Supervisor motivating styles and legitimacy: moderation and mediation models

Yaniv Kanat-Maymon, Yaron Mor, Elinur Gottlieb and Anat Shoshani
Interdisciplinary Center Herzliya, Herzliya, Israel

Abstract
Purpose – The purpose of this paper is to examine the mediating and moderating roles of perceived supervisor legitimacy in the association between perceived supervisor motivating styles and subordinate functioning. Specifically, based on Self-Determination Theory (SDT), two supervisory motivating styles were examined: the autonomy-supportive style, characterized by nurturing employees’ inner motivational resources, and the controlling style, in which supervisors pressure their employees to behave in specific manager-directed ways. Legitimacy was defined according to the Relational Model of Authority (RMA).

Design/methodology/approach – An online survey was administered to a sample of 252 employees. Moderation and mediation analyses were conducted to test the hypotheses.

Findings – The autonomy-supportive motivating style, but not the controlling style, was linked to employee work-related outcomes (i.e. job satisfaction, commitment, engagement, burnout, and depression) through perceived legitimacy. Legitimacy buffered the negative impact of the controlled orientation on burnout and depression.

Originality/value – Taken together, the results suggest that legitimacy as a resource may be enhanced by autonomy support and can also minimize the harmful consequences of controlling supervisory behaviors. The theoretical implications of integrating SDT with RMA and the practical implications of these findings are discussed.

Keywords Motivation, Legitimacy, Self-determination

Paper type Research paper

One of the most challenging aspects of management is how to motivate employees to achieve organizational goals. Self-Determination Theory (SDT; Deci and Ryan, 2000; Ryan and Deci, 2017) is an approach to motivation that uses traditional empirical methods to investigate how the interpersonal climate shapes people’s quality of motivation (Gagné and Deci, 2005; Deci and Ryan, 2000). In work organizations, the ways in which supervisors attempt to motivate subordinates constitute a crucial component of the interpersonal climate. SDT differentiates between two main forms of supervisory motivating styles (Hardré and Reeve, 2009; Moreau and Mageau, 2012; Kanat-Maymon and Reizer, 2017). A controlling style describes supervisors who exercise authority through external factors such as incentives, deadlines, and surveillance in order to pressure subordinates to think, feel, or behave in specified ways (Ryan and Deci, 2017). By contrast, the autonomy-supportive style refers to supervisors’ efforts to nurture employees’ inner motivational resources, such as their on-the-job interest, perceived competence, and sense of value of the work they are involved in.

A large body of research within SDT has underscored the benefits of the autonomy-supportive style with regard to employees’ work attitudes and performance (Gagné and Deci, 2005; Kanat-Maymon and Reizer, 2017; Ryan and Deci, 2017). According to SDT, the difference in the quality of volitional or autonomous motivation promoted by each style is the main reason why autonomy support is more effective than the controlling style (Gagné and Deci, 2005). Autonomy support is said to produce a more volitional type of...
motivation that enhances the perceptions and feelings of “wanting to” act, as opposed to the controlling style that fosters the experience of “forced to” act (Ryan and Deci, 2017).

Motivating subordinates based solely on a controlling style (i.e., reward and coercion) is often ineffective because compliance is not likely to persist when the extrinsic contingencies are no longer enforced (Tyler and Blader, 2005). Coercive power may also breed contempt among subordinates or result in negative feelings and other undesirable outcomes, such as turnover and unethical behavior (Kanat-Maymon et al., 2015; Gillet et al., 2013).

Here it is argued that perceived supervisor legitimacy can make a unique contribution to understanding the relative effectiveness of SDT-based motivating styles. Legitimacy, according to the Relational Model of Authority (RMA; Tyler, 1997; Tyler and Lind, 1992), is an identity-based process that focuses on the extent to which employees generally accept and acknowledge their supervisors’ rank and the latter’s right to influence employees’ beliefs and behavior (Tyler, 1997). Defined in this way, legitimacy is less an issue of “wanting to” or being “forced to” act, but rather more of a feeling that the supervisor “has a right to” be obeyed (French and Raven, 1959; Tyler, 2006).

The social identity mediation hypothesis put forward by Tyler and Blader (2003) contends that identity evaluations, such as those involved in legitimacy (Tyler, 1997), can mediate the relationship between organizational treatment and employees’ attitudes, values, and cooperative behaviors. Others (e.g., Hegtvedt et al., 2003) have suggested that legitimacy has buffering qualities that can minimize negative affect and counterproductive behaviors in cases of organizational maltreatment (Johnson et al., 2000).

Since both SDT and legitimacy examine aspects of volitional compliance, it is surprising that so little research has examined these two theoretical perspectives jointly. In an attempt to fill this gap, this study integrates research on legitimacy (Tyler, 2006; Tyler and Ryan, 2000; Ryan and Deci, 2017) with SDT (Deci and Ryan, 2000) to investigate whether and how legitimacy can mediate and moderate the effect of supervisor motivating styles on work-related outcomes. In our view, legitimacy is fundamental for any organization to function properly; therefore, we expect its effects to manifest themselves in various employee work-related outcomes. Specifically, we examined our model with regard to a number of important positive (i.e., job satisfaction, engagement, and commitment) and maladaptive (i.e., burnout and depression) employee work-related outcomes, which previous research has shown to be relevant for organizational performance (Halbesleben and Bowler, 2007; Judge et al., 2001; Kessler et al., 2008; Meyer et al., 1989; Rich et al., 2010).

Integrating the dual role of legitimacy (Tyler, 2006; Tyler and Blader, 2003) with SDT-based motivating styles (Ryan and Deci, 2017) can contribute to the field of management by showing why and when SDT-based motivating orientations are effective. Given that most SDT studies consider that autonomous motivation (i.e., a volition-based motivation) drives the autonomy-supporting orientation (Deci and Ryan, 2000), identifying an additional motivational mechanism such as legitimacy can broaden our understanding of why motivating orientations are effective. Moreover, a better understanding of how legitimacy alters the impact of motivating styles is crucial because it helps shift the focus away from asking whether the impact of motivating styles is effective (Gagné and Deci, 2005) to when it is effective, if at all. This work also contributes to RMA literature on legitimacy, which has mostly addressed the effects of organizational justice on perceived legitimacy and behavioral compliance (Tyler, 2006). Thus, SDT-based motivating styles may provide an additional theoretical source that can account for legitimacy.

