# Appreciation at work and the effect on employees' presenteeism

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### Abstract.

**BACKGROUND:** Presenteeism, which means attending work while feeling unhealthy or ill, is a serious risk behavior that reduces the employees' productivity and performance. Employees who are treated appreciatively by their work environment show less presenteeism. Investigating the mechanisms behind the relationship between appreciation and presenteeism can help to understand how presenteeism can be reduced even more in the workplace.

**OBJECTIVE:** This study aimed to investigate the impact of two forms of appreciation (supervisor appreciation and general appreciation from the work environment), on presenteeism and includes the moderating effects of resources and stress. This will help to answer the questions a) which form of appreciation is more beneficial for employees and b) whether appreciation counteracts presenteeism by building up resources.

**METHOD:** 1077 Austrian workers were invited to fill-in an online survey about work-related issues. The data was analyzed with structural equation modelling (SEM).

**RESULTS:** The results showed that both forms of appreciation increase the resources of the employees. Through this increase of resources employees experience less stress, which consequently lowers presenteeism. Additionally, general appreciation is more beneficial than supervisor appreciation.

**CONCLUSION:** The findings indicate that appreciative behavior builds resources at the workplace which are essential for showing less presenteeism at work.

Keywords: Effort-reward imbalance, leadership, stress, resources

# 1. Introduction

Appreciation at work and its consequences have been investigated in a general way (e.g., organizational appreciation) or specifically for a certain group, for example supervisor appreciation. Especially the supervisors' appreciation is related to positive organizational outcomes, such as higher job satisfaction [1]. On the other hand, low appreciation is related to negative outcomes such as stress, as low appreciation is regarded as an inappropriate reward to work efforts [2]. One especially harmful outcome at work is presenteeism. Presenteeism means attending work while feeling unhealthy or being ill [3]. Presenteeism is considered as a risk behavior with negative consequences for the organization [4]. By going ill to work, the employees' performance suffers since sick employees are not able to produce the same high quality output as their healthy colleagues. In addition, employees may catch sickness from team members (e.g. flu or colds), which leads to rising sickness absences or rising presenteeism which further decreases performance [5]. Therefore, it should be a particular concern for organizations to avoid high presenteeism rates. Especially the behavior of supervisors has an effect on presenteeism at

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the workplace [6]. Low supervisor support increases stress at work, which in turn can lead to employees being unable to stay at home when they are ill [7]. Vice-versa, a respectful supervisor who supports employees decreases presenteeism rates [6]. The appreciation that employees receive from the supervisor and the work environment can prevent illness in the first place and thus lead to lower presenteeism rates. On the other hand, a work environment with a high level of recognition empowers employees in such a way that in case of illness, staying at home is accepted rather than sanctioned.

The present study aims to clarify the relationship between appreciation at the workplace and presenteeism and contributes to research in two ways: First, we investigate two forms of appreciation at the workplace, namely general appreciation received by the whole work environment and appreciation from the direct supervisor. In this study, supervisor support is defined with the frequency of noticing the employee's efforts and acknowledging their efforts from the side of the direct supervisor. This does not directly include the company's health policy or regulations like the company's wellbeing program. General appreciation includes also other affords acknowledgement from co-workers and team members inside the company. By investigating both forms of appreciation, we can address the question of whether supervisor appreciation is a stronger predictor for presenteeism than general appreciation.

Second, we investigate underlying mechanisms of the relationship between appreciation and presenteeism by including resources and stress as mediators. Resources, especially social resources and task resources are able to reduce critical effects of a harmful working environment such as stress [8]. According to Siegrist's [2] model of the effortreward imbalance, appreciation at work is regarded as a reward for work efforts. Receiving inadequate reward in form of non-appreciation causes stress. Stress is a predictor for presenteeism rates [7], and thus should be reduced. If resources and stress are in balance, negative work-related outcomes such as presenteeism can be reduced. Therefore, both resources and stress are investigated as mediators in the relationship between appreciation and presenteeism.

