# Stakeholder management influence on trust in a project: A quantitative study

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## Abstract

This article aims to analyze the influence of stakeholder management on trust in project environments. Data was collected from 130 project professionals in companies from several national and multinational segments operating in Brazil. PLS-PM was applied for treatment and for data analysis. The results show that the relational stakeholder management influence on the three types of trust is relevant and significant. Therefore, it is important that the project manager not fail to consider actions such as communication with empathy as of the beginning of the project.
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## 1. Introduction

Stakeholder management has aroused interest in practitioners and academics as an important means to achieve project objectives. Some authors (Aaltonen, 2011; Achterkamp and Vos, 2008; Aladpoosh et al., 2012; Bourne and Walker, 2005a, 2005b; Gil, 2010; Littau et al., 2010; Mok et al., 2014) defend that it is necessary to find an approach and engagement with the stakeholder to achieve the project success. The project performance criteria such as cost, time and scope are not enough to ensure success. The relationship between project manager and project stakeholders came to have a greater emphasis to the extent that the more instrumental approach of stakeholder management did not result in an improvement in the perception of project success (Achterkamp and Vos, 2008; Bourne, 2015; Heravi et al., 2015; Mok et al., 2014; Olander and Landin, 2005; Rajablu et al., 2015).

Establishing relationships, communication and leadership is common in any project, for the project is a typically social activity in which the objectives will hardly be reached without the participation of people, even if indirectly. By establishing relationships of trust, communication, leadership and interpersonal relationships are facilitated, influencing the increase of stakeholder resilience and, in the event of conflicts or problems in the project, opening space for alternative solutions. Trust, therefore, plays an important role acting as a lubricant in stakeholder relations and project management (Aaltonen, 2011; Aladpoosh et al., 2012; Gil, 2010; Karlsen, 2008; Shenhar, 2004).

The fact that relationships exist in projects does not mean that they will always be aggregators because there are a number of obstacles that hinder the creation of positive relationships, that is, trust relationships. The very nature of the project hinders the formation of trust, since singularity and temporality represent obstacles to the creation of credible bonds. Many project teams come together just to share the same goal, but there's nothing in common that would justify team building. This explains why trust relationships are more common in permanent organizations, as a result of various interactions over time (Hartmann and Hietbrink, 2013; Karlsen

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et al., 2008; Mok et al., 2014; Pinto et al., 2009; Rose and Schlichter, 2013).

Although trust and stakeholder management have varied studies due to their importance, there are few that deal with the interaction and relationship between them (Rose and Schlichter, 2013; Strahorn et al., 2015). To assist in the discussion of this gap, this article aims to investigate the influence of stakeholder management on trust in project environments. In this context we formulated the following research question: *What is the influence of stakeholder management on trust in project environments?*

The research approach was based on the literature review of the two constructs and the proposal elaboration of one of the conceptual research models. The methodological approach was validated through a survey-based research, with the application of structural equation modeling.

This article is organized in six sections, as follows. In the next section, the theoretical basis for stakeholder management and trust are presented. The methodological approach is presented in section 3 and the results in section 4. Section 5 presents the discussion of the results. The conclusions are presented in Section 6.

## 2. Literature review and research model

The literature review aims to present, not exhaustively, the main concepts concerning the two research constructs: stakeholder management and trust.

### 2.1. Stakeholders and Stakeholder Management

Stakeholders are individuals, groups or institutions with a vested interest in the project, and who can affect its outcome (Littau et al., 2010) and Stakeholder Management is defined as a process in which the project team manages the needs of stakeholders, identifying them, collecting their expectations, closing agreements with them, and ensuring that their objectives be met (Rajablu et al., 2015). According to Aragonés-Beltrán et al. (2017), Stakeholder Management includes the processes required to: (i) identify stakeholders, (ii) analyze stakeholders' expectations and their impact on the project, and (iii) develop strategies for effectively engaging stakeholders in project decisions and its execution. The process of stakeholder management occurs throughout the project life cycle (Bourne and Walker, 2005a) because the influence of stakeholders can at any moment be different in meaning and intensity (Cleland, 1986). The stakeholder influence base is not static, which justifies the need to update the knowledge base of stakeholders at different stages of the project (Olander and Landin, 2005).

Mitchell et al. (1997) proposed to classify stakeholders based on the priority of their competing claims through the Salience model. Stakeholders can be identified from three attributes: (1) the power of stakeholders to influence the organization, (2) the legitimacy of the stakeholder relationship with the organization, and (3) the urgency of stakeholder demands in the organization. Thus, the saliency of stakeholders is related to the perception of the management as to the presence, or the combination of these, three attributes.

The authors Yang et al. (2009) criticize the Salience model proposed by Mitchell et al. (1997), as does Rajablu et al. (2015), due to the complexity of its construction and its dependence on the quality of information regarding the stakeholders. However, in order to simplify classification, Olander and Landin (2005) proposed the matrix of power and interest.

The Salience model and the stakeholder power and interest matrix are recommend by the PMI (Project Management Institute) which periodically provides and updates a framework for management practitioners and publishes them in the Project Management Body of Knowledge Guide - PMBOK® Guide (PMI, 2013), applicable to any type of project, justifying its broad business use (Carvalho and Rabechini Jr., 2011).

On the other hand, Shenhar (2004), without presenting an adaptive model, advocate a contingency approach to project management, since, as projects are sources of uncertainties, unpredictability, and change, a standardized model induces a single form of management. Thus, the mapping of the stakeholders regarding their interests and project power foreseen in the PMBOK® Guide (PMI, 2013) does not represent a guarantee of success. Rajablu et al. (2015) criticize the weaknesses of stakeholder mapping models because they do not consider the complexity of the network of relationships. There are also reservations for not contemplating changes in stakeholder behavior throughout the project cycle (Aaltonen, 2011).

Also attentive to the question of the complexity that a project may have, Rolstadås and Schiefloe (2017) propose the classification of stakeholders in three main groups. The primary stakeholders group includes the project organization itself, the project owners, and the main suppliers. The secondary stakeholders group are the actors or organizations that the project is more or less dependent upon for services, finance, permissions, cooperation or goodwill. Unions and customers can also be added to this layer of interests. In the tertiary stakeholders group one can find local interest groups, NGOs, media, competitors, and others.

From the observation of action initiatives with a strongly instrumental approach and a relational approach applied in stakeholder management, Aladpoosh et al. (2012) proposed two schools of thought for stakeholder management. The first school of thought is prescriptive and focuses on the application of methodologies and tools to minimize the negative impact of stakeholders. According to Cleland (1986), Mitchell et al. (1997) and Bourne and Walker (2005a), actions such as mapping, assessing and monitoring stakeholders that can exert interest and power in the project are needed throughout the project life cycle. The second school is relational and focuses on establishing and maintaining links, with emphasis on the relationships and interactions of different stakeholders (Mok et al., 2014).

Olander and Landin (2005) emphasize that involvement and communication with key stakeholders in the early stages of the project contribute to success. According to Bourne (2015), it is necessary to establish an effective relationship with everyone in

every life cycle, especially with those that can influence, positively or negatively, the achievement of the objectives.

