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Why and when do employees imitate the absenteeism of co-workers?

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ABSTRACT

We aimed to shed light on the reason why individual employees adjust their absence levels to their co-workers' absence behavior and under what conditions imitation is most likely by integrating social learning theory and social exchange theory. In Study 1, a vignette study among 299 employees, we found that respondents were more likely to call in sick when coworkers were often absent because respondents had more tolerant absence norms and more economic as opposed to cooperative exchange norms. This study also showed that employees strongly disapproved of absence and had stronger cooperative exchange norms when they worked in highly cohesive and task interdependent teams. In Study 2, a field study in 97 teams, we found that coworker absence was less strongly imitated under conditions of high cohesiveness and task interdependency. Our findings suggest that employee behavior is not only influenced by team norms about acceptable absence levels, but also by norms on what level of cooperation is expected.

1. Introduction

> "*I do not like to miss work, it would make it harder on my co-workers.*"
>
> "*I carried the load when others were out, so now it is my turn to take time off.*"
>
> [Employees from this study's sample]

Missed work due to employee absence is estimated to cost organizations in the U.S. about 202 billion dollars every year (Goetzel, Hawkins, Ozminkowski, & Wang, 2003). Absenteeism, defined as the employee's failure to report for scheduled work (Johns, 2008), can be seen as mildly deviant behavior as the employee falls short in his or her contract with the employer, resulting in reduced organizational productivity (Harrison, Johns & Martocchio, 2000; Robinson & Bennett, 1995). Although employees may call in sick for legitimate reasons, there is a grey area of reasons for reporting sick that are less legitimate, such as not feeling like going to work, or conflicting demands between work and family (Johns, 2008). Due to this information asymmetry concerning reasons for being absent, the problem is difficult to fight for organizations and difficult to study for researchers.

In an attempt to better understand the causes of absenteeism, research has shifted from a focus on individual-level predictors such as health and job satisfaction (e.g., Darr & Johns, 2008; Harrison & Martocchio, 1998; Hensing, Alexanderson, Allebeck, & Bjurulf, 1998) to group-level predictors, such as absence cultures (Rentsch & Steel, 2003). Workplace absence culture refers to the set of absence-related beliefs, values, and behavioral patterns shared by the members of an organization, a team, or some other organizational unit (Nicholson & Johns, 1985). Taking into account how group level processes may affect employee absence is particularly important since teams have become a common way in which work is organized (Mathieu, Maynard, Rapp, & Gilson, 2008). There is strong evidence that co-workers' absence behavior influences the absence rates of individual group members (Duff, Podolsky, Biron, & Chan, 2014; Gellatly & Allen, 2012; Johns, 2008; Rentsch & Steel, 2003) in such a way that an employee is more likely to be absent when co-workers are often absent. Team members thus seem to imitate each other's absence behavior. However, two pressing questions have remained unanswered. First, why do team members imitate each other's absence behavior, and second, under what team conditions is the imitation of absence behavior more or less likely?

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Most commonly, research on team absence norms and behavior is built on social influence theories such as social learning theory (Bandura, 1977) and social information processing theory (Salancik & Pfeffer, 1978). The core idea behind these perspectives is that together, team members create norms concerning acceptable absence behavior. Newcomers learn this team norm while interacting with their co-workers; after having internalized the group norm, newcomers adjust their absence behavior accordingly (Dello Russo, Miraglia, Borgogni, & Johns, 2013). Thus, the simple acquisition of information from an accepted source is assumed to cause imitation. Absenteeism research has confirmed that employees adjust their absence behavior to what they believe is the group absence norm (Dello Russo et al., 2013; Martocchio, 1994; Xie & Johns, 2000), co-workers', and supervisors' expectations of acceptable absence rates (Bamberger & Biron, 2007; Markham & Mckee, 1995), or to the supervisor's and team's absence levels (Duff et al., 2014).

In addition to social influence theories, the literature on coworker influence (Chen, Takeuchi, & Shum, 2013) highlights that team members affect each other's behavior through social exchange mechanisms. Social exchange theory (Blau, 1964) suggests that team members can influence each other's behavior either positively or negatively, depending on whether they have a high or low quality exchange relationship (Chen et al., 2013). When team members have high quality exchange they trust each other, feel committed to each other, and support each other (Kamdar & Van Dyne, 2007). Conversely, under low quality exchanges, team members do not trust each other, are not committed to each other, and chose their self-interest over the group interest. A response to a coworker's absence spell can then be either cooperative or uncooperative. In a cooperative exchange, the employee will go to work even though co-workers are sick, as in high quality exchange, exchange partners tolerate short-term inequity and are motivated to maintain the relationship (Chen et al., 2013). The first quote above reflects such a cooperative response, in that the employee goes to work because s/he wants to be there for his/her co-workers. In an uncooperative exchange an employee will repay absence spells of co-workers by elevating his or her own absence, making sure s/he does not work more than co-workers. The second quote presented is an example of this strategic response to get even. The exchange of "disfavors" creates economic exchange relationships among team members, whereby they strategically balance their absence levels (Ferris, Brown & Heller, 2009; Sanders & Nauta, 2004).

To our knowledge, absence research has not examined the possibility that social exchange relationships explain why absence levels are interrelated in teams. This is important not only because it would advance theoretical knowledge of how imitation of behavior in teams happens, but also because it would give organizations new leads as for how to prevent undesirable imitation behavior. The target of intervention could be discouraging tolerant absence norms but also enhancing cooperative relationships. We suggest that the two theoretical perspectives, social influence and social exchange, can be integrated through their common recourse to norms. By often being absent, teams might develop norms concerning what level of absence is acceptable, but at the same time, this behavior may inform team members about norms of cooperation (i.e., economic and/or cooperative exchange). We aim to advance our understanding of why employees attune their absence rates to those of their co-workers using insights from both social learning theory (Bandura, 1977) and social exchange theory (Blau, 1964). To test these theoretical frameworks, we study the reasons (i.e. absence norms, exchange norms) employees have for their decision to call in sick in response to high co-worker absenteeism in Study 1, a vignette study among 299 employees.

Next, we address our second research question, under what conditions is the imitation of absence behavior most and least likely to occur? Teams have been defined as "collectives who exist to perform organizationally relevant tasks, share one or more common goals, interact socially, exhibit task interdependencies, and maintain and manage boundaries" (Mathieu et al., 2008, p. 411). This definition implies that teams have some level of social integration – that is, cooperation as socially cohesive groups that work interdependently. However, teams can vary in how socially integrated they are, and these variations influence the norms that develop in teams (Harrison et al., 2000; Xie & Johns, 2000). For instance, based on social exchange theory, we would expect that in high socially integrated teams, defined as work teams in which employees have a strong group feeling and work interdependently, more cooperative norms develop disapproving of absence and favoring cooperative exchange. As a result, employees in high socially integrated teams might respond less strongly to absence spells of co-workers because they value the cooperative relationship within the team while employees in low socially integrated teams focus more on their self-interest and therefore retaliate. In Study 1, we first verify if teams with high social integration (i.e., high team cohesion and task interdependence) have less tolerant absence norms and stronger cooperative exchange norms, whereas low socially integrated teams have more tolerant absence norms and stronger economic exchange norms. Then, in Study 2, a field study among 97 work teams, we examine if the imitation of absence behavior among team members is weaker in more, as compared to less, socially integrated teams. Testing whether the imitation of absence behavior differs between high versus low socially integrated teams can thus shed further light on the theoretical mechanism that is responsible for the imitation of absence behavior in teams.

In the following, *employee* is used to refer to the target person, *co-worker* is used for the team members that influence the target person, and *team members* refers to all team members, including the co-workers and the target person. The terms *team* and *group* are used interchangeably.

2. Theoretical framework

2.1. The social influence process

Insights from social information processing theory (Salancik & Pfeffer, 1978) and social learning theory (Bandura, 1977) are most commonly used to explain the emergence of absence cultures and their impact on individual absence behavior (Gellatly & Allen, 2012). Both theories are based on the premise that individuals are motivated to belong to a social group. As assumed by social information processing theory, in order to fit in with others, individuals search their social environment for information about appropriate attitudes, common practices, and expected behaviors (Robinson & O'Leary-Kelly, 1998). Employees working in the same context will receive similar social cues about appropriate behavior. This increases the likelihood that team members develop similar views about acceptable absence levels, adjusting their absence behavior to emergent norms.

Social learning theory (Bandura, 1977) describes how individuals seek information about appropriate behavior in their social environment. A key assumption is that individuals use role models, such as co-workers, to learn about group norms and accepted behaviors (Robinson & O'Leary-Kelly, 1998). The behavior of co-workers forms the standard, guiding employees to behave in a way that will lead to their social acceptance by the group. From this point of view, employees follow the example of their

co-workers because they want to fit in with the group, and therefore they match their behavior with what they believe is the group norm. After having observed the behavior of the group for a while, newcomers learn the group norm and adjust their behavior accordingly. This means that when co-workers are frequently absent, the employee's norm toward absenteeism should become tolerant, and consequently, the employee's absence spells are likely to increase. In other words, employees who respond with higher absence rates to the frequent absence of co-workers do so because their norm toward absence has become more tolerant. The same logic holds for a situation in which co-workers are infrequently absent. Based on low co-worker absence rates, the employee will internalize intolerant norms toward absenteeism and consequently, s/he will be less likely to call in sick. In our hypothesis, we focus on the situation in which co-workers are often absent, instigating high employee absence behavior, because this is the organizational problem that we hope to shed more light on.