**Hypothesis development**

**SDT of motivation**

SDT (Deci and Ryan, 2000; Ryan and Deci, 2017), unlike most other traditional approaches to motivation, segments the unitary concept of motivation into distinctive types that
represent various degrees of self-determination, also known as autonomous motivation. Experiencing autonomy involves acting with a sense of volition and choice. On the other hand, when autonomy is low (i.e. controlled motivation), behavior is experienced as pressured by forces perceived to be external to the self. A robust body of literature, including prospective designs, experiments, and intervention programs, has confirmed that in work organizations as well as in other life domains, greater autonomous motivation leads to positive workplace outcomes, more effective performance, and better psychological health (Baard et al., 2004; Gagné and Deci, 2005; Hardré and Reeve, 2009).

Given the benefits of autonomous motivation to organizational outcomes, researchers have attempted to identify what managers can say and do to support employees’ autonomous motivation. Based on SDT, two motivating styles were defined. The first, an autonomy-supportive motivating style, is one in which managers nurture employees’ autonomous motivation. More specifically, supervisory autonomy support refers to the supervisor’s ability to understand and acknowledge the subordinates’ perspective, afford choice when possible, provide a meaningful rationale when choice is constrained, encourage self-initiation, and minimize pressure (Gagné and Deci, 2005; Moreau and Mageau, 2012).

The second style is the controlling motivating style. In it, managers pressure employees to behave in a specific manager-directed way, which undermines autonomous motivation (Ryan and Deci, 2017). Examples include the use of external sources of motivation such as threats of punishment, neglecting to provide explanatory rationales, relying on pressuring language (e.g. “have to”), displays of impatience with employees’ ways of doing things, and reacting to employees’ complaints and expressions of negative affect with authoritarian statements (Moreau and Mageau, 2012).

Cumulative research consistent with SDT supports the notion that supervisory autonomy support can enhance employees’ key work-related outcomes such as well-being (Mouratidis et al., 2010), engagement (Hardré and Reeve, 2009), and performance (Baard et al., 2004; Kanat-Maymon and Reizer, 2017) through autonomous motivation. Recent research has also indicated that autonomy-supportive and controlling motivating styles may impact employees’ desirable and less desirable outcomes differently (Bartholomew et al., 2011). Autonomy support may account for optimal functioning and well-being because it nurtures the inner motivational resources that are valuable for effective functioning and well-being (Ryan and Deci, 2017). Autonomy support is less likely to relate strongly to poor functioning and ill-being because low autonomy support does not adequately tap the active nature and intensity of being controlled. For instance, a supervisor who does not actively encourage employees to voice opinions (i.e. low autonomy) may not have the same effect as a supervisor who actively disregards employees’ suggestions (i.e. high control). Therefore, the negative experiential state of being controlled is far more likely to lead to poor functioning and diminished well-being. For example, Bartholomew et al. (2011) found that, among athletes, a coach’s autonomy support through need satisfaction was the dominant predictor of high functioning and well-being, as expressed in vitality and positive affect. On the other hand, a coach’s controlling behavior through need thwarting tended to better predict poor functioning and ill-being, as indicated by measures of depression, eating disorders, negative affect, and burnout.

**Perceived legitimacy**

To explain why the autonomy-supportive motivating style usually yields better outcomes than the controlling motivating style, we propose that the autonomy-supportive motivating style is more likely to foster a supervisor’s perceived legitimacy and consequently enhances compliance and performance. Legitimacy is defined as a characteristic of an authority or an institution which makes people accept and believe that the authority deserves to be obeyed (Tyler, 2006). The RMA views legitimacy as an identity-based process in which the authority’s power is internalized (Tyler, 1997), so that people take upon themselves the
obligation to obey and voluntarily comply with its directives (French and Raven, 1959; Tyler and Lind, 1992). In this sense, legitimacy is more than just the instrumental power wielded by authority figures over others (i.e. deterrence). Rather, it is an additional form of power that enables an authority figure, such as a supervisor, to shape other peoples’ behavior by the right of that figure to be deferred to Ford and Johnson (1998).

This view of legitimacy is different from SDT’s notion of autonomous motivation. Whereas autonomous motivation emphasizes internalization of the task or activity (i.e. the excitement and desire to act as opposed to being forced to act), the key feature of legitimacy is the identification and internalization of the authority’s power, and a person’s belief that others have the right to direct his or her behavior. For instance, when employees believe that the supervisor is legitimate, they are more likely to voluntarily comply with the supervisor’s directives because it is within the latter’s rights, not necessarily because they are eager to act or are afraid of the consequences if they do not (Tyler and Blader, 2005). Thus, legitimacy captures a unique motivational force that is not covered by autonomous or controlled motivation.

Motivating styles and legitimacy
According the relational approach, legitimacy is an identity-based phenomenon that is socially constructed through both implicit and explicit interactions between subordinates and supervisors (Tyler, 1997; Tyler and Lind, 1992). The RMA argues that relational features such as the supervisor’s trustworthiness (i.e. the authority is perceived to acknowledge and care for the individual’s interests and needs), interpersonal respect (i.e. the authority treats people with respect and dignity), and neutrality (i.e. the authority is perceived to be fair and objective) are important determinants of legitimacy because they communicate the extent to which the subordinate is valued in the eyes of the authority (Tyler, 1997). Following the presuppositions of social identity theory (Tajfel and Turner, 1986), individuals classify themselves and others into different social categories and link their sense of self-worth to the characteristics of the group and their standing within the group (Tyler, 1997; Tyler and Blader, 2003). Because individuals desire to maintain or enhance their self-worth, they are more likely to identify with groups that inform them of their high status (Fuller et al., 2006). In this process of identification, employees internalize the organizational power structure and norms and thus come to accept the authority as legitimate. Hence, the relational treatment that employees receive carries with it important information about the employee’s value; and feeling of being of value is linked to deference. Support for the RMA approach stems mostly from research on organizational justice (Tyler, 2000) which shows that procedural justice communicates relational information and is therefore an antecedent of legitimacy (for a review, see Tyler, 2006).