The importance of stakeholder engagement in the project as a factor to achieve success is also pointed out by Rowlinson and Cheung (2008). Therefore, as an identity is formed with the project and shared objectives, the tolerance of stakeholders towards the difficulties encountered increases (Bourne and Walker, 2005b). The authors Olander and Landin (2008) described as an example the NIMBY syndrome (not in my backyard), in which there is the resistance of the stakeholders to the implementation of a project. The authors themselves point out that to mitigate this syndrome, it is important to communicate the various aspects of the project, whether good or bad, minimizing the negative impacts and maximizing the positive ones in order to arouse the interest of all stakeholders (Di Maddaloni and Davis, 2017).

Therefore, for the success of the project, the identification, mapping, control and monitoring of stakeholders is as important as coordinating actions for stakeholder engagement and collecting information about their perceptions throughout the life cycle, thereby composing the framework of management actions with a relational focus (Mok et al., 2014). This approach sets forth to the management the need to consider the social and environmental contexts in which projects are included (Gil, 2010).

In the environmental context, issues external to the project are considered, such as customer contact, users, community and sponsors (Aaltonen, 2011; Newcombe, 2003). In the social context in projects, topics such as trust, communication and leadership in the internal team, project manager and sponsors are addressed (Littau et al., 2010; Smyth, 2008). Considering different contexts means assuming that relationships between stakeholders are not preconceived. It is necessary to identify and monitor how they develop and how actors react with one another, and also what they do to be positive and to add more value, for the relationship between the project manager and the stakeholders can have many different forms and characteristics. It is recommended that efforts be made to encourage an environment that fosters relationships of trust (Rose and Schlichter, 2013). From this perspective, considering the different contexts to achieve success in the project represents conducting the management of stakeholders from a prescriptive and relational order, for the practical purpose of mapping, engaging stakeholders and managing expectations and needs. This is since management is facilitated when trust relationships are established (Karlsen, 2008; Mok et al., 2014; Rose and Schlichter, 2013).

## 2.2. Trust

Trust is defined by Rousseau et al. (1998) as a psychological state that comprises the intention to accept vulnerability based on positive expectations of the intentions or behaviors of the other part. Therefore, trust would not be necessary if actions could be undertaken with complete certainty and without risk. For the authors, Rempel et al. (1985), trust is believing in the other and considered as the intrinsic motivation of a partnership. For Johnson-George and Swap (apud Mayer et

al., 1995) the willingness to take risks may be one of the few characteristics common to all situations of trust. The authors Mayer et al. (1995) relate the trust of one of the parties to be vulnerable to the actions of another part, based on the expectation that the other party will perform a certain important action for the assignor, independently of his the ability to monitor or control.

The concept adopted for trust in this article is the one defended by Karlsen et al. (2008) and Rose and Schlichter (2013), who are critiques of Rousseau et al. (1998) because to them it is not a moral imperative or a psychological condition of the individual, but a usual component in the organization and consequence of the interaction between two parts, with a direct relation to reaction in response to an action. The definition of Karlsen et al. (2008) and Rose and Schlichter (2013) embarks on the reflection that relationships of trust are cause and effect since trust is an optimistic response to an action performed by another person. The actors of the trust relationship may not even belong to the same organization, broadening the scope to the analysis of trust relations between work units.

Therefore, there are two conditions necessary to have relationships of trust. The first is that it is inevitable to take risks with a mitigation stance when depositing trust in the other party. The second condition is interdependence, where the interests of one party can not be achieved without resource from the other (Aubert and Kelsey, 2000). In this way, the degree of interdependence changes the way confidence can be manifested. The greater dependence implies greater relevance of relations of trust with the other part. The dynamics of relationships contribute to the virtuous cycle of trust since risk-taking strengthens a sense of credibility when the expected behavior is performed (Rousseau et al., 1998).

As such, trust acts as an ideal lubricant for smooth and effective coordination, allows cooperative behavior, promotes adaptive forms of organization, reduces harmful conflicts and transaction costs, and delivers more effective responses to the crisis (Rose and Schlichter, 2013). Karlsen et al. (2008) also state that trust is important for problem-solving because it encourages the exchange of relevant information and determines if team members are willing to allow others to influence their decisions and actions. The correlation is strong between project success and stakeholder trust (Pinto et al., 2009), for building trust can lead to constructive working relationships, and understanding how different relationships between stakeholders are to be worked out helps to be more effective in balancing conflicting issues that usually arise in projects. However, the benefits of trust only occur when it is bilateral (Aubert and Kelsey, 2000; Hartman, 2003; Karlsen, 2008; Karlsen et al., 2008). Apart from the reciprocity to establish relationships of trust, another obstacle comes from nature itself, since it can involve organizations, groups, and individuals who have never worked together, with little time and often little inclination to address the social subtleties of being together or even learning to trust each other (Hartman, 2003).

These characteristics have an impact on confidence building, being more common in permanent organizations because it is established and maintained after several interactions over time

(Karlsen et al., 2008). However, Aubert and Kelsey (2000) point out that under certain conditions trust is a weak predictor to directly influence team performance, it is not, therefore, a precedent for success in short-time projects considered by the organization.

Hartman (2003) states that trust influences virtually every aspect of project management, being more relevant in projects than in operations management. Karlsen et al. (2008) argue that trust is an important factor in business-to-business relationships, but is portrayed as a complex entity of difficult measurement, largely because of the different flows and information to be administered.

The organization of resource and information flows determines how the interactions occur in the project, and may even grow in complexity with the increase of these exchanges (Karlsen et al., 2008; Rolstadås and Schiefloe, 2017). The project manager must have considerable power to influence the processes of interaction to avoid problems which are hard to solve, which makes the management of relationships with the different stakeholders a key factor. One of the issues that is hard to mend due to the failure of the management of the relationships is that to avoid failure in the project, one chooses to deal superficially with complex relationships, which leads to a failure to communicate, or to pay the price in additional work, turnover or bonuses to offset identified risks (Hartman, 2003).

The existence of a relationship between two parties does not refer to any kind of pattern of interaction. Therefore, each relationship is unique in both its content and the dynamics of how it affects stakeholders and develops through the project phases (Karlsen, 2008). The dynamics of relationships of trust is also highlighted by Rousseau et al. (1998), which can be expanded, maintained or even reduced over time.

Trust is a powerful asset and can create loyalty giving those who receive the vote of confidence the benefit of doubt in situations where they seem to have a different stance from that which they advocate to follow. Also, the establishment of trust reduces the costs of monitoring and controlling, thus making the transaction more efficient (Karlsen, 2008). Even credibility can be a substitute for more formal control methods (Aubert and Kelsey, 2000; Guo et al., 2013).

For Pinto et al. (2009), there is a great potential impact of trust on the practice of project management including: a better customer relationship, reduced time to market, reduced risk premiums in outsourcing and therefore lower project costs, and more effective communication. Still, as the authors maintain, the last item, communication, made it worth exploring the phenomenon of trust, because communication failures are responsible for most, if not all, of the project failures. The adoption of actions that develop stakeholder trust should occur at the beginning of the project, as they have shown to been influential in the outcome of the project (Strahorn et al., 2015). However, according to the authors, the demonstration of trustworthiness at the beginning of any exchange relationship comes with some risk and the benefits of trust are discredited if there is evidence of intentions different from those that were contracted.