Hypothesis 1. Employees who decide to be absent from work when coworkers are often absent do so because of strong norms that approve of absenteeism and weak norms that disapprove of absenteeism.

2.2. Social exchange perspective

Social exchange theory is another perspective that gives insight into how team members affect one another's behavior. In a social exchange, actor A trusts that his or her input will be returned by actor B at some point in the future, without specifying the future obligation (Blau, 1964; Van Knippenberg, van Dick, & Tavares, 2007). The start of social exchange relationships is rather economic; the values of things offered and received are in close balance. If one receives a gift, one feels the obligation to give another gift in return. As trust still needs to be developed at this early stage, favors are returned within a short period of time, and the values of favors are matched each time (Cropanzano & Mitchell, 2005). Actors feel that gifts and returns need to be in balance. This economic relationship is the first step in building a socio-emotional relationship. After a number of sequences of giving and receiving, the interaction partners no longer count their investments and returns. Instead, they perceive the relationship as rewarding to both parties (Organ, Podsakoff, & MacKenzie, 2006). In this relationship, actors are likely to exchange other resources, such as care and empathy, that results in a cooperative exchange. In cooperative exchanges, the exchange of favors is less calculative, meaning that one does not count the exact value of what is being exchanged, and longer periods of time can pass before a favor is returned (Cropanzano & Mitchell, 2005).

Responding with calling in sick to a co-worker's absence spell can be considered as calculative or economic exchange in which non-cooperative, deviant organizational behavior is exchanged (Ferris et al., 2009; Sanders & Nauta, 2004). The actors count their investments and behave in such a way that what they receive is in balance with what they give. By calling in sick when coworkers are often absent, the employee ensures s/he does not work more than his or her coworkers do. The investments (how much the employee invests in the team) and returns (i.e. how much team members invest in the team) in this exchange relationship are then in balance. Particularly in a team setting, the absence of co-workers may lead to an increased workload for an employee, prompting feelings of inequity. Therefore, the employee may respond to the high absence rate of co-workers by calling in sick more frequently.

Social exchange theory thus supports the same assumption as social learning theory, that employee absence behavior is positively related to co-worker absence behavior. The reason for this imitation behavior, however, is different. Social learning theory suggests that team members learn what level of absence behavior is acceptable. Social exchange theory adds to this that other norms might develop, namely norms with regard to how cooperative team members should be. When coworkers are often absent, employees might interpret this as uncooperative behavior or feel that team members do not value team relationships. The idea that absence reflects uncooperative organizational behavior, while presence at work represents cooperative behavior, is rooted in the deviance model of absence (Harrison & Martocchio, 1998; Robinson & Bennet, 1995). The model suggests that most people assess absence as unfavorable behavior that is associated with unreliability and disloyalty (Conlon & Stone, 1992). Even if an employee has legitimate reasons for being absent, co-workers and supervisors often disapprove of and sanction absence, as it can disrupt the work process, signal contractual violations, and be expensive for the organization (Johns, 2008; Simpson & Martocchio, 1997).

When coworkers are often absent, the employee might thus learn that in this team, it is acceptable to pursue one's own interest instead of the team's interest. In other words, in addition to absence norms, teams develop norms of reciprocity (Gouldner, 1960) informing members how cooperative they ought to be. We expect that in teams with high coworker absence, employees learn that they do not have to be cooperative. They reciprocate high coworker absence levels strategically because of economic rather than cooperative exchange norms.

Hypothesis 2. Employees who decide to be absent from work when coworkers are often absent do so because of high economic exchange norms and low cooperative exchange norms.

2.3. Conditions of imitative behavior

The degree of social integration of teams, whether or not team members have a cohesive group feeling and work interdependently to finish their work, is likely to affect team members' absence norms and social exchange norms. When team members have strong ties with each other, it is more likely that they develop cooperative norms. Research shows that when team members know each other better norms emerge that favor sharing, cooperating, and sacrificing self-interest for the team (Chatman & Flynn, 2001). Similarly, teams with high task interdependency have been found to exhibit higher cooperative norms (Wageman, 1995). If team members in a highly socially integrated team value cooperation, this is likely to weaken norms that favor deviant behavior such as absenteeism. In this environment, the employee likes to help co-workers, and is more likely to disapprove of calling in absent as this undermines cooperation. More specifically, when cohesion is high, employees care about their group members and don't want to shirk or let them down (Duffy & Shaw, 2000; Karau & Williams, 1993). Similarly, when task interdependency is high, the employee feels responsible for the group outcome (Campion, Medsker, & Higgs, 1993) and is less likely to approve of behavior that will disadvantage team members or the team outcome (Bennett & Naumann, 2004). In teams with high social integration, it is therefore more likely that team members have strong norms that favor being present, while they disapprove of frequent absence.

Hypotheses 3a/b. Disapproval absence norms are stronger, whereas approval absence norms are weaker, when (a) team cohesion, and (b) task interdependence are high as compared to low.

From an exchange perspective, we expect that cooperative rather than economic exchange is more likely when team members depend on each other and have close ties. Social exchange theory (Gouldner, 1960; Molm, 1994) suggests that the continuance of an exchange relationship is more likely when exchange partners are dependent on each other. If there is no interdependence, there is less need to return a favor, as the costs of exiting the exchange relationship are negligible. Due to the continuing exchange the actors have time to get to know each other, build trust, and exchange favors other than just tangible, practical favors. Task interdependence thus acts as a catalyst driving a calculative exchange relationship into a more cooperative exchange relationship (Cropanzano & Mitchell, 2005). Indeed, Koster, Stokman, Hodson, and Sanders (2007) reported that the exchange of cooperative behavior (i.e. helping co-workers with their job) among co-workers was more likely when task interdependence was high.

In regard to cohesion, psychological closeness between partners plays a crucial role in the transition of economic exchange into cooperative exchange as well (Cropanzano & Mitchell, 2005). Actors in close relationships are more likely to exchange goods, first of all because they highly value the relationship, and therefore are more willing to invest in it (McPherson, Smith-Lovin, & Cook, 2001). In addition, trust is high in cohesive groups (Fine & Holyfield, 1996). Trust is particularly relevant in cooperative exchange relationships since the timing and the exact form of the return are often not specified (Blau, 1964). The giver must trust that the other will reciprocate in the future (Cropanzano & Mitchell, 2005). Actors are more willing to take this risk and engage in long-term cooperative relationships if they trust their exchange partners. Several studies confirm that team cohesion, referring to the commitment of team members to each other (Mathieu et al., 2008), contributes to prosocial behavior within the team, such as helping behavior, altruism, and courtesy (Kidwell, Mossholder, & Bennett, 1997; Ng & Van Dyne, 2005; Podsakoff, Mackenzie, Paine, & Bachrach, 2000). Following this line of argumentation, we expect that task interdependence and team cohesion will stimulate cooperative exchange norms among team members while reducing tit-for-tat thinking.

Hypotheses 4a/b. Cooperative exchange norms are stronger, whereas economic exchange norms are weaker, when (a) team cohesion, and (b) task interdependence are high as compared to low.

If social integration affects the employee's norms regarding absence levels and social exchange, it also affects how the employee responds to absence behavior of co-workers. In teams with high social integration, disapproval of absenteeism may be felt so strongly by individual members that the frequent absence of co-workers does not alter these beliefs. In fact, the employee might feel even more pressure to go to work when task interdependence is high because members are then together responsible for the team outcome (Campion et al., 1993). If others are absent, someone needs to keep the teamwork going. Moreover, if the employee has close ties with team members s/he may disapprove more strongly of absence as this implies betraying co-workers. Several studies indeed show that employees are less likely to call in sick in cohesive (Johns, 2009) and task interdependent (Bridges & Hallinan, 1978) teams. We thus expect that the employee is less likely to call in sick in response to coworker absence in high socially integrated teams, because employees strongly feel they should go to work and disapprove of being absent.

Cooperative exchange norms in these teams have a similar effect. When social integration is high, employees have stronger cooperative exchange norms and thus feel the urge to go to work and help out (Chatman & Flynn, 2001), especially if the team is short staffed. Responding in a non-cooperative way (i.e. by calling in sick) would undermine relationships with team members and is less likely when team members have cooperative exchange relationships. Also, the potential harm of not going to work is high because the rest of the team depends on the employee and the employee values his/her close relationship with all team members (Raub & Weesie, 2000). Moreover, in highly socially integrated teams, the employee trusts that the coworker will return this favor, and therefore risks this temporary inequity by going to work. This also means that in teams with low social integration an uncooperative response is more likely and individuals are more likely to respond strategically to high coworker absence levels, keeping their inputs in balance with those of team members. In short, we expect the following.

Hypotheses 5a/b. An employee is less likely to call in sick in response to high coworker absence when (a) team cohesion, and (b) task interdependency are high as compared to low.