### 2. Theoretical background and hypotheses

In the framework of the six areas of worklife [9], appreciation is specifically mentioned in the area

of reward. The area of reward covers collegial or managerial recognition, material compensation and intrinsic enjoyment of the work. According to the six areas of worklife, it is more likely to develop symptoms of burnout if employees experience a lack of appropriate recognition.

An appreciative, respectful work environment in which employees can work in a healthy and committed manner is an important resource at the workplace [1]. Supervisors play an important role in providing such an appreciative work environment [10]. Showing appreciation is an important component of positive leadership [11] and a key factor in concepts of health-promoting leadership [12].

Organizational appreciation and supervisor appreciation are distinct constructs that might lead to different organizational outcomes [13]. Supervisor appreciation is more strongly related to the employees' work-related well-being than coworker appreciation [14]. Employees experience a greater power imbalance to supervisors than coworkers; therefore, the behavior of supervisors might have more significance as this behavior is less controllable [15].

The effects of appreciation at the workplace – or better the effects of non-appreciation - on workrelated outcomes are explained in the model of the effort-reward imbalance (ERI, 2). This model assumes that effort at work is spent as part of a contract based on the norm of social reciprocity where rewards are provided in exchange to efforts. According to the model, an imbalance between effort (stated as 'costs') and rewards (stated as 'gains') elicits a state of emotional distress in exposed people. Next to monetary rewards, non-monetary rewards are especially important to prevent stress [16]. Non-monetary rewards include recognition and appreciation from supervisors, coworkers, clients and stakeholders [9]. Therefore, the feeling of not being appreciated is regarded as inappropriate reward which causes stress [17]. Vice-versa, high appreciation at work decreases stress [18].

A potential buffer in the critical relationship between low appreciation and stress are resources. Resources play a major role in the relationship between work demands and stress [8]. Especially social resources (social support from colleagues) and task resources (autonomy, participation possibilities and the possibility of conducting breaks) are important resources to reduce negative work-related outcomes, such as stress and burnout [19, 20].

Appreciation itself can be understood as an important work resource, however it goes beyond the other work-related resources such as social resources (social support from colleagues) and task resources, since it signals the acknowledgment of one's characteristics and/or behaviors more directly, meaning that it can provide the enhancement of one's self [21]. A supportive work environment and a respectful supervisor can restore and enhance resources at the workplace. For example, a supervisor who is appreciative of his or her employees increases their social resources by fostering community and team cohesion. Showing appreciation at work can also increase task resources by promoting the employees' participation possibilities and decision-making.

The feeling of being appreciated may motivate employees to use higher amounts of all available work-related resources. Contrary to that, the lack of appreciation or even the conflict with supervisors or co-workers might result in loss of valuable work-related resources [22]. Some studies have addressed the direct relationship between general appreciation and supervisor appreciation on work-related resources. According to Stocker et al. [11] general job appreciation is positively related to social resources. In their study, Jourdain and Vézina [23] also found a positive relationship between supervisor support and co-worker support on work-related resources. According to that we propose the following:

- H1. General appreciation has a positive impact on work-related resources.
- H2. Supervisor appreciation has a positive impact on work-related resources.

In the job demands resources (JD-R) model [8], resources are seen as an important moderator between job demands and stress, reducing possible negative outcomes of job demands on stress and other healthrelated outcomes. This concept shares similarities with the model of recovery/resources-stress balance [24]. In this model, stress at the workplace can be especially harmful and lead to negative outcomes if the relation between stress and resources is imbalanced. Resources are able to reduce stress and burnout only if they are constantly restored [24]. Therefore, next to the availability of resources, the degree of depletion is important. Resources that have been depleted lose their buffering effect between demands and stress and might even lead to much greater stress [25]. Hence, we hypothesize:

H3. Work-related resources have a negative impact on stress.

Presenteeism is commonly used as an indicator for poor health at the workplace [26]. Presenteeism is related to more sickness, more sickness absences and to a lower overall health status [27]. In the past years, many definitions of presenteeism have been used in scientific research. The most common definitions refer to going to work while feeling unhealthy or feeling ill [3, 28].