Here, we suggest that the autonomy-supportive motivating style has the potential to communicate important relational information such as trustworthiness, respect, and neutrality and thus to shape perceived legitimacy. Supervisors with an autonomy-supportive motivating style try to provide options and choice, and give a meaningful rationale in those cases where choice is constrained. Autonomy-supporting supervisors also try to take their subordinates’ perspectives into account, for instance by soliciting the latter’s opinion about their performance or by asking how their instructions were received. In an intervention study, Deci et al. showed that when supervisors understood and acknowledged the needs, feeling, and attitudes of their subordinates, management was perceived as more trustworthy. Moreover, encouraging voice (i.e. allowing an opportunity to voice opinions) is an important feature of autonomy support which is also known to be a determinant of perceived authority fairness (Folger et al., 1979; Lind et al., 1990). Subordinates are often well aware that painful decisions are necessary for the sake of organizational interests. As such, opportunities to voice are interpreted as indications that procedures implemented by decision makers are fair (Leventhal, 1980). Indeed, van Prooijen (2009) found that supporting autonomy by providing
choice and voice predicted people’s perceived respect and fairness-based responses to decision-making procedures. Hence, autonomy support has the potential to communicate relational information and as such it is expected to affect legitimacy. This link has yet to be thoroughly examined in the workplace context; however, Graça et al. (2013) found in a sample of high school students that the perception of teachers’ autonomy support was positively related to student ratings of teacher legitimacy. Hence, we hypothesize that:

H1. A supervisor’s autonomy-supportive motivating style will be positively linked to perceived legitimacy.

Conversely, demands communicated in a controlling and imposing way while ignoring employee opinions, restricting choice, and denying voice are likely to signal that employees are not highly valued (van Prooijen, 2009) and may thus undermine perceived authority legitimacy. This suggests the following:

H2. A supervisor’s controlling motivating style will be negatively linked to perceived legitimacy.

Legitimacy and employee work-related outcomes

This study assessed both desirable and maladaptive employee work-related outcomes to provide a better understanding of the experiences of employees in the workplace. Specifically, we examined three variables that capture high employee performance: job satisfaction, engagement, and commitment. We also measured employee burnout and depression as indicators of maladaptive functioning.

Job satisfaction refers to an employee’s overall sense of well-being at work. It is an attitude based on assessing job and job-related experiences with some degree of favor or disfavor (Locke, 1976). Perceived supervisor legitimacy involves identification with power roles and internalization of the authority’s right to be deferred to (Tyler, 2006). A significant body of research has shown that perceiving behavior as flowing from internal values about what one ought to do can shape people’s satisfaction (Tyler, 1997; Tyler and Huo, 2002). Moreover, organizational identification is found to predict job satisfaction because an employee who endorses an organization’s image is likely to focus on the positive rather than negative elements of the job (Ng, 2015). In line with this view, Kim (2000) found that employees’ perceived legitimacy predicted job satisfaction. Therefore, we hypothesize that:

H3a. Perceived supervisor legitimacy will be positively linked to job satisfaction.

Affective organizational commitment refers to emotional attachment and involvement in the organization (Allen and Meyer, 1990). When employees accept their supervisors’ and the organization’s authority as legitimate through processes of identification, they may be more apt to be committed to the workplace and develop an emotional attachment to it (Halaby, 1986). This view is supported by research on organizational identification (Ashforth and Mael, 1989) which indicates that, when employees identify with their organization, they act in ways that support the organization, such as being committed to it (Bergami and Bagozzi, 2000; Marique and Stinglhamber, 2011). Indeed, Kim (2000) as well as Yoon and Thye (2011) showed that perceived legitimacy is a major determinant of employees’ affective commitment. Thus, we hypothesize:

H3b. Perceived supervisor legitimacy will be positively linked to affective commitment.

Engagement is a positive work-related state of mind characterized by vigor, dedication, and absorption (Schaufeli et al., 2002) and is recognized as one of the key indices of positive organizational behavior (Bakker and Schaufeli, 2008). Engagement, unlike mere compliance,
is more than just a reactive response, since it involves self-initiated proactive behaviors. Hence, engagement is about going beyond the formal job description to engage in extra-role behavior (Bakker and Demerouti, 2008).

Recent literature on work organizations has indicated that when employees identify with their organization and its supervisors, they take on the values of the group, develop favorable attitudes and feelings toward their work, and engage in voluntary actions motivated by the desire to help their group be viable and effective (Blader and Tyler, 2009; Tyler and Blader, 2000). Legitimacy, which involves identification with the group, may thus increase engagement. To the extent that this reasoning is valid, we hypothesize that:

\[ H3c. \text{ Perceived supervisor legitimacy will be positively linked to engagement.} \]

Burnout is considered a prominent indicator of poor employee functioning (Maslach et al., 2001). Although there are different definitions of burnout (Maslach et al., 2001; Malach-Pines, 2005; Schaufeli and Enzmann, 1998), exhaustion is perhaps the central, dominant, and most significant component (e.g. Evans and Fischer, 1993; Richardsen and Burke, 1993; Wright and Bonett, 1997). Semmer et al. (2015) suggested that perceived lack of legitimacy is a unique source of stress and hence burnout. Based on the Stress-as-Offense-to-Self theory (Semmer et al., 2007), perceived illegitimacy can be regarded as a special case that poses a threat to a person’s professional identity and social standing, and thus to the self. These threats to the self, if experienced frequently, may create more enduring symptoms of strain, such as burnout (Sonnen-tag and Frese, 2013). Semmer et al. (2015) showed that perceived illegitimate tasks in the workplace predicted burnout. Although Semmer et al. (2015) did not directly examine the illegitimacy of the supervisors, research has indicated the employees tend to view their supervisors as representatives of the organization (e.g. Shanock and Eisenberger, 2006). Hence, we hypothesize that:

\[ H3d. \text{ Perceived supervisor legitimacy will be negatively linked to burnout.} \]