All hypothesized relationships are summarized in Fig. 1.

3. Methods Study 1

3.1. Sample and procedure

To better understand the reasons employees have for imitating absence behavior of co-workers, we designed an experiment in which respondents were asked to make a decision about attending work or calling in sick and explain the reason for this decision. We aimed for a design that would correspond to the real work situation of employees. Therefore, we recruited employees from real work teams and had them read a work scenario in which only coworker absence was manipulated. Participants rated team cohesion, and task interdependency of their actual work teams.

We used response Qualtrics panel data in the U.S. To be selected to complete an online survey, participants needed to (1) be older than 18 years of age, (2) have a paying job for a minimum of 20 h per week, (3) be part of a team of more than three members, and (4) work in the same physical location as their team members for at least two days a week. We underscored that participation was voluntary, and that all information they would provide (also their decision to participate or not to participate) was anonymous as we did not collect information that could identify the participant (e.g. name, employer's name). Participants who completed the survey earned $5. Qualtrics announced the study among their panel members, and after going through the five screening questions, only participants who met our criteria were invited to complete the full survey.

To ensure that participants had read the work scenario and questions carefully, we conducted an attention check. At the end of the survey, we asked respondents to indicate whether team members in the case scenario had (a) been absent often from the team meeting or (b) had almost always attended the meeting in the last couple of weeks. Respondents who failed this check (i.e., indicated a level of team absenteeism that was different than that described in the scenario) were automatically dropped from the sample (N = 55). We also did a quality check, dropping respondents who answered gibberish on the open-ended question or gave an answer that clearly indicated they had not read or understood the question (N = 36). As a result, we had 299 participants in our final sample.

Regarding characteristics of the final sample, 60.2% were female. About a third of the respondents had a high school or GED (28.1%), 23.4% had finished two years of college, 31.8% had a

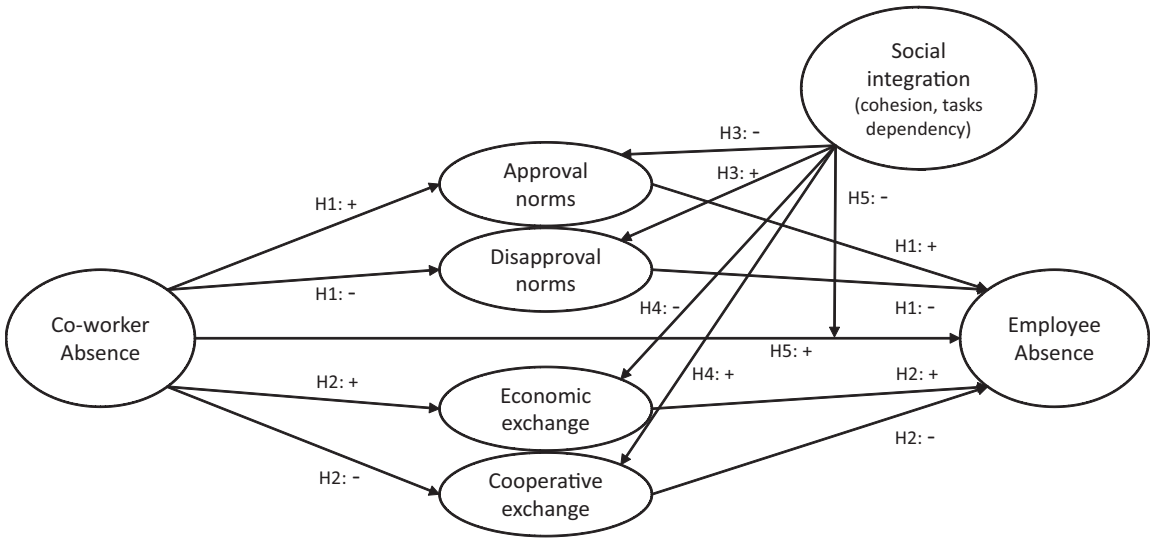

Fig. 1. Overview of hypothesized relationships.

bachelor degree, 12.7% a Masters degree and 12.0% had obtained an MBA or PhD. The majority of participants identified as White (78.3%), while the remainder identified as Black (10%), Asian (6.7%), Hispanic (4.7%) and Other (0.3%). The average work hours were 42.6 (SD = 8.1) per week. Respondents had an average of 19.6 years (SD = 12.0) of work experience, and tenure at their company was on average 9.6 years (SD = 8.6). Half of the respondents (50.5%) had worked for more than two years with their current team, 28.1% had worked between 1 and 2 years with their team, 13.7% for 6 months to a year, and 7.7% for up to 6 months. Respondents worked in a wide variety of industries including education (13.7%), professional services (12.7%), production (11.0%), healthcare (7.4%), finance (5%), construction (4.7%), government (4.3%), commerce (4.0%), transport (3.3%), catering (3.0%), communication (3.0%), culture and leisure services (1.3%), agriculture (1.0%), and other (25.4%).

3.2. Case scenarios

3.2.1. Independent variable

We manipulated co-worker absence using case scenarios. Participants were randomly assigned to one of the two experimental conditions but since we were mainly interested in the condition of high coworker absence we used a 60/40 ratio. As a result, we had 186 respondents in the high coworker absence condition and 113 respondents in the low coworker absence condition. In the case scenarios participants were asked to imagine that the described scenario had happened in their own team at work. The exact descriptions of high and low co-worker absence were:

> *Please imagine the following work scenario. This scenario may or may not be in line with what actually happens in your team but we ask you to imagine it does:*
> *In the last three months, your team members regularly did not show up at work. Almost every week, someone was absent and the work needed to be done with an understaffed team. This week, finally, all your team members are back at work.* [High co-worker absence] Or:
> *In the last three months, your team members almost always showed up at work. Only in a rare incidence, one of them called in sick and most of the time, the work could be done with a complete team. This week, again, all your team members are present.* [Low co-worker absence]

3.2.2. Dependent variable

After the description of the situation and team characteristics, respondents were asked to make a decision as to whether they would go to work or call in sick. To create a "grey" area of absenteeism, whereby it is not indisputably clear whether one had a good reason to be absent (Johns, 2008), we added that the respondent did not feel well, although not feeling really sick either. This extra information before respondents were asked to make a decision was as follows:

> *One morning this week you get up not feeling super fit, but you also know that you are not really sick either. You are considering to call in sick.*

Finally, respondents were asked to indicate what they would decide in this case, choosing from the answer categories 1 (I go to work for sure), 2 (I tend toward going to work) 3 (I tend toward calling in sick), and 4 (I call in sick for sure). We combined answer categories 1 and 2, as well as 3 and 4 to create a dummy variable for the decision (0 = present, 1 = absent).

3.3. Measures

3.3.1. Absence norm

After the case scenario and decision, we asked respondents: "to what extent do the following statements reflect the reasons for your decision?" We listed reasons related to absence norms and social exchange norms. We used self-developed scales to measure approval and disapproval norms for absenteeism. Answer categories ranged from 1 (strongly disagree) to 5 (strongly agree). Sample items for the three-item disapproval absence norms scale were "I feel it is not accepted in my team to call in sick" and "In my team, being present as often as possible is an informal norm" (Cronbach's alpha = 0.79). Sample items of the three-item approval absence norms scale were "I feel it is accepted in my team to call in sick" and "It is seen as normal in my team to be sick fairly often" (Cronbach's alpha = 0.80).

3.3.2. Social exchange

We used the scales developed by Shore, Tetrick, Lynch, and Barksdale (2006) for social exchange norms because these authors created subscales for economic and cooperative exchange. Since the scales concerned the exchange relationship between the

employee and the organization, we adjusted the items to reflect the employee's exchange relationship with team members. Answer categories ranged from 1 (strongly disagree) to 5 (strongly agree). Sample items of the six-item economic exchange scale were "I watch very carefully what I get from my team, relative to what I contribute," and "My relationship with my team members is strictly an economic one – I go to work if they do" (Cronbach's alpha = 0.88). Sample items of six-item cooperative exchange scale were "There is a lot of give and take in my relationship with my team members" and "My relationship with my team members is based on mutual trust" (Cronbach's alpha = 0.84).

3.3.3. Team cohesion

We used a scale developed by De Vries (1997) to measure team cohesion using answer categories ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items of the four-item scale were "The people in my group cooperate as a real team", and "my team members have each other's back" (Cronbach's alpha = 0.90).

3.3.4. Task Interdependency

Task interdependency was measured with the five-item scale of Pearce and Gregersen (1991) using answer categories ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items of the four-item scale were "The way I perform has significant impact on my team members", and "I frequently must coordinate my efforts with my team members" (Cronbach's alpha = 0.90).

3.4. Analysis

To examine the reasons employees had for their decision, we created a 2 (coworker absence low vs. high) × 2 (decision present vs. absent) between-subject design. This way, we could compare if the reasons of employees who decided to call in sick when their coworkers were often absent – that is, their mean scores on absence norms and economic exchange norms – differed from employees who decided to go to work or from employees in the low coworker absence condition. We chose this design and not for instance, a regression analysis, because a regression analysis would not enable us to take into account the condition (coworker absence) and the decision (present or absent) simultaneously. For instance, a positive regression estimate between coworker absence and approval norms means that employees in the high coworker absence condition have more tolerant absence norms, but it does not reveal whether respondents who decided to be absent have more tolerant norms than respondents who decided to be present. Since this is our key question (i.e., the reasons employees have to call in sick when coworkers do), we decided to use an analysis that enables us to compare the reasons between four groups differing in condition (high vs low coworker absence) and decision (absent vs present). We used a Bonferroni test to estimate whether mean scores differed significantly between these four groups.

