

# Unveiling the potential of perceived authentic leadership to enhance followers' moral intentions: a self-determination theory perspective

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Authentic  
leadership and  
followers' moral  
intention

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## Abstract

**Purpose** – The purpose of this study is to explore the effects of followers' perceptions of their leaders' authentic leadership behaviors on how followers become motivated to develop moral intention.

**Design/methodology/approach** – Using field survey data ( $n = 337$ ), exploratory factor analysis and multiple regression, the authors suggest that perceived authentic leadership positively affects followers' moral intent. The authors tested a self-determination theory-based model to explain the mediations.

**Findings** – The authors found that perceived authentic leadership is related to employees' autonomous moral motivation through basic psychological need satisfaction, which in turn predicts their moral capacities and moral intent.

**Originality/value** – This study is unique in that it has examined various motivational variables to explain the mechanism by which authentic leadership influences morality. In addition, this is also novel in empirically using the autonomous motivation construct in the moral domain to explain how employees may develop moral capacities over time, impacting their moral intent. This research is also unique in testing the relationship between all moral capacities proposed in the literature and moral intent. The theoretical implications, practical implications and avenues for further research are also discussed.

**Keywords** Authentic leadership, Moral intent, Self-determination theory, Moral capacities

**Paper type** Research paper

## Introduction

Scandals and ethical violations in the workplace have encouraged researchers to discover the roots of immoral behavior at work and examine solutions to reduce immoral behaviors (Wang *et al.*, 2021). However, many unknowns exist about the factors influencing employees' moral choices (Kish-Gephart *et al.*, 2010). Understanding human psychological tendencies and moral decision-making processes can help explain when and why employees engage in immoral behavior at work and how to enhance morality in the workplace (Islam, 2020).

Although various factors influence the formation of employees' moral decisions, the present research focuses on how direct supervisors with degrees of authentic leadership (AL) behaviors influence their followers' moral intent. Authentic leaders attempt to stay true to their moral standards more often, guiding them to behave more ethically (Gardner and McCauley, 2022a). In addition, Gardner and McCauley (2022b) argue that “inward focused self-reflections on one's values, goals, strengths and weaknesses can inform and guide one's leadership interactions with others” (p. 834).



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Studying AL's influence on followers' morality is vital because, in some organizations that involve jobs with few opportunities to be monitored, it is challenging to address unethical actions by external factors such as ethical codes and managing processes (Farrell *et al.*, 2002). Therefore, organizations need influencing factors that target the *internalized values* of employees and their capabilities in dealing with moral issues to achieve more stable behaviors. From this perspective, as the main idea of the research, we suggest that AL can help internalize moral conduct, considering the potential impact of AL on employees' motivational factors and capabilities in addressing moral issues. This paper develops and discusses this notion by testing a theory-driven model.

This study is significant and essential because it focuses on the potential of AL to enhance followers' moral intention based on AL's various dimensions other than its moral dimension. It demonstrates the unstudied mechanisms of related influences and integrates self-determination theory (SDT) with AL. This unveils the role of internalized motives in reaching moral capacities and behavior under the guidance of authentic leaders in organizations and highlights the capacity of direct managers with AL behaviors to enhance morality at work. Each of these justifications for the study is elaborated as follows.

Brown and Mitchell (2010) stated that because of the strong emphasis of AL on the moral dimension of leadership, researchers could be invited to examine the relationship between AL and followers' moral outcomes. We propose that it is not merely the moral dimension of AL that may facilitate developing followers' morality. We suggest that authentic leaders enhance the autonomy of followers to internalize their motivations to act morally, which is distinct from ethical leadership, the existence of ethical behaviors in leaders, or working in an organizational ethical climate. In that, AL relies less on positive and negative incentives as ethical leadership, and in contrast, authentic leaders' autonomy, transparency, moral freedom and honest treatment of subordinates together shape the leaders' moral behaviors, which affect followers' learning goal orientation and cause followers to follow AL's virtue ethics (Lemoine *et al.*, 2019). Lemoine *et al.* (2019) argue that this unique approach of AL to what is moral provides "a salient basis to distinguish AL from other approaches to leadership" (p. 35). Cavazotte *et al.* (2021) also discussed that both internalized moral perspective and relational transparency are dimensions of AL that help followers learn authentic leaders' moral conduct. Based on social exchange theory, authentic leaders, by being transparent in challenges and by making moral decisions, signal to subordinates what constitutes moral behaviors (Cavazotte *et al.*, 2021).

Despite the emphasis on the importance of AL's role in moral issues, surprisingly few empirical studies have been conducted on this topic (e.g. Cianci *et al.*, 2014), with no empirical support for explaining the influencing mechanisms. In addition, previous studies that explain the mechanisms through which AL influences outcomes focus on outcomes other than followers' morality (e.g. Zeb *et al.*, 2020a). Considering this insufficient evidence and the call for studying the mechanisms through which AL affects followers' morality (Cianci *et al.*, 2014), this study aims to propose and test a theory-based mechanism to explain how AL can enhance morality in followers from a motivational perspective. This study fills the gap in the literature regarding the insufficiency of empirical studies on the relationship between AL (with the ability to internalize values) and followers' morality as the final outcome of the leadership process.

According to Rest's (1986) moral decision-making model, people demonstrate moral behaviors based on their moral intent when faced with issues involving morality. Hannah *et al.* (2011a) suggested that four moral capacities influence moral intent. "Moral capacity" is a kind of cultivable capability in individuals that helps them achieve results at different stages of moral decision-making (Hannah *et al.*, 2011a). In previous studies, moral capacities

that lead to moral intent have not been examined empirically altogether; however, as a contribution of this research to the literature, we study all four proposed capacities that influence moral intent. Considering all these capacities helps to get a deeper understanding of the importance of each one and whether some of the capacities have larger impacts on moral behavior than others. This comparison has not been empirically investigated in previous studies. Moreover, previous studies provide no explanation and evidence on how these capacities are strengthened, especially by authentic leaders.

The outcome of this study's model is "moral intent" because it is salient before undertaking a moral action. Considering that moral intent is a *motivation* for engaging in moral action (Rest, 1986; Hannah *et al.*, 2011a), we developed and proposed an influencing mechanism based on the motivation theory of self-determination (Deci *et al.*, 2017). Moreover, moral capacities that predict moral intent are arguably deep psychological states and, hence, not usually formed by external motives with a short-term impact. The empirical use of SDT regarding the internalization of "moral" values, already proposed theoretically (Arvanitis, 2017), is a new aspect addressed in this research. In their theoretical paper, Curren and Ryan (2020) also proposed that moral motivation is not just a commitment to a set of moral principles or reasoning but needs to be internalized. Autonomous moral motivation is more sustainable and consistent with virtue ethics emphasized in the literature on moral aspects of AL (May *et al.*, 2003). However, autonomous moral motivation has been almost overlooked empirically in the AL literature. The current study addresses this issue theoretically and empirically. Accordingly, our study's model proposes that AL impacts followers' autonomous moral motivation, which in turn influences their moral capacities essential for increasing their moral intention. Previously, the relationship between AL and SDT has been discussed conceptually (e.g. Miniotaitė and Bučiūnienė, 2013) and empirically (e.g. Schoofs *et al.*, 2023). However, applying this relation to the morality domain and expanding the usage of an autonomous motivation scale to the moral domain is a novel idea explored in this study.

Finally, we position this study within the literature on leadership exercised by direct supervisors as an essential antecedent of followers' moral behavior (Kottke and Pelletier, 2013). Despite the fact that many factors influence followers' moralities, such as the ethical climate of the organization (Al Halbusi *et al.*, 2021) or senior managers (Kottke and Pelletier, 2013), this article suggests that direct supervisors can have their own influences on employees' moral issues. Kottke and Pelletier showed that followers' moral decision-making processes are more related to the ethical behaviors of direct supervisors than top leaders, who may be distant from followers. Examining the role of AL demonstrated by direct supervisors in followers' resistance to immoral behaviors is a novel implication of AL for this literature. Other studies have covered the impact of AL on supervisors regarding outcomes other than morality (e.g. Hsieh and Wang, 2015) or the impact of supervisors on followers' morality with no relevance to AL (e.g. Lee *et al.*, 2017).

