Grounded in self-determination theory, the present study aimed to investigate whether daily changes in employee motivation depend on whether employees receive appreciation from various sources at work, using a 7-day diary design. Beyond general knowledge about the effects of appreciation as an important source of motivation, there is still a lack of knowledge about the intrapersonal effect of appreciation on different types of regulation/motivation in terms of self-determination theory over time.

The sample consisted of 104 employees in full-time employment. More than half were women (72%) and the mean age was 43.25 years ($SD = 10.53$). They completed trait-level measures and then daily records, in which they reported their motivation and whether they received appreciation. Sources of appreciation were leaders, followers, and clients.

Multilevel random coefficient modeling showed that employees reported higher levels of motivation on days when they received appreciation from different sources, independent of gender, trait-level motivation, and the Big Five. Furthermore, introjected regulation moderated the positive association between daily motivation and daily appreciation by the client, and appreciation did not have a lagged effect for subsequent days.

The current study has both practical and theoretical implications. The results show that employee motivation can be supported through simple but effective steps through appreciation regardless of the source, although appreciation may be more important for employees with introjected regulation than for others.

employee motivation; multilevel modeling; appreciation; self-determination theory; daily diary design
BACKGROUND

The topic of motivation, which addresses the conditions that influence changes in the intensity, stability, quality, and direction of ongoing behavior, continues to hold a central position in the interest among researchers and practitioners in industrial and organizational psychology (Landy & Conte, 2016; Schmidt et al., 2012). Keeping employees motivated is an essential step for positive work outcomes, such as low absenteeism and high productivity (Hansen et al., 2002), higher levels of satisfaction and happiness (Gillet et al., 2013), or participation in vocational training (Godlewska-Werner et al., 2014). However, after 100 years of development (Diefendorff & Chandler, 2011), and with the potential of the self-determination theory to explain motivation at work (Gagné & Deci, 2005), the motivation field faces the challenge of proving existing conclusions in a more natural and methodologically correct within-person research design (Kanfer et al., 2017), which makes it possible to reflect dynamic changes over time. As an example, among the frequently mentioned existing conclusions is the role of appreciation in motivating people, although a comprehensive understanding of within-person fluctuation of motivation as a function of appreciation is still lacking.

APPRECIATION AS A SOURCE OF MOTIVATION AT WORK

In the context of organizations, there is a degree of social interdependence between employees, their supervisors, colleagues, customers, clients, and patients (Muntz & Dormann, 2020). The interactions that take place in work environments can convey a number of messages that can influence employee motivation and engagement (e.g., Nowicka-Kostrzewska & Roźnowski, 2023). Frequently mentioned ways of communication with an effect on motivation include appreciation (or recognition, positive feedback, praise, and gratitude), underlined by scholars (e.g., Deci et al., 2017; Wood & Bandura, 1989) and by business and practical literature (Armstrong & Taylor, 2020; Arnold & Randall, 2016).

Interactions occurring in the form of appreciation are positively associated with several work outcomes (e.g., Stocker et al., 2010, 2014) and are valued by employees (DiPietro et al., 2014). Appreciation, defined as acknowledging the value of individuals and the feeling of a positive emotional connection to them (Adler & Fagley, 2005), could reach different sources and different types. Distinguished appreciation could be from the leader, colleagues, customers, followers, patients, etc., and the types could be praise, support, or gratitude, through a gift or reward (see, e.g., Arnold & Randall, 2016; Nadkarni et al., 2022; Stocker et al., 2014).

Although the list of sources, types, and schemas are not stable in both scientific and applied literature, the extent of an appreciation effect under the conditions of a particular source, type, and schema appears to rely on a dependent variable (Stocker et al., 2014) or occupational context (Jacobshagen & Semmer, 2009; Muntz & Dormann, 2020). The approach of the present study was to measure everyday appreciation situations concerning their sources and in relation to within-person variations in motivation as a dependent variable. Motivation was conceptualized as a state-like trait in the present study since it refers to a dynamic internal state that is influenced by changing environmental factors (Ryan & Deci, 2017). Previous research also provided evidence that motivation changes on a daily basis (e.g., Bellhäusser et al., 2021).