Depression, more than any other state of health, has the largest effect on individual work performance (Kessler et al., 2008). Long-lasting strenuous psychosocial working conditions are considered to be a risk factor for depression (Bonde, 2008). Low legitimacy involving a threat to professional identity can induce this type of strain (Sonnen-tag and Frese, 2013), which may evolve into depression. Although previous research has not directly examined the association between perceived supervisor legitimacy and depression, this hypothesis can be inferred from research on workplace justice, which is a well-established antecedent of legitimacy (e.g. Tyler, 2000). Prospective studies by both Ybema and van den Bos (2010) and Grynderup et al. (2013) have documented that organizational injustice predicts depression. To the extent that supervisors are perceived as representatives of the organization, we hypothesize that:

\[ H3e. \text{ Perceived supervisor legitimacy will be negatively linked to depression.} \]

**The mediational model**

Previous research on perceived autonomy-support and controlling motivating styles has demonstrated their effects on focal employee work-related outcomes. Perceived autonomy support has been associated with greater job satisfaction (Deci et al., 2001), greater affective commitment (Chang et al., 2015), higher engagement (Deci et al., 2001), lower burnout (Fernet et al., 2013; Sullivan et al., 2014), and lower depression (Deci et al., 2017). Conversely, the controlling supervisory style, which received less empirical attention in SDT, was associated with more depression and burnout (Bartholomew et al., 2011; Eyal and Roth, 2011) and less engagement (Trépanier et al., 2013).
In accordance with the posited links between perceived supervisor motivating styles and legitimacy (H1 and H2), together with the body of research on the organizational outcomes of perceived legitimacy (H3a-H3e), we suggest that a supervisor’s perceived legitimacy may mediate the association between supervisor motivating styles and subordinates’ work-related outcomes. Although not previously examined in the workplace, this notion is supported indirectly by findings reported in Mouratidis et al. (2010), where sport coaches’ autonomy-supporting as opposed to controlling communication style was linked to the coaches’ high level of legitimacy, which in turn was associated with more autonomous motivation, higher well-being, higher future intentions to persist, and lower ill-being. This suggests the following:

H4. Perceived legitimacy will mediate the relationship between a supervisor’s autonomy-supportive motivating style and the outcome variables of (a) job satisfaction, (b) commitment, (c) engagement, (d) burnout, and (e) depression.

H5. Perceived supervisor legitimacy will mediate the relationship between a supervisor’s controlling motivating style and the outcome variables of (a) job satisfaction, (b) commitment, (c) engagement, (d) burnout, and (e) depression.

The moderation model – the buffering hypothesis
Alternatively, rather than viewing legitimacy as a mediator of a supervisor’s motivating style, the two can also be thought of as joint inputs. From this perspective, perceived legitimacy may moderate the effects of a supervisor’s motivating style, and in particular, a controlling style. The theoretical foundation for this hypothesis is rooted in the works of Walker and Zelditch (1993) and Tyler (1999) on legitimacy as a collective process and the phenomenon of non-decisions (i.e. failure to take action to address unjust reward allocation). Walker and Zelditch (1993) argued that when the legitimacy of an authority is strong, people will tend to comply even if they privately believe that the rules or norms are less appropriate. Compliance, in their view, is a way for subordinates to avoid formal sanctions from supervisors and informal sanctions from peers. Hegtvedt and Johnson (2000) extended this reasoning and argued that legitimating forces are not merely limited to the suppression of rule-breaking behaviors, but rather also shape the perception of the severity of mistreatment. Hence, legitimacy can be seen as buffering the negative consequences of authority mistreatment.

Tyler and Blader (2003, 2005) attributed this to a processes of identification. They argued that legitimacy is a process of group identification where people comply with the rules first and foremost because they identify with group norms. As a result, legitimacy encourages a favorable perception of decisions by the authority (Mueller and Landsman, 2004; Tyler and Huo, 2002), and thus buffers the negative consequences of authority mistreatment. Despite these different views of legitimacy, both approaches make similar predictions regarding the buffering role of legitimacy.

Research on organizational justice tends to support the buffering hypothesis (Tyler, 2006). Hegtvedt et al. (2003) found that people are less likely to react cognitively and behaviorally to the disruption of distributitional justice if they perceive the authority of the allocator to be legitimate. In other words, when experiencing unfair allocation outcomes from a legitimate authority, people are less likely to interpret the allocation procedures as being unfair. Similarly, Johnson et al. (2000) applied the buffering hypothesis to the supervisor-subordinate conflict. They found that legitimacy, in addition to the impropriety of a supervisor’s act, influenced both the anticipated emotional response and the likelihood of the expression of negative emotions. Specifically, they found that when a supervisor is highly legitimate, subordinates report feeling less resentful even in response to adverse decisions.
We thus posit that if employees view their supervisor as more legitimate, and as entitled to exercise power and some coercion (within reason), they should be less likely to react negatively to their supervisor’s controlling motivating style. We hypothesize that:

\[ H6. \] Perceived supervisor legitimacy will moderate the relationship between a supervisor’s controlling motivating style and the outcome variables of (a) job satisfaction, (b) commitment, (c) engagement, (d) burnout, and (e) depression.

We reasoned that legitimacy captures a unique facet of acceptance that is not covered by SDT’s notion of autonomous motivation. Thus, to better differentiate the unique role of legitimacy from autonomous motivation, we accounted for employees’ autonomous motivation covariances when assessing the association between perceived legitimacy and the outcomes. Furthermore, we did not include specific hypotheses regarding autonomous motivation, as this was not the variable of interest in the current investigation.