Some assumptions regarding AL should be acknowledged here before reviewing the literature and elaborating on the theoretical background. We agree with Einola and Alvesson (2021) that "unethical behavior, corruption, [...] are problems the uprooting of which would require much more than what can be delivered by the AL theory" (p. 487). Consistent with Gardner and McCauley (2022a), we also emphasize that the claim of our study is not to show that the concept of AL can fully influence the desired results, but we discuss, according to the following hypotheses developed in this paper, that leaders with a stronger degree of AL may be more effective regarding followers' outcomes, including morality. This is more understandable when we consider that authenticity as the core concept exists on a continuum (Erickson, 1995). Thus, we similarly argue that leaders do not

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necessarily possess the full degree of AL. Gardner and McCauley (2022a) also argue that although leaders may not always be authentic, authentic leaders may be more or less true to self at various times depending on cultural, temporal context and boundary conditions. Therefore, leaders with such characteristics are not unusual people with extraordinary capabilities expected to have extraordinary effects on followers' outcomes. Moreover, being authentic may be seen as a complex psychological phenomenon that is an ideological form of being that may not be common among individuals (Alvesson and Einola, 2019). However, in this study, we argue that kinds of perceptions related to AL behaviors may be shaped in people in their interactions with their leaders about issues such as how much integrity a leader has and how much they consider others' views before decision-making, even when those views differ from their ideas. In this regard, we measured the employees' *perceptions* of the degrees of AL in their leaders.

### Research background review

#### *Moral intent and its antecedents*

Ethical behavior models tested in the literature are usually based on the framework suggested by Rest (1986). This framework explains the four basic components of ethical decision-making: 1. identifying the moral nature of an issue; 2. moral judgment about that issue; 3. moral intent; and 4. engaging in moral action. Moral intent is the process through which a person obtains commitment to a certain moral action. Specific moral values are given weight over others to motivate the action (Hannah *et al.*, 2011a).

Hannah *et al.* (2011a) suggested a framework, including moral conation capacities, that affects Rest's four-component model, explaining the effectiveness of the process. They introduced moral identity, moral ownership, moral efficacy and moral courage as the antecedents of moral intent. Moral identity refers to "the degree to which being a moral person is important to an individual's identity" (Hardy and Carlo, 2011, p. 212). It is the individual's knowledge about themselves as moral agents, and it can be defined and measured depending on the unity between sub-identities (identities in each life context) (Hannah *et al.*, 2011a). Individual preferences and values can change depending on which sub-identity has been prioritized. Moral ownership is the extent to which people feel psychologically responsible for the moral nature of their actions or the actions of other related groups (Hannah *et al.*, 2011a). Lack of moral ownership can cause people to use "moral disengagement" techniques (Bandura, 1999), such as directing blame toward others, to psychologically get rid of one's moral responsibility. Individuals may remain inactive to perform a moral action because they lack the confidence to act morally (Hannah *et al.*, 2011a). Moral efficacy explains this gap (Hannah *et al.*, 2005; May *et al.*, 2003). Moral efficacy is a person's belief in their abilities to organize and stimulate motivation, cognitive resources, tools and a series of actions to achieve moral performance in a specific moral domain (Hannah *et al.*, 2011a). Like self-efficacy (Bandura, 2001), moral efficacy can be increased over time with mastery and vicarious experience. As the fourth capacity, moral courage is a malleable character strength that provides the necessary will to commit to personal moral principles and resist unethical pressures and threats when one is aware of the dangers of supporting those principles (Sekerka *et al.*, 2009).

#### *Authentic leadership*

The common aspects of the definitions of AL are knowing one's abilities, thoughts, motivations and true feelings and communicating them transparently to the people close to the leader (Avolio *et al.*, 2004; Walumbwa *et al.*, 2008). The four dimensions of conceptualized AL are self-awareness, balanced processing (receiving feedback, reflecting

on diverse viewpoints, not denying information about one's weaknesses and improving oneself based on new perspectives), relational transparency (not presenting a distorted self to others) and internalized moral perspective. "Internalized moral perspective" is an important dimension that refers to how an authentic leader uses self-regulation based on internal ethical standards (Walumbwa *et al.*, 2008).

Crawford *et al.* (2020) reviewed some critiques on AL and reconceptualized this concept to minimize the flaws. The focus of their reconceptualization was based on adding social aspects to the AL dimensions. For example, they argued that the dimension of self-awareness should involve two subdimensions – self-awareness and social awareness – and that relational transparency should also include interpersonal relationships. Despite this reconceptualization, these critiques have not been addressed empirically in the literature, and the related measurement scales have not been developed or revised to measure the suggested concepts. Alvesson and Einola (2019) and Einola and Alvesson (2021) have also criticized positive leadership styles, including AL, with no consensus on them so far. Despite these ongoing critiques, the empirical literature in this field uses the model of Walumbwa *et al.* (2008) in the conceptualization and measurement of this phenomenon. Future conceptualization and tools may provide new directions for studying AL.

#### *Self-determination theory*

SDT emphasizes autonomy and self-determination in internalizing external motivational regulations, which results in the quality of motivation. This theory contains six mini-theories, including basic psychological need satisfaction (BPNS) theory and organismic integration theory (Vansteenkiste *et al.*, 2010). BPNS theory introduces three needs: 1. competence (the need to feel effective and proficient in important areas of life); 2. relatedness (the desire to feel loved, be in connection with others and care about other people); and 3. autonomy (the desire to experience autonomous control of personal affairs and to behave in accordance with one's integrated self-concept) (Deci *et al.*, 2017). SDT also suggests that with BPNS, people engage in activities they are interested in, where they experience well-being, and where internalization of external motivation will be supported.

According to organismic integration theory, most human behavior is not only based on intrinsic motivation but also on where people can internalize their external motivations (Deci *et al.*, 2017). This mini-theory suggests controlled motivation occurs when using the least internalization regarding the relevant subject. In contrast, "identified motivation" is when individuals understand the value and importance of the external issue, validate it and experience having the choice to do it. Therefore, they find meaning and choice in engaging in the target behavior, even in unfavorable conditions. The final form of internalized motivation is the integration of identified values with other aspects of self, called "integrated motivation." Intrinsic, identified and integrated motivation are called "autonomous motivation."

#### *Implications of self-determination theory for the moral domain*

The original idea of internalizing motivation has been theorized broadly for human activities such as learning, religion, sport, friendship and academia (e.g. Niemiec and Ryan, 2009). However, autonomous motivation in the domain of morality has yet to be investigated (Arvanitis, 2017; Curren and Ryan, 2020).

One of the SDT implications regarding morality has been the examination of whether or not morality functions as a basic psychological need and correlates with psychological thriving as much as the other three basic psychological needs in SDT (Prentice *et al.*, 2020). The study's results demonstrated overall support for the hypotheses. Regarding the

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organismic integration mini-theory of SDT, few studies have considered some related concepts in the morality domain and this mini-theory in their investigations. For example, a concept named “moral identity motivation” has been identified as the motivation to uphold moral intentions where there exist conflicting concerns (Krettenauer and Victor, 2017). Based on SDT, moral identity motivation has been categorized into external and internal motivation, measured among 252 random individuals. Internal moral identity motivation has been found to prevail over external moral identity motivation in the later stages of life (Krettenauer, 2020). However, the measurement of these internal and external moral identity motivations had nothing to do with SDT scales. Sheldon *et al.* (2018) applied the Goal Contents mini-theory of SDT and studied the relation between people’s intrinsic and extrinsic aims (goal contents) and their intrinsic and extrinsic reasons for following these goals as defined in SDT in predicting moral attitudes and behavior. This study also did not use any SDT morality scale and merely found the relationship between some SDT concepts and moral behavior. The introduction and usage of the SDT autonomous motivation scale in the moral domain, while examining its relationship with the moral outcome, are unique in this study.

#### *Influencing mechanisms of authentic leadership on followers*

Different influencing mechanisms of AL on employees’ outputs have been examined in the literature. These include strengthening psychological capacities (e.g. hope and optimism), role modeling, emotional contagion, positive social exchanges, supporting followers’ self-determination and individual and organizational identification (Avolio *et al.*, 2004; Gardner *et al.*, 2005; Ilies *et al.*, 2005).

Most previous studies that explain AL’s influencing mechanisms cover employees’ outcomes other than moral behavior, such as extra effort (Peus *et al.*, 2012) or employee creativity (Zeb *et al.*, 2020b). In the study of Rehman and Zeb (2023), the mechanism introduced for the relationship between AL and followers’ creativity was self-efficacy. They discussed that authentic leaders are aware of their own and their followers’ strengths, and consequently, those leaders employ open and honest relationships by emphasizing the employee’s strengths to empower their followers to overcome deficiencies, enabling them to reach self-efficacy, which in turn affects their creativity. In another study, Islamic work ethic was introduced as the moderator of the relationship between AL and knowledge-sharing behavior (Javaid *et al.*, 2018).