From a historical perspective, research findings, without clear a specification, showed the short-term effect of appreciation on motivation (e.g., Herzberg et al., 2017; Sheridan & Ambrose, 2022). However, to our knowledge, no study has investigated whether receiving daily appreciation is associated with changes in employees’ daily motivation. Likewise, the lagged effect of daily appreciation on daily motivation has not been examined.

SELF-DETERMINATION THEORY APPLIED FOR WORK MOTIVATION AND APPRECIATION

Self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2017) is a general theory of human motivation that has been used to understand emotion, cognition, and behavior in a variety of contexts, including the workplace (Deci & Ryan, 1985). SDT describes a multidimensional model of motivation that allows the measurement of not only the amount of autonomous motivation but also the types of motivation behind the behaviors of individuals (Ryan & Deci, 2000). It distinguishes motivation according to the level of autonomy or the extent to which it emanates from the self.

Two main forms of motivation are distinguished, which vary in nature and quality. Autonomous motivation is a higher-quality motivation and is characterized by a total sense of choice, willingness, and freedom in action. In the work context, employees with autonomous motivation pursue an activity because it is interesting. They also find meaning in the activities or personally value the activities (Deci & Ryan, 2008; Ryan & Deci, 2000). Research based on SDT has shown that autonomous motivation promotes employee energy, vitality, satisfaction, and well-being (e.g., Deci et al., 2017; Tadić Vujčić et al., 2017). Controlled motivation, on the other hand, is associated with internal or external pressures, and individuals perform behaviors due to these sources of control (Deci & Ryan, 2008; Ryan & Deci, 2000).
Not surprisingly, controlled motivation is more often associated with negative work outcomes (e.g., Fernet et al., 2012; Halvari et al., 2021; Reizer et al., 2019).

Thanks to environmental support, less autonomous forms of motivation (e.g., identified and introjected) become an integral part of the resulting behavior that emanates from the self (Gagné & Deci, 2005). From the perspective of work motivation, integrated motivation seems to be particularly important because, compared to intrinsic motivation, which is based on the sustained enjoyment of work, it is highly predictive of behaviors that require discipline and are not always interesting for workers (Gagné & Deci, 2005).

Appreciation stands in the center of the developmental pathway that brings motivated behavior and autonomy into activities without natural intrinsic motivation. Appreciation helps one reconcile oneself to inescapable tasks of work and accept that “this must be done” for one to succeed and fulfill the instrumental meaning of work. Past research has shown that both receiving appreciation (Stockler et al., 2014) and level of motivation (e.g., Reizer et al., 2019; Tadić Vujčić et al., 2017) are dynamic in everyday working life. Thus, to capture the dynamic intra-individual changes in experiences of appreciation and motivation, we employed a daily diary method. Instead of examining the average level of appreciation and its association with average motivation, we focused on examining intra-individual changes in motivation and appreciation. Specifically, we aimed to examine the role of daily appreciation from various sources at the level of within-employee fluctuations in daily motivation. The analysis of within-employee level allows us to test whether employees who received more appreciation on a given day than their own average over 7 days reported increased or decreased motivation on that day compared to their own average motivation level.

The extended version of the Background with a description of the theoretical background of this study is available in the public repository: https://osf.io/xd6t/?view_only=b3eaad34a3cd40c9a890e890ebc21119d8ef without restricted access.

THE PRESENT STUDY

Past research has shown that employees are more motivated when their work and efforts are appreciated by various sources such as leaders, colleagues, and clients (Muntz & Dormann, 2020), and appreciation is one of the most important ranked factors that motivate employees (DiPietro et al., 2014). However, to the best of our knowledge, no study has directly examined whether receiving appreciation from various sources in the workplace is associated with daily changes in motivation. Therefore, we aimed to examine whether daily variations in work motivation are associated with daily variations in receiving appreciation from the self-determination theory perspective. At the same time, we are interested in the role of the intrinsic and extrinsic basis of work motivation in the relationship between the daily fluctuation of appreciation and motivation. In the present study, leaders, colleagues, and clients were the sources of appreciation, although a different effect might be expected (Pfister, 2019; Stockler et al., 2014). Accordingly, the following hypotheses were formulated:

H1: Within individuals, general appreciation during workdays predicts a higher state of motivation at the end of the day; this effect exceeds those of gender, trait level motivation, and Big Five traits.