4. Results Study 1

Table 1 reports the correlations between the study variables. The decision to be absent was positively related to coworker absence, approval absence norms, and economic exchange and negatively related to disapproval absence norms, cooperative exchange, team cohesion and task interdependency.

To test the basic assumption that coworker absence is positively related to the employee's decision to call in sick, we first estimated an OLS regression model in SPSS. This model showed a positive relationship between co-worker absence and the decision to be absent (estimate = 0.29, SE = 0.09, $p < 0.001$). Group comparisons further quantify that the chance an employee decided to call in sick was significantly higher when coworkers were often absent. In the high coworker absence condition 18.8% of the respondents tended to or decided to call in sick, against 5.3% in the low coworker absence condition ($F = 10.5$, $p < 0.001$).

Table 2 shows the scores on the four reasons for the decision made in each of the four groups. The group in the High co-Worker Absence condition that decided to be Absent (HWA) has the highest score on approval absence norms of all groups (m = 3.43). The Bonferroni test reported in Table 2 shows that this score is significantly higher than any of the other groups. The HWA group scored significantly lower on disapproval absence norms than the High co-Worker absence condition group that decided to be Present (HWP Δmean = −0.98, SE = 0.17, $p < 0.001$) and the Low co-Worker absence condition group that decided to be Present (LWP Δmean = 1.33, SE = 0.18, $p < 0.001$). These findings are in line with Hypothesis 1, that employees who decide to call in sick when coworkers are often absent do so because of strong norms that approve of absenteeism and weak norms that disapprove of absenteeism.

Table 2 also reports the scores on social exchange related reasons. The HPA group had the highest score on economic exchange of all groups (m = 3.41). This score is significantly higher than the scores of the HPW group (Δmean = 1.12, SE = 0.19, $p < 0.001$) and the Low Co-worker absence group that decided to be Absent (LPA Δmean = 1.22, SE = 0.45, $p < 0.05$). The HPA group scored significantly lower on cooperative exchange as compared to the HPW group (Δmean = −0.67, SE = 0.15, $p < 0.001$) and the LPW group (Δmean = −1.09, SE = 0.16, $p < 0.001$. The results therefore support Hypothesis 2, in which we predicted that employees who reciprocate high absence behavior have strong economic exchange norms, while they score low on cooperative exchange norms.

Table 1
Study 1: Means, standard deviations and correlations.

	M	*SD*	1	2	3	4	5	6	7
1. Decision to be absent	1.57	0.77							
2. Coworker absence	0.62	0.49	0.19**						
3. Approval absence norms	2.47	1.13	0.16**	0.19**					
4. Disapproval absence norms	3.42	0.99	−0.34**	−0.18**	−0.11*				
5. Economic exchange	2.64	1.10	0.13*	−0.17**	0.63**	0.11			
6. Cooperative exchange	3.67	0.86	−0.29**	−0.28**	−0.05	0.54**	0.24**		
7. Team cohesion	4.15	0.67	−0.13**	−0.16**	−0.10	0.35**	0.02	0.41**	
8. Task interdependency	4.00	0.88	−0.17**	−0.09	−0.15*	0.36**	0.01	0.49**	0.59**

N = 299.
** $p < 0.01$.
* $p < 0.05$.

Table 2
Study 1: Mean comparisons between decision groups in condition of high versus low coworker absence.

	Means				Bonferroni test					
	HWA	HWP	LWP	LWA	ΔHWA-HWP	ΔHWA-HWP	ΔHWA-LWP	ΔHWP-LWP	ΔHWP-LWA	ΔLWP-LWA
Approval norms	3.43	2.46	2.20	2.00	0.97***	1.23***	1.43*	0.26	0.46	0.20
Disapproval norms	2.45	3.43	3.78	2.22	−0.98***	−1.33***	0.23	−0.35*	1.21**	0.156***
Economic exchange	3.41	2.29	2.91	2.19	1.12***	0.50	1.22*	−0.63***	0.09	0.71
Cooperative exchange	2.93	3.60	4.02	3.14	−0.67***	−1.09***	−0.21	−0.42***	0.46	0.89*
N	35	151	107	6						

H = high, L = low, W = Co-Worker Absence, A = Decision Absent, P = Decision Present. For instance: HWA = High Co-Worker Absence Decision to be Absent.
*** $p < 0.001$.
** $p < 0.01$.
* $p < 0.05$.

Table 3
Study 1: Mean comparisons between groups scoring high vs low on task interdependency and team cohesion.

	HC	LC	F stat	HT	LT	F stat
Approval norms	2.29	2.62	6.07*	2.38	2.57	1.94
Disapproval norms	3.73	3.16	25.79***	3.66	3.14	21.90***
Economic exchange	2.59	2.68	0.53	2.65	2.63	0.03
Cooperative exchange	4.03	3.36	52.46***	3.94	3.36	38.59***
N	137	162		139	160	

	HWHC	HWLC	F stat	LWHC	LWLC	F stat	HWHT	HWLT	F stat	LWHT	LWLT	F stat
Approval norms	2.44	2.78	3.78	2.07	3.54	1.54	2.59	2.69	0.38	2.08	2.33	1.83
Disapproval norms	3.64	2.96	22.68***	3.85	3.54	3.55	3.55	2.94	17.64***	3.84	3.51	4.00*
Economic exchange	2.46	2.52	0.14	2.77	2.97	1.16	2.46	2.52	0.10	2.92	2.82	0.28
Cooperative exchange	3.90	3.16	39.28***	4.21	3.75	13.45***	3.78	3.16	26.47***	4.17	3.72	12.07**
N	81	105		56	57		96	90		64	49	

F stat = F statistic from ANOVA test. H = high, L = low, W = Co-Worker absence, T = Task interdependency, C = cohesion. For instance: HWHC = high co-worker absence, high team cohesion. Comparisons are made between high vs low cohesion and high vs low task interdependency. For instance, the F statistics 22.68*** indicates that 3.64, the mean score on disapproval norms for the HWHC group, is significantly higher than 2.96, which is the mean score on disapproval norms for the HWLC group.
*** $p < 0.001$.
** $p < 0.01$.
* $p < 0.05$.

To test Hypotheses 3 and 4, whether social integration affects absence norms and social exchange norms, we first checked if the scores on the four reasons differed significantly between groups low and high in team cohesion and task interdependence. These groups were created using mean scores as cut off points. We used ANOVA to compare the mean scores between two subsets of groups (i.e. high cohesion vs low cohesion and high task interdependency vs low task interdependency). This analysis (Table 3, upper part) showed that employees with high team cohesion scored higher on disapproval absence norms ($F = 25.79$, $p < 0.001$) and cooperative exchange ($F = 52.46$, $p < 0.001$) than employees with low team cohesion. Likewise, employees with high task interdependency scored higher on disapproval absence norms ($F = 21.90$, $p < 0.001$) and cooperative exchange ($F = 38.59$, $p < 0.001$) than employees with low task interdependency. The score on approval norms was lower among employees with high team cohesion as compared to employees with low team cohesion ($F = 6.07$, $p < 0.05$), but it did not differ between the group high vs low in task interdependency. The score on economic exchange did not differ between groups high vs low in cohesion and task interdependency.

To ensure that these differences were not in fact driven by the level of coworker absence (e.g. all highly task interdependent teams happened to be in the low coworker absence condition), we also reported the scores on the reasons while distinguishing between the level of coworker absence, thus, creating eight groups (Table 3, lower part). This additional analysis gives similar results: The scores on approval absence norms and economic exchange norms did not differ significantly between groups varying in task interdependence and team cohesion. However, the scores on disapproval norms and cooperative exchange differed between employees with low versus high team cohesion and task interdependence. Focusing on the high coworker absence condition, we found that employees with high team cohesion scored significantly higher on disapproval absence norms ($F = 22.68$, $p < 0.001$) and cooperative exchange ($F = 39.28$, $p < 0.001$) as compared to employees with low team cohesion. Similarly, employees with high task interdependency scored higher on disapproval norms ($F = 17.64$, $p < 0.001$) and cooperative exchange ($F = 26.47$, $p < 0.001$) than employees working in low task interdependent teams. These findings partially support Hypotheses 3 and 4. More specifically, disapproval absence norms were stronger in teams with high cohesion and task interdependency, while approval norms did not differ between these groups (H3). Although economic exchange norms did not differ between teams low and high in social integration, cooperative exchange norms were stronger in teams with high cohesion and task interdependency (H4).