The implications of AL influencing mechanisms in the context of followers’ morality in previous research are limited. Cianci *et al.* (2014) empirically examined the relationship between temptation, AL and moral decision-making among American MBA students in an experimental study and considered how this influence happens. However, they provided no empirical variable for explaining these influencing mechanisms. Erkutlu and Chafra (2013) also found supportive evidence for the relationship between AL and organizational deviance (immoral acts directed against the company, such as stealing) with the moderating role of trust and psychological contract violation in an academic context in Turkey. In addition, Hannah *et al.* (2011b) provided theoretical arguments on how AL impacts moral courage. The arguments were based on mechanisms such as social learning and role modeling. Although they measured and empirically tested the relationship between AL and moral courage, they had no measure or empirical examination of the mechanisms that they theorized as the mediation of this relationship. However, we test different relationships that are hypothesized in the current study, which explain how AL and the moral capacity components are related.

Gilbert and Kelloway (2014) explained the relationship between AL and followers' basic psychological needs; however, they did not link the arguments to any other output, including followers' morality. They argued that authentic leaders promote the satisfaction of the need for autonomy by allowing followers to express themselves and promote the satisfaction of the need for relatedness through openness and cooperative relationships with followers. In addition, they support followers' need satisfaction for competence with trust building, cooperative relationships and facilitating the exchange of information to develop new skills and competencies. Some studies have supported the relationship between AL and BPNS (Leroy *et al.*, 2015; Schoofs *et al.*, 2023).

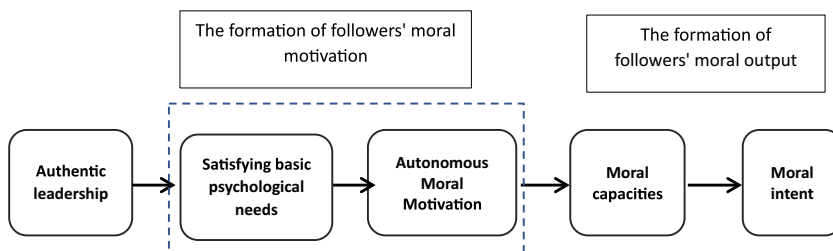
*Direct supervisors and moral outcomes*

Many researchers have pointed out the crucial influence of leaders on subordinates' morality (e.g. Sims and Brinkman, 2002; Posner and Schmidt, 1984; Brown and Mitchell, 2010). However, it is argued that top managers are often distal models, and thus, their influence on employees can be distorted (Weaver *et al.*, 2005). Researchers suggested and found that immediate supervisors can play a more important role in predicting employees' moral behavior than top-level managers (Cheng *et al.*, 2019; Kottke and Pelletier, 2013). For example, supervisors' behavioral integrity, along with their guiding subordinates, was found to be effective in subordinates' OCB (Dineen *et al.*, 2006), or ethical leadership of immediate supervisors was associated with employees' moral voice in South Korean organizations (Lee *et al.*, 2017). In another study in Spanish banking and insurance industries, the moral intention of subordinates was related to the role modeling and integrity of their supervisor (Ruiz-Palomino and Martinez-Cañas, 2011).

Moreover, supervisors may play a crucial role in shaping the business moral values of their subordinates. In a study conducted by Jiang *et al.* (2011), with supervisor-subordinate dyadic data in Taiwanese companies, supervisor business moral values were found to be positively related to the business moral values of subordinates. In this regard, these authors invited further investigation of supervisors' business moral values.

**Theoretical arguments and hypotheses**

Our hypotheses developed for this study are based on a theoretical framework depicted in Figure 1. In an overview, AL enhances followers' moral intent by supporting the internalization of moral motives (Arvanitis, 2017; Deci *et al.*, 2017) and enhancing moral capacities (Hannah *et al.*, 2011a). The outcome of this study's model is "moral intent" because it is salient before undertaking a moral action. The moral motivation component is based on self-determination motivation, as moral capacities are arguably deep psychological states and, hence, not usually formed by external motives with short-term impact.



Source: Authors' own creation

Figure 1. The theoretical framework of the research

Figure 1 will be elaborated in our hypotheses' arguments developed below. The first relationship (between AL and BPNS) has already been proposed (Gilbert and Kelloway, 2014) and supported (Leroy *et al.*, 2015; Schoofs *et al.*, 2023) in the literature. Therefore, we start our arguments from the second relationship in Figure 1 as follows.

*The relationship between followers' basic psychological need satisfaction and autonomous moral motivation*

In organizational ethics, some regulations are conveyed through external rules and norms or disciplinary issues. We suggest that for individuals experiencing BPNS, according to SDT (Deci *et al.*, 2017), the chance of internalizing moral values will increase in that those values are not external requirements; rather, the followers have the chance to approve the desired moral value based on their own justified rationalization. We define this internalized motivation toward moral issues based on personally validated values as autonomous moral motivation.

BPNS is experienced to some degree as a result of interacting with authentic leaders, who create a cooperative and trust-based climate for open dialogue and information sharing (Gilbert and Kelloway, 2014) that helps followers internalize moral values. In such a situation that the authentic leader creates, a follower understands the arguments and reasoning behind moral norms enforced by the organization. In addition, a follower can discuss them with the leader and validate or integrate the external moral phenomenon with their internal values. These experiences provide situations in which there is a chance for basic psychological needs satisfaction, which is essential for value internalization (Deci *et al.*, 2017). Therefore:

*H1.* BPNS is positively related to autonomous moral motivation.

Levesque-Côté *et al.* (2021) suggested that AL facilitates the internalization and acquisition of values that result in subordinates becoming more autonomously motivated to engage in behaviors that express these values. Regarding the relationship between AL and autonomous moral motivation, we discuss that followers who work with an authentic leader who practices moral values may enhance their moral motivation by observing the leader's moral acts and assuming the leader as their role model. However, for moral motivation to be autonomous, it seems that a mechanism other than just following a role model should take place, which we suggest as helping satisfy the basic psychological needs by the authentic leader based on the abovementioned arguments. Previous studies suggest that AL supports subordinates' autonomy by giving noncontrolling feedback and by acknowledging their points of view (Levesque-Côté *et al.*, 2021), which are related to aspects of the satisfaction of basic psychological needs (especially autonomy and relatedness). Based on these, we propose a mediation hypothesis in this regard:

Mediation *H1.* BPNS mediates between AL and autonomous moral motivation.

*The relationship between autonomous moral motivation and moral capacities*

In this section, we consider moral identity, moral efficacy, moral courage and moral ownership as moral capacities. First, individuals who lack an integrated moral identity with no unified self-concept may not have a unified image of themselves and, therefore, feel confused in moral situations. The lack of a strong moral identity in challenging situations may lead them to rely on values that come from nonmoral and disintegrated sub-identities (Hannah *et al.*, 2011a). However, in situations where individuals develop higher levels of

autonomous self-regulation over time that integrate their desires and choices consistent with their internalized values (Deci *et al.*, 2017), they will form a stronger *moral identity*. Assor (2012) also expressed a logical relationship between integrated moral motivation and the individual's moral identity, in that this kind of moral motivation regulates individuals' moral behaviors based on their central values, core self and identity.

We also argue that individuals with a higher autonomous motivation have a better chance to develop their efficacy beliefs in the moral domain. According to social cognitive theory, mastery experiences and positive emotions are among the main sources of developing self-efficacy (Bandura, 2001). When addressing moral issues, individuals with greater autonomous moral motivation put in more effort and show better initiative in facing moral issues. Thus, they gradually gain more learning, competence and mastery experiences (Bandura, 2001) in such issues, which increases their moral efficacy. This idea is empirically supported by evidence that autonomous motivation is strongly related to deep learning (Kyndt *et al.*, 2013). Autonomous moral motivation is expected to make people learn more from solving moral problems, strengthening mastery experiences and moral efficacy. With respect to the positive emotion source of self-efficacy (Bandura, 2001), autonomous moral motivation may help individuals experience fewer negative emotions, such as anger and worry, due to the voluntary choice of those values. It means they have a greater positive emotional state – the second source of self-efficacy. Therefore, as a result of the positive impact of autonomous moral motivation on these two sources, individuals with greater autonomous motivation can develop a stronger belief in having efficacy concerning that moral value, namely *moral efficacy*.

In addition, individuals with autonomous moral self-regulation gradually reach the ability to persevere against immoral pressure and commit to moral principles. An autonomous acceptance of that moral value backs this strong desire to commit to moral principles. This may increase their *moral courage* because such strong motivation can help them react based on their moral identity and give them resistance in autonomously committing to their morality. In addition, the more individuals possess a high level of autonomous moral motivation, the more likely they feel agentic in moral situations and gradually take psychological ownership of their moral issues. The reason is that a sense of psychological responsibility for the moral nature of one's actions (Hannah *et al.*, 2011a), which comes from the human agency, causes a person not to disengage from moral action (Bandura, 1999). Thus, such an agentic approach enhances *moral ownership*. Individuals are more likely to disengage from a moral action when the value contained in that action is mandatory and not a value they have endorsed and internalized autonomously.