Presenteeism is considered as a risk behavior with negative consequences for the organization, such as lower productivity and performance [4]. Several factors have been associated to influence presenteeism: personal circumstances (e.g., critical financial situation or family life), attitudes (e.g., feeling a strong obligation to coworkers or the organization) and work-related factors [29]. Personal factors such as gender or age are related to presenteeism. Women are more sick than men, but are less likely to show presenteeism [30]. Older workers show more presenteeism than younger workers [31]. Reasons could lie in a higher fear of losing the job, or having multiple health conditions (e.g., diabetes, arthritis, chronic pain) sickness absences and also more presenteeism days [32].

Especially high job demands might affect presenteeism, as employees in high-demand jobs are inclined to maintain high levels of performance [33]. Also, other studies have found a robust positive association between high demands and levels of stress and presenteeism (e.g., 34; 35; 36). According to that we propose:

### H4. Stress has a positive impact on presenteeism.

Next to risk factors that enhance presenteeism, factors associated with lower frequency of presenteeism have been studied as well. A supportive, respectful work environment lowers presenteeism rates, as employees are more confident to stay at home to recuperate from illness [37]. Especially supervisor support is strongly connected with a lower degree of presenteeism at the workplace [38]. Being appreciated at work should lower presenteeism rates as appreciation at the workplace enhances resources. Resources are needed to have lower levels of stress and thus having the possibility to stay home if employees are ill. These assumptions are in line with the model of effort-reward imbalance [2], where appreciation at work should be related to lower employee stress. An imbalance between work efforts

and rewards is also associated with higher levels of health problems and presenteeism [39]. According to that we propose:

H5. Resources and stress mediate the impact of general appreciation on presenteeism.

H6. Resources and stress mediate the impact of supervisor appreciation on presenteeism.

Being appreciated at work should lower presenteeism rates as appreciation at the workplace enhances resources. Resources are needed to have lower levels of stress and thus having the possibility to stay home if employees are ill. These assumptions are in line with the effort-reward imbalance model [2], where appreciation is related to lower employee stress levels. An imbalance between work efforts and rewards is also associated with higher presenteeism [39]. In addition to the effort-reward imbalance, we refer to the JD-R model and the model of recovery/resources-stress balance where resources mediate the relationship between working conditions (i.e., appreciation at the workplace) and stress.

Therefore, following hypotheses are stated:

H7. Resources mediate the impact of general appreciation on stress.

H8. Resources mediate the impact of supervisor appreciation on stress.

High stress at work is related to higher presenteeism rates [33]. This can result either from employees falling ill more often due to high levels of stress or from employees being unable to stay home due to high levels of workload. Either way lowering stress can prevent high presenteeism rates, which should be in the focus of supervisors and the whole organization. Raising resources that help employees to cope with stress should benefit employees and support them in the decision to stay home when they are ill. Thus, following hypothesis is stated:

H9. Stress mediates the impact of resources on presenteeism.

### 3. Materials and methods

# 3.1. Sample and data collection

Austrian workers from different companies and industrial sectors were invited to fill-in an online survey about work-related issues. The access to the study

was open for all German-speaking workers. On the first page of the survey, participants were informed about the purpose and length of the study, and informed about the contact address of the research group. After reading the instructions and if participants agreed to the terms of the study, they could click "continue" to begin. Participation was voluntary and the participants could exit the study at any time.

The link to the survey was promoted in different online networks and Austrian newspapers. Only the respondents that have completely answered the questionnaire were included in the final sample, meaning that a total of 1077 participants provided the basis for the analyses.

# 3.2. Participants

The sample of 1077 participants consisted of 56.5% female and 43.5% male participants. 18.9% of the participants were younger than 30 years, 31.9% of the participants were between 31 and 40 years old, 30.7% were between 41 and 50 years old and 18.4% were older than 50 years. The participants worked full-time or more (78.6%) or part-time (21.4%). They worked in different industrial sectors, mostly in health care (14.7%), followed by manufacturing (13.1%), education (10.7%) and public sector (9.7%). Regarding their hierarchical position in the organization, 20.5% were managers and 79.5% didn't have a leading position.