Within a project environment, it is essential that its participants demonstrate a willingness to act in the best interest of the other part, this characteristic determines the extent of trust

relationships (Strahorn et al., 2015). Sharing vision and objectives helps in the practice of effective communication facilitates the creation of meanings and supports creative solutions in unanticipated situations, essential items for building relationships of trust and cohesion (Dervitsiotis, 2003).

Negative events in any project can directly influence the relationships of trust among stakeholders, and their breakdown will have significant consequences (Strahorn et al., 2015). Some of the impacts of stakeholder mistrust are direct, apparent, and measurable, while many others are indirect and difficult to estimate both in the short and long term (Dervitsiotis, 2003). According to the authors Strahorn et al. (2015), the process of repairing trust is complex because it must restore positive expectations in a relationship with greater effort than the trust initially established. One of the negative events that lead to a breach of trust, for example, is a failure to keep promises, whether it is a delay, a lack of integrity, or deliveries that do not meet the required needs, such as failure to execute. A rapid response with a genuine concern for the stakeholders' deepest needs and presenting alternatives to problems that have broken trust relationships has been shown to help reduce the impact of lost trust (Dervitsiotis, 2003).

Another aspect of trust, according to Hartman (2003), is the role of leadership in project management in organizations exposed to rapid change. Increasingly, today's critical projects are happening in an unstable environment, changing the demands on project managers as leaders, and building trust with their team is essential to achieve results. Authors Karlsen et al. (2008) and Strahorn et al. (2015) argue that there is a strong relationship between trust and communication, justifying that managers should put their efforts into improving their communication skills. In fact, effective communication with the other party requires an adequate level of trust.

Effectively communicating, according to Dervitsiotis (2003), means communication for action based on relationships of quality, transparency and respect with stakeholders, behaving reliably throughout the life cycle of the project, being committed, being sincere, benevolent and competent, being and acting with integrity, working to reach the milestones of the project, and establishing first and foremost the common objectives. Effective communication was also identified as an important factor in achieving project success (Pinto et al., 2009). Along the same lines, Strahorn et al. (2015) support the relevance of trustworthy behavior throughout the life cycle of the project, since levels of trust between the parties are constantly reevaluated for decisions about whether or not risk-taking in terms of relational interactions should be maintained. Therefore, positive or negative experiences dictate future expectations and emotional responses.

The development of trust cannot succeed without the existence of a relationship. Thus, as opposed to a personality trait exhibited by either party (Karlsen et al., 2008), the relationship of trust is a result of factors perceived by the one who trusts about the characteristics of the one who receives the trust. These factors for Dervitsiotis (2003) are: Sincerity, the degree to which people mean what they say; The Skills correspond to the capacity to fulfill a promise and the

Involvement that reflects how much there is legitimate interest in the other.

Mayer et al. (1995) present three factors, named perceived trust: *Ability* being the set of skills that enable those who are entrusted by having influence in some specific domain; *Benevolence*, being how well the receiver of the trust wishes he who places the trust and, *Integrity* that concerns the values and principles expected by those who are entrusted.

Similarly, Hartman (2003) lists three factors: integrity, competencies, and intuition. The integrity trust refers to how much is perceived as an authentic relationship between its actors. The competence trust has its core legitimacy stemming from the knowledge and skills of the actors involved. The intuition trust is based on the cognitive perception of the actors, driven by appearance and presence. The potential for teams to deliver results is reached in the balanced presence of these three types of origins of trust (Hartman, 2003; Pinto et al., 2009).

The classification chosen in this article is that of Hartman (2003), because, as defended by the author and ratified by the authors Pinto et al. (2009), this classification was purposefully developed to meet the relationships that exist in the project. The concept of sincerity proposed by Dervitsiotis (2003) and benevolence by Mayer et al. (1995), present an underlying assumption that the parts are known over a period of time prior to their construction and, as already presented, the typical nature of the projects is the uniqueness (Pinto et al., 2009; Shenhar, 2004).

Strahorn et al. (2015) show that a history of delivering results contributes to the construction of the competence trust, and the integrity trust is associated with the image of honesty of the actors. Pinto et al. (2009) argue that the decision as to the type of hiring will depend on the level of integrity trust, and that will probably not influence communication between the actors.

### 2.3. Stakeholders management and trust

The literature review aimed to describe the constructs and variables of the research. From the analysis of the main concepts of the study, it was possible to bring a comprehensive view as is represented in Fig. 1. The synthesis of the theoretical research identifies in the literature the points considered most significant, discussing the relations among constructs, within the scope of the theory.

Stakeholder management is relevant for achieving results in projects. It is one of the areas of knowledge in the PMBOK (PMI, 2013) that establishes techniques and tools to manage the interests and affected parts (Rajablu et al., 2015). There are two schools of thought in Stakeholder Management, a prescriptive one, in which the focus is the application of methodologies of mapping, identification, classification and monitoring (Mitchell et al., 1997; Olander and Landin, 2005), and the relational school with a focus on stakeholder involvement and engagement (Bourne and Walker, 2005b, Mok et al., 2014, Olander and Landin, 2005, Rowlinson and Cheung, 2008). According to the model proposal presented in Fig. 1, prescriptive
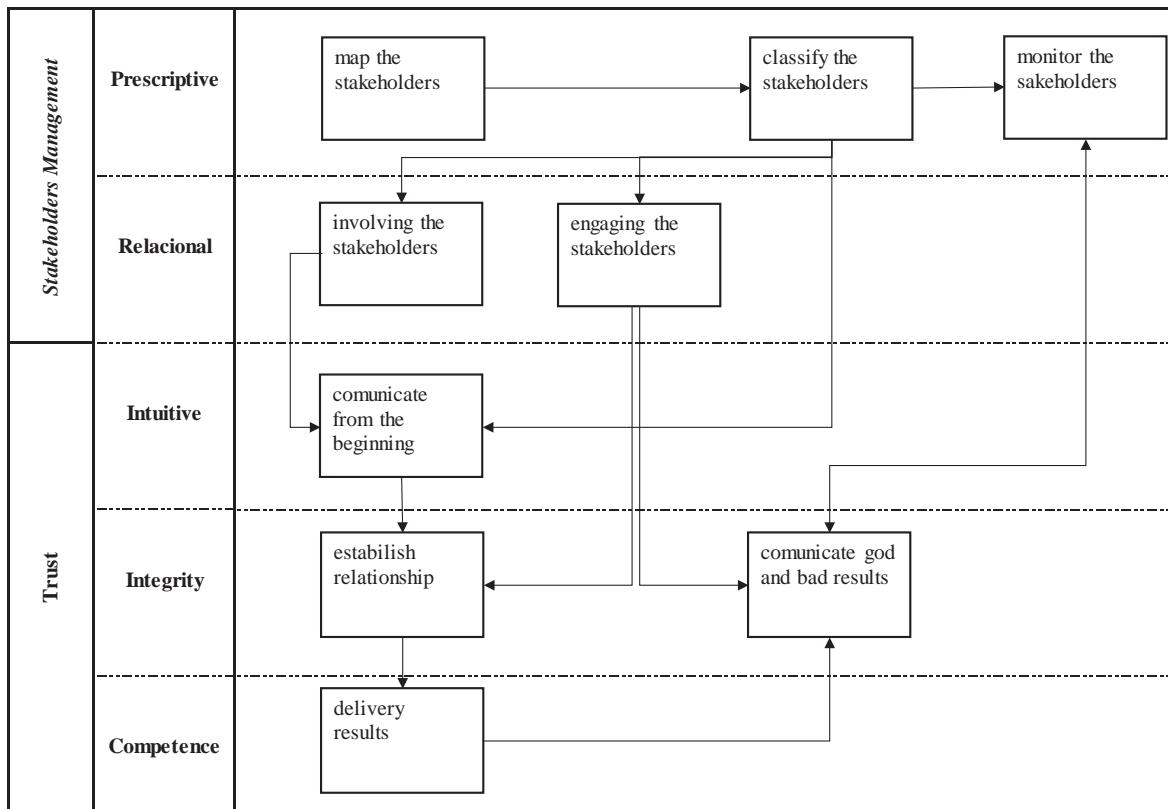
Fig. 1. Conceptual model stakeholders management and trust.

