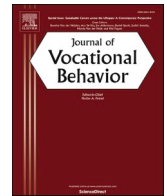


Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Vocational Behavior

journal homepage: www.elsevier.com/locate/jvb

Managing the risks and side effects of workplace friendships: The moderating role of workplace friendship self-efficacy

Ulrike Fasbender^{a,*}, Anne Burmeister^b, Mo Wang^c^a University of Hohenheim, Germany^b University of Cologne, Germany^c University of Florida, United States of America

ARTICLE INFO

Keywords:

Workplace friendships
 Role theory
 Role conflict
 Resource depletion
 Self-efficacy

ABSTRACT

In this paper, we investigate the risks and side effects of workplace friendships for coworkers. Combining the dialectical perspective on workplace friendships with a self-regulatory perspective, we argue that workplace friendships can lead to incivility directed toward coworkers because employees experience inter-role conflict between their role as “employee” and their role as “friend”, and subsequent resource depletion. We further suggest that employees with higher workplace friendship self-efficacy are better able to manage these risks and side effects. We tested our hypotheses in two studies with time-lagged data (Study 1: 451 employees, Study 2: 499 employees) using structural equation modeling. Study 1 showed that workplace friendships are positively related to incivility via inter-role conflict and subsequent resource depletion. Workplace friendship self-efficacy buffered the indirect relation between workplace friendships and incivility. Study 2 partly replicated and extended the findings from Study 1. We found support for the serial mediation effect of workplace friendship on incivility via inter-role conflict and resource depletion and we were able to extend Study 1 by disentangling the targets of incivility. In particular, employees instigated incivility toward other coworkers rather than their workplace friends. However, the moderating effect of workplace friendship self-efficacy did not replicate. Our findings contribute to the literatures on workplace friendships and role conflicts.

Workplace friendships refer to voluntary and informal social relationships at work that are driven by communal norms and socioemotional goals (Pillemer & Rothbard, 2018). As an important aspect of organizational life, workplace friendships can provide employees with a sense of belonging at work (Dutton & Heaphy, 2003; Methot et al., 2017). Accordingly, the majority of studies documented the benefits of workplace friendships, such as increased employee well-being (Hsu et al., 2019; Morrison, 2004; Nielsen et al., 2000; Zhang et al., 2021), boosts in cooperation, creativity, and workplace innovation (Jehn & Shah, 1997; Lu et al., 2017), and more effective organizational functioning (Berman et al., 2002). For a while, scholars have therefore viewed workplace friendship through “rose-tinted glasses” assuming workplace friendship to be an almost exclusively positive phenomenon.

Recently however, scholars have started to question this exclusively positive perspective of workplace friendships (Hommelhoff, 2019; Ingram & Zou, 2008; Methot et al., 2016; Pillemer & Rothbard, 2018). Workplaces are grounded in norms and expectations of instrumentality and impartiality, whereas friendships are based on norms of affection and favoritism (Bridge & Baxter, 1992; Hommelhoff, 2019; Ingram & Zou, 2008). These conflicting norms and expectations can become an excessive demand for employees

* Corresponding author at: University of Hohenheim, Business and Organizational Psychology, Wollgrasweg 49, 70599 Stuttgart, Germany.
 E-mail address: Ulrike.Fasbender@uni-hohenheim.de (U. Fasbender).

<https://doi.org/10.1016/j.jvb.2023.103875>

Received 26 May 2021; Received in revised form 9 March 2023; Accepted 17 April 2023

Available online 20 April 2023

0001-8791/© 2023 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

involved in workplace friendships (Dietz & Fasbender, 2022). Employees may feel overwhelmed because they cannot reconcile the norms and expectations of their role as “employee” and their role as “friend” and react with deviant work behavior toward coworkers, such as *incivility* (i.e., insensitive, rude, and discourteous behavior toward others; Andersson & Pearson, 1999). Incivility occurs more frequently than high-intensity deviant work behaviors (e.g., aggression or violence; Schilpzand et al., 2016) and can have serious detrimental consequences for organizations, such as lower levels of innovative and creative performance (Sharifirad, 2016; Zhan et al., 2019), or higher levels of absenteeism and employee turnover (Cortina et al., 2013; Porath & Pearson, 2012). It is therefore worth investigating the potential link between workplace friendships and incivility due to role tensions and consider ways of managing this unwanted side effect.