Concerning the professions, the majority of respondents were employed in administration (17.3%), followed by engineering (7.1%), management (5.6%), research & development, finance and controlling, and production staff (4.7%). Informatics staff accounted for 4.5% and marketing staff for 4.3% of the total sample. The remaining participants were distributed among a variety of different occupations. Since there could potentially be differences in the presenteeism status,  $\chi^2$  test was deployed and showed that there are no statistically significant differences in the presenteeism level between the professions ( $\chi^2 = 57.4$ ; p > 0.05).

### 3.3. Measurement instrument and scales

The initial model included five latent variables: general appreciation, appreciation of leaders, stress, resources and presenteeism. General appreciation and appreciation of leaders were constructed as a first order constructs, stress and resources as a sec-

ond order constructs, and presenteeism as a single variable.

General appreciation. To measure general appreciation at the workplace, the dimension reward from the Areas of Worklife Scale (AWS – German version; 40) with three items was used. The items can be answered on a 5-point Likert-Scale ranging from 1 (strongly disagree) to 5 (strongly agree). One example item is "I receive recognition from others for my work".

Supervisor appreciation. To measure the extent of appreciation received from the direct supervisor, the dimension reward from the health-promoting leadership conditions questionnaire (HPLC; 41) was used. This dimension was measured with three items and assessed the perceived extent of non-monetary reward from the supervisor. Answer format ranges on a 7-point scale from 0 (never) to 6 (always). One example item is "In the last 4 weeks, my leader took care that... work is appreciated".

Stress and resources. The RESTQ-Work [42] was designed to assess stress and resources specifically for the work context. In this study, the shortest version of the RESTQ-Work with 27 items was used. The items can be answered on a 7-point-Likert scale ranging from 0 (never) till 6 (always). One example item for a stress-related item would be "In the past 7 days/nights... I felt frustrated through my work" and for a resources-related item "In the past 7 days/nights... I had the chance to make suggestions at work." The items can be categorized in two total scores of stress and resources.

*Presenteeism.* Presenteeism was measured with one item: "In the last year, did it occur that you have been ill but went to work, anyway?" The items could be answered on a 3-point scale divided between 1 (no), 2 (yes, once), and 3 (yes, more than once).

### 3.4. Control variables

Two control variables were included in order to control the possible impact on presenteeism, since in previous studies, age and gender seem to have some influence on the presenteeism behavior [31, 32]. Age was included as the ratio variable and gender as nominal variable coded as 1 = female and 2 = male.

# 3.5. Statistical analyses

Tests of reliability and validity and other results were calculated using SPSS 24.0 and AMOS 24.0 software packages. The reliability of the constructs

was assessed with the Cronbach's alpha and with composite reliability indicator, which is the squared correlation between a construct and an unweighted composite of its indicators [43]. Convergent and discriminant validity were tested with the confirmatory factor analysis (CFA). The average variance extracted (AVE) was calculated for assessment of convergent validity and Fornell-Larcker [43] and heterotraitmonotrait ratio of correlations (HTMT) tests [44] were deployed for assessment of discriminant validity. The structural equation modelling was performed with the maximum likelihood (ML) estimation in order to test the proposed hypothesis.

# 4. Results of the study

# 4.1. Reliability and validity of the scales

Due to higher parsimony two constructs have been included as second order variables (stress and resources). The reliability for the underlying indicators was assessed with Cronbach's alpha before constructing the second order factors. In the previous studies the reliability of the stress and resources dimensions has been well established [45].