management is the starting point, and once identified and classified, the relational management begins.

The operationalization of the relational school considers environmental and social contexts to achieve project objectives (Gil, 2010). Environmental context means including actions related to clients, users, communities and sponsors with a view to engagement, on the agenda of project managers (Aaltonen, 2011; Newcombe, 2003). The social context, on the other hand, addresses the issues of communication, trust and leadership for the internal public (Littau et al., 2010). The internal public in the social context is also named in the literature as primary stakeholders (Newcombe, 2003). In Fig. 1, the social context and the environmental context are represented by activities to involve and engage stakeholders.

The two schools of stakeholder management are complementary, since mapping, classification, and monitoring without considering involvement and engagement actions is not a guarantee of success in projects. Yet, not mapping or monitoring the main stakeholders with power to influence the project means neglecting the management of all parties with a vested interest (Bourne, 2015).

Stakeholder engagement actions, as advocated by relational management, are considered to be key to achieving the objectives, and trust is a key part of engagement. This justifies the strong correlation between project success and trust relationships (Pinto et al., 2009), for trust acts as a facilitator for smooth and effective coordination. It allows for cooperative behavior, promotes adaptive forms of organization, reduces conflicts, and delivers more effective responses to crisis (Rose and Schlichter, 2013).

In this article, the definition used for trust is that it is a pragmatic component of organization and interaction (Karlsen et al., 2008). Thus, for every relationship of trust there will always be two parts. One that gives trust and one that receive trust. Any relationship of trust granted is an effect of an action performed by the recipient of this trust (Rose and Schlichter, 2013). Likewise, it is possible to expand the relationship of trust between areas, departments, and companies, considering that the actors of a trust relationship can represent distinct work units.

There are three types of trust: *Integrity* refers to the authenticity of relations between two parties; *Intuitive* relates to the perception left by the other party, and that of *Competence* that comes from the knowledge and skill of the other (Hartman, 2003). All three types contribute to improve trust relationships. The *Intuitive* one is preponderant at the beginning of the project, represented in Fig. 1 and started after the activities of the stakeholder's management. In order to mitigate the effect of the NIMBY syndrome (Hartman, 2003, Olander and Landin, 2005, Rousseau et al.), *Integrity* is linked to authenticity, transparency, and quality of communication throughout the project and results in relationships of trust (Aubert and Kelsey, 2000). *Competence* is located in the last part. If there are no consistent deliveries to the contractor, none of the types of trust will be retained. The main reason the other party initially assumed the risk of a project was because it believed it would receive the contracted deliveries (Pinto et al., 2009). The interrelationship between the activities foreseen in Fig. 1

represents the dynamism and interdependence exerted throughout the life cycle of the project.

From the theoretical basis in which the importance of stakeholder management and trust was presented and discussed within the scope of projects, it was possible to establish the hypotheses of this research. The objectives are to describe, within a project environment, the influence of stakeholder management of prescriptive order on the relational order, and the relational order on trust in the three types of trust established by Hartman (2003): (1) the Intuitive trust; (2) Integrity trust, and (3) Competence trust. To do so, before detailing and basing the four hypotheses, it is convenient to stress that some assumptions were listed below, to minimize errors that could impact bias in the study:

- There was the collection of the perceptions of the internal stakeholders of the project (primary) regarding the relationship of trust and management, such as project team, supplier, sponsor, technical staff, functional and support manager, as defined by Cleland (1986), for they are actors who are closer to the decisions and they perceive the consequences of the presence or absence of trust relations and the management of stakeholders (Rabechini Jr. and Carvalho, 2003).
- The definition that there are basically two roles throughout the project was adopted: the role of the project client and the executor (Zanjirchi, 2012). Thus, for this research, the primary stakeholders in the position of the client have as their other party, the executors of the project, and the primary stakeholders in the position of the supplier have the client of the project as the other party. Thus, with regard to trust relations, this paper will focus on identifying the perception of the primary stakeholders regarding the other party of the project.

Managing the relationship with stakeholders is one of the activities in stakeholder management and several authors recommended not restricting the performance objectives, such as scope, cost and time during the managerial application, but promoting approximation and engagement (Aaltonen, 2011; Achterkamp and Vos, 2008; Aladpoosh et al., 2012; Bourne and Walker, 2005b; Gil, 2010; Littau et al., 2010; Mok et al., 2014).

According to Rose and Schlichter (2013), trust also promotes engagement and, as argued by Pinto et al. (2009), there is a strong relationship between trust and success in projects. One of the rationales for trust to be related to project engagement is its own definition since there would be no need for trust if the actions envisaged in one project were not subject to risk and reliance on the other for execution. In this way, trust acts as a viable element of constructive work relations, reducing harmful conflicts, promoting more effective responses to unforeseen situations (Dervitsiotis, 2003; Karlsen et al., 2008; Pinto et al., 2009; Rose and Schlichter, 2013; Rousseau et al., 1998).

However, there is a close relationship between the two schools of thought of stakeholder management with trust. In the prescriptive school, the Salience model proposed by Mitchell et

al. (1997) identifies the stakeholders of a project from three attributes: power, legitimacy, and urgency. Of these attributes, the same authors establish the classification of the stakeholders into seven groups. It is important to establish trust relationships to meet project objectives, but the definitive group, which concentrates the three attributes, represents the category in which, in addition to establishing relationships of trust, it is also essential to manage them. This is because their expectations and needs must be managed and negotiated to avoid conflicts that may impact the project, as presented by Carvalho and Rabechini Jr. (2011).