Based on the above arguments concerning the impact of autonomous moral motivation on four moral capacities, we suggest that:

H2. Autonomous moral motivation is positively related to moral capacities.

#### *The relationship between followers' basic psychological need satisfaction and moral capacities*

Research has shown that BPNS impacts individuals' well-being and reduces exhaustion (Deci *et al.*, 2017). In the context of our research, this may support employees to hold *positive emotional states* during their work activities when facing moral challenges. These positive emotional states can be a source for their efficacy belief (Bandura, 2001) in the morality domain, which is labeled *moral efficacy* as a component of moral capacities. In addition, BPNS provides a situation where individuals feel less obliged by internal and external control (Deci *et al.*, 2017). This can help employees become more responsible for their work

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activities, including moral decision-making, which may result in higher moral responsibility over time (moral ownership). As a result of such development over time, they may also show greater resistance and courage to environmental pressure for committing immoral decisions due to their psychological states, capabilities and responsibilities that they develop (moral courage). Moreover, when basic psychological needs are satisfied more, followers feel more integrated, and hence, they will refer to their core self-based on their central values, which leads them to strengthen their identity. As the psychological needs are satisfied to some degree by the moral leaders in this context, followers can enhance the moral aspect of their core self, which is their *moral identity*. Based on the above argument, we propose that:

*H3.* BPNS is positively related to moral capacities.

As discussed above, individuals with more satisfied basic psychological needs are more likely to have opportunities to internalize moral values, resulting in autonomous moral motivation. In addition, as mentioned above, autonomous moral motivation is argued to be positively related to resisting moral pressures (moral courage) and a stronger moral responsibility toward moral issues due to a more robust agentic view (moral ownership). This leads to the gradual formation of a more unified self in the person (moral identity) which helps them become more involved in moral situations and gain moral mastery experiences (moral efficacy). Therefore:

Mediation *H2.* Autonomous moral motivation mediates between BPNS and moral capacities.

*The relationships between moral capacities and moral intent*

Humans are generally motivated to maintain integrity in their self-perception and, consequently, intend to demonstrate their behaviors consistent with their integrated view of self (Hannah *et al.*, 2011a). Therefore, in moral issues, it seems that the stronger *moral identity* people have, the stronger moral intention they demonstrate. This is because when people experience a less unified and disintegrated self, they may choose or be confused by competing values due to non-unified sub-identities and, therefore, may not be inclined to choose the moral option in their minds (moral intent). Aquino and Reed (2002) also state that people with a stronger *moral identity* make more efforts to maintain harmony between their moral self and their actions in the outside world. Akhtar *et al.* (2023) also showed that the positive effect of a direct supervisor's despotic leadership on employees' unethical workplace behavior is weaker when moral identity is high, supporting the important role of a strong moral identity.

People choose what challenges to accept and how much effort they put into doing something or dealing with failures based on their belief in their self-efficacy (Bandura, 2001). This could be because of the pleasure one feels when acting in accordance with one's ability and gaining related achievements. Similarly, if individuals' *moral efficacy* is higher, their choice to engage in and put effort into related domains (moral domains here) would be higher. This is because they have a stronger belief in their ability to overcome moral issues, and therefore, they are more inclined to choose and struggle for the actions related to the ability they have mastery in (acts related to moralities). In other words, *moral efficacy* leads the person to intend to act morally.

Bandura's theory of agency (2001) helps explain the relationship between *moral ownership* and moral intent because an agentic view is needed before moral actions. In this way, people may use techniques of moral disengagement (the opposite of moral ownership)

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to psychologically free themselves from their immoral actions and maintain a positive image of themselves (Bandura, 1999). In addition, *moral ownership* strengthens moral intent because individuals at higher levels of moral ownership are more determined to fight with their desire to free themselves from moral constraints (Hannah *et al.*, 2011a). That is, moral ownership and feeling responsible for moral actions are required to overcome diversionary thinking about the immoral side of one's actions, which is the mental barrier to being an agent in moral behaviors.

People may feel responsible for moral action (moral ownership) but still lack the courage to overcome the related threats they face (Hannah *et al.*, 2011a). This shows the importance of *moral courage* in predicting moral intent. Individuals who lack the courage to overcome threats concerning moral issues may intend to engage less in moral actions (less moral intent) because they may fear confronting those threatening situations. Anita *et al.* (2021) and Hannah *et al.* (2011b) also showed the mediating role of employees' moral courage in the relationships between AL and moral outputs (disclosure of unethical behaviors and followers' ethical behaviors), supporting the role of moral courage in moral processes:

H4. Moral capacities are positively related to moral intent.

## Methods

### *The study's context, sample and data collection*

The selection of our study's context was based on certain criteria in accordance with the purposeful sampling proposed by Patton (1990, p. 169): "The logic and power of purposeful sampling lies in selecting information-rich cases for study in depth [...] those from which one can learn a great deal about issues of central importance to the purpose of the research." Based on this logic, we adopted this sampling strategy to explore and learn how AL may enhance followers' morality (the research goal). First, the importance of moral behaviors had to be discernible in performing the related jobs by followers. The employees of some organizations we initially examined as candidates for our study were limitedly involved in moral decision-making. Thus, studying those organizations was inappropriate considering our study's goal. Second, we tried to select a context in which moral behavior cannot be easily controlled and monitored through formal and control systems because the scope of this study was to explore moral behaviors based on internal motivation. Third, as it may take time for individuals to perceive the AL behaviors of a direct supervisor, a significant period of time had to have passed in the leader-follower relationship. Therefore, we checked whether the period of time that the direct managers were replaced in the organization would not be short. For example, in our final choice, most managers were the direct managers of their unit for at least three years. According to Banks *et al.* (2016), it can be argued that AL has a greater effect on followers *over time* because of the required time to form the perception of the extent of AL and due to the nature of the internalization process in AL. Fourth, we avoided organizational contexts in which the relationship between leaders and followers was distant or by correspondence, and based on the scope of the study, we deliberately focused on direct relationships between employees and their direct supervisors. Thus, we needed some extent of the actual and non-virtual relationship between the leader and the follower to study the potential effect of authentic behaviors on followers' actions.

After contacting nine different organizations in different industries, an Iranian supplier company in the auto parts industry, a subsidiary of a parent semipublic automotive organization, was the only organization that met all our study's criteria and agreed to our data collection. The selected context was a prominent and large company in the industry, a typical company with considerable financial transactions with its contractors. This

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company's staff members, purchasing agents, receive auto parts from several small manufacturers in the private sector and deliver them to the parent company after checking the quality during the entire manufacturing process. They report or prevent any deviation from the quality standards of the parent company. This company was suitable for our study's goal because we realized that there were various potential immoral behaviors in this supplier company, including the possibility of an agent taking a bribe from manufacturers without informing their direct supervisors, lying to get time off and allocating and reporting unrealistic working hours to organizational missions.

We collected data in the above-mentioned context in 2020 by conducting a paper-based questionnaire survey. The scales were translated from the English versions. To ensure the quality of the translation, two professional translators were asked to back-translate the scales to ensure the equivalency of these versions (Brislin, 1986). Subsequently, we checked the Farsi questionnaires with a sample of three company employees, asking them to fill out the questionnaire, followed by interviews to fully understand whether they comprehended each questionnaire item's concepts consistent with the actual items in English. Consequently, we made minor edits to the wording of some questionnaire items. It should be noted that before designing the research and selecting the scales, we conducted more than 10 interviews with the company's purchasing agents to comprehend this organization's climate, structure and relationships. This helped us to better select and develop the moral-based scenarios in our questionnaire, which were used to measure moral intent, the final dependent variable of the study.

To minimize the common method bias, we employed some strategies. First, in the phase of designing our questionnaires, we considered the proximal separation between the scales of the antecedent variable and the dependent variable in the questionnaire booklet (Podsakoff *et al.*, 2012). This reduces the possibility of being influenced by previous ratings to answer the subsequent questionnaire items by the respondents (Podsakoff *et al.*, 2003). Second, we assured the respondents that their responses would remain anonymous (Podsakoff *et al.*, 2003). We also emphasized that there are no right or wrong responses. These two strategies help reduce respondents' concerns about the possibility that their responses can be identified by others and decrease the likelihood of rating the questionnaire items to be socially desirable or according to what they think is in the researcher's favor (Podsakoff *et al.*, 2003). In addition, the common method bias may result from the same scale type or the same number of scale points (Podsakoff *et al.*, 2012). In this research, as reported in the next section, both the five-point Likert scale and the seven-point Likert scale were used to measure our variables. Moreover, the descriptions of each point of the scale were different in measuring each variable (such as "strongly agree," "very much" and "completely sure"). These two strategies help reduce the common method bias because the resemblance of the response format increases the probability of recalling the response to one question to other similar questions. Also, we took advantage of the recommendation of Podsakoff *et al.* (2003) and Podsakoff *et al.* (2012) to solve the problem of systematic answering of respondents due to ambiguous questions by using simple, specific and precise writing of questions, defining ambiguous and unfamiliar words and using examples where necessary. Podsakoff *et al.* (2012) emphasize that ambiguous items increase response tendencies, such as extreme or midpoint styles, because respondents are uncertain about the item's content. In the review of questionnaire items with the three sample employees, no major ambiguity was found in the questions' contents, and minor ambiguities were resolved.