The results of the implemented CFA (structural model) are presented in Table 1. Additionally, the distribution of answers for first order constructs (supervisor appreciation, general appreciation, and presenteeism) is presented in Table 2. Since presenteeism was constructed as a latent variable with a single indicator its error variance was set to 0. According to the results, the values of indicator loadings reached from 0.46 to 0.68. All except for the psychological recovery exceeded the suggested value of 0.6. Composite reliabilities reached from 0.74 to 0.90 and are inside the suggested intervals meaning that the scales are reliable. AVE values varied between 0.43 and 0.81. Only for the resources construct AVE has not exceeded the suggested threshold of 0.5. The main reason for this could be the calculation of the second order constructs, which sometimes show lower AVE [46]. Next the Fornell-Larcker test [43] was deployed. Obtained correlation between the latent constructs and square roots of AVE are presented in Table 3. The square roots calculations of AVE are higher than correlations between the constructs for all cases except for the correlation between resources and general appreciation of employees. Also, the HTMT matrix presented in Table 4 shows that all values are lower than the suggested threshold

Table 1
Indicators means, standard deviations, and loadings, and latent variables composite reliabilities and average variances extracted

Latent and manifest variables	Mean	Std. dev	Lambda	CR	AVE
Resources					
Overall recovery	2.005	1.045	0.799	0.747	0.433
Leisure/breaks	1.849	1.117	0.640		
Psychosocial resources	2.692	1.519	0.463		
Work-related resources	2.591	1.186	0.683		
Stress					
Social emotional stress	4.061	1.503	0.818	0.896	0.812
Loss of meaning/burnout	3.785	1.370	0.978		
Supervisor appreciation					
Item 1: In the last 4 weeks, my leader	1.817	1.554	0.902	0.889	0.728
took care that work is appreciated.					
Item 2: In the last 4 weeks, my leader	1.701	1.458	0.785		
took care that efforts do not go					
unnoticed.					
Item 3: In the last 4 weeks, my leader	1.640	1.379	0.868		
took care that all contributions are					
being acknowledged.					
General appreciation					
Item 1: I receive recognition from others	2.639	1.092	0.881	0.846	0.652
for my work.					
Item 2: My work is appreciated.	2.789	1.112	0.901		
Item 3: My efforts usually go unnoticed	2.638	1.115	0.608		
(reversed).					
Presenteeism					
In last year, did it occur that you have	2.212	0.826	1.000	n/A	n/A
been ill but went to work, anyway?					

Fit indices for the measurement model:  $\chi^2(80) = 437,76$ ; p < 0.001; RMSEA = 0.081; GFI = 0.937; CFI = 0.952; TLI = 0.933; IFI = 0.953.

Table 2
Distribution of answers for supervisor appreciation, general appreciation, and presenteeism variable (in percentages)

Supervisor appreciation						
	Never	Rarely	Frequently	Often	Very often	Always
Item 1: In the last 4 weeks, my leader took care that work is appreciated.	20.5	29.7	22.8	10.3	8.8	5.5
Item 2: In the last 4 weeks. my leader took care that efforts do not go unnoticed.	20.9	33.3	20.8	11.6	7.5	4.2
Item 3: In the last 4 weeks. my leader took care that all contributions are being acknowledged.	19.8	35.9	22.2	11.1	6.5	3.1

General appreciation					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Item 1: I receive recognition from others for my work.	17.3	29.2	28.8	21.7	3.0
Item 2: My work is appreciated.	15.3	24.0	31.1	25.3	4.2
Item 3: My efforts usually go unnoticed (reversed).	15.4	34.8	24.1	20.2	5.4

Presenteeism					
	Never	Once	More than once		
In last year, did it occur that you have been ill but	26.2	26.9	46.9		
went to work, anyway?					

	1	2	3	1	5
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1. Resources	0.657*				
2. Supervisor appreciation	0.646	0.853*			
3. General appreciation	0.721	0.748	0.808*		
4. Stress	-0.809	-0.540	-0.594	0.902*	
5. Presenteeism	-0.376	-0.201	-0.224	0.342	n.a

Table 3
Square roots of the AVE and correlations among the latent variables

Table 4
Heterotrait-monotrait ratios of correlations

	Resources	Stress	Supervisor appreciation
Stress	0.823		
Supervisor appreciation	0.656	0.503	
General appreciation	0.770	0.600	0.747

of 0.85 [44] which suggest the appropriate discriminant validity.