Olander and Landin (2005) consider that the two main attributes of their matrix: power and interest, besides simplifying the identification in comparison to the salient model, also facilitate classification and management into four large groups of stakeholders: key stakeholders, keep satisfied, keep informed and minimal effort. Thus, despite the importance of establishing relationships of trust with all stakeholder groups, the group in lower levels of power and interest, i.e., minimum effort, is the least relevant group.

At the other side of the scale where we find the key stakeholders with high power and high interest in the project, it is fundamental to maintain a relationship of trust, since they are potentially influential, positively or negatively, in achieving the project objectives (Strahorn et al., 2015). The construction of stakeholder mapping models was criticized for its fragility by not considering the complexity of the relationship network and the behavioral changes of the stakeholders throughout the project life cycle (Aaltonen, 2011; Rajablu et al., 2015).

Thus, the relevance of the relationship with the stakeholders is justified. This approach is recommended by the second school of thought, having communication throughout the life cycle of the project as its strong point while presenting all relevant aspects of the project, whether good or bad, in order to arouse the interest of all stakeholders (Bourne and Walker, 2005b; Mok et al., 2014; Olander and Landin, 2008).

The relationship-focused approach refers to: sharing vision and goals to assist in the creation of meaning; building a relationship of trust and cohesion; helping in the practice of effective communication, as well as supporting the search for creative solutions to unforeseen situations (Dervitsiotis, 2003). In this way, establishing and nurturing relationships of trust not only opens space for conflict solutions to be more easily negotiated, but also facilitates communication with stakeholders, a baseline activity of the relational focus of stakeholder management (Karlsen et al., 2008).

The two schools of thought of stakeholder management (prescriptive and relational) contribute positively to trust in a project environment (Aaltonen, 2011). The first one, in applying the mapping and the identification of the stakeholders, allows them to be classified and monitored according to their position in the project and, to each group of stakeholders. It is possible to establish and manage priorities in the credibility relations. The second school, based on relationship, assists in the assertiveness of communication and engagement with different stakeholders. In short, the prescriptive school assists in the effectiveness of stakeholder management by defining the group and the intensity of the relationships of trust. The second relational school helps efficiency by executing practices so that the trust relationship is built and maintained throughout the project life cycle.

From the theoretical framework on Stakeholder Management of Prescriptive order and Stakeholder Management of Relational order, and having the complementary vision of the two schools of thought highlighted in the conceptual model, it was possible to determine the first of four hypotheses to test:

**H1**. Stakeholder Management of the Prescriptive order positively influences the Management of Stakeholders of the Relational order.

One of the types of trust listed by Hartman (2003) is the intuitive trust that relies on empathy, primarily of emotional origin. Less concrete than the other two types of trust, it is related to socialization among project members (Pinto et al., 2009). The relationship with clients, users, community and sponsors is highlighted as important to the performance of stakeholder management (Aaltonen, 2011; Newcombe, 2003). Therefore, stakeholder management should contribute positively to projects where there is the presence of trust of intuitive origin.

The NIMBY syndrome described by Olander and Landin (2008) as the resistance of some stakeholders to the implementation of a project, subjectively suggests the lack of intuitive trust to the point where these make a decision of disinterest or against the project due to having little or no information. This is why, as the authors recommend, to mitigate the occurrence of this syndrome, in addition to informing the stakeholders as soon as possible, various aspects of the project should be disseminated, whether good or bad, minimizing negative aspects and maximizing positive ones in order to arouse interest and reduce the resistance of these stakeholders.

Although recognized by Pinto et al. (2009) as relevant in the project environment, the intuition trust did not present statistical significance in the research. As a justification, the authors emphasize the difficulty of identifying intuitive trust, given its transient behavior, because intuitive trust has only manifested influence at the beginning of projects (Aubert and Kelsey, 2000). In the introductory phase, there is still a small amount of information to determine the level of confidence in integrity and competence, leaving a perception or feeling of what to expect as a result, but it is not sustainable in itself. If the behavior expected intuitively, whether positive or negative, is confirmed along the development of the project, the influence of intuition decreases, but the integrity trust or that of competence, or even both strengthen and consolidate. This keeps on until the presence of some event that would destabilize the relations of trust due to some concrete facts that are faced (Aubert and Kelsey, 2000; Rousseau et al., 1998). In addition, it was possible to address the second hypothesis for testing, relating intuitive trust and relational stakeholder management.

**H2**. Relational Stakeholder Management positively influences Intuitive Trust in the project environment.

Integrity trust or ethical trust is built with the rectitude and integrality of communication, the elimination of defensive behavior and the willingness to accept suggestions (Pinto et al., 2009). Authors Karlsen et al. (2008) cite the question: "Will you take care of my interests transparently?" as a way of identifying if there is a trust relationship of integrity. Dervitsiotis (2003) names engagement as one of the ingredients needed to build trust, which reflects how much real interest there is on the part of the other, thereby defining integrity trust.

As probity is seen as a key factor in building trust-based relationships, it is expected that once credibility is established in the relationship between the parties, there will be a strong chance of the presence of integrity trust (Aubert and Kelsey, 2000). With regard to loss of trust, the mending process is complex (Strahorn et al., 2015), and it has been shown that the rapid response, the transmission of being genuinely concerned with stakeholder needs, and the provision of appropriate alternatives are actions that focus on regaining integrity trust and may reduce the impact of lost credibility (Dervitsiotis, 2003).

Integrity trust is present in the five types of project relationships, as well as their characteristics of collaboration and integration, proposed by Karlsen et al. (2008), being: (1) classic market; (2) through a third party; (3) open and direct; (4) integrated team and, (5) in partnership. In the classical market, typically common in serial production segments, as well as through a third party with delivery following a rigid operational procedure, there is no need to establish robust trust relationships, and integrity trust is not required (Hartman, 2003).

Open and direct, the relationship of mutual trust is fundamental to achieve the objectives of the project and integrity trust is evidenced. In this type of collaboration, there is an intense exchange of information and knowledge with integrated teams and an inter-organizational structure developing together in which there are risks of great impact (Karlsen, 2008).

Thus, the greater the risk assumed in the project, the greater is the dependence of the customer's perception of the integrity of the supplier (Hartman, 2003). The adoption of punitive clauses in contracts is a precept used by actors to reduce risk and thus ensure that their interests be served. Thus, if there were trust relationships between economic partners, there would be no agency costs (Strahorn et al., 2015). The agency theory advocates that economic partners act in their own interests, or may deceive regarding the execution (Arruda et al., 2008). As a consequence, a lower cost of litigation management is expected if there is a demonstration of willingness to act in the best interest of the other party within a project environment. That is, if integrity is present (Hartmann and Hietbrink, 2013).

It can be thus concluded that competence and intuition trust are not enough to justify the formalization of a project-client-supplier contract (Arruda et al., 2008; Hartman, 2003; Strahorn et al., 2015). Identifying and monitoring the group of stakeholders who are prone to the risk protection mechanism will represent less exposure to agency costs. Likewise, in projects that have not achieved their objectives, they must precede weak trust relationships of integrity.