While research on the risks and side effects of workplace friendships has gained traction (Hommelhoff, 2019; Methot et al., 2016; Pillemer & Rothbard, 2018), our understanding of the outcomes, associated mechanisms, and boundary conditions is incomplete. Researchers have conceptualized negative effects for individuals (e.g., distraction from individual goals), groups (i.e., ineffective decision-making), and organizations (inhibited information sharing; Pillemer & Rothbard, 2018), but negative effects have only been empirically demonstrated for individual task performance (Methot et al., 2016). We have yet to understand the potential negative spill-over effects for coworkers. Understanding how coworkers are affected is important as it broadens our understanding of the implications of workplace friendships as a relational phenomenon. Focusing on deviant work behavior directed toward coworkers seems particularly relevant as research outside of the workplace suggests that friendships can stimulate risky, norm-deviant, and antisocial behavior (Bagwell, 2004; Ciairano et al., 2007). Shedding light on potential harm for coworkers is relevant to allow for more comprehensive theorizing and overcome possible risks and side effects.

Further, the underlying mechanisms of the link between workplace friendships and deviant work behavior directed at coworkers have yet to be deciphered. More specifically, researchers conceptualized role tensions between the norms and expectations of the employee role and the friend role (Bridge & Baxter, 1992; Pillemer & Rothbard, 2018) and explored broken friendship rules and conflicting resources in a critical incident study (Hommelhoff, 2019). In addition, they demonstrated that depleted resources in terms of exhaustion can explain the negative effects of workplace friendships on individual task performance (Methot et al., 2016). However, these role and resource-based perspectives have yet to be integrated to understand the precise nature of the underlying processes that link workplace friendships to negative interpersonal outcomes such as deviant work behavior.

It is also important to shed light on the boundary conditions that can buffer the risks and side effects of workplace friendships. Specifically, understanding how individual characteristics shape the resource depleting pathway allows for a more nuanced theorizing and interventions regarding the negative effects of workplace friendships (Methot et al., 2016). In addition, theorizing and testing individual characteristics as moderators also complement conceptual research that only highlighted friendship characteristics (e.g., closeness, status inequality) as potential boundary conditions (Bridge & Baxter, 1992; Pillemer & Rothbard, 2018).

In this research, we therefore examine the mechanisms through which workplace friendships can spark incivility directed toward coworkers, and we uncover the moderating role of workplace friendship self-efficacy. Combining the dialectical perspective on workplace friendships (Bridge & Baxter, 1992) with a self-regulatory perspective (Beal et al., 2005), we argue that workplace friendships can lead to incivility directed toward coworkers because employees experience *inter-role conflict* (i.e., overall tension or conflict between the “employee” role and the “friend” role also called dual-role tensions; Bridge & Baxter, 1992) and subsequent *resource depletion* (i.e., a mental state associated with the feeling that one’s resources and energy levels are running low; Lanaj et al., 2014). Accordingly, workplace friendships can deplete employees’ resources because they are struggling to reconcile the conflicting demands associated with the enactment of employee and friend roles at work. As a result of the experience of resource scarcity, employees may fail to regulate their behavior in line with workplace norms (Christian & Ellis, 2011; Rosen et al., 2016) and thus engage more in insensitive, rude, and discourteous behavior toward others. However, we further argue that employees with higher *workplace friendship self-efficacy* (Bagci et al., 2019; Fitzpatrick & Bussey, 2014), which represents a context-specific form of general self-efficacy (i.e., confidence in one’s ability; Bandura, 1977), are better able to manage the simultaneous demands of employee and friend roles. Employees who are more confident in their ability to manage their workplace friendships are better able to navigate the tensions between the conflicting demands of their roles as employee and friend, such that the detrimental downstream consequences of workplace friendships on incivility should be buffered.

With this research, we aim to contribute to the literatures on workplace friendships, role conflicts, and workplace incivility. First, we contribute to the nascent but growing research stream on the risks and side effects of workplace friendships (Hommelhoff, 2019; Methot et al., 2016; Pillemer & Rothbard, 2018) by specifying that not only the focal employee but also coworkers can be affected negatively. Specifically, we examine incivility directed toward coworkers who may or may not be part of the focal workplace friendship as an outcome. In doing so, we broaden extant theorizing about who can be negatively affected by workplace friendships, which has conceptualized downsides for focal employees, groups, and organizations (Pillemer & Rothbard, 2018). With our research, we add coworkers—who may or may not be part of the focal workplace friendship—to the list of targets that might experience negative consequences.

Second, we shed light on the processes through which workplace friendships are linked to detrimental interpersonal outcomes such as incivility. Focusing on the consequences of the conflict between the formal employee role and the informal friend role contributes to research on role conflict in the work context more broadly. This research has either focused on conflicts between different aspects of the employee role (e.g., multi-team membership; Berger & Bruch, 2021) or examined conflicts between work and family roles (e.g., work-family conflict; Kossek & Lee, 2017). We draw on the dialectical perspective of workplace friendships to add the conflict between employee and friend roles at work to this research stream. We further integrate a role-based perspective (i.e., dialectical perspective on workplace friendships; Bridge & Baxter, 1992) with a self-regulatory perspective (Beal et al., 2005), to allow for more precise specification of the sequential process that links workplace friendships to detrimental interpersonal outcomes.