All technical purchasing agents, the target of our study, were located in different specialized units in a four-storey building. To maintain confidentiality and the untraceability of the names of the participants (which was not possible by gathering data

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via the company's internal IT system), we distributed the questionnaires in paper form (or a pen-and-pencil survey) as used in other similar studies (e.g. Akhtar *et al.*, 2023).

From the 351 questionnaires distributed and completed on-site, we gathered 337 usable responses, equal to a 96% response rate. The high response rate may be due to the several trust-building strategies we employed, considering the ethical standards of the university where we work. We announced that the management of the company has agreed not to ask the researchers for the detailed results of the research. This helped anonymity and trust-building. Furthermore, we declared that participation in the research was voluntary, which helped maintain confidentiality. Moreover, we provided an e-mail address to contact the university where the research was conducted in case they encountered a problem or had any complaints during participation. In addition, an email was sent by the company management to all relevant personnel regarding this research, supporting the research and its importance. Moreover, we applied a pen-and-pencil strategy for data collection, and in each company unit we entered to distribute the booklets, we had an oral explanation of the study's goal and its significance. After some days, the same distributor (one of the authors of this article) returned and collected the completed booklets. The employees were not under any pressure to complete the questionnaires. In total, 280 participants were men, 57 were women (proportional to gender distribution at the company) and all had a bachelor's or master's degree. We had a few missing data, and we used the multiple imputation strategy to address missing data, which substitutes missing values with two or more potential values through repetitive processes (Rubin, 1987).

#### *Measures and the results of exploratory factor analysis*

*Perceived authentic leadership.* We used a 14-item scale to measure AL from the followers' viewpoints (Neider and Schriesheim, 2011). Items were rated on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). As Neider and Schriesheim reported, the Cronbach's alpha of AL ranged from 0.74 to 0.85 in their multi-studies. A sample item was, "My leader shows consistency between his/her beliefs and actions." Only one strong factor was extracted for this measure (Cronbach's alpha = 0.95, eigenvalue = 8.6 and factor loadings between 0.5 and 0.83). This is similar to the result by Hsiung (2012), which also identified one factor with a Cronbach's alpha of 0.96. From a theoretical point of view, considering that the four dimensions of AL together constitute the construct, it is not far from the expectation that the perception of these behaviors is highly interrelated.

*Basic psychological need satisfaction.* In total, 12 items were used to measure BPNS (Chen *et al.*, 2015). Respondents indicated whether they agreed with the statements on a 7-point scale ranging from 1 (completely disagree) to 7 (completely agree). A sample item was, "At work, I feel a sense of choice and freedom in the things I undertake." One factor with Cronbach's alpha of 0.91 was extracted (eigenvalue = 6, and factor loadings between 0.58 and 0.75). SDT expects that the fulfillment of these three needs is highly related. This result is consistent with previous studies with a Cronbach's alpha of 0.84 (e.g. van den Broeck *et al.*, 2008).

*Autonomous moral motivation.* Gagné *et al.* (2015) have developed a scale to measure autonomous motivation. We adopted this scale and edited the questions for use in the moral domain. It is noteworthy that, as far as we know, this is the first usage of a scale for autonomous moral motivation in the literature. A sample item was: "I try to act morally because putting effort into behaving morally aligns with my personal values." Items were rated on a seven-point Likert scale, ranging from 1 (not at all) to 7 (completely). The autonomous moral motivation factor was extracted with a Cronbach's alpha of 0.85, an eigenvalue of 4.3 and factor loadings between 0.79 and 0.83. We later examined the

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nomological network of this new scale in the moral domain related to this study, which will be considered in the discussion section.

*Moral identity.* We used [Zhu et al.'s \(2011\)](#) scale. They developed and tested a five-question scale to measure moral identity. The Cronbach's alpha of this scale was found to be 0.91. Items were rated on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). A sample statement was, "I view being an ethical person as an important part of who I am." The Cronbach's alpha in our study was 0.83. The eigenvalue was 1.4, and except for one question, factor loadings exceeded 0.6.

*Moral conation capacities.* [Hannah and Avolio \(2010\)](#) developed a scale to measure three capacities of moral conation. They tested this scale in two studies and concluded that these are distinct but create a higher-order latent variable. We used this measure in our study. Cronbach's alphas of moral courage, moral ownership and moral efficacy were reported as 0.79–0.92 in [Hannah and Avolio's \(2010\)](#) multi-study. The total Cronbach's alpha was 0.85 and 0.92. For example, one of the items related to moral courage was about how much individuals estimate that they can stand up to an immoral act by their colleagues. Another sample item related to moral efficacy was related to how much one believes they are confident that they can manage moral challenges [1]. Items were rated on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Although we expected to have three distinct factors for moral courage, moral ownership and moral efficacy, our exploratory factor analysis revealed one factor with combined items related to moral courage and moral ownership, and the other one was related to the items about moral efficacy. We also examined forcing three factors in the analysis. However, the eigenvalue of one of the factors was below 1.0, which showed that the forced three-factor solution is unacceptable. In contrast, the combination of two factors (moral courage and moral ownership) was a factor yielded with no item elimination or extra interpretation needed. In addition, the related scree plot showed a sharp decline in the explained variance after two.

As a possible explanation, the respondents may perceive that the concept of being morally responsible is associated with courageous behavior because of their cultural backgrounds or the nature of their work activities. Based on the initial study conducted by [Hannah and Avolio \(2010\)](#), it seems that they were also aware of the potential of such a unified factor comprising these two capacities' measurement items. The high correlation obtained between the two variables of moral courage and moral ownership in their research also supports this issue (0.84 and 0.78) in the two studies of this research. Based on the result, we call this factor "courageous moral responsibility." Considering the measurement items, this factor can be interpreted as a moral capability by which individuals feel responsible for moral issues and also exert courage in the face of threats to defend their moral values. Cronbach's alpha of this unified factor and moral efficacy factor were 0.86 and 0.83, and the eigenvalues were 6.2 and 2.1, respectively. The factor loadings for each were between 0.5 and 0.96.

*Moral intent.* Scenarios were used in this study to measure moral intent in line with previous similar studies ([Valentine and Bateman, 2011](#)). We carefully studied and translated moral intent scenarios available in the literature. Then, we examined them in a pilot study. Finally, two scenarios were selected from [Fritzsche's \(2000\)](#) research that had more relevant content to this study's context. Cronbach's alphas were 0.67–0.87. We made minor edits to the scenario's text as proposed by Fritzsche. In addition, consistent with Fritzsche's approach, we asked respondents how likely they were to take action, considering alternatives mentioned at the end of each scenario. We used a five-point Likert scale from 1 (very unlikely) to 5 (very likely), as was used in [Valentine and Bateman's \(2011\)](#) research, which was also about receiving illegitimate gifts. We also wrote two new scenarios

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according to the knowledge obtained from initial interviews conducted in the company to become familiar with the context. We finalized these two scenarios after discussing them with an expert in ethics who checked their face validity.

As the data collection in this study was among purchasing agents, we emphasize that these roles are exposed to various immoral behaviors, including general unethical actions like lying to get leave and some epical financial or nonfinancial immoral acts such as rigging bids, favoring certain suppliers, accepting gifts and benefits, approving false invoices and accepting inferior product (Graycar, 2019). Thus, considering the various immoral behaviors, including general or role-specific unethical actions, and as the goal of this research is to study the AL's effects on followers' moral behavior in general, we had both kinds of scenarios in our study.

We conducted a factor analysis on the data gathered for the four scenarios and identified one factor with a Cronbach's alpha of 0.76 and an eigenvalue of 2.3. The four scenarios are in the supplementary file: "Moral Intent Scenarios."

### *Control variables*

We controlled for some variables in our regression analysis. AL has a larger impact on followers over time than in the short term (Banks *et al.*, 2016); therefore, total tenure and length of work experience with the current direct supervisors of purchasing agents were included. Moreover, empirical studies support that women are more associated with an ideal follower (Braun *et al.*, 2017). This may cause a greater influence when interacting with leaders. Therefore, we controlled for followers' gender as well. In addition, in leadership studies, the leader's desirability for the follower is often measured as a control for employees' liking for the leader (e.g. Mumford and Fried, 2014). Considering the length of our questionnaire and our practical limitation in this regard, only the item "I like my boss." was used to measure "liking the manager." Furthermore, in our interviews before designing the questionnaire booklet, we realized that "interest in the organization" is relatively high among some employees and may be important to impact their moral behaviors when performing their tasks. Therefore, we added only the single item, "I like my organization." to control for this due to the limitation of the length of the questionnaire.