Therefore, the management of stakeholders should contribute positively to integrity trust. The authors Mok et al. (2014) emphasize that involvement and communication with all stakeholders, typical activities of the relational school, contribute to the engagement and, thus, the stakeholders develop a sense of belonging essential to developing credibility (Dervitsiotis, 2003). Likewise, the activities of mapping, identifying and monitoring the stakeholders advocated by the first school of thought has an important role to play in establishing which stakeholder risks jeopardize the project. The positive influence of relational on integrity confidence is also supported by the authors' search results in Pinto et al. (2009), who, when conducting the study with sponsors and contractors in large construction projects in Canada, related the approach to stakeholders with the construction of integrity trust.

Based on this analysis, and with the objective of understanding the influence of the Stakeholder Management of Relational order on Integrity Trust, the hypothesis, H3, was formulated:

**H3**. Relational Stakeholder Management positively influences Integrity Trust in the project environment.

The author Dervitsiotis (2003) defines competence trust as the ability to fulfill the promise. Yet, to the authors, Pinto et al. (2009), competence has its core in the legitimacy stemming from the knowledge and skills of the actors involved. The authors Strahorn et al. (2015) defined it as the history of the capacity to deliver results and the author Hartman (2003) explains that the answer to the question: "Will you be able to do the job?", will establish the level of competence trust.

For Pinto et al. (2009), competence infers in the quality of communication between the actors. Therefore, if the client identifies an unnecessary work carried out by the supplier, this will affect in greater intensity the competence trust, as the same authors justifies. Strahorn et al. (2015) also argue that, within a project environment, the adoption of a focused approach to selecting business partners should be considered based on trustworthiness rather than selection only due to the least cost, which covers the importance of competence trust.

Competence trust plays a prominent role in all its characteristics of collaboration and integration in the types of projects proposed by Karlsen et al. (2008). It would be impossible to achieve the project objectives if there was not adequate competence. It is expected that the management of stakeholders can contribute positively to competence trust, as it provides both models for identification and classification, as well as communication processes with stakeholders, in order to provide support so that the needs of these are met by the project (Gil, 2010).

In this way, it establishes competence trust through the prescriptive school; the identification and monitoring of stakeholders that hold a legitimacy classification in the project (Mitchell et al., 1997) and a degree of power and interest in the project (Olander and Landin, 2005). The management of relational stakeholders contributes to the formation of

competence trust relationships, by establishing a process of communication, involvement and engagement (Mok et al., 2014).

In the study by Pinto et al. (2009), trust competence was a significant predictor of project performance only for customer sample and not for supplier sample. One of the reasons lies in the essence of this type of contracting since, as Hartman (2003) proposes, customers are more dependent on suppliers who have knowledge. This is because they do not completely dominate the technology, either because it is not their essential competency, or due to technological advances at a greater speed than its absorption capacity. It is of greater relevance to the customer to identify the competence of the supplier.

Based on the concepts gathered on competence trust and relational stakeholder management, we present the last research hypothesis, H4:

**H4**. Relational Stakeholder Management positively influences the Competence Trust in a project environment.

The four research hypotheses to be tested are presented in Fig. 2. Also, the theoretical reference model of the research is presented, correlating the hypotheses with the constructs and the respective indicators.

## 3. Research design and methodology

The objective of this research is to investigate the influence of stakeholder management on trust relationships in a project environment. For this to be possible, a quantitative research based on an online survey and a literature survey were chosen as a methodological approach (Babbie, 2013; Creswell, 2013). The key constructs of this research, as well as the

interrelationship between them, are explained in the literature review and summarized in Fig. 1. In Appendix A, we summarize the constructs, indicators, and literature review that support this article. Fig. 2 shows the relationships between the variables and the respective research hypotheses.

### 3.1. Data collection and sample

Survey respondents are clients and project suppliers occupying the position of project managers, sponsors and project teams from national and multinational companies located in Brazil. Through a connection to a web address, >160 respondents accessed the survey, 148 answered, 130 of which were considered valid. This sample size is larger than the minimum calculated by the G * Power 3.0 software (Ringle et al., 2014), considering the research model, method, statistical significance lower than 5%, Test of 80% and a size effect ($f2$) of 15 (Hair et al., 2014a, 2014b). The characterization of the sample is presented in Fig. 3. The greater presence of project suppliers stands out when compared to that of clients, as well as the major participation of projects in the execution and closing phases.

### 3.2. Research instrument and research model

The data was collected through a questionnaire based on the conceptual definition researched in the literature on stakeholder management and trust in the project environment (see Appendix A). The survey was distributed with a link to access to the web page for professionals in social networks such as Linkedin, Facebook, WhatsApp as well as by email. It is, therefore a non-random and cross-sectional research. Before the
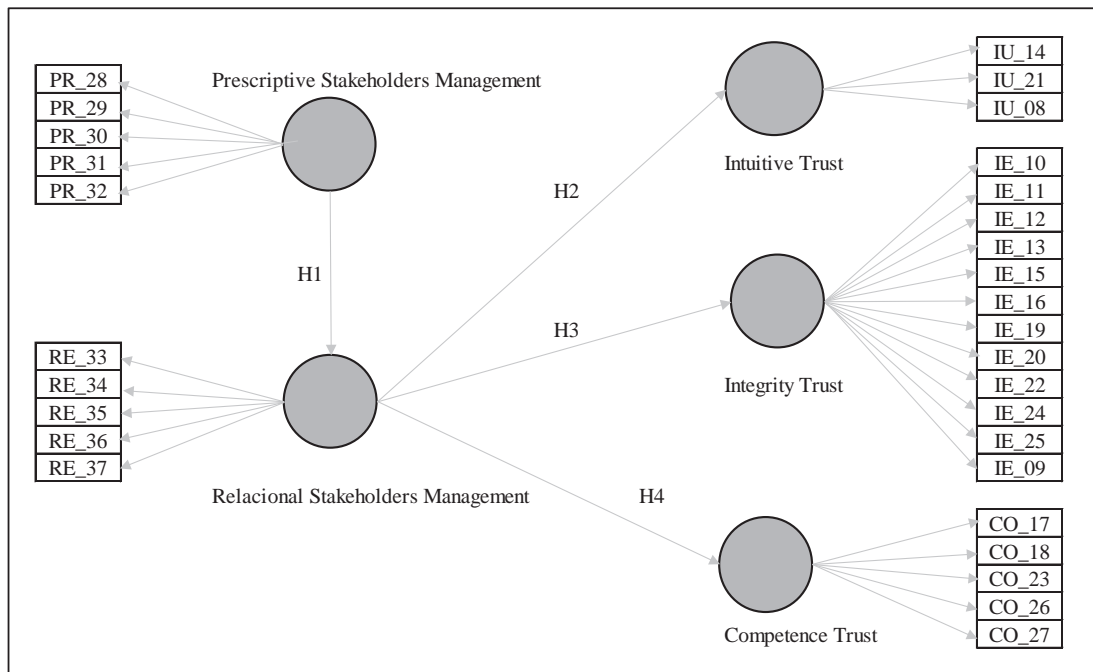


Fig. 2. Research model.