4.1. Posthoc analysis

Even though the respondents were more likely to call in sick in the high coworker absence condition as compared to the low coworker absence condition, a large number of respondents ($N = 151$) decided to go to work in the high coworker absence condition. This decision is not in line with what social learning and social exchange would predict, and it made us wonder what reasons

employees have to be loyal to the team, even while coworkers are often absent. Qualitative data are particularly suitable for such an exploratory question (Corbin & Strauss, 2015), and we thus analyzed the answers employees gave on an open-ended question in which we asked them to explain the reason for their decision. At the same time, these open ended answers offer further evidence for our hypotheses about the reasons employees have to imitate high absence levels. In line with our theoretical framework, respondents who decided to be absent in response to high coworker absence should express reasons related to more tolerant absence norms and economic exchange while employees who decided to go to work should give reasons related to disapproval of sickness absence and more cooperative exchange. We asked respondents: *Can you explain in your own words what the reason was for your decision?* Respondents could list multiple reasons but were encouraged to express their most important reason.

We followed Corbin and Strauss's (2015) guidelines for grounded theory research. We aimed to identify key themes in the answers given by respondents to further develop theory. Two of the authors first read all open-ended responses and independently developed initial themes. We compared the themes, and in the case of a difference (3 out of 13 themes), we solved this disagreement through discussion. Then, two research assistants, who were not familiar with the goal of our research, independently assigned each response to the most suitable theme. For 82% of participants' reasons, the coders agreed which categories they fit into. The responses on which coders disagreed were coded by two of the authors and any further disagreements were resolved by discussion.

Appendix A shows the categories per decision and per condition. Employees who decided to go to work even while co-workers were often absent most commonly said they did so because of financial motives (20.5%) and cooperative exchange norms (19.9%). Three of the other reasons mentioned reflect sentiments expressing disapproval of absence: 17.2% of the employees who decided to go to work in the high coworker absence condition felt strongly responsible for work, 12.6% disapproved of calling in sick illegitimately, and 14.6% specified that co-workers being absent often was no reason for them to be irresponsible. Others mentioned that they simply loved their work (7.9%), did not want work to pile up (6.0%), or felt so much pressure from their supervisor or organization's policy around absence that they reported for work (2.6%).

The most important reason for employees in the low coworker absence condition to go to work was disapproval of calling in sick illegitimately (35.5%), cooperative exchange norms (29.9%), and financial motives (21.5%). The six respondents who decided to call in sick even while co-workers were often present said they did so because they needed a day to recover (n = 3), did not believe they would be effective at work (n = 1), or simply did not like work (n = 2). The respondents who decided to call in sick in the high coworker absence condition, mostly said they did so to get even with their coworkers (economic exchange: 57.1%), because they needed a day to recover (40.5), or because they did not believe they would be effective at work (5.7%).

5. Brief discussion Study 1

In Study 1, we aimed to reveal the reasons employees have to call in sick in response to high coworker absence. Our findings indicate that employees tend to call in sick when co-workers are often absence because they have internalized more tolerant norms toward sickness absence (weaker disapproval norms and stronger approval norms), while their norms regarding exchange with coworkers are economic rather than cooperative. The open-ended questions gave further insight in employees' decision making and confirmed that more than half of these respondents viewed their relationship with co-workers as an economic exchange: they called in sick to get even with the coworkers for whom they had been picking up the slack.

Interestingly, our experiment revealed that employees do not necessarily imitate their co-workers' absence behavior, since the majority of employees reported for work in the high coworker condition. The reason for going to work even while coworkers are often absent was both pragmatic and normative. Many employees indicated that they simply needed the money, or had so few sick days that they wanted to save them for real emergencies. In addition, this group felt responsible for their work, disproved of calling in sick illegitimately (regardless of what their co-workers did), and did not want to let their coworkers down.

Finally, we examined if social integration had an effect on respondents' reasons for going to work or calling in sick. Employees working in high socially integrated teams disapproved more strongly of absence, while they held stronger cooperative norms as compared to employees with low social integration. When we combine the insights gained through Study 1, we would expect that employees in highly socially integrated teams are less likely to call in sick because they strongly disapprove of absenteeism and want to be there for the team. We test this hypothesis in Study 2, a field study, examining if imitation of absence behavior is less likely in teams with high cohesion and task interdependency.

6. Methods Study 2

6.1. Sample and procedure

Data for Study 2 were collected from employees at 24 Dutch organizations that use teams as their primary work units. The 24 organizations represented three sectors: (1) health care (e.g., a nursing home), (2) facilities and support (e.g., a logistics center), and (3) commercial services (e.g., a consultancy firm). After consulting the human resources staff of each organization, the researchers distributed questionnaires among team members and their supervisors, accompanied by an introductory letter from the research coordinator with information about the study's aims and procedures. Respondents could fill out the questionnaire at their discretion and return it to the research coordinator. The employee questionnaire contained questions about the employee's work characteristics (e.g., team cohesion) and work outcomes (e.g., absence). The supervisor questionnaire contained questions about team outcomes (e.g., absence rates at the team level). Team members and supervisors provided their team names or numbers, enabling us to link team members to each other and to their supervisors.

Of the 1527 employee questionnaires distributed, 520 were returned (34.1%), which is reasonable for samples in the Netherlands, although it is somewhat low compared to international response rates (Anseel, Lievens, Schollaert, & Choragwicka, 2010; Baruch & Holtom, 2008; Stoop, 2005). We dropped six employees from our analysis because they reported to have been sick for more than 30 days due to burnout. As this is a health related cause, it is unlikely that norms would affect this. The response rate for supervisors was 61%, as 66 of the 109 contacted supervisors returned the questionnaire. The mean response rate of members per team was 60%. The 514 employees covered 97 teams, with the number of members ranging from 2 to 19 ($m = 7.6$). The sample included more female (61%) than male employees, due in part to the inclusion of six healthcare organizations with only 4% male personnel. This distribution, with a very low percentage of male nurses in health care, conforms to national figures (The Netherlands Institute for Social Research, SCP, 2006). Also, the percentage of male and

female respondents found for the other sectors (58% male; 42% female) is comparable to national figures. The respondents' mean age was 38.83 years (SD = 10.99), ranging from 17 to 63 years. Lower educated employees (no education, primary school or lower vocational education) were underrepresented (11%) compared to employees with secondary (43%) and tertiary (46%) education. Examples of jobs and professions that were represented in our sample are attorney in a law firm, sales representative in a tile company, cashier in university restaurant, and nurse in elderly care.

6.2. Measures

The questionnaires were presented in the Dutch language. Several of the measures were in fact developed and validated in Dutch, and the others were translated from English and then back to Dutch using conventional procedures.

6.2.1. Employee absence behavior

We conceptualized absence behavior as the total number of days the employee reported sick in the previous three months. We note that employees in the Netherlands are entitled to paid sick leave of up to two years (UWV, 2013). Calling in sick does not cause a loss of income, and therefore, it could be tempting to do so, even when one is not ill or not severely ill. Our conceptualization of absence thus captures the form of mildly deviant behavior that may be susceptible to social learning and social exchange.

We needed information on employee absence from various organizations to ensure that our sample included teams with enough variation in degree of integration (cohesion, task interdependence). It is rare to see multisite studies that are able to employ records-based individual-level absence data. Also, in our case, a considerable number of companies could not provide archival data. Therefore, employee self-reports were used to measure absence. In a meta-analysis of absence self-reports Johns and Miraglia (2015) found that the sample size weighted correlation between self-reported absence data and records-based measures ranged from 0.66 to 0.73, equaling unity with reliability corrections. Self-reports thus seem to be convergently valid proxies of employee absence behavior.

We took into account several guidelines for designing adequate self-report absence measures (Johns & Miraglia, 2015). The questionnaire provided a clear description of the relevant absence behavior, we used a short time interval (three months) to avoid memory loss, and a free-response format was employed. The absence probe read "*How many days have you reported sick for work due to illness in the previous three months?*" We were able to check the correlations between the records-based team level absence measures and the aggregated self-reports at the team level, as we had supervisor reports of absence for 64 teams. We found a correlation of 0.55 between supervisor records of the team's average days of absence and the team members' average days of absence as reported by the team members.

6.2.2. Co-worker absence behavior

Co-worker absence behavior was the predictor variable. For each employee, we computed the mean team member score based on the absence data excluding the employee's score (Gellatly & Allen, 2012). Thus, we calculated the co-worker absence of focal team member A as follows: The absence scores for team members B, C, and D were added, team member A's score was removed, and this number was then divided by the number of co-workers (participating team members − 1). Since the general social influence thesis implies a direct consensus aggregation model (Chan, 1998), we calculated interrater agreement to determine if aggregating co-worker absence was justified. The mean r_{WG} of 0.82 indicated good interrater agreement for time lost due to absenteeism (LeBreton & Senter, 2008).

6.2.3. Task interdependence

Task interdependence was operationalized as the extent to which employees needed each other to complete their tasks. We used a five-item scale developed by Costa (2000), ranging from 1 (*totally disagree*) to 5 (*totally agree*). Sample items are, "To finish my work I am dependent on my team members," and, "My job requires close cooperation with team members" ($\alpha = 0.83$). We used the team's mean scores, as this better reflects team level task interdependency and because multiple-source ratings provide a more reliable measure of the construct (LeBreton & Senter, 2008). The moderate interrater agreement of team members' individual scores justified aggregation to the team level ($r_{WG} = 0.67$).