**Method**

**Participants and procedure**

A convenience sample of 252 workers from various Israeli companies volunteered to participate in the present study. Ads asking for participants were posted on social networks (e.g. Facebook, WhatsApp, and Twitter). Participants who responded were sent a link to a Qualtrics online survey. To reduce the presence of response distortion (Chan, 2009), participants were informed that their responses would be treated confidentially.

The participants worked in a wide variety of industries (electronics and computers, education, manufacturing, hospitals, financial services, pharmacy, food and beverage, security, and communications) and occupational categories (administrators, technicians, salespersons, manual workers, clerical workers, management, nurses, call-center representatives, waiters, and teachers). The average age of the participants was 51.5 years (range = 25 to 72, SD = 9.14). Of the participants, 66 percent were women, 78 percent were married, and 47 percent had a college degree or higher. The average organizational tenure was 12.7 years (range = 1 to 30, SD = 6.12).

**Measurements**

For all the measurements in the present study, the participants were asked to evaluate the extent to which they agreed with each item on a 1 (I do not agree at all) to 5 (I strongly agree) Likert-type scale.

**Supervisor motivating styles.** Participants’ perceptions of their supervisors’ motivating styles were measured on the 21-item Perceived Autonomy Support Scale for employees (Moreau and Mageau, 2012). The autonomy-supportive style was measured using nine items that examine provision of choices, provision of a rationale for rules, and inquiries about acknowledgment of consideration (e.g. “Within certain limits, my supervisors give me the freedom to choose how and when I will execute my tasks”). The controlling style was measured using 12 items having to do with receiving orders, inducing guilt, using threats, and manipulating others by offering rewards (e.g. “My supervisors try to motivate me by making me feel guilty for not doing enough”). Scores on all autonomy-supportive subscales were averaged, as well as scores on all the controlling subscales. The internal reliability (Cronbach’s \( \alpha \)) was \( \alpha = 0.87 \) for the autonomy-supportive style and \( \alpha = 0.87 \) for the controlling style.

**Legitimacy.** Supervisor legitimacy was measured using a four-item subscale taken from the Legitimacy of Leaders Scale (Tyler and De Cremer, 2005). This subscale assesses supervisor legitimacy (e.g. “It is wrong to ignore a supervisor’s decisions, even if you can get away with it”). The internal reliability (Cronbach’s \( \alpha \)) was \( \alpha = 0.81 \).
Job satisfaction. Satisfaction at work was measured using three items from the emotional contagion subscale on the Focal Measures questionnaire (e.g. “All in all, I am satisfied with my present job”; Netemeyer et al., 2010). Cronbach’s α coefficient was 0.78.

Work engagement. Work engagement was measured using the short version of the Utrecht Work Engagement questionnaire (Schaufeli and Bakker, 2003). The questionnaire is comprised of nine items that reflect vigor (e.g. “At my work, I feel that I am bursting with energy”), dedication (e.g. “I find the work that I do full of meaning and purpose”), and absorption (e.g. “Time flies when I’m working”). Cronbach’s α reliability was 0.84.

Affective commitment. This was measured using the six-item affective commitment subscale from the Occupational Commitment scale (e.g. “I would be very happy to spend the rest of my career with this organization”; Meyer et al., 1993). Cronbach’s α reliability was 0.84.

Burnout. Burnout was measured using the ten-item abbreviated version of the burnout measure developed by Malach-Pines (2005). The scale assesses the physical (e.g. “Tired”), emotional (e.g. “Depressed”), and mental exhaustion (e.g. “I’ve had it”) aspects of burnout. Cronbach’s α coefficient was 0.88.

Depression at work. Depression at work was measured using the seven-item depression subscale from the Depression Anxiety Stress Scales (e.g. “I felt that I had nothing to look forward to”; Lovibond and Lovibond, 1995). The internal reliability coefficient here was 0.90.

Employee’s autonomous motivation. Autonomous motivation at work was measured using the Motivation at Work Scale (Gagné et al., 2010). Participants were given 12 reasons for why they are doing their job. These reasons reflect the four SDT-based types of motivation, ranging from the most to the least autonomous: intrinsic motivation (e.g. “For the moments of pleasure that this job brings me”), identified regulation (e.g. “Because this job fulfils my career plans”), introjected regulation (e.g. “Because my work is my life and I don’t want to fail”), and external regulation (e.g. “Because this job affords me a certain standard of living”). Cronbach’s coefficient was 0.86 for intrinsic motivation, 0.75 for identified regulation, 0.66 for introjected regulation, and 0.66 for external regulation. Furthermore, and consistent with Gagné et al. (2010) and Roth et al. (2006), an overall index of relative autonomous motivation was computed by weighting the subscales according to where they fell on the relative autonomy continuum (intrinsic weighted +2, identified weighted +1, introjected weighted −1, and external weighted −2), with higher scores indicating higher levels of autonomous motivation.

Analytical strategy
To test the hypotheses concerning the mediational and moderating roles of legitimacy, we used the PROCESS macro in IBM SPSS (Hayes, 2012), which calculates regression analyses. For the mediational hypothesis, this macro assesses the magnitude of the indirect effect of the predictor on the outcome through the mediator. To test for the significance of the indirect effects, we followed Hayes’ (2013) recommendation and calculated 5,000 bootstrapped samples to estimate the 95 percent bias-corrected and accelerated confidence intervals (CI) of the indirect effects.

For the moderation hypothesis, we included an interaction term (controlling style × legitimacy) in addition to the main effects of controlling style and legitimacy as predictors of the outcome variables in the regression analyses. In cases where this moderation hypothesis was supported, we again utilized the PROCESS macro to probe the interaction into conditional effects at three different values of legitimacy (i.e. −1 SD, mean, 1 SD).