| Period of data collection | August and September/2016 |
|---|---|
| Number of respondents | 130 |
|      Project customers | 17 (13%) |
|      Project providers | 113 (87%) |
| Average experience of project respondents (years) | 14.4 |
| Average project budget (millions R$) | 56 |
| Average project time (months) | 16 |
| Project phase | |
|      Initiation | 1% |
|      Planning | 2% |
|      Execution | 28% |
|      Termination | 5% |
|      Closed | 64% |
| Area of activity of the respondent's company | |
|      Information Technology Services | 29% |
|      Industry | 22% |
|      Communication and Telephony | 12% |
|      Other areas | 37% |

Fig. 3. Characterization of the sample.

online publishing and following the recommendation of Babbie (2013) and Hair et al. (2005), the survey was validated by three professors with a doctorate in business administration and by four professionals with an average of 18 years of experience in the position of project managers in national and multinational companies from the information technology, civil construction and financial segments. For each indicator presented in Appendix A, the respondents answered according to their perception of adherence on a seven-point Likert scale, ranging from totally disagree to totally agree. This scale was chosen with adherence to the research performed by the authors Pinto et al. (2009) on the impact of trust in project success. For the indicators of prescriptive and relational stakeholder (PR and RE) constructs, an additional option was enabled for respondents. "I would not know if it was carried out for the chosen project". Answers with this option were collected and treated as lost data. The average proportion of respondents who chose this alternative was 6%.

Data was processed and analyzed using the multivariate statistical approach of partial path least squares (PLS-MP). This technique was chosen because it is recommended when the purpose is to confirm a theory from the constructs and the sample size is small and/or the data is not normally distributed (Ringle et al., 2014). All the constructs of the measurement model predicted in Fig. 2, as well as their interactions, are based on the theoretical survey, and can be classified as reflective (Hair, Black, Babin, and Anderson, 2014a). For reflective measurement models, we use reliability analysis of internal consistency, convergent validity and discriminant validity (Hair, Hult, Ringle, and Sarstedt, 2014b). The reliability of the internal consistency can be analyzed by composite reliability (CR) and Cronbach's alpha, and both should exceed 0.70 (Ringle et al., 2014). The convergent validity was analyzed by the average variance extracted (AVE) and should exceed 0.50 (Hair, Hult, Ringle, and Sarstedt, 2014b). For discriminant validity, the square root of the AVE should be greater than the correlation between the latent variables (Hair, Hult, Ringle, and Sarstedt, 2014b).

For the analysis of the prediction quality of the model, that is, for structural analysis of the model (Ringle et al., 2014), the size effect is calculated and classified in the range of 0.02, 0.15 and 0.35 for weak, moderate and strong effects respectively (Hair, Hult, Ringle, and Sarstedt, 2014b). The validation of the measurement and structural models were performed in the SmartPLS 2.0 software (Hair, Hult, Ringle, and Sarstedt, 2014b).

## 4. Analysis and results

The analysis of the results was possible based on the literature survey, the data collected from the survey presented in Appendix A and the relationship model of the latent variables of stakeholder management and trust, as presented in Fig. 2.

### 4.1. Measurement model validation: stakeholders management (PR e RE) and trust (IU, IE, CO)

For the validation of the measurement model, it was necessary to withdraw five indicators, as presented in Table 1. After the indicators were extracted and recalculated, the values of AVE, Composite Reliability and Cronbach's alpha presented in Table 1 met the criteria for approval.

The discriminant validity was analyzed for all latent variables, the square root of stroke should be greater than the

Table 1
Stakeholders management and trust.

| | AVE | Composite Reliability | Cronbach's Alpha | Initial number of indicators | Final number of indicators |
|---|---|---|---|---|---|
| Prescriptive | 0.7478 | 0.9367 | 0.9153 | 5 | 5 |
| Relational | 0.7088 | 0.9239 | 0.8971 | 5 | 5 |
| Competence | 0.7239 | 0.9401 | 0.9234 | 6 | 6 |
| Integrity | 0.7814 | 0.9616 | 0.9533 | 11 | 7 |
| Intuitive | 0.8697 | 0.9303 | 0.8502 | 3 | 2 |

Table 2
Discriminant validity of stakeholders management and trust.

|  | Competence | Integrity | Intuitive | Prescriptive | Relational |
|---|---|---|---|---|---|
| Competence | 0.8508 | – | – | – | – |
| Integrity | 0.8458 | 0.8840 | – | – | – |
| Intuitive | 0.8402 | 0.8755 | 0.9326 | – | – |
| Prescriptive | 0.4466 | 0.4983 | 0.5386 | 0.8648 | – |
| Relational | 0.6077 | 0.6195 | 0.6667 | 0.6314 | 0.8419 |

correlation between them (Hair, Hult, Ringle, and Sarstedt, 2014b). The results are in Table 2 and meet the acceptance criteria.

## 4.2. Structural model validation: stakeholders management (PR e RE) and Trust (IU, IE, CO)

In conclusion, if the objectives of the study were met regarding the influence of stakeholder management on trust in a project environment, it is necessary to validate the structural model. By means of bootstrapping, 1000 resamples were simulated with a sample size of 130 in SmartPLS 2.0, as recommended by Ringle et al. (2014). From the comparison between the path coefficients of the calculated model and the predictive model presented in Table 3, the values of the Pearson coefficient ($R^2$), as presented in Table 4, with p. values <1%, can be considered relevant and significant, as well as interpreting that all the constructs have a great effect on the model since they are >0.30 (Hair, Hult, Ringle, and Sarstedt, 2014b).

## 5. Discussion of results

Revisiting the hypotheses that supports the research which identifies the influence of stakeholder management on trust in the project environment as positive, all four hypotheses for the sample analyzed were confirmed. As is summarized in Table 4, it is possible to infer that relational stakeholder management exerts on intuitive trust, the greatest power in explaining the model, followed by integrity trust and, finally, competence trust. In the same manner, the management of stakeholders of prescriptive order exerts influence on the management of relational stakeholders, confirming what was raised in the literature research. As such, consider a relationship of proximity with Stakeholders, in particular those with significant level of power and interest in the project (Olander and Landin,

Table 3
Test of significance through bootstrapping.

| Relationship between constructs | Bootstrapping | | | |
|---|---|---|---|---|
|  | Path Coefficient | Average Coefficient | Standard Deviation | t Student |
| Prescriptive → Relational | 0.6314 | 0.6367 | 0.0543 | 11.618* |
| Relational → Competence | 0.6077 | 0.6128 | 0.0472 | 12.870* |
| Relational → Integrity | 0.6195 | 0.6238 | 0.0488 | 12.693* |
| Relational → Intuitive | 0.6667 | 0.6676 | 0.0445 | 14.977* |

Note: * Level of significance p. value <0.01.