Third, with our investigation of workplace friendships as an unanticipated precursor of incivility, we also contribute to our understanding of the antecedents of incivility. Specifically, we add a relational perspective to the literature, which has so far concentrated on attitudes and characteristics of the instigator (e.g., job satisfaction, [Blau & Andersson, 2005](#); trait anger, [Meier & Semmer, 2013](#); machiavellianism, [Lata & Chaudhary, 2020](#)) or situational antecedents of incivility (e.g., job demands, [van Jaarsveld et al., 2010](#)). Given that the workplace is a hub for social interactions between coworkers, a better understanding of relational aspects leading to incivility matters. Despite the positive outcomes of workplace friendships, it is important to understand how it may harm others through incivility directed toward coworkers, and detect ways to minimize the downstream consequences on incivility ([Schilpzand et al., 2016](#)). In this regard, we introduce workplace friendship self-efficacy as a potential moderator of the unwanted effects of workplace friendships, which adds an agentic perspective to research on boundary conditions of workplace friendships' effects on incivility toward involved or non-involved coworkers.

1. Theoretical background

The dialectical perspective on workplace friendships ([Bridge & Baxter, 1992](#)) provides a useful theoretical lens to understand the risks and side effects of workplace friendships as it highlights the specific tensions between the “employee” and “friend” roles at work. [Bridge and Baxter \(1992\)](#) apply dialectical perspectives on romantic and non-work friendship relationships ([Baxter, 1988](#); [Rawlins, 1989](#)) to the work context, to specify why blending the informal friendship role with the formal employee role leads to inter-role conflict ([Kahn et al., 1964](#); [Katz and Kahn, 1978](#)). Accordingly, role demands grounded in norms and expectations associated with the employee and the friend roles might be incompatible and even contradictory, thereby creating dialectical tensions (i.e., a contradiction of functional opposites that negate each other; [Bridge & Baxter, 1992](#)).

More specifically, an employee might experience inter-role conflict because their role as employee requires them to act impartial and treat everyone at work equally, whereas their role as friend requires them to display preferential treatment toward their workplace friends (i.e., impartiality-favoritism dialectic; [Bridge & Baxter, 1992](#)). In addition, workplace friendships might lead to inter-role conflict because friendship norms of total acceptance might collide with work-related expectations of using judgment and criticism to improve work outcomes (i.e., judgment-acceptance dialectic; [Bridge & Baxter, 1992](#)). Further, workplace friendships might be associated with inter-role conflict because expectations of maintaining personal connections with workplace friends might challenge an employee's autonomy (i.e., autonomy-connection dialectic; [Bridge & Baxter, 1992](#)). Moreover, expectations of being totally equal as friends might collide with inequality built into different employee roles regarding seniority, responsibility, and remuneration (i.e., equality-inequality dialectic; [Bridge & Baxter, 1992](#)). Finally, expectations of total openness and confidentiality with friends might contradict expectations of workplace information management where relevant information needs to be shared and some information needs to be kept confidential (i.e., openness-closedness dialectic; [Bridge & Baxter, 1992](#)).

In turn, inter-role conflict can lead to resource depletion ([Kahn et al., 1964](#); [Ritter et al., 2016](#); [Rizzo et al., 1970](#)) because employees attempt to regulate their behavior to adapt to highly demanding work situations. The initial loss of resources and the subsequent attempt to cope with the demands by investing more resources deplete employees' reservoir of self-regulatory resources and thus inhibit further self-regulatory processes ([Beal et al., 2005](#)). When employees experience resource depletion, they lack the necessary self-regulatory resources to control impulses and inhibit socially undesirable behaviors ([Eissa & Wyland, 2018](#); [Liu et al., 2015](#); [Wheeler et al., 2013](#)). This self-regulation impairment resulting from resource depletion can give rise to behavior that is inconsistent with personal goals and workplace norms ([Christian & Ellis, 2011](#); [Rosen et al., 2016](#)), such as abuse ([Wheeler et al., 2013](#)), aggression ([Liu et al., 2015](#)), and social undermining ([Eissa & Wyland, 2018](#)).