H2: The effect of appreciation by leaders on the state of motivation will be stronger than the effect of appreciation by colleagues and clients.

Self-determination theory suggests that appreciation serves as a support for the development of autonomous motivation in the early stages when behavior is externally regulated or controlled by external and internal pressures (Deci et al., 2017; Gagné & Deci, 2005). Especially, amotivated behavior, external regulation, and introjected regulation are characteristics of less autonomous behavior requiring external support (Deci et al., 2017).

H3: The effect of appreciation on the state of motivation will be higher for those with amotivated and externally driven behavior (external and introjected regulation).

The effect of appreciation is considered to be short (Herzberg et al., 2017), although more precise conclusions are lacking. However, we would expect that daily motivation supported by appreciation should persist one day after appreciation.

H4: The effect of appreciation on the state of motivation lasts for no longer than one day after the day on which the appreciation was received.

PARTICIPANTS AND PROCEDURE

This section briefly describes the procedure, the study sample and the instruments. The full version of the methods, including Table S1 with the items of the instruments used, is available in the public repository: https://osf.io/xd6t/?view_only=b3eaad34a3cd40c9a890e890ebc21119d8ef without restricted access. Table S1 can also be found in the Supplementary materials.

PROCEDURE

The study was designed as an online diary study and was conducted during the winter months of 2020-2021. The survey was administered to each respondent for 7 consecutive working days. All respondents
began the survey on Monday and completed it on Tuesday of the next week, so everyone was measured on the same days of the week. The survey was not administered on weekends.

Once the respondent expressed interest in participating, an email was sent to the respondent immediately with further information about the study and a start date on the nearest Monday. In the baseline questionnaires administered before the Monday of the start of the diary study, they completed the informed consent, the demographic information form and trait versions of the questionnaires. Also, a unique code was created by each respondent to match their surveys later. Subsequently, on each research day, the respondent received an email at 1:00 pm with a link to the daily questionnaires to be completed.

PARTICIPANTS

Respondents were invited to participate in the study via posters on Facebook and via emails, which were sent to private organizations. In total, 467 organizations were invited, and 213 individuals expressed their interest in participating. Initially, 193 respondents completed the questionnaires on the first day. With each day of the survey, the number of completed questionnaires decreased, and by day 7, only 104 respondents had fully completed all daily surveys according to the specified conditions. More than half were female (72%), and the mean age was 43.25 years (SD = 10.53). All participants completed the diary entries without any missed days. Thus, we have 728 completed records out of 728 possible records over seven days.

BASELINE (GENERAL) SURVEYS

The Work Extrinsic and Intrinsic Motivation Scale, used in its Czech version (Šmahaj & Cakirpaloglu, 2015), operationalizes SDT. The scale measures 6 types of motivation, namely intrinsic motivation (IM), integrated regulation (INTEG), identified regulation (IDEN), introjected regulation (INTRO), external regulation (EXT), and amotivated behavior (AMO). The Cronbach α values for this study were as follows: IM = .76, INTEG = .82, IDEN = .71, INTRO = .81, EXT = .74, AMO = .59, and work self-determination index (WSDI) = .68.

The NEO-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992). The Five-Factor Personality Inventory, in its Czech adaptation (Hřebíčková & Urbánek, 2001), tracks five general traits of personality. Cronbach α values on the data of our study were: neuroticism = .77, extraversion = .86, openness = .58, agreeableness = .62, and conscientiousness = .78.

DAILY MEASURES

The Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2004). In its 9-item version (UWES-9), the Utrecht Work Engagement Scale tracks one engagement factor. A version of the UWES-9 adapted into Czech (Mičulková, 2016) became the basis for the instrument tracking daily variability in motivation status. The items of the scale, which has been renamed the Work and Well-being Survey, have been reformulated to track the current state of motivation for a given workday only. Cronbach α values varied during the seven days in the range .89 to .95, with the highest value on Friday.

The Appreciation Questionnaire. The Appreciation Questionnaire was developed for the current study. Three items were formulated with a list of options. These are items asking for the type of appreciation (6 options), scheme (11 options), and source (8 options). In developing the items, we drew on a wide range of findings from both research studies (e.g., Herzberg et al., 2017; Stocker et al., 2014) and review publications (Adair, 2004; Armstrong & Taylor, 2020) to provide respondents with the maximum range of options within daily situational appreciation.