Table 4
Verification of search hypotheses.

| Dependent Variable | Relationship | Hypotheses | Accepted? | Path Coefficient* | $R^2$ |
|---|---|---|---|---|---|
| Relational | Prescriptive → Relational | H1 | Yes | 0.6314 | 0.3986 |
| Intuitive | Relational → Intuitive | H2 | Yes | 0.6667 | 0.4445 |
| Integrity | Relational → Integrity | H3 | Yes | 0.6195 | 0.3838 |
| Competence | Relational → Competence | H4 | Yes | 0.6077 | 0.3693 |

Note: * significant 1%

2008), or with Stakeholders with power, legitimacy and urgency (Mitchell et al., 1997), and maintenance of communication throughout the project life cycle (Aaltonen, 2011; Bourne and Walker, 2005b; Missonier and Loufrani-Fedida, 2014; Mok et al., 2014). Following the same line of thought, in relational stakeholder management, being empathic and concerned in considering the interests of the other party from the outset of the project is important in establishing credible relationships that, coupled with other behavior such as honoring deadlines and delivering what was contracted, establish relationships that are positive to meet the stakeholders' goals, adhering to the theoretical survey carried out (Hartmann and Hietbrink, 2013; Pinto et al., 2009; Rose and Schlichter, 2013).

### 5.1. Academic implication

The main Academic contribution of this research was to relate the management of stakeholders with the construction of trust relations. For, as Rose and Schlichter (2013) and Strahorn et al. (2015) have, although trust and stakeholder management have many studies because of their importance, few are dealing with interaction and trust. The other contribution is the theoretical relevance and statistical significance of the typology proposed by Hartman (2003) for the trust relationship. There are in theory other trust's typologies (Dervitsiotis, 2003; Mayer et al., 1995), but as presented by Pinto et al. (2009) the Hartman typology is indicated for the project environment and confirmed its relevance in this research for the sample studied.

### 5.2. Practical implication

The conceptual model (Fig. 1), based on theoretical research, was presented as a reference to practitioners about stakeholder management and the construction of trust relationships in projects. Establishing relationships of trust (intuitive, integrity and competence) has a positive influence on stakeholder management for the sample studied, reinforcing the importance of considering them throughout the project life cycle by project managers.

## 6. Conclusion

The focus of this article was to investigate the influence of stakeholder management on trust in project environments. The main objective was met, both by theoretical relevance and also with statistical significance without establishing generalizations from the results and with conclusions restricted to the sample studied. Thus, six main contributions can be listed.

First, the two orders of stakeholder management (prescriptive and relational) are relevant and should be considered by the project manager, with the prescriptive providing identification, classification and monitoring, and the relational recommending involvement and engagement. Second, the management of stakeholders of relational origin contributes positively to trust relationships, be they intuitive, integrity or competence. Third, involvement and engagement, expected of the relational order, are conducive to relationships of trust. Fourth, Hartman's (2003) typology for trust was effective in explaining the proposed model, since relevant and significant relationships were found between all three types of trust and stakeholder management. Fifth, intuitive trust is more relevant than other types, which indicates the importance of empathy and demonstration of interest in needs and expectations. This demonstration needs to be maintained after the start of the project because it is necessary to confirm and sustain trust in integrity and competence. Last but not least, the links between the relational order and integrity trust, and between the relational order and competence trust were relevant and statistically significant, although to a lesser degree than the intuitive one. Therefore, they should not be neglected by project managers.

Thus, despite meeting the objectives planned in this article, during the course of the research, it was possible to identify limitations and raise new questions that are topics for future investigations. The constraint on considering only the primary stakeholders did not take into account the perceptions of other stakeholders that may influence project outcomes. As for example, users, government and other areas that are not at the core of the project, but can influence its repercussion. Another limitation is related to the trust construct since no more exhaustive reviews of the literature on behavior in the absence of trust and in the presence of mistrust were made. The inclusion of these factors in the model could impact the results. The trust construct itself was analyzed from the respondents' perceptions, based on projects they list. The result could be different if one analyzes the perception of the client and the supplier of the same project.

The limitations raised lead to the conclusion that the results obtained, as well as the analysis, cannot be generalized. On the other hand, these limitations and deficiencies represent opportunities for future studies to advance the understanding of the influence of stakeholder management on trust. Considering the results obtained from this research, the development of a study applying the hypothesized relationships is suggested between the management of stakeholders of prescriptive order the three types of trust. Other factors not included in this article may be analyzed, such as communication, engagement, involvement and leadership of the project manager.

## Conflict of interest

The authors have no conflict of interest.

## Appendix A. Summarize among constructs, indicators, and its references

| Constructs | Indicators | References |
|---|---|---|
| Stakeholders prescriptive | PR28 Project stakeholders were formally identified. PR29 Stakeholders were classified by their level of influence, power, and interest in the project. PR30 Stakeholders of the project, especially those with high power and influence, had their needs deployed in actions and activities throughout the life of the project. PR31 Stakeholders were mapped by the level of urgency and legitimacy in the project. PR32 The Stakeholders of the project had their objectives open in actions and activities. | Mitchell et al. (1997) Olander and Landin (2005) |
| Stakeholders relational | RE33 During the execution of the project, inclusions and/or changes in activities were planned to adapt the identified needs of the Stakeholders. RE34 There has been frequent communication with the main Stakeholders regarding the project. RE35 There were actions to engage Stakeholders throughout the life of the project. RE36 There were actions to strengthen relationships with Stakeholders throughout the life of the project. RE37 I believe that Stakeholders were engaged in the project. | Rowlinson and Cheung (2008); Mok et al. (2014) e Littau et al. (2010) |
| Intuitive trust | IU08 I feel comfortable about having been dependent on the supplier/client throughout the life of the project. IU14 I feel I have been able to trust the supplier/client throughout the life of the project. IU21 My "intuition" told me to be cautious in dealing with the supplier/client of the project. | Pinto et al. (2009) |
| Integrity trust | IE09 I believe the supplier/client kept his word throughout the life of the project. IE10 I feel confident that the supplier/client had high levels of integrity. IE11 I believe the supplier/client has adhered to a high ethical and principles level throughout the life of the project. IE12 I am sure the supplier/client was fair in the whole life of the project. IE13 I am confident that the supplier/client looked at my interests throughout the life of the project. | Pinto et al. (2009) |

(*continued*)

| Constructs | Indicators | References |
|---|---|---|
|  | IE15 I believe the supplier/client wanted to do me good. | |
|  | IE16 I can tell that the supplier/client did not take advantage of me. | |
|  | IE19 I was willing to be dependent on the supplier/client of the project throughout the life of the project. | |
|  | IE20 I believe the supplier/client had ulterior motives or "hidden" agendas. | |
|  | IE22 During the life of the project, the supplier/client harmed me not consciously in order to benefit. | |
|  | IE25 Other partners, who should interact with the supplier/client, consider it reliable if they have to develop a project with it. | |
| Competence trust | CO17 I am sure that the supplier/client had the ability to work productively over the life of the project. | Pinto et al. (2009) |
|  | CO18 I believe that the supplier/client, responsible for the technical specification of the project, was competent. | |
|  | CO23 The supplier/client was professional and dedicated throughout the life of the Project. | |
|  | CO24 Most people would trust and respect the supplier/client, even those who are not close friends of him if they had to develop a project with him. | |
|  | CO26 Given the history of the supplier/client, I see no reason to doubt their competence and preparation for future projects. | |
|  | CO27 In cases of error in project execution, I was able to rely on the supplier/client to find alternatives. | |

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