.269           Experiential knowledge         0.899         0.312           Intercept         -1.488         0.352

Table 3. Type of trust outcome in the second round

Note:  $R^2 = .203$  (Cox & Snell), .244 (Nagelkerke).

# Discussion, limitations, and future research

### Discussion

There appears to be some consensus in the literature that trusting relationships are important and useful for a range of organizational activities, such as teamwork, leadership and human resource management (Six and Skinner 2010; Timming 2012; Zeffane and Connell 2003). Thus, literature has witnessed an increasing emphasis on trust (e.g. Deery, Iverson and Walsh 2006; Kelloway et al. 2012) and, more specifically, on interpersonal trust (Chang and Chi 2007; Chou et al. 2008; Webster and Wong 2008). Interacting with others, when it is impossible to control their actions or even fully understanding their motivations, makes interpersonal trust interactions overwhelmingly complex for individuals. Nonetheless, because people continually need to interact under such unpredictable circumstances, they apply a variety of methods for reducing this crushing complexity. This is especially the case in interactions that are not fully governed by rules and regulations (Fukuyama 1995), themselves complexity-reduction methods. Initial and experiential knowledge constitute two examples of complexity-reduction tools used to cope with trust interactions characterized by uncertainty.

Previous literature on trust and management has focused on the link between knowledge and trust behavior among individuals known to each other. Little is known, however, about the relationship between different levels of initial knowledge and trust behavior. Moreover, studies analyzing trust outcomes are also scarce and have not explored specifically which factors influence the probability of the occurrence of each type of trust outcome. This paper contributes to fill both research gaps by investigating the influences of initial knowledge and experiential knowledge on trust behaviors and trust outcomes, respectively. We believe that our analysis offers several contributions to literature on trust and management.

First, this work stresses the differences between trust behavior and trust outcome. While most of the previous literature has assumed trust behaviors to be reciprocal between trustors and trustees (Serva et al. 2005), we note that this does not necessarily happen in every case and that trustors' expectations play a key role in understanding the trust outcomes arising from interactions between trustors and trustees.

Second, we complement the literature on trust by using a dynamic approach to propose a different role for the knowledge accumulated by trustors before a trust interaction (i.e. initial knowledge) and for the knowledge gained by trustors throughout a trust relationship with a

trustee (i.e. experiential knowledge). While initial knowledge predicts well the trustors' trust behavior, experiential knowledge predicts trust outcomes.

Third, the previous literature on trust has placed special emphasis on identifying the factors affecting an agents' trust behavior (Mayer et al. 1995). Studies conducted in several areas have identified national culture, gender, and group membership as significant factors influencing individuals' trust behaviors (e.g. Buchan, Croson and Solnick 2008). Our results complement prior studies by introducing initial knowledge into the analysis. These results reveal that the level of initial knowledge between a trustor and a trustee positively influences the trustor's trust behavior towards the trustee in both rounds of the experimental game. Therefore, hypothesis 1 is supported.

Fourth, we find that trustors' experiential knowledge directly affects trust outcomes. This result supports hypothesis 2 and provides interesting theoretical contributions to the previous literature. On the one hand, this paper shows the potential benefits of introducing the concept of experiential knowledge in the literature on trust and management (Mayer et al. 1995; Schoorman et al. 2007) to help explain trust outcomes. On the other hand, while prior works on trust and management have approached trust outcomes separately and have adopted different definitions of the terms (e.g. Cropanzano and Mitchell 2005; Elangovan and Shapiro 1998; Serva et al. 2005), our paper enriches this fragmented literature by simultaneously analyzing all potential outcome types (i.e. betrayal, reciprocity, and reward) that may arise from a trust relationship. Our results reveal that the accumulation of experiential knowledge by trustors significantly predicts the type of trust outcome emerging from trust interactions.

# Limitations and future research

There are several opportunities for future research, some of which can address this study's limitations. First, the application field of our sample is rather narrow; it focuses on students

under a Business and Economics Faculty. Therefore, caution should be employed when extrapolating these results to other disciplines and areas. Testing our hypotheses in different contexts and geographical areas could verify the validity of our results. A second limitation is the low number of iterations in our experiment; the trust game was played only twice. Although prior literature has noted that simple dynamic models, when initiated with firstperiod observed behavior, constitute appropriate settings for predicting how observed behavior will evolve (Roth and Erev 1995), it would be interesting to develop further empirical studies that include a greater number of interactions among the agents to provide some insight into how the influence of initial knowledge and experiential knowledge evolves regarding trust behaviors and trust outcomes.

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