As suggested by Hayes (2013), all the predictors were mean-centered prior to the analyses to facilitate the interpretation of the main effects. Because of the covariance between autonomous motivation with legitimacy and the outcome variables, we statistically accounted for autonomous motivation in all the analyses. The mediation and moderation
models were tested simultaneously; thus, when estimating the statistical effects of the mediation hypothesis, we controlled for the variance accounted for by the moderation hypothesis and vice-versa.

Results
The results are presented in five sections. The first reports the power analysis. The second presents a preliminary examination of the correlations between the variables. The third section examines the mediation hypothesis. The fourth section examines the moderation hypothesis. The fifth and last section presents additional findings.

Measurement and power analysis
Prior to analysis, we examined the measurement model with items as indicators. In line with Hu and Bentler (1999), we used the SRMR $\leq 0.09$ cutoff as criterion of goodness-of-fit because it minimizes Type I and Type II error rates for complex models. The results indicated an acceptable fit ($\chi^2 = 5247.14, df = 1,682, p < 0.001, \text{SRMR} = 0.09$).

To determine the power for the mediational hypothesis, we used the PowMedR in R (Kenny, 2013). The power analysis indicated that a sample of $n = 105$ would have sufficient power (80 percent) to detect a medium effect size of 0.30 (in a correlation metric) for each model path at $\alpha = 0.05$. To assess the power for the moderation effect, we used the G*Power software package (Faul et al., 2009). Because moderation effects tend to have a small effect size (Aguinis et al., 2005), a sample of $n = 158$ was needed to achieve sufficient power (80 percent) to detect a small effect size of $f^2 = 0.02$ at $\alpha = 0.05$. In the current investigation the sample size was $n = 252$; hence, the research design had more than sufficient power.

Preliminary analysis
Table I presents the correlations between the research variables. Examination of the correlations provided initial support for the mediational hypotheses. Specifically, autonomy support was found to be positively linked to legitimacy, whereas a supervisor’s controlling motivating style was found to be negatively related to legitimacy. In addition, legitimacy was found to have significant positive associations with job satisfaction, engagement, and commitment, and significant negative correlations with burnout and depression.

The results also provide initial support for the idea that legitimacy is a separate and distinct construct from autonomous motivation ($r = 0.18, p < 0.01$). Relative autonomous motivation was positively correlated with autonomy support; however, no such association was found for controlling supervisor behavior. Autonomous motivation had significant

<table>
<thead>
<tr>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Autonomy support</td>
<td>3.46</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Controlling</td>
<td>2.61</td>
<td>0.66</td>
<td>-0.53*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Legitimacy</td>
<td>3.58</td>
<td>0.73</td>
<td>0.53*</td>
<td>-0.32*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Job satisfaction</td>
<td>3.51</td>
<td>0.93</td>
<td>0.64*</td>
<td>-0.43*</td>
<td>0.47*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Engagement</td>
<td>3.56</td>
<td>0.72</td>
<td>0.62*</td>
<td>-0.36*</td>
<td>0.45*</td>
<td>0.66*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Commitment</td>
<td>3.53</td>
<td>0.82</td>
<td>0.50*</td>
<td>-0.37*</td>
<td>0.42*</td>
<td>0.59*</td>
<td>0.71*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Burnout</td>
<td>2.54</td>
<td>0.74</td>
<td>-0.42*</td>
<td>0.42*</td>
<td>-0.51*</td>
<td>-0.51*</td>
<td>-0.55*</td>
<td>0.53*</td>
<td></td>
</tr>
<tr>
<td>8. Depression</td>
<td>1.89</td>
<td>0.76</td>
<td>-0.34*</td>
<td>0.39*</td>
<td>-0.33*</td>
<td>-0.46*</td>
<td>-0.54*</td>
<td>-0.57*</td>
<td>0.61*</td>
</tr>
<tr>
<td>9. Autonomous motivation</td>
<td>0.29</td>
<td>2.64</td>
<td>0.18*</td>
<td>-0.10</td>
<td>0.18*</td>
<td>0.22*</td>
<td>0.43*</td>
<td>0.45*</td>
<td>-0.36*</td>
</tr>
</tbody>
</table>

Notes: $n = 252$. *$p < 0.01$
positive associations with job satisfaction, engagement, and commitment, and negative correlations with burnout and depression. These correlations justified the need to control for autonomous motivation when estimating the role of legitimacy.

The mediation model (H1-H5)

To examine the mediational model we conducted a mediational analysis using two sets of regressions (Hayes, 2013). In order to examine the unique mediation effect of legitimacy, we controlled for autonomous motivation and the effects of the moderation hypothesis in the analysis.

The first regression, presented in the left panel of Table II, reports the association between supervisor motivating styles and legitimacy. The results indicated that supervisor autonomy support was positively linked to legitimacy, which is in line with H1. No such link was found between supervisor controlling style and legitimacy. Thus, H2 was not supported.

The second regression, presented in the right panel of Table II, examined the association between legitimacy and the dependent variables while controlling for supervisor motivating styles. Specifically, the findings indicated significant positive associations between legitimacy and job satisfaction, engagement, and commitment. Significant negative associations were found between legitimacy and both burnout and depression. These finding lend support to H3a-H3e.

As presented in the bottom part of Table II, the use of a bootstrapping approach (Hayes, 2013) to test for mediation, indicated that the 95 percent CI for the indirect effect of supervisor autonomy support through legitimacy did not include zero for any of the subordinates' outcomes. These results lend weight to mediational H4a-4e. However, the 95 percent CIs for the indirect effects of controlling motivating style did include zero. Therefore, H5a through H5e were not supported.