RESULTS

Means, standard deviations, and correlations for all study variables are provided in Table S2 (baseline variables), Table S3 (daily variables), and Table S4 for baseline and daily variables. Tables S2-S4 can be found in the Supplementary materials.

A summary of the Results section is presented below due to limited space. The full version of the analytical strategy and the detailed results are available in the public repository: https://osf.io/xad6t?view_only=bf5eaad34a3cd40c9a890ebc21119d8ef without limited access.

TESTING HYPOTHESES MODELS

Analyses showed that on days when appreciation was received from the leader (β = .50, t = 5.77, p < .001) and the colleague (β = .21, t = 2.22, p = .014), individuals reported a higher level of motivation controlling for baseline level of motivation (see Table 1). A separate analysis was performed for the Big Five as the control variable in Level 2. The findings showed that on days when appreciation was received from the leader (β = .49, t = 6.08, p < .001), the colleague (β = .27, t = 3.34, p < .001), and the client (β = .35, t = 2.17, p = .032), individuals reported a higher level of motivation controlling for the Big Five (see Table 2). Thus, the first hypothesis is supported, but hypothesis 2 is not. There is no difference between daily apprecia-
tion from leaders and appreciation from colleagues in terms of daily motivation.

As can be seen from the coefficients in Table 3, introjected regulation is the only significant moderator in the link between daily motivation and daily appreciation coming from the client. The moderating relationship was such that the association between daily motivation and appreciation from the client was strongest for those having higher scores in introjected regulation as compared to individuals who had lower scores. Hypothesis 3 is supported in terms of the moderating effect of introjected regulation.

We examined whether the previous day’s appreciation coming from different sources is associated with the next day’s motivation. The results showed that there was no significant lagged effect from any sources of appreciation on motivation. Thus, the last hypothesis was not supported.

**DISCUSSION**

The present study aimed to capture the daily fluctuations in motivation as a function of different sources of appreciation in the workplace. The results show that receiving appreciation from different sources (leaders, followers, and clients) is linked to greater motivation. Specifically, employees who generally received more appreciation experienced greater motivation. These results emerged even when gender, trait level motivation, and personality traits were controlled for. These findings corroborated previous research claiming that appreciation is a good source of motivation for employees (e.g., DiPietro et al., 2014; Hansen et al., 2002; Muntz & Dormann, 2020).

Findings showed that on days when employees received appreciation from their leader and colleague(s), they reported greater motivation regardless of their baseline motivation. In addition, on days when employees received appreciation from their leaders, colleagues, and clients, they also reported greater motivation regardless of their personality (H1). Although colleagues were the most common source of appreciation, there were still no significant differences between appreciation from leaders and colleagues in terms of daily changes in motivation, which is contrary to our proposition (H2). This finding suggests that it is not the source of appreciation per se that matters. Although previous research reflects leaders as a crucial source of appreciation

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Daily motivation</th>
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<tbody>
<tr>
<td></td>
<td>Coefficient</td>
</tr>
<tr>
<td>Gender</td>
<td>.09</td>
</tr>
<tr>
<td>Leader</td>
<td>.50***</td>
</tr>
<tr>
<td>Colleague</td>
<td>.21*</td>
</tr>
<tr>
<td>Client</td>
<td>.43†</td>
</tr>
<tr>
<td>WSDI</td>
<td>.07</td>
</tr>
<tr>
<td>WSDM</td>
<td>−.03</td>
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<tr>
<td>WNSDM†</td>
<td>.17</td>
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</tbody>
</table>

Note. WSDI – work self-determination index; WSDM – work self-determined motivation; WNSDM – work nonself-determined motivation; *p < .05, ***p < .001, †p < .10.

**Table 2**

Relationships between daily motivation and daily appreciation controlling for the Big Five and gender

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Daily motivation</th>
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<tbody>
<tr>
<td></td>
<td>Coefficient</td>
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<tr>
<td>Leader</td>
<td>.49***</td>
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<tr>
<td>Colleague</td>
<td>.27***</td>
</tr>
<tr>
<td>Client</td>
<td>.35*</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.01</td>
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<tr>
<td>Extraversion</td>
<td>.01</td>
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<tr>
<td>Openness</td>
<td>.02</td>
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<tr>
<td>Agreeableness</td>
<td>.01</td>
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<tr>
<td>Conscientiousness</td>
<td>.02</td>
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</table>

Note. *p < .05, ***p < .001.