### *Data analysis methods*

This research used exploratory factor analysis for several reasons. First, the measures did not have a Persian version, so conducting an exploratory factor analysis on the translated Persian versions was necessary to reach the necessary validity. Second, in this research, we used the motivation questionnaire to measure autonomous moral motivation for the first time by adding some moral words in the phrases to reflect the moral domain. Third, no study has examined all four moral capacities simultaneously, relating an integrative scale of them to moral intent in Hannah *et al.*'s (2011a) framework. Principal axis factoring was used to extract factors. The hierarchical multiple regression method was used to estimate and test the relationships proposed in the hypotheses. The order of entering independent variables was based on the theoretical rationale presented for the hypotheses. Control variables were entered in the first step of each regression. Then, each related variable was entered at different stages. Improvement in the regression model was based on the significance of  $R^2$  change after each step (Tables 1 and 2).

## **Results**

With the results of factor analysis related to moral conation capacities, the number of our hypotheses is changed as follows:  $H2$  is changed to  $H2a$  (the relationship between autonomous

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Authentic leadership	–											
2. BPNS	0.51**	–										
3. Autonomous moral motivation	0.08	0.27**	–									
4. Courageous moral responsibility	0.25**	0.40**	0.22**	–								
5. Moral identity	0.18**	0.47**	0.51**	0.43**	–							
6. Moral efficacy	0.18**	0.40**	0.33**	0.55**	0.54**	–						
7. Moral intent	0.11*	0.29**	0.28**	0.34**	0.41**	0.34**	–					
8. Gender	–0.02	–0.01	0.08	–0.06	0.04	–0.03	0.05	–				
9. Total tenure	–0.4	0.08	0.03	0.22**	0.03	0.06	0.12*	–0.11*	–			
10. Years coworking with current boss	0.06	0.08	0.03	0.18**	0.14*	0.05	0.06	0.01	0.20**	–		
11. Liking the boss	0.64**	0.27**	0.03	0.09	0.06	0.05	0.05	–0.05	–0.06	0.03	–	
12. Liking the organization	0.18**	0.38**	0.15**	0.21**	0.23**	0.14**	0.27**	–0.13*	0.16**	–0.01	0.30**	–

**Table 1.**

Correlations between the study's variables

Notes: \* $p < 0.05$ ; \*\* $p < 0.01$  (two-tailed tests)

Source: Authors' own creation

moral motivation and moral identity), *H2b* (the relationship between autonomous moral motivation and moral efficacy) and *H2c* (the relationship between autonomous moral motivation and courageous moral responsibility); *H3* is changed to *H3a* (the relationship between BPNS and moral identity), *H3b* (the relationship between BPNS and moral efficacy) and *H3c* (the relationship between BPNS and courageous moral responsibility); and *H4* is changed to *H4a* (the relationship between moral identity and moral intent), *H4b* (the relationship between moral efficacy and moral intent) and *H4c* (the relationship between courageous moral responsibility and moral intent).

#### *Estimating the common method bias*

Harman's single-factor test was used to examine the common method bias issue (Fuller et al., 2016). All factors that measured our model's variables were factor analyzed, forcing a single factor. Some studies have suggested that this variance should not be more than the majority (or 50%) of the covariance between the variables (Fuller et al., 2016). The variances of 34%, 31%, 29%, 31%, 43%, 46%, 47%, 28%, 27% and 28% (less than 50%.) were obtained using the Harman's single factor test for the variables considered in seven regression models used for testing *H1*, *H2a*, *H2b*, *H2c*, *H3a*, *H3b*, *H3c*, *H4a*, *H4b* and *H4c*, respectively.

#### *The correlation matrix*

The correlation matrix is reported in Table 3. The matrix has sufficient statistically significant relationships supporting running multiple regression analysis to test the hypotheses. The correlation between the age variable and the total tenure is 0.91, so we included only the person's total tenure variable. Considering the magnitude of correlations of the main variables associated with our hypotheses, which are mostly below 0.60, there seems to be no major concern about the discriminant validity. However, we conducted the discriminant validity test, and the AVE of the target variables was larger than the square of the correlation of each variable with all other variables (Anderson and Gerbing, 1988).

Furthermore, we checked for multicollinearity in our data. The variance inflation factors were between 1.39 and 1.99, which were far below the cutoff value of 10 (Kleinbaum et al.,

Steps	Variables	H1 – dependent variable: autonomous moral motivation			H2a – dependent variable: moral identity			H2b – dependent variable: moral efficacy			H2c – dependent variable: courageous moral responsibility						
		F change	P	R square	Beta	F change	P	R square	Beta	F change	P	R square	Beta	F change	P	R square	Beta
1	Gender	NS*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2	Total tenure	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	14.97	0.00	0.04	0.21
3	Years cowering with current boss	NS	NS	NS	NS	5.78	0.02	0.02	0.13	NS	NS	NS	NS	6.03	0.01	0.02	0.13
4	Liking the boss	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
5	Liking the organization	9.36	0.00	0.03	0.18	19.04	0.00	0.05	0.25	NS	NS	NS	NS	8.06	0.01	0.02	0.16
6	AL	NS	NS	NS	NS	9.10	0.00	0.03	0.20	11.16	0.00	0.03	0.23	19.10	0.00	0.05	0.28
7	BPNS	16.91	0.00	0.05	0.26	53.70	0.00	0.13	0.44	38.45	0.00	0.10	0.39	24.96	0.00	0.06	0.30
8	Autonomous motivation	–	–	–	–	77.19	0.00	0.15	0.40	22.40	0.00	0.05	0.24	5.74	0.02	0.01	0.12

Steps	Variables	H3a – dependent variable: moral identity			H3b – dependent variable: moral efficacy			H3c – dependent variable: courageous moral responsibility					
		F change	P	R square	Beta	F change	P	R square	Beta	F change	P	R square	Beta
1	Gender	NS*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2	Total tenure	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3	Years cowering with current boss	5.78	0.02	0.02	0.13	NS	NS	NS	NS	NS	NS	NS	NS
4	Liking the boss	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
5	Liking the organization	19.04	0.00	0.05	0.25	NS	NS	NS	NS	NS	NS	NS	NS
6	AL	9.10	0.00	0.03	0.20	11.16	0.00	0.03	0.23	19.10	0.00	0.05	0.28
7	BPNS	53.70	0.00	0.13	0.44	38.45	0.00	0.10	0.39	24.96	0.00	0.06	0.30

**Note:** \*NS = not significant  
**Source:** Authors' own creation

**Table 2.**  
Regressions on  
autonomous moral  
motivation and  
moral capacities

Steps	Variables	F change	P	R square change	Beta
<i>H4a – dependent variable: moral intent</i>					
1	Gender	NS*	NS	NS	NS
2	Total tenure	5.77	0.1	0.02	0.15
3	Years coworking with current boss	NS	NS	NS	NS
4	Liking the boss	NS	NS	NS	NS
5	Liking the organization	22.96	0.00	0.07	0.30
6	AL	NS	NS	NS	NS
7	BPNS	14.37	0.00	0.04	0.26
8	Autonomous motivation	12.15	0.00	0.04	0.20
9	Moral identity	13.66	0.00	0.04	0.25
<i>H4b – dependent variable: moral intent</i>					
10	Moral efficacy	4.42	0.04	0.01	0.14
<i>H4c – dependent variable: moral intent</i>					
10	Courageous moral responsibility	6.56	0.01	0.02	0.16

**Note:** \*NS = not significant  
**Source:** Authors' own creation

**Table 3.**  
Regression on moral intent

1988). Consequently, we can conclude that, in our data, multicollinearity is too low. We checked for the normality of variables. Skewness and kurtosis values ranged from  $-1.5$  to  $1.5$  and from  $-0.97$  to  $3.5$ , respectively, far from the nonnormal threshold indicated by Kline (2023) (2.0 and 7.0, respectively). We also checked for linearity; we checked if the linear relationship was strong enough compared to other feasible relationships. In all the study's variables, the linear relationship had the highest F compared to other equations, and the significance level was 0.00 in all cases.

#### *Hierarchical multiple regression analysis and hypothesis testing*

Table 2 contains information regarding our regression analysis for testing hypotheses concerning the dependent variables: autonomous moral motivation, moral identity, courageous moral responsibility and moral efficacy. Table 3 also contains the results of the regression analyses for hypotheses related to moral intent (the final variable of the model).