6.2.4. Team cohesion

Team cohesion was operationalized as the cooperative, reliable, and loyal atmosphere of the team as a whole. We used a four-item scale ($\alpha = 0.87$) designed by De Vries (1997) with items such as, "The people in my group cooperate as a real team" and "My team members know that they can count on each other." Answer categories ranged from 1 (*totally disagree*) to 5 (*totally agree*). Because team cohesion is a team level variable, we used the aggregated team's score to express team cohesion ($r_{WG} = 0.85$).

6.2.5. Controls

Based on recent essays on the use of control variables (Carlson & Wu, 2012; Spector & Brannick, 2011) we used control variables only scarcely, and focused on possible third variables that may have confounded the relationships of interest. Because average absence rates may differ by industry (Statistics Netherlands, 2011), we controlled for business sector using two dummy variables (commercial services and healthcare) using facilities and support as the reference category. Team climate may similarly affect absence levels of co-workers and the employee (Hemingway & Smith, 1999). As a proxy for team climate, we controlled for supervisor support measured with a four-item scale (Cronbach's $\alpha = 0.87$) designed by Van Veldhoven, De Jonge, Broersen, Kompier, and Meijman (2002). Answer categories ranged from 1 (=totally disagree) to 5 (=totally agree). Sample items were "I feel appreciated by my supervisor," and "My supervisor shows understanding for when I encounter problems at work." The aggregated measure (mean score) was used as the team's supervisor support ($r_{WG} = 0.77$). Furthermore, as the possibility for interaction and duration of the relationship may influence interpersonal co-worker relationships (Raub & Weesie, 2000), we controlled for weekly work hours (a continuous variable) and contract status, using an ordinal variable with the answer categories 1 (*temporary contract for* <1 *year*), 2 (*temporary contract for* >1 *year*), and 3 (*permanent contract*). We also checked whether common individual control variables, including job motivation, emotional exhaustion, age, and gender (Darr & Johns, 2008) affected our models. As permanent contract and job motivation did not affect the relationships under study, we decided not to include those variables.

6.3. Analysis

The individual-level absenteeism data were highly skewed (Skewness = 9.16, SE = 0.11, Kurtosis = 82.29, SE = 0.214), and normality tests (Kolmogorov-Smirnov = 0.466, $p < 0.001$; Shapiro-Wilk = 0.093, $p < 0.001$) confirmed that the data violate the normality assumption needed for OLS regression models. Also, the data contained a non-negligible number of zeros (65.4%). Therefore, we estimated a zero-inflated negative binomial regres-

sion model (ZINB). ZINB regression models are particularly useful when the outcome variable has an excessive number of zeros (the employees that were never absent) and when two processes might affect the outcome variable (Long, 1997). We are mainly interested in the decision the employee makes to take a day off (yes or no) when coworkers are often absent, as this fits with our theoretical framework. Namely, we expect that employees make a decision based on norms – whether calling in sick is acceptable, and whether calling in sick is part of a social exchange. For the employees who do call in sick, different factors (e.g. severity of illness, demotivation, or feelings of inequity) might influence how many days one calls in sick (Frick & Malo, 2008; Hardy, Woods, & Wall, 2003). The two outcome variables estimated in ZINB models are thus a likelihood variable (likelihood of belonging to the large zero group) and a count variable. Even though our hypotheses will be tested on the likelihood outcome variable, for the sake of transparency, we also report the model for the count outcome variable. In line with other absenteeism studies (e.g., Taimela et al., 2007), we report the likelihood variable reversed, as this is in line with the interpretation of the count variable. The model thus estimates the chance of being absent (logit model) and the number of days of absence (count model).

Because we had multilevel data, with employees nested in organizations and teams, we used multilevel analysis in Mplus (Muthén & Muthén, 2012). As there was no significant variance in employee absence behavior at the organizational level, we dropped this level from further analyses. A two-level null model was estimated to determine the percentage of variance in employee absence behavior explained by factors at the employee level and the team level. The two-level null model showed that the variance in absence at the team level (estimate = 0.213, $SE = 0.076$, $p < 0.01$) and the individual level (estimate = 1.548, $SE = 0.105$, $p < 0.001$) were both significant. Of the overall variance in absence, a significant amount (12%) was accounted for by differences between teams, justifying a multilevel approach.

In order to test the proposed interaction effects we first centered the team level cross-product components at the grand mean (Enders & Tofighi, 2007) and added this cross-product, along with its original components, as a predictor in the model. We estimated the significance of the simple slopes using the calculators developed by Preacher, Rucker, and Hayes (2007).

7. Results Study 2

Table 4 provides descriptive statistics and correlations between the variables. Coworker absence was positively related to employee absence. Table 4 shows the multilevel ZINB analysis of the main model, testing the assumption that co-workers' absence behavior predicts the employee's absence behavior. As expected, we found a positive relationship between coworker absence and likelihood that the employee was absent (logit estimate = 0.14, SE = 0.04, p < 0.01).

Next, we tested the interaction effect for team cohesion and task interdependency on the likelihood of calling in sick. As shown in Table 5, both interaction effects were significant and in the expected direction. The likelihood that the employee called in sick in response to high coworker absence decreased significantly when task interdependency (logit estimate = −0.52, SE = 0.29, p < 0.05) and cohesion (logit estimate = −2.98, SE = 1.15, p < 0.01) were high. The simple slope of the relationship between coworker absence and the employee's likelihood to be absent was positive in low cohesive groups (estimate = 1.13, SE = 0.39, p < 0.01), while negative in high cohesive groups (estimate = −1.09, SE = 0.50, p < 0.05). This means that in teams in which coworkers were often absent (+1SD), the odds that an employee called in sick increased by 1.48 in low cohesive groups, while this chance was −0.76 times lower in high cohesive groups (see Fig. 2). The simple slopes for the relationship between coworker absence and the employee's likelihood to call in sick were not significant for low task interdependency (estimate = 0.31, SE = 0.20, ns) or high task interdependency (estimate = −0.27, SE = 0.25, ns). This means that these slopes differ significantly from each other, but they are not significantly different from zero. Fig. 3 depicts the odds to call in sick when coworkers are often absent in high (0.46) versus low (0.05) interdependent teams.

Table 4
Study 2: Means, standard deviations, and correlations.

	M	*SD*	1	2	3	4	5	6	7	8
1. Employee absence	1.59	3.64								
2. Commercial service sector	0.34	0.48	0.02							
3. Healthcare sector	0.31	0.46	−0.14**	−0.49**						
4. Facilities and support sector	0.27	0.44	0.01	−0.44**	−0.40**					
5. Supervisor support	3.75	0.72	0.06	0.24**	−0.22**	0.06				
6. Weekly work hours	33.93	11.71	0.11*	0.48**	−0.63**	0.12**	0.14**			
7. Permanent contract	2.74	0.60	−0.01	−0.20**	0.23**	0.12**	−0.02	−0.06		
8. Job motivation	3.71	0.63	0.00	0.07	0.09*	−0.17**	0.11*	0.02	0.05	
9. Emotional exhaustion	2.27	0.79	−0.02	−0.03	0.07	−0.05	−0.20**	0.01	0.04	−0.29**
10. Age	38.83	10.99	−0.06	−0.34**	0.30**	0.20**	0.13**	−0.15**	0.31**	0.05
11. Gender (female)	0.59	0.49	−0.02	−0.22**	0.52**	−0.32**	−0.14**	−0.50**	0.02	0.13**
12. Coworker absence	2.33	3.53	0.13*	−0.13**	0.12**	−0.04	−0.07	−0.11**	0.04	0.06
13. Team cohesion	3.72	0.36	−0.05	0.05	−0.04	0.03	0.19**	0.05	−0.03	0.10*
14. Team task interdependency	3.75	0.54	−0.07	0.22**	0.05	−0.18	−0.01	0.22**	0.09*	0.02

	9	10	11	12	13
9. Emotional exhaustion					
10. Age	−0.03				
11. Gender (female)	0.03	−0.02			
12. Co-worker absence	−0.03	0.06	0.09*		
13. Team cohesion	−0.10*	−0.01	−0.02	−0.13**	
14. Team task interdependency	0.06	−0.03	−0.02	−0.01	0.05

N = 514. All correlations are individual level, with means of team-level variables assigned to individuals.
** $p < 0.01$.
* $p < 0.05$.

Table 5
Study 2: Zero inflated negative binomial regression model predicting employee absence.