**Table 3**

Trait-level motivation as a moderator of the relationship slopes between daily motivation and daily appreciation from different sources

<table>
<thead>
<tr>
<th>Appreciation</th>
<th>Intrinsic</th>
<th>Integrated</th>
<th>Identified</th>
<th>Introjected</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader</td>
<td>−.03</td>
<td>−.07</td>
<td>−.02</td>
<td>.10</td>
<td>−.01</td>
</tr>
<tr>
<td>Colleague</td>
<td>.01</td>
<td>.01</td>
<td>.08</td>
<td>−.02</td>
<td>−.01</td>
</tr>
<tr>
<td>Client</td>
<td>−.25</td>
<td>.07</td>
<td>−.34</td>
<td>.28*</td>
<td>−.28</td>
</tr>
</tbody>
</table>

Note. Coefficients with * were significantly different from 0 at p < .05.
(e.g., Li et al., 2022), our results imply that other sources of appreciation are also as important as leaders in improving employee motivation.

We also examined whether within-person relationships between motivation and appreciation varied as a function of different types of extrinsic motivation (external and introjected regulation) (H3). Only introjected regulation moderated the positive link between daily motivation and appreciation by the client. Previous research has linked introjected regulation to both positive and negative outcomes (e.g., Nie et al., 2015; Van den Broeck et al., 2021). These researchers also suggested that introjected regulation, in contrast to external and identified regulation, may have some particular effects on psychological function (see Nie et al., 2015). We corroborated the previous findings and also provided evidence for the unique role of introjected regulation on greater daily motivation, which is a positive work outcome. Finally, contrary to our expectations, we could not find support for the lagged associations of appreciation with motivation (H4). Daily appreciation affects daily motivation only on the same day.

LIMITATIONS AND FUTURE DIRECTIONS

This study has some limitations that should be expressed. First, although appreciation encompasses a wide range of behaviors (e.g., Muntz & Dormann, 2020), we only analyzed whether participants received appreciation or not on a given day. Consequently, we could not represent this variety in the present study. However, it was essential to keep the diaries short to prevent participant fatigue and reduce drop-outs (Gochmann et al., 2022). Second, part of the conclusions could be affected by the low reliability of the instruments used, in particular, the openness to experience and agreeableness in the role of the control variables in H1. The AMO subscale, also with low reliability, intended as a moderator in H3, was excluded without affecting the results, which were not significant for AMO itself. Third, employees who are highly motivated for their current job may prefer to participate in the current study and complete all surveys. However, the link between daily appreciation from different sources and daily motivation was still significant after controlling for baseline motivation (trait level motivation) of employees in the analyses. Fourth, a portion of the research sample participated in the study during times of growing COVID-19 problems. Although the sampling was terminated before official precautions were taken, participants may have felt discomfort that affected their state of motivation. Fifth, our participants were only white-collar employees. Although previous research showed that both blue-collar and white-collar workers value receiving appreciation (Marandi & Moghaddas, 2013), the effect of appreciation on motivation may differ in these two groups. This could be an avenue for future research. Finally, we did not collect data from colleagues or leaders, the most common sources of appreciation in the present study, as objective measures of appreciation. However, our results suggest that employee perceptions are of critical importance when it comes to receiving appreciation rather than the quantity of appreciation in terms of increased motivation.

IMPLICATIONS

Organizational management in general can benefit from an appreciative atmosphere or behavior or when conditions both inside and outside an organization allow for such behavior and actions. In addition to developing leadership in the sense of appreciative communication (Bregenzer et al., 2022), organizations can focus on the implementation of the appreciative interview (e.g., Susada, 2023) in their practice or implement procedures that encourage appreciative actions by colleagues and customers in everyday life. This applies in particular when considering the absence of a lagged effect of appreciation on the motivational state on the following day. Appreciative actions by natural observers of employee behavior can offset the short-term nature of the effects.

Supplementary materials are available on the journal’s website.

DISCLOSURES

This research received no external funding. Institutional review board statement: Not applicable. The authors declare no conflict of interest.

REFERENCES


Effect of appreciation on the daily state of motivation