# 4.2. Hypotheses testing

The structural equation modelling was performed with the maximum likelihood (ML) estimation. An overall fit assessment of the model yielded a significant chi-square value ( $\chi^2(80) = 538,511$ ; p < 0.001) which is usually the case when dealing with a complex model and large sample sizes. In this study RMSEA, CFI, TLI, and IFI fit indices were used to assess overall model fit. The following indices were calculated for the general model: RMSEA = 0.073, GFI = 0.934, CFI = 0.944, TLI = 0.926 IFI = 0.944. All indices were in the accepted boundaries RMSEA < 0.08 CFI > 0.90, TLI > 0.90, IFI > 0.90 as proposed by representative authors in the field [47].

In the initial model the direct paths from general appreciation and supervisor appreciation to presenteeism and stress were proposed. Since those were statistically nonsignificant they were removed in the final model, which resulted in a slight improvement of fit indices. The results of the structural model are presented in Table 5. They show positive and statistically significant impact of general appreciation and supervisor appreciation on resources ( $\gamma 1 = 0.547$ ;  $\gamma 2 = 0.241$ ; both significant at p < 0.001). According to that hypotheses H1 and H2 were supported. The impact of resources on stress is negative ( $\beta 1 = -0.818$ ; p < 0.001), and the impact of stress on presenteeism was positive and statistically significant ( $\beta 2 = 0.343$ ; p < 0.001), therefore also H4 and H5 were supported.

For the mediating impacts first, the direct impact of general appreciation and supervisor appreciation on presenteeism behavior was tested. Since there were no direct impacts, the indirect impacts through stress and resources were tested. Additionally, the significance of indirect effects was assessed with the bootstrapping procedure [48]. Both appreciation variables (supervisor and general) have a positive and significant indirect impact on presenteeism, however the impact of supervisor appreciation is weaker ( $\beta = -0.067$ , p < 0.05) than the impact of general appreciation ( $\beta = -0.153$ , p < 0.05). According to that H5 and H6 were supported.

Also, a direct path from general appreciation and supervisor appreciation on stress was proposed in order to assess direct and indirect impacts of both constructs on stress. Both direct impacts were insignificant, meaning that resources mediate all the impact between the constructs. The indirect impact of general appreciation on stress through resources was stronger ( $\beta = -0.447$ , p < 0.01) than the indirect impact of supervisor appreciation. ( $\beta = -0.197$ , p < 0.05), supporting H7 and H8.

Finally, the indirect impact of resources on presenteeism through stress was assessed. This path also was positive ( $\beta = -0.280$ ) and significant at p < 0.05, showing support for H9.

All paths are presented in Fig. 1.

### 5. Discussion

This study aimed to investigate the impact of appreciation (general and supervisor appreciation), on presenteeism and the moderating effects of resources and stress. The results showed that general and supervisor appreciation both show direct and indirect impacts on presenteeism. In the indirect path, both appreciation forms enhance the resources of employees, which in turn is needed to cope with stress. Subsequently, the presenteeism is lowered.

<sup>\*</sup>Square root of the AVE.

Table 5 Structural paths

Standardized path coefficients	Standardized regression paths	Sig.	Confidence intervals	
H1: General appreciation -> Resources	0.547	p < 0.001		
H2: Supervisor appreciation ->	0.241	p < 0.001		
Resources		•		
H3: Resources -> Stress	-0.818	p < 0.001		
H4: Stress -> Presenteeism	0.343	p < 0.001		
H5: General appreciation ->	-0.153	p < 0.05	[-0.199; -0.125]	
Presenteeism (indirect)		_		
H6: Supervisor appreciation ->	-0.067	p < 0.05	[-0.095; -0.040]	
Presenteeism (indirect)				
H7: General appreciation -> Stress	-0.447	p < 0.01	[-0.526; -0.389]	
(indirect)				
H8: Supervisor appreciation -> Stress	-0.197	p < 0.05	[-0.261; -0.112]	
(indirect)				
H9: Resources -> Presenteeism	-0.280	p < 0.05	[-0.328; -0.233]	
(indirect)				
Control variables				
Sex -> Presenteeism	-0.072	p < 0.05		
Age -> Presenteeism	-0.042	ns.		