H1 is supported. SDT (Deci et al., 2017) clarifies that BPNS increases the possibility of strengthening autonomous motivation. Using the Macro process method in SPSS software, the mediation H1 regarding the mediating role of BPNS between AL and autonomous moral motivation was supported (coefficient effect = 0.15, bootSE = 0.05, CI [0.07, 0.25]) at the 95% confidence interval level. However, the direct relationship is not significant. Therefore, we identified a full mediation.

H2a regarding the relationship between autonomous moral motivation and moral identity was supported. The mediation H2a concerning the mediation role of autonomous moral motivation between BPNS and moral identity was supported for a partial mediation (coefficient effect = 0.12, bootSE = 0.04, CI [0.05, 0.20]) at the level of 95% confidence interval for indirect and CI [0.27, 0.45] for the direct relationship). That means our H3a (the relationship between BPNS and moral identity) is also supported.

H2b regarding the relationship between autonomous moral motivation and moral efficacy is supported. The mediating H2b, about the mediating role of autonomous moral motivation between BPNS and moral efficacy, is also supported for partial mediation. The indirect relationship was significant (coefficient effect = 0.06, bootSE = 0.02, 95%, CI [0.03, 0.11]),

while the direct relationship was also supported (CI [0.23; 0.43], ( $p = 0.00$ )). That is, our *H3b* (the relationship between BPNS and moral efficacy) is also supported.

*H2c* about the relationship between *autonomous moral motivation* and *courageous moral responsibility* is also supported. The mediation *H2b* regarding the mediation role of *autonomous moral motivation* between BPNS and *courageous moral responsibility* is supported for a partial mediation (coefficient effect = 0.03, bootSE = 0.02, 95%, CI [0.01; 0.08]), while the direct relationship was also significant (CI [0.26; 0.47]). Thus, our *H3c* (the relationship between BPNS and courageous moral responsibility) is also supported.

*H4a*, *H4b* and *H4c* regarding the relationship between *moral capacities* and *moral intent* are supported. We entered moral identity as a more fundamental moral capacity (Hannah *et al.*, 2011a) before the final independent variable in *H4b* and *4c*. However, we had no robust theoretical rationale for whether moral efficacy affects moral courage/moral ownership or vice versa. Thus, we entered *moral efficacy* and *courageous moral responsibility* separately in step 10 of two distinct regressions after *moral identity* to predict *moral intent* (see Table 3). All five mediating variables of the model, including BPNS, *autonomous moral motivation* and three moral capacities, were also tested exploratively in the relationship between AL and *moral intent*, and the indirect relationship was supported (coefficient effect = 0.15, bootSE = 0.04, 95% CI [0.07; 0.23]).

Regarding the growing consideration of methodological concerns in leadership studies and the emphasis on the dependence of the results of multiple hypothesis testing with multiple predictors and outcomes in regressions (Wulff *et al.*, 2023), we made further analysis and conducted the Holm-Bonferroni test (Holm, 1979). The Holm–Bonferroni correction is a method to control the familywise error rate (FWER) when multiple statistical tests are being performed on the same data set by adjusting the  $p$ -values of statistical tests. Although all hypotheses were supported in our regression analysis reported above, after a Holm-Bonferroni correction, two of the hypotheses (2c and 3b: the relationship between autonomous moral motivation and courageous moral responsibility and the relationship between moral efficacy and moral intent) did not reach statistical significance. We also examined the effect size to reveal the power of the regressions. We used Cohen's  $f^2$  by following Cohen's (1988) and Hayes's (2013) procedure. In Table 4, Cohen's  $f^2$  values are reported (the threshold is as follows:  $f^2 \geq 0.02$ : small effect size;  $f^2 \geq 0.15$ : medium effect size; and  $f^2 \geq 0.35$ : large effect size). Except for one hypothesis (*H1*), hypothesis (*H2a*) had a large effect size and others had medium effect sizes. Based on the Holm-Bonferroni correction and Cohen's  $f^2$  procedure, *H2a* (the relationship between autonomous moral motivation and moral identity), *H2b* (the relationship between autonomous moral motivation and moral

Hypotheses	Cohen's $f^2$	Effect size
<i>H1</i> – dependent variable: autonomous motivation	0.10	Small
<i>H2a</i> – dependent variable: moral identity	0.60	Large
<i>H2b</i> – dependent variable: moral efficacy	0.27	Medium
<i>H2c</i> – dependent variable: courageous moral responsibility	0.28	Medium
<i>H3a</i> – dependent variable: moral identity	0.30	Medium
<i>H3b</i> – dependent variable: moral efficacy	0.19	Medium
<i>H3c</i> – dependent variable: courageous moral responsibility	0.27	Medium
<i>H4a</i> – dependent variable: moral intent	0.30	Medium
<i>H4b</i> – dependent variable: moral intent	0.32	Medium
<i>H4c</i> – dependent variable: moral intent	0.33	Medium

Source: Authors' own creation

Table 4.  
Effect size statistics

efficacy), *H3a*, *H2b* and *H3c* (the relationships between BPNS and moral capacities), *H4a* (the relationship between moral identity and moral intent) and *H4c* (the relationship between courageous moral responsibility and moral intent) are supported with a large or medium effects, and *H1* is supported with a low effect. *H2c* and *H4b* are not supported after the Holm-Bonferroni correction.

## Discussion

The relationship between AL and the moral intention of employees to not engage in immoral behaviors was supported through the mediation of BPNS, autonomous moral motivation and moral capacities. As Lemoine *et al.* (2019) and Cavazotte *et al.* (2021) argued, we also showed that this impact is not merely due to the moral dimension of AL; however, AL enhances followers' morality by helping to satisfy their basic psychological needs, strengthening their autonomous motivation toward moral issues.

Reviewing the results of hypotheses testing, the relationship between BPNS and autonomous moral motivation (*H1*) was supported. After Holm-Bonferroni correction, the relationships between autonomous moral motivation and two of the capacities (moral identity and moral efficacy) were supported (*H2a* and *H2b*). Mediation hypotheses were all supported as well. Moreover, our results demonstrated that the direct relationships between BPNS and moral capacities (*H3a* to *H3c*) are stronger than mediation relationships through autonomous moral motivation. In addition, the relationships between "moral identity" and "moral intent" and between "courageous moral responsibility" and "moral intent" were supported (*H4a* and *H4c*). We argue that in the study's context, the role of direct supervisors in helping purchasing agents satisfy their basic psychological needs following enhancement of their autonomous moral motivation is crucial. Moreover, the enhancement of moral capacities resulting from autonomous moral motivation can help employees avoid immoral behaviors such as bribe-taking in their roles.

We conducted the Holm-Bonferroni correction in this research because of the study's number of variables and regressions. Among the relationships, two significant relationships identified in separate regressions comprised of the relationships between "autonomous moral motivation" and "courageous moral responsibility" (*H2c*) and between "moral efficacy" and "moral intent" (*H4b*) were not significant after the Holm-Bonferroni correction. This helped us control the FWER and reduce the false positive (Type 1) error rate (Holm, 1979).

The above results demonstrated that although autonomous moral motivation is generally related to moral intent through the mediation of moral capacities, this relationship is complex. We argue that the possible explanation of these outcomes may be due to the interrelatedness of moral capacities, as the formation of these capacities is intertwined (Hannah *et al.*, 2011a). We discuss that as autonomous moral motivation develops over time, individuals' moral efficacy can be enhanced due to mastery experiences in addressing moral issues. Consequently, people may become courageous and responsible about a moral issue after some time. This idea is supported by our data in that autonomous moral motivation is related to moral efficacy and moral identity, and these capacities may have affected courageous moral ownership, which impacts moral intent.

Some empirical studies have tested the relationship between a single or limited number of moral capacities and moral-based behaviors. For example, Jino and Dyaram (2019) found a statistically significant relationship between moral ownership and moral behavior (Beta = 0.26). Hannah *et al.* (2020) also found a statistically significant relationship between moral identity and moral behavior intention with a magnitude of 0.21 and 0.31 in two studies. Moreover, Hannah *et al.* (2011b) demonstrated a significant relationship between moral

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courage and moral behavior with a magnitude of 0.28. Consistently, [Zhang et al. \(2016\)](#) also showed that among Chinese bank employees, the combination of the three capabilities of moral ownership, moral courage and moral efficacy has a relationship with a strength of 0.19 with “reporting undesirable behaviors in the organization.” The advantage of our study is that we considered a complete range of these capacities, and our results are consistent with previous studies in supporting the crucial roles of moral capacities in affecting moral intent and behavior.

## Conclusions

This research has explored how supervisors with AL behaviors influence employees' morality – an outcome rarely investigated in relation to AL – by exploring the relationship between AL and moral intention. This study shows satisfaction of basic psychological needs and having autonomous moral motivation can be crucial in shaping employees' moral capabilities and can foster their reaction to immoral stimuli in the environment.