From a dialectical perspective on workplace friendships, we further argue that the risks and side effects of workplace friendships are shaped by individual characteristics. One individual characteristic, which is promising in buffering the potential risks and side effects, is workplace friendship self-efficacy. Workplace friendship self-efficacy reflects one's confidence in managing personal relationships at work ([Bagci et al., 2019](#); [Fitzpatrick & Bussey, 2014](#)). Self-efficacious employees hold relevant mastery experiences that can help them to meet the demands and expectations of their multiple work roles ([Bandura, 1977](#)). As a result, self-efficacious

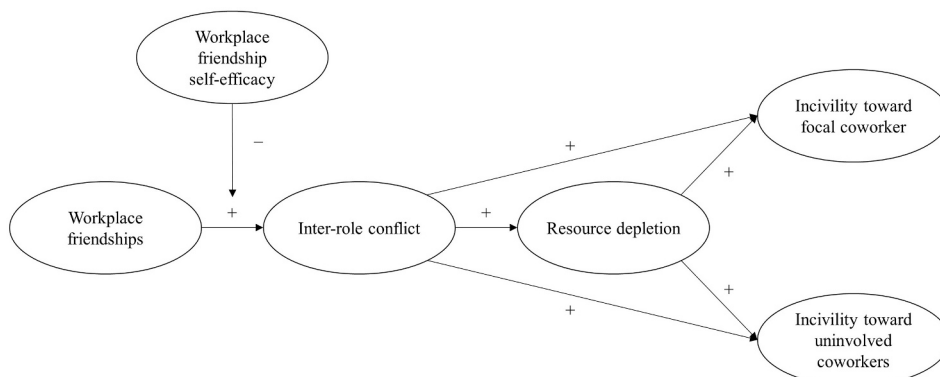


Fig. 1. Conceptual model of managing the risks and side effects of workplace friendships.

employees should be less prone to the risks and side effects of workplace friendships. We therefore consider workplace friendship self-efficacy as a relevant boundary condition. Fig. 1 shows our conceptual model.

2. Hypotheses development

2.1. Workplace friendships and the indirect relation with incivility via inter-role conflict and resource depletion

We argue that workplace friendships can lead to incivility via inter-role conflict and subsequent resource depletion, due to the different and potentially conflicting demands placed on individuals in their roles as “employee” and “friend” at work. First, workplace friendships can lead to inter-role conflict because the different role expectations attached to “employee” and “friend” are sometimes mutually exclusive (Bridge & Baxter, 1992). For example, employees reported that workplace friendships resulted in “a sense of divided loyalty between the needs of a friend vs. the needs of the organization” (Bridge & Baxter, 1992, pp. 216–217). More specifically, individuals experience inter-role conflict because they need to make decisions about which role to prioritize (Fasbender & Drury, 2022; Kahn et al., 1964; Methot et al., 2016). To illustrate, if employees decide to invest their limited resources into the time-sensitive completion of a work report, they might not be able to respond appropriately to the immediate socioemotional needs of a workplace friend. In line with our argument, an exploratory study found that workplace friendships can lead to inter-role conflict between friendship- and task-related aspects of the work role (Hommelhoff, 2019). We thus expect that workplace friendships are positively associated with inter-role conflict.

Second, inter-role conflict can lead to resource depletion because employees tend to invest their resources into navigating the tensions between their formal role as “employee” and their informal role as “friend” (Methot et al., 2016). In doing so, employees need to regulate the allocation of attention and resources across incompatible role demands, which consumes regulatory resources (Beal et al., 2005) and leads to resources being lost in the attempt to juggle both roles (Bamberger et al., 2017; Grandey & Cropanzano, 1999). This investment of self-regulatory resources to reconcile competing role demands leads to feelings of depletion, represented by having difficulties to concentrate, or feeling drained and unfocused at work. Taken together, and supported by research that found that role stressors are linked to several forms of employee strain (e.g., exhaustion, fatigue; Barling & Frone, 2017; Barling & Macintyre, 1993; Rivkin et al., 2015), we expect that inter-role conflict is positively associated with resource depletion.

Third, resource depletion can lead employees to instigate incivility because complying with workplace norms requires the investment of self-regulatory resources, which are not available to employees when their resources are depleted. Deviant behavior “can be thought of as self-regulatory failures” (Rosen et al., 2016, p. 1621) because when employees experience resource depletion, they lack the resources necessary to suppress deviant behaviors and act in a way that is consistent with workplace norms (Christian & Ellis, 2011; Rosen et al., 2016). When employees' resources are depleted, they may struggle to suppress rude and discourteous behavior at work. For example, they may be less able to take the perspective of their coworkers or do not think too much about the consequences of their behavior, which can result in instigating incivility at work. In line with our argument, previous research has shown that resource depletion is linked to deviant behavior, such as impulsive, unethical, or aggressive behavior toward others (Christian & Ellis, 2011; DeWall et al., 2007; Jahanzeb & Fatima, 2018; Lin et al., 2016) as well as incivility (Rosen et al., 2016).