The moderation model (H6)

In addition to the mediating role of legitimacy, we also simultaneously tested whether legitimacy moderated the association between the supervisor controlling motivating style and the outcomes of interest. Therefore, in the regression equation, we included an interaction component (controlling × legitimacy) in addition to all the predictors that were included in the mediational model (i.e. autonomy support, controlling, legitimacy, and autonomous motivation). As presented in the right panel of Table II, the results showed that

<table>
<thead>
<tr>
<th>Mediator as outcome</th>
<th>Job satisfaction</th>
<th>Engagement</th>
<th>Commitment</th>
<th>Burnout</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legitimacy</td>
<td>0.48**</td>
<td>0.46**</td>
<td>0.28**</td>
<td>−0.05</td>
<td>−0.05</td>
</tr>
<tr>
<td>Autonomy support</td>
<td>−0.05</td>
<td>−0.05</td>
<td>−0.14*</td>
<td>0.26**</td>
<td>0.29**</td>
</tr>
<tr>
<td>Legitimacy</td>
<td>0.15**</td>
<td>0.12*</td>
<td>0.16**</td>
<td>−0.34**</td>
<td>−0.14*</td>
</tr>
<tr>
<td>Autonomous</td>
<td>0.09</td>
<td>0.31**</td>
<td>0.36**</td>
<td>−0.25**</td>
<td>−0.29**</td>
</tr>
<tr>
<td>Controlling ×</td>
<td>0.06</td>
<td>0.08</td>
<td>−0.01</td>
<td>−0.11*</td>
<td>−0.11*</td>
</tr>
<tr>
<td>Legitimacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect effects: B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[95%CI]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy support</td>
<td>0.08 (0.04, 0.16)</td>
<td>0.07 (0.01, 0.13)</td>
<td>0.08 (0.01, 0.16)</td>
<td>−0.18 (−0.26, −0.12)</td>
<td>−0.07 (−0.14, −0.01)</td>
</tr>
<tr>
<td>Controlling</td>
<td>−0.01 (−0.03, 0.01)</td>
<td>−0.01 (−0.03, 0.01)</td>
<td>−0.01 (−0.03, 0.01)</td>
<td>0.02 (0.01, 0.02)</td>
<td>0.01 (0.01, 0.03)</td>
</tr>
</tbody>
</table>

Notes: n = 252. B = standardized point estimate of mediation coefficient (ab). *p < 0.05; **p < 0.01
legitimacy significantly moderated the link between supervisor controlling style and burnout and depression. Hence, $H6d$ and $H6e$ were supported while $H6a$, $H6b$, and $H6c$ were not supported.

Probing the conditional effects of the significant interactions showed that they were consistent with a moderating (buffering) explanation. The conditional effects are presented in Figure 1. Specifically, as presented on the left side of Figure 1, the highest positive association between supervisor controlling style and burnout was detected when legitimacy was low ($\beta = 0.36, p < 0.01$). However, a less pronounced association was found for a medium level of legitimacy ($\beta = 0.26, p < 0.01$), and this association declined further for those with high perceived legitimacy ($\beta = 0.16, p < 0.05$).

A similar pattern of conditional effects was found for depression. As presented on the right side of Figure 1, the positive association between the supervisor controlling style and burnout was at its peak when legitimacy was low ($\beta = 0.39, p < 0.01$). This association decreased at a medium level of legitimacy ($\beta = 0.29, p < 0.01$), and was lowest for those with high perceived legitimacy ($\beta = 0.18, p < 0.05$). These results strengthen the moderation hypothesis.

**Additional findings**

Finally, taking an exploratory approach, we examined the extent to which legitimacy moderated the association between supervisor autonomy support and the outcomes of interest. This additional interaction term was not found to be significant for any of the outcome variables. We also examined the hypotheses while controlling for gender and tenure. In spite of slight changes in the magnitude of the associations, their interpretation and statistical significance remained as reported.

**Discussion**

This work aimed to integrate SDT (Deci and Ryan, 2000)-based motivating styles (i.e. autonomy support and control) as interpersonal relationship strategies used by supervisors in their work, with the RMA (Tyler, 1997; Tyler and Lind, 1992) and its view of legitimacy to explain employee work-related outcomes. Our theoretical model suggested that the supervisors’ motivating style and their perceived legitimacy could be integrated in two ways, as expressed by the mediation and moderation models.

Overall, the hypotheses regarding the meditational model were partially supported. The results supported $H1a$ and suggested that the perceived supervisor autonomy-supportive
motivating style was positively associated with perceived legitimacy. There was no such support for $H1b$ regarding the association between the supervisor controlling style and legitimacy. Legitimacy, however, was positively associated with employees' positive work outcomes and negatively associated with employees' undesired outcomes. These findings support $H2a-H2e$. The mediation tests provided support for $H3a$ since legitimacy was found to mediate the effect of supervisor autonomy support on all the outcomes of interest. Yet, legitimacy did not mediate the effect of the controlling style, and this did not support $H3b$.

These findings are in line with the relational approach to legitimacy which stresses that employees' perception of legitimacy is influenced by how they are treated by authorities (Tyler, 1997; Tyler and Lind, 1992). Building on SDT, we suggest that a focus on an interpersonal relationship strategy that takes employees' interests into account, presents alternatives, and minimizes the use of coercive strategies is a way for supervisors to promote voluntary consent among employees to execute the decisions and proposals they make. In other words, by motivating their employees in an autonomy-supportive manner when interacting with them, supervisors may accrue legitimate power as perceived by subordinates. This deference to supervisors' directives is then manifested in the subordinates' well-being and functioning.

Surprisingly, however, we did not find a significant link between the controlling motivating style and legitimacy. Similar to the current findings, in a large sample, Tyler and Blader (2005) found that using a command-and-control approach (i.e. a controlled approach) to regulate employees was not linked to deference to organizational policy based on supervisors' ratings. A possible explanation for the lack of impact of controlled orientation on legitimacy is that, in work organizations, employees acknowledge that the organization and its authority figures have the right, to some extent, to intervene and regulate employee behavior and attitudes. For instance, the use of incentives and sanctions and the extensive use of monitoring (e.g. cameras, phone call recorders, time clocks, drug tests, performance tracking devices, etc.) are common examples of control within organizations. However, when prior legitimacy is high, subordinates are willing to tolerate certain levels of control or improper acts (Tyler, 2006). Furthermore, they are even more likely to downplay their perceptions of the impropriety of these acts (Hegtvedt and Johnson, 2000). Hence, subordinates may come to perceive some control as legitimate and even essential to guarantee the organization's effective functioning.