This study has several contributions to the literature. The results of our study reveal the ability of AL to enhance followers' moral intention, a response to the call of [Cianci et al. \(2014\)](#) to fill the research gap in the field of the influencing mechanisms of AL on followers' morality. The proposed mediating relationships are important because previous studies do not suggest empirical mediating variables explaining how AL impacts moral outcomes.

Though previous studies supported the relationship between AL and BPNS, the outcomes were other than morality ([Leroy et al., 2015](#); [Schoofs et al., 2023](#)). In addition, to the authors' best knowledge, no study was found in which autonomous moral motivation is a part of the mediating relationship between AL and followers' moral capacities, resulting in moral intent. This is crucial considering the idea that AL may impact employees' morality through motivational mechanisms, in addition to the role of AL's morality as the main mechanism proposed in the literature ([Avolio and Gardner, 2005](#)).

This research studied the relationships between all four related moral capacities ([Hannah et al., 2011a](#)) and moral intent compared with the previous studies that tested a limited number of such capacities. The supported relationship between moral capacities and moral intent suggests that moral intent, which is a psychological step before moral action among humans, requires the development of moral capacities. This supports the theoretical issues raised by [Hannah et al. \(2011a\)](#), showing the important role of moral capacities in strengthening the moral intention of employees. The results also supported the idea that the formation of moral capacities can be intertwined and that individuals' moral efficacy and moral identity may be enhanced prior to moral courage and moral ownership.

Our study's results also demonstrate that SDT can have a crucial role in explaining the influencing mechanism of AL on followers' morality outcomes. Another important result of this research highlights the role of direct managers in enhancing the moral behavior of employees. This is critical because direct managers are close enough to employees' activities to influence their moral behaviors ([Wood, 1995](#)).

Based on the findings, this study makes important contributions to the literature on autonomous motivation. This study has introduced and applied an autonomous moral motivation scale and found this construct to be a part of the mediating relationship between AL and followers' moral capacities. This supports the idea that “autonomous moral motivation” is salient in moral issues in organizational realities, as [Arvanitis \(2017\)](#) generally suggested.

This study also makes contributions to practice. In purchasing jobs, internalizing moral values is critical to the employees' moral outcomes. The evidence provided in this study about the impact of the internalization of moral values on moral intent can be significant in

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organizations where managing external factors is complex, workers have opportunities for flexible negotiation and agreement on business issues, or where there is a distance between managers and employees. Moreover, the study provides evidence that at the operational level, direct supervisors can impact moral outputs in their relationship with employees through AL behaviors.

### **Research limitations and suggestions for future research**

There are limitations that must be considered. First, the study was conducted using a cross-sectional design. This kind of research design was due to the sensitivity of the topic (self-reporting of conducting moral or immoral actions), which led to the organization's request to limit the study to the shortest possible time. Therefore, causal inferences cannot be made. Future studies can examine the relationship between AL and employees' moral behavior or moral intention over time. Especially regarding the complex relationship between moral capacities that we found, we suggest conducting more exploration on whether moral identity and moral efficacy may develop sooner than courageous moral responsibility in individuals. Therefore, we propose studying the dynamics of the development of moral capacities in future studies using longitudinal designs.

Second, the context's characteristics (e.g. the nature of the business requiring interactions with different vendors) may have influenced the results, affecting their generalizability. Therefore, the replication of this study in other industries and organizations where employees do not need this much interaction is proposed. Similarly, other types of jobs with different levels of monitorability by the organization could be the focus of future studies because, when the monitoring of personnel is easier, supervisors have many more tools to control and guide the employees' behavior from an ethical point of view. Other cultures (like Western cultures with less collectivism) can also be the focus of future studies to make it more possible to generalize this study's results. In more individualistic cultures, shaping moral capacities may differ from collectivistic cultures. For example, moral courage, to some degree, may be formed under the influence of social norms in a more collectivistic community. Likewise, autonomous moral motivation in societies with more power distance may be less likely to be shaped by a stronger obedience system than in cultures with lower power distance. This may affect the strength and significance of relationships tested in this study. Regarding the study of one context in this research, our findings make a case for the assumption that the supported hypotheses may be plausible in other similar contexts, although they require further empirical investigations.

Third, considering that we used the autonomous motivation scale for the first time in the domain of morality and that our other scales were not available in Persian, we used exploratory factor analysis [2]. If our translations are used in future studies, it will be possible to conduct confirmatory factor analysis in Persian. Fourth, because of the newness of the autonomous motivation instrument, its psychometric aspects require examination in future studies.

Fifth, we cannot infer a one-way causality direction for the relationship between moral motivation and moral capacity. Individuals' moral capacities may also impact moral regulations in specific situations. In future studies, testing and comparing both causal directions are suggested. This issue can be more important in organizations that have employees with much more tenure and more developed moral capacity as a result of their maturity and experience.

Sixth, we focused on the role of AL in shaping followers' morality, independent of the role of the organization's ethical climate in this regard. In future studies, the ethical climate of organizations can be examined along with the AL behaviors of top managers or supervisors.

This research idea requires a large sample of organizations in a cross-level design to test the impact of organizational climate at the organizational level on employees' morality at the individual level, including their direct managers' AL.

Seventh, the data collection method in this research was paper-based. We speculated that we could experience an insufficient response rate by using a Web-based data collection due to the lack of employees' trust in the anonymity of names in the company's IT system (which was concluded in the initial interviews). Therefore, we distributed the questionnaires in paper form. The advantages of paper-based administration (PBA) over Web-based administration (WBA) are reported as higher data return and participant comfort (Hardre *et al.*, 2012) and greater data quality (Hardre *et al.*, 2007). The advantages of WBA over PBA are reported as enhanced efficiency and accuracy of data collection for older participants (Fanning and McAuley, 2014), fewer data entry mistakes and missing values and cost-saving (Touvier *et al.*, 2010).

We attempted to take maximum advantage of the PBA method. Moreover, we tried to reduce missing data by asking participants to recheck their booklets and fill in any unanswered questions upon collecting the booklets. Some participants agreed to fill in the missing items and returned their booklet after reviewing it again. This reduced our missing data. We suggest that data be collected online if employees trust the confidentiality of their participation while using their organization's IT system.

Despite these limitations, we anticipate that the findings of this study will help expand the areas of literature on mechanisms through which followers' moral intent is enhanced autonomously, AL's moral outcomes and purchasing supervisors' impact on followers' morality.

### Practical implications

The effect of AL on the development of personnel's moral capacities is shown to be significant in this study. Therefore, it seems important that organizations focus more on developing AL behaviors among managers and provide guidance on how their AL behaviors can be used to increase employees' basic psychological needs satisfaction. Given that the result of this study is around the effect of AL on morality, we suggest that supervisors' development programs can provide exercises and types of role-playing that will help leaders (supervisors) know their *inner* values and intentions to affect their work domain autonomously.

Second, we propose that organizations plan to develop their direct supervisors in the following areas:

- realizing what each moral capacity means because they can recognize what moral capacities must be developed for each employee;
- learning how to help the organization's members internalize job-related moral values by satisfying their needs for relatedness, giving them autonomy and creating the climate of learning and competence; and
- how to develop the skill of being authentically transparent about one's moral values.

Based on these developments, supervisors are guided to the path of internalizing the desired moral values among followers and strengthening followers' moral capacities by applying AL behaviors and satisfying followers' basic psychological needs. It is also suggested that Human Resource Management (HRM) departments can develop training programs and provide coaching to help personnel satisfy their basic psychological needs.

In addition, dialogue sessions can be held among organizational members. More experienced members can be invited to share what they recall from their managers who had autonomous moral behaviors in their interactions and impacted their moral capacities and moral intent, for example, in rejecting gifts. More specifically, it is possible to talk about how authentic managers empower their employees regarding the immorality of actions such as accepting bribes, even in challenging economic conditions.

We also suggest that HRM departments design surveys to identify the supportive factors or obstacles that impact the internalization of moral motivation in the employees and seek related solutions. For example, they may realize that the personnel of one of the organization's units have significantly lower levels of autonomous moral motivation than other units. HRM departments may try to train or provide coaching for the direct supervisors of their organizations on how to facilitate the personnel's BPNS and use strategies such as rationalization and transparent relationships for enhancing the internalization of moral values. In addition, HRM departments may hold sessions discussing the case studies used in this research to stimulate personnel's moral sensitivity about moral issues, which may ultimately enhance their moral intent.

### Notes

1. We could not deliver the sample items' exact wordings due to our commitment to the contract with Mind Garden Inc. not to reveal the exact items.
2. The English version of the scale is available upon request from the authors.

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**Supplementary material**

The supplementary material for this article can be found online.

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