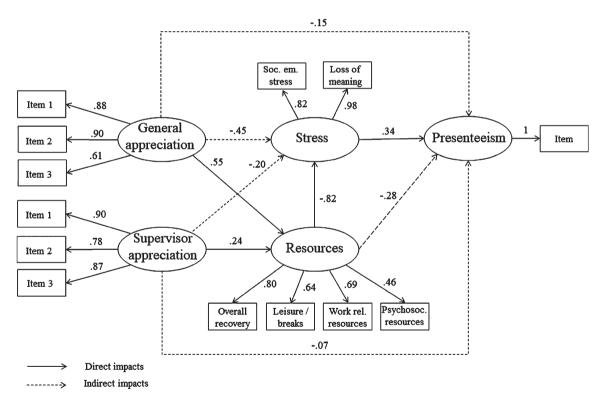


Fig. 1. Structural model with path coefficients.

The present study is one of the few investigating two different forms of appreciation simultaneously, e.g., supervisors' appreciation and general appreciation received by the whole work environment. The results indicate that the direct and indirect effects of general appreciation on resources was much higher than the direct and indirect effects of supervisor appreciation on resources. Contrary to that, current literature assumes that supervisor behavior in particular is a stronger predictor of the employees' well-being than appreciative behavior from co-workers or appreciative behavior from the working environment in general [14]. That this turned out to be the other way around in our study could have several reasons.

First, the behavior of supervisors can also influence the behavior of the work environment [49]. In the case of appreciation, this could manifest itself in the way that the appreciative behavior of the supervisor is adopted by the co-workers as a kind of role model. If the co-workers then also show appreciative behavior, this can be reinforced by the supervisor in turn.

Second, it is possible that employees consciously or unconsciously include the behavior of their supervisor when evaluating the behavior of their social work environment. Thus, the evaluation of the work environment includes not only the behavior of co-workers, but also the behavior of supervisors. Nevertheless, if this is the case, there is still an additional effect of supervisor appreciation on the resources of the employees besides the effect of general appreciation on resources. In terms of incremental validity, the supervisor's appreciative behavior adds additional variance in the outcomes.

Another important finding of the study is the mediating effect of resources in the relationship between appreciation and stress. This mediating effect could be found for both general and supervisor appreciation. Building up resources in the workplace through appreciative behavior is thus an important aspect at work to reduce the employees' stress experience. Experiencing appreciative behavior builds up resources in the employee, such as participation, scope for decision-making, support from colleagues or team cohesion. These aspects increase the total resource reservoir of employees, which should be as full as possible in order to effectively lower stress levels. Lowering stress leads to healthier employees, which brings us to the next point of our study.

Presenteeism in particular is a critical indicator of health at work. The more stress employees experience at work, the more frequent presenteeism becomes. One reason for this may be that having stressful work demands poses a health risk and promotes health impairments [50]. Individuals are particularly prone to presenteeism when health impairments are present [37]. On the other hand, high stress levels can lead to increased pressure to go to work when ill. A high sense of responsibility or fear for the job can play a role here. Lowering stress to prevent presenteeism is a key factor, which is also reflected in the results of this study.

### 5.1. Theoretical implications

The results are in line with Siegrist's [2] model of the effort-reward imbalance. In his model, receiving inadequate reward in form of non-appreciation causes stress, which in turn is a critical factor for presenteeism in the workplace. This impairing effect can be prevented by having high resources, as resources are able to reduce the impairing effects of a critical working environment (e.g., a working environment without appreciation) on stress [24]. The beneficial effect of resources on stress is evident in many studies around the JD-R model [8] and was again demonstrated in our study.