With regard to the moderation model, partial support was found for $H4$. The controlling motivating style and legitimacy were jointly associated with the employees' maladaptive outcomes of burnout and depression, but not with their desirable outcomes. Specifically, a controlling motivating style had a less pronounced impact on burnout and depression in employees who regarded their supervisor as more legitimate.

These findings suggest that in the context of subordinate-supervisor social relationships, legitimacy has the additional power to buffer the consequences of the controlling style. This finding is consistent with works that have studied the buffering function of legitimacy for inappropriate or unjust acts (Johnson et al., 2000). Hegtvedt et al. (2003) suggested that if authority figures are perceived as legitimate, their followers are more likely to attribute their improper acts to external contingencies than to internal factors, and thus are less likely to react in a negative manner.

Theoretical implications

The findings of this study have several theoretical implications. First, this work expands research on RMA by pointing to supervisors' motivational styles as an additional source that can elicit legitimacy. The integration of SDT-based motivating styles with the RMA view of legitimacy engenders a compelling model that can help explain employee attitudes.
and well-being, well beyond the potential explanation that each theory offers separately. The inclusion of legitimacy as a mechanism through which motivating styles impact employee outcomes extends the SDT by shedding light on an additional mechanism that transfers the effect of autonomy support. Traditionally, the impact of autonomy support was explained by its indirect effect through autonomous motivation. The present findings suggest that legitimacy can be considered an additional and unique path by which autonomy support impacts employee outcomes.

Second, although autonomous motivation and legitimacy can both be considered forms of internalization, the present findings suggest that these two sources of internalization are distinguishable and have specific impacts on employee outcomes. Acknowledging these forms of internalization can pave the way for new interesting research questions. For instance, it would be worth exploring the extent to which these forms of internalization can shape one another; in other words, to what extent a task that was assigned by a legitimate supervisor would not only be more deferred to, but also be experienced as more interesting than if it were assigned by a less legitimate source.

Practical implications
The present findings have a number of practical managerial implications. They suggest that legitimacy is not only an important factor that promotes desirable employee outcomes, but also has the power to buffer the negative impact of a supervisor’s controlling orientation. In work settings, supervisors have to use some level of control in the form of incentives and sanctions, deadlines, evaluations, and even controlling language and tone to achieve organizational goals. However, if supervisors also employ autonomy-supportive strategies, they can acquire more legitimacy which then buffers the undesirable impact of controlling strategies. Thus, legitimacy may act as a “reservoir of support” (Tyler, 2006) for authority figures, which is of particular interest in periods when there is an increase in controlling practices.

Second, our findings suggest that the supervisor autonomy-supportive motivating style, as opposed to a controlling style, may play an important role in promoting employee well-being and functioning which, unlike personality or demographic characteristics, are more amenable to intervention. Autonomy support is not a mechanical technique; rather, it is more of an interpersonal style. Hardré and Reeve (2009) showed that supervisors can be taught how to refine their interpersonal skills and actualize an autonomy-supportive style. From an applied perspective, this kind of training may be of special value to those charged with training managers.

Limitations and future directions
Several limitations should be taken into account when making generalizations based on the present study. First, we used a cross-sectional survey to assess whether supervisors’ motivating styles were related to employee well-being and functioning, and whether this link was mediated and moderated by perceived legitimacy. This type of research design is limited in terms of causality. Moreover, mediational models are more sensitive to bias in cross-sectional designs (Maxwell and Cole, 2007). Future use of longitudinal research can assist in strengthening these causal inferences.

Second, data were based on self-reports collected from a single source; hence, common method variance may limit their value. However, common method variance may not be a significant problem in organizational research (Crampton and Wagner, 1994), and has little impact on moderation effects (Evans, 1985), which were of primary interest in the present study. Future research could benefit from the use of multiple sources of ratings, such as supervisors and subordinates, and the use of multiple methods such as objective measurements of functioning.
Third, the moderation effects were relatively small in terms of effect size. However, several authors (e.g. Evans, 1985) have argued that even small effect sizes should be considered important because authorities often supervise a number of employees. Hence, the supervisors’ motivating styles may impact all of their subordinates. Thus, although the effect size was small, it was widespread.

Fourth, job satisfaction was measured using the overall satisfaction subscale of a larger instrument. Although its face validity is clear, the construct and predictive validities are more uncertain. Fifth, the rating of perceived autonomy support overlaps conceptually and empirically with variables such as participating in decision making (Black and Gregersen, 1997; Hunton et al., 1998) and transformational leadership (Eyal and Roth, 2011). Moreover, social exchange theory (Kelley and Thibaut, 1978), which views people as motivated in their relationships by self-interest, may also provide an alternative explanation of the findings so that the employees empower the supervisor in an effort to develop and preserve long-term beneficial group interactions (Tyler and Lind, 1992). Future research may examine an integrative model that can illuminate the overlaps and unique contributions of these theoretical perspectives to the emergence and maintenance of perceived authority legitimacy.

Finally, future studies should explore how supervisor motivating styles shape subordinates’ perceptions of legitimacy throughout tenure. Research suggests that supervisor-subordinate relationships are important channels through which legitimacy develops in newcomers (Jablin, 2001). Yet with time, legitimacy becomes increasingly independent of the favorability of authority (Tyler, 2000). Portraying the interplay between SDT-based motivating styles and legitimacy over the course of tenure may shed light on how these two constructs interact to explain employee functioning, and may be valuable for understanding socialization processes.

References


**Corresponding author**

Yaniv Kanat-Maymon can be contacted at: ymaymon@gmail.com

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldlite.com/licensing/reprints.htm](http://www.emeraldlite.com/licensing/reprints.htm)

Or contact us for further details: permissions@emeraldinsight.com