	Main model				Interaction model			
	Logit		Count		Logit		Count	
	B	SE	B	SE	B	SE	B	SE
Commercial services sector	−0.19	0.33	−0.77	0.48	5.47*	2.55	−1.43***	0.34
Health care sector	−0.99*	0.41	−0.41	0.53	−0.34	1.04	−0.82*	0.49
Supervisor support	0.17	0.19	0.04	0.12	−0.15	0.47	0.33*	0.17
Work hours	0.02	0.02	0.01	0.01	0.12*	0.05	−0.00	0.02
Emotional exhaustion	0.38*	0.16	−0.15	0.09	0.84*	0.37	−0.09	0.14
Age	−0.03*	0.01	0.01	0.01	−0.05	0.04	0.00	0.01
Gender (female)	0.64*	0.31	−0.05	0.12	2.66*	1.08	0.12	0.23
Co-worker absence	0.14**	0.04	−0.30***	0.06	0.03	0.16	0.10*	0.05
Team cohesion					−5.20**	1.98	0.39	0.36
Task interdependency					−2.06*	0.85	−0.02	0.26
Co-worker absence*team cohesion					−2.98**	1.15	0.53**	0.18
Co-worker absence*task interdependency					−0.52*	0.29	−0.22*	0.10
Loglikelihood	−708.82				−704.27			

$N = 514$. Unstandardized estimates (B) and Standard Errors (SE). Logit model indicates the likelihood of calling in sick (0 = present, 1 = absent). Count model indicates number of days sick (1, 2, 3, etc.).
*** $p < 0.001$.
** $p < 0.01$.
* $p < 0.05$.

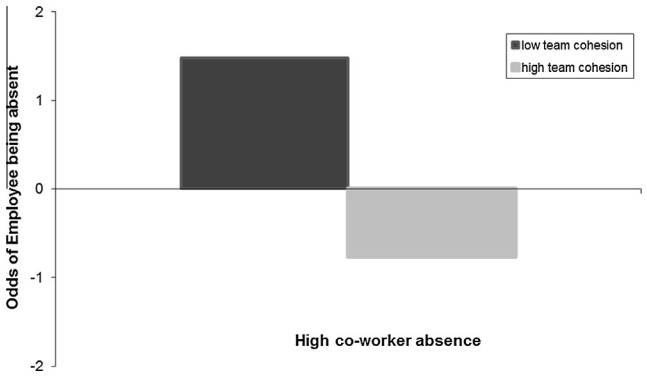

Fig. 2. Study 2: The odds of calling in sick when co-workers are often absent for high versus low cohesive teams.

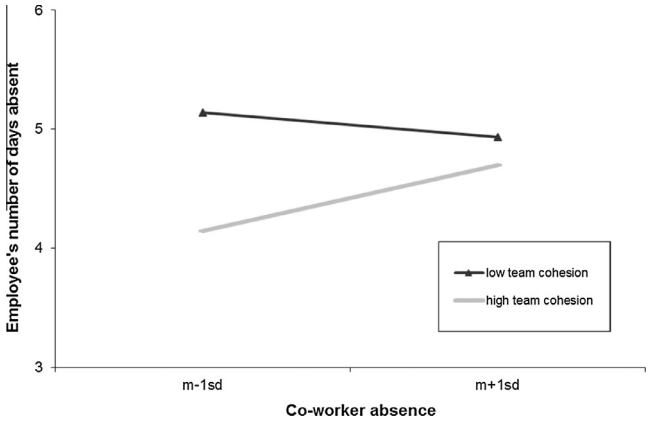

Fig. 4. Study 2: Moderation effect of team cohesion on the relationship between co-workers' absence and employee's number of days absent.

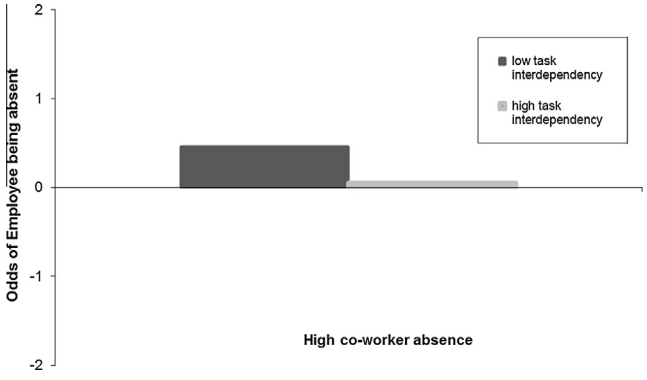

Fig. 3. Study 2: The odds of calling in sick when co-workers are often absent for high versus low task interdependent teams.

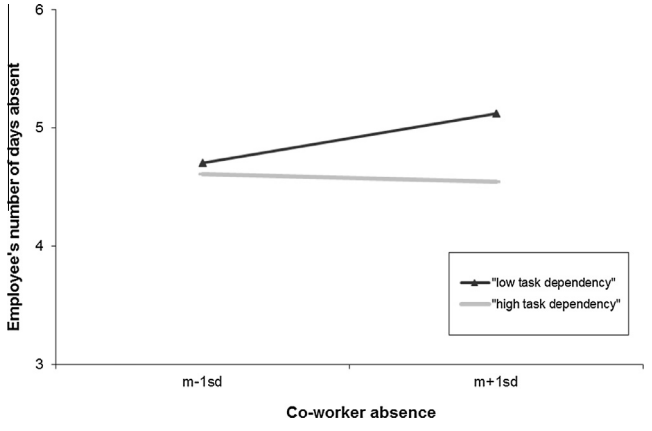

Fig. 5. Study 2: Moderation effect of task dependency on the relationship between co-workers' absence and employee's number of days absent.

These results provide support for Hypotheses 5a and 5b. The odds that an employee calls in sick in response to high coworker absence were lower in highly cohesive and task interdependent teams as compared to low cohesive and task interdependent teams.

Finally, we also reported our model for the count outcome variable (Table 5). We found a negative relationship between coworker absence and the count variable (count estimate = −0.30, SE = 0.06, $p < 0.05$). This means that even though the chance that the employee called in sick increased when coworkers were often absent, employees who called in sick only did so for a minimum number of days. When we looked at the interaction effects, unexpectedly, we found that the relationship between coworker absence and employee absence days was more strongly positive when cohesion was high (B = 0.53, SE = 0.18, $p < 0.01$). The simple slope for the relationship between coworker absence and the employee's number of absence days was positive for high cohesion (estimate = 0.28, SE = 0.11, $p < 0.01$) whereas this relationship was not significant in teams with low cohesion (Fig. 4). Task interdependency had a similar attenuating effect on the count outcome (B = −0.22, SE = 0.10, $p < 0.05$) as on the logit outcome. As can be seen in Fig. 5, the simple slope was positive in teams with low task interdependency (estimate = 0.21, SE = 0.09, $p < 0.05$) but not in teams with high task interdependency.

8. Brief discussion Study 2

The goal of Study 2 was to examine the condition under which the imitation of absence behavior in teams is more or less likely. The results from the field study showed that the odds an employee calls in sick in response to high coworker absence are lower in high socially integrated teams as compared to low socially integrated teams. This finding is in line with Study 1, in which we found that cooperative exchange and disapproval absence norms were stronger in highly socially integrated teams. We expected that in teams with high cohesion and task interdependency employees would feel a strong norm to be present and help out co-workers. Study 2 confirmed that when studying teams in their own context, imitation is indeed less likely in teams with strong social and functional ties.

Interestingly, our ZINB analysis revealed that even though employees were more likely to call in sick when co-workers were often absent, they only did so for a few days. It thus seems that employees take a short-term revenge, and then go back to work. Another interesting finding was that employees in highly cohesive teams were less likely to call in sick in response to coworker absence, but the ones that did call in sick took more days off. Perhaps the few employees who did call in sick felt they could count on the support from their co-workers for their decision to stay at home and thus take more days off.

9. General discussion

We sought to increase understanding of the reasons employees have to adjust their absence levels to the absence levels of co-workers. In Study 1 we found that employees' decision to call in sick or report for work was based on norms about what level of absence they believed was acceptable in their team, as well as norms of how cooperative they believed they ought to be toward the team. Employees who decided to call in sick when co-workers were often absent did so because they felt that absence was not frowned upon in their team, but also because they did not have a cooperative relationship with their coworkers. Instead, they viewed their relationship with the team as economic. These findings support our theoretical framework and highlight that in addition to social learning theory (Bandura, 1977) social exchange theory (Blau, 1964) is a valuable lens that sheds more light on the decision to call in sick or go to work when employees are faced with high coworker absence. When coworkers are often absent, the employee learns that it is acceptable to call in sick, but also that s/he doesn't have to be very cooperative. Instead, the employee can return the disfavor of being absent in a calculative manner, making sure his/her self-interest is served.

Second, we investigated the role of social integration in the imitation process. In Study 1, we showed that employees in highly socially integrated teams strongly disapproved of absence and advocated cooperative exchange norms. In these closely knit teams, employees would feel guilty about calling in sick illegitimately and found it important to be there for their team. Consequently, in Study 2, we found that in high socially integrated teams employees were less likely to call in sick when their coworkers were often absent as compared to low socially integrated teams. Together, these findings suggest that teams with strong social and functional ties develop norms that foster behavior that is beneficial to the team. Calling in sick is not beneficial to the team, and team members therefore disapprove of this behavior. Helping each other and standing in for each other is beneficial, and team members thus advocate such cooperative exchange relationships. In low socially integrated teams, employees lack such cooperative exchange norms, and norms that keep them from calling in sick (i.e. disapproval absence norms) are weak. As a result, employees are more likely to call in sick in response to high coworker absence in low socially integrated teams.