The enhancement of resources, which is essential for reducing stress, can be strongly influenced by the supervisor. In the concept of health-promoting leadership, the focus lies specifically on promoting work-related resources to cope with stress [10]. A core aspect of health-promoting leadership is increasing workplace appreciation. In this sense, supervisors can take care that all contributions are being acknowledged and that efforts do not go unnoticed. These behaviors are intended to ensure that resources are always replenished among the individual employees, but also within the team as a whole. The results of this study again show that resource building by the supervisor plays a significant role in workplace well-being.

Our results also make a valuable contribution to presenteeism research. Research shows that appreciative behavior in the workplace significantly reduces presenteeism [36], but the underlying mechanisms of how appreciation can influence presenteeism were rarely explored. Our study explains the relationship and shows that models such as the JD-R model or the model of effort-reward imbalance can shed light on how presenteeism arises and how it can be prevented. The important role of resources in this context is particularly emphasized.

# 5.2. Practical implications

The results of our research give some practical implications for managers suggesting the importance of a systematic approach towards managing appreciation. This means that managers can not only pass on appreciation directly to their employees, but also shape the work environment in such a way that the entire team interacts in an appreciative manner. In the concept of health-promoting leadership, the second approach is especially important [12]. Supervisors

with a systematic approach towards appreciation can achieve double benefits for the organization. First, such an environment motivates employees to carry out activities that increase work resources, which help to reduce stress and presentism in the workplace. Second, an appreciative leadership behavior can create an environment where appreciation among co-workers becomes self-evident in working teams giving further benefits. Therefore, employee appreciation management should be considered as one of the important components of a working environment health program and organizational culture.

### 5.3. Limitations

This study was a cross-sectional study with the data collected at one measurement point. To determine causality, longitudinal analyses are needed. Samesource bias and common method bias are possible limitations of the study. As we asked the employees to rate the workload in the organization, we assessed the perceived workload from the view of employees. It is possible to take objective indicators for work environment for the analyses (e.g., accident statistics, workplace descriptions), but these are usually difficult to obtain as companies are hesitant to hand over internal data. Since only Austrian workers from different companies participated in the present study, the results should be understood in the specific geographical, economic, and cultural settings, and should be generalized with caution. Different economic situations on the market, more inclination towards the presenteeism act, and differences among cultures could possibly change the relationships between the constructs investigated in this study.

Appreciation at work itself can be regarded as a workplace resource. However, our operationalization of appreciation at work relates to the concept of the areas of worklife, where appreciation (stated as "reward") is seen as a potential stressor [51]. This is in accordance with other authors [21], since appreciation is seen as an acknowledgment of one's characteristics and/or behaviors and can provide the enhancement of one's self.

General appreciation and supervisor appreciation are strongly related [13]. Supervisor appreciation was measured with the HPLC, an instrument that was developed on basis of the areas of worklife scale [41]. In the present study, the areas of worklife scale was used to measure general appreciation. Therefore, the phrasing of some of the items are similar. However, both constructs can be distinguished as the correla-

tion between both constructs is high but not as high as one could assume that both instruments measure the same form of appreciation.

As for presenteeism, it would be interesting to differentiate whether one shows presenteeism due to physical or mental illness and if both forms of presenteeism can be reduced by appreciation. We set the focus more on physical illnesses and less on mental illnesses. Future studies might distinguish between the two forms of illness.

# 6. Conclusion

Appreciation is of key importance for employee resources, which in turn lowers stress and presenteeism. It turns out that appreciation of co-workers seems to play a stronger role in building resources than supervisor appreciation. However, the role of supervisors in this context is also important, as they are responsible for creating an appropriate organizational climate that enables general appreciation. The positive indirect impacts between both appreciation forms on stress indicates the importance of the resources that are mediating the impacts. Since we could not support a direct relationship between appreciation and presenteesim, the important role of resources becomes apparent. Organizations should pay attention that enough resources should be available to employees. An effective way to enhance resources is to create an appreciative work environment. This way employees will be able to adequately overcome stress in the workplace, and consequently organization will be able to reduce the presence of presenteeism.

### Conflict of interest

None to report.

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