Importantly, research suggests that incivility can be directed at different targets (Zappalà et al., 2022). Thus, it seems worthwhile to disentangle whether depleted employees instigate incivility toward their workplace friends or toward other coworkers who are not workplace friends. From an attribution perspective, it seems likely that resource-depleted employees enact incivility toward their workplace friends because they identify interactions with their friends at work as the source of the problem that is to blame for their loss of resources. Employees might thus retaliate by instigating incivility toward workplace friends. In addition, friendship norms, which emphasize acceptance, favoritism, and affection (Bridge & Baxter, 1992), would suggest that workplace friends occupy a special position in the focal employees' social hierarchy and employees might thus instigate incivility toward other coworkers. Research showed that employees can redirect deviant behaviors toward innocent targets to restore perceptions of control if the source of the problem is (for whatever reason) difficult or impossible to reach (Martinko et al., 2013). Taken together, we expect that workplace friendships have indirect relations with incivility in general, incivility toward workplace friends, and incivility toward other coworkers via inter-role conflict and resource depletion.

Hypothesis 1. Workplace friendships have positive indirect relations with (a) incivility, (b) incivility toward workplace friends, and (c) incivility toward other coworkers via inter-role conflict and subsequent resource depletion.

2.2. The buffering role of workplace friendship self-efficacy

We argue that workplace friendship self-efficacy buffers the positive effect of workplace friendships on inter-role conflict, thereby mitigating the downstream consequences on incivility. General self-efficacy affects a large variety of employee outcomes (Gist & Mitchell, 1992), and has been shown to help employees persist in the face of adversity (Lent et al., 1987), deal more effectively with challenging situations (Hill et al., 1987), and generate more benefits from opportunities (Alessandri et al., 2015). More specifically, research on the moderating role of self-efficacy at work found that believing in one's abilities can help employees to effectively respond to challenges and buffer the negative effects of several work-related demands (Brown et al., 2001; Jex & Bliese, 1999). For example, Brown et al. (2001) showed that employees with higher (vs. lower) self-efficacy were better able to deal with the demands of information seeking and more likely to effectively interpret information to clarify role expectations. Accordingly, employees with higher self-efficacy are more effective in interpreting ambiguous information because they are less distracted and hence waste less cognitive

resources with rumination about perceived inadequacies (see Bandura, 1997).

More specifically, employees who are self-efficacious regarding their workplace friendships are confident in their ability to manage their friendships at work (Bagci et al., 2019; Fitzpatrick & Bussey, 2014). We expect that the link between workplace friendships and inter-role conflict is less pronounced when workplace friendship self-efficacy is higher (vs. lower). This is because individuals develop beliefs about their capabilities and adapt to changing demands based on information provided by their social context and interactions with their social environment (Bandura, 1997; Gist & Mitchell, 1992). Employees with higher workplace friendship self-efficacy believe that they can effectively manage their workplace friendships based on their experiences and their ability to deal with interpersonal issues. Workplace friendship self-efficacy thus enables employees to navigate their role as workplace friend more effectively, which reduces the perceived conflict with their formal role as employee.

Research has yet to test the moderating role of workplace friendship self-efficacy for the detrimental effects of workplace friendships on inter-role conflict and its downstream consequences. However, the limited research on the moderating role of friendship self-efficacy found that it can buffer the negative effects of social victimization (i.e., socially aggressive behaviors targeted at seemingly powerless individuals; Fitzpatrick & Bussey, 2014). Accordingly, workplace friendship self-efficacy strengthens individuals' belief in being proactive agents who can shape and exercise control over their social environment. Taken together, we expect that workplace friendship self-efficacy buffers the positive link between workplace friendships and inter-role conflict.

Hypothesis 2. Workplace friendship self-efficacy moderates the positive relation between workplace friendships and inter-role conflict, such that the positive relation is weaker when workplace friendship self-efficacy is higher (vs. lower).

Integrating our arguments, we expect that workplace friendship self-efficacy buffers the detrimental downstream consequences of workplace friendships on instigated incivility. Specifically, the positive links between workplace friendships and incivility via inter-role conflict and subsequent resource depletion are weaker when workplace friendship self-efficacy is higher (vs. lower).

Hypothesis 3. The positive indirect relations between workplace friendships and (a) incivility, (b) incivility toward workplace friends, and (c) incivility toward other coworkers via inter-role conflict and subsequent resource