9.1. Theoretical Implications

Research on absence culture most commonly assumes that imitation of absence is the result of employees observing coworkers' behavior and learning the group's absence norm from this observation. As suggested by Chen et al. (2013) the influence of coworkers on employee behavior is likely also based on the social exchange relationship they have with their co-workers. Our study showed that social exchange (Cropanzano & Mitchell, 2005) is at least as important in explaining group behavior as simple social influence. In fact, our findings cannot be adequately explained by social influence alone. From a social learning standpoint, one could argue that imitation of absence behavior should be more pronounced in high socially integrated work settings, as employees often interact and thus have more opportunities to learn the group norm. Also, if there is more social integration, it is particularly rewarding to comply with the group, as one identifies with the group and wants to belong to this ingroup (Akers, Krohn, Lanza-Kaduce, & Radosevich, 1979; Harrison et al., 2000). Our findings, however, show that imitation of absence behavior is less pronounced in highly socially integrated teams. Study 1 also gave suggestions for why this is the case. We found that in highly socially integrated teams, disapproval norms and cooperative exchange norms are stronger as compared to lower socially integrated teams.

Apparently, social integration not only fosters the development of cooperative exchange norms in teams, but it also promotes strong disapproval absence norms. This implies that when social integration is high, the employee's absence norms are only marginally influenced by the absence behavior of co-workers. Because if this were the case, we would have found more tolerant norms among employees in the high coworker condition. Instead, employees with high cohesion and task interdependency developed disapproval absence norms, which matched their cooperative climate, regardless of whether their co-workers had been absent

often or not. Social exchange theory thus complements social influence theories and informs us that the degree to which employees have cooperative versus economic exchange relationship with their coworkers explains if they respond cooperatively or strategically to high coworker absence. Particularly in teams with high social integration, cooperative norms develop, explaining why elevated co-worker absence does not instigate tolerant absence norms. Instead, employees decide to stand in for each other because they disapprove of absenteeism and because they want to help team members.

9.2. Limitations, future directions, and implication for practice

This study was subject to a number of limitations. To begin with, in Study 1 we used panel data, asking employees to imagine that the case scenario reflected their own team context. It is possible that our manipulation (i.e. high vs low coworker absence) did not match the respondent's actual team situation and therefore diluted our results. Because we also asked for the actual absence level of their coworkers, we could check if a mismatch between the condition and the actual team situation of respondent had biased his/her decision. This was not the case, as the actual number of days team members had been absent in the last three months did not significantly relate to the employee's decision to call in sick ($B = 0.04$, $SE = 0.04$, $p = ns$), while our manipulation was still significantly related to the employee's decision to call in sick ($B = 0.25$, $SE = 0.10$, $p < 0.05$) when controlling for actual coworker absence levels. Therefore, even though future research will benefit from utilizing data on reasons for decisions in a real organizational setting, we do not think it is appropriate to dismiss our results simply because they were obtained from experimental scenario data. Another limitation is that our outcome variable in Study 1 did not measure actual absence behavior, but the employee's decision to call in sick in a hypothetical scenario. Future research is needed to examine if the employee's decision is reflected in actual absence behavior. Event-based designs (Bolger, Davis & Rafaeli, 2003) might be helpful, whereby the researcher investigates the reasons and conditions in the event an employee calls in sick.

In addition, the self-reported data in Study 2 might have reduced the accuracy of our absence measure. Employees might have underreported their lost days, either due to social desirability or memory loss. In our model, such possible bias is less of an issue because we were not interested in explaining absolute levels of absenteeism, for which absence measures need to be as objective as possible. Instead, we examined the relationship between co-worker absence and employee absence. If employees underreported their absence levels, this bias would be the same in the predictor and outcome variable, leaving the correlation unaffected. Moreover, self-reported absence data can be especially problematic when self-reported predictors are used to explain this absence, due to common method variance (Harrison & Shaffer, 1994). Since we used predictors reported by co-workers (i.e. co-worker absence) to explain absence reported by the employee, our study design overcomes this problem.

We also note that Study 1 was conducted in the U.S., where most employees do not have paid leave, while Study 2 was held in the Netherlands, where paid sick leave is regulated by law. It is possible that American employees are less likely to call in sick because they face a financial penalty. The findings of Study 1, however, indicate that imitation behavior does occur in the U.S. as well, but it is possible that the results of Study 1 would have been more pronounced had we conducted it in the Netherlands. It would therefore be interesting to examine imitation behavior cross-culturally, using the exact same study design in multiple countries.

Another possible shortcoming of Study 2 is the relatively low employee response rate and the use of information from incomplete teams. It is possible that team members with high absence levels did not participate in the study. If this is the case it only marginally affected our results, as the scores of those nonrespondents would affect the predictor (co-worker absence) and the outcome variable (employee absence) in a similar way. Moreover, the incomplete information leads to a more conservative test of our model. We underscore that it is relatively difficult to collect data from teams, as the organizations, supervisors, and team members themselves must be willing to cooperate (Kalleberg, 1994). Sampling from 24 organizations ensures that we have not reported a rare anomaly. Therefore, we argue that, despite its limitations, this study has unique value, adding to our understanding of team context and processes and absence behavior.

Future research is needed to further unravel the interplay between absence norms and social exchange norms. Our results suggest that in teams with strong cooperative exchange norms, high coworker absence affects the team's absence norm to a lesser extent. It would be interesting to examine if, under certain conditions, social exchange mechanisms overrule social learning mechanisms. Another suggestion is to examine the conditions under which the impact of group absence norms on the employee's behavior is strongest. For instance, if there is strong agreement in the team about absence norms, or groups have worked together for a long time, the impact of absence norms on the employee's absence behavior is likely stronger. In addition, the suggested economic exchange mechanism could be further revealed by examining whether feelings of distributive justice, fairness, and resentment function as a mediator in the relationship between co-worker absence and employee absence. Future research could also investigate if social control prevents employees from strategically responding to high coworker absence. Economic imitation of absence should be curtailed when deviant behavior is more transparent, for instance due to co-worker pressure, close supervision by management, or formal organizational policies. Finally, other measures of social integration could be investigated. In particular, flexible work designs, which might loosen ties between team members, would be interesting to look at since their implementation has grown exponentially in the last years (De Menezes & Kelliher, 2011).

The results are highly pertinent to the trend toward team designs in organizations. In an essay concerning some unintended effects of job design, Johns (2010) explains how team designs have sometimes provoked elevated absenteeism or failed to deliver expected gains in attendance, even though such designs have features (e.g., higher social control) that might be expected to facilitate attendance (Harrison et al., 2000). Coupled with emerging evidence that absence seems to peak in organizational settings with very poor social integration (Johns, 2008, 2009), our results suggest that these uneven research findings for the impact of team designs on absence levels may stem in part from rational actors attempting to manage equity within teams. In this case, imitation is not flattery but a move to balance the equity equation within the team, and it is most likely under conditions of lower social integration. Our study helps identify job designs that mitigate the imitation of dysfunctional behavior. While team members may have the tendency to repay co-workers' absence by calling in sick, this strategic behavior can be countered by creating a cohesive team atmosphere and designing projects with high task interdependence. At the same time, higher social integration fosters team norms that disapprove of absenteeism. Thus, good job design (i.e., high cohesion, task dependency) can break through the vicious circle in which team members imitate each other's absence behavior. Instead, in such integrated team climates, disapproval absence norms and cooperative relationships evolve making it more likely that team members stand in for each other.

Appendix A. Reasons for decision from qualitative data

Theme	Low coworker absence		High coworker absence		Example
	Count	%	Count	%	
Decision to call in sick	6		35		
Economic exchange	0		20	57.1	"I'll be honest and admit that if my team members are lazy, I will be lazy back at them."
Need for recovery	3	50.0	14	40.0	"I want to rest at home for my mild health condition so that the sickness does not increase."
Not effective	1	16.7	2	5.7	"I have learned that going in when you don't feel great leads to sub-par work."
Other	2	33.3	6	17.1	"There is a very good chance that I would be called in anyway, even if I said I was sick", "I don't want to work that hard".
Decision to go to work	107		151		
Cooperative exchange	32	29.9	30	19.9	"My reason for going to work is my team members are counting on me, and I don't want to increase their workload."
Financial motives	23	21.5	31	20.5	"If I don't go to work, I don't get paid."
Responsibility and integrity	16	15.0	26	17.2	"I personally need to be responsible, and do the job I was hired for. It is important to maintain one's level of integrity".
Disapproval absence norm	38	35.5	19	12.6	"The reason for going to work is because I was not sick. Not "feeling well" is no excuse to stay home."
No economic exchange	0	0.0	22	14.6	"Just because my team members miss a lot of work doesn't mean I should unless I'm legitimately sick."
Love work	12	11.2	12	7.9	"I really like going to work, nothings will get me down unless I am in the hospital."
Work would pile up	6	5.6	9	6.0	"I know that if I stay home that my work will only start to pile up more."
Organizational pressure	4	3.7	4	2.6	"Missing a day is seriously frowned on and a point system is used, when 12 points are used employee is terminated regardless of paperwork from a doctor."
Other (reason unclear)	10	9.3	26	17.2	"I always go to work and I do not like to call in sick.", "I can't call in sick."

Note: Respondents could list multiple reasons for their decision in their open-ended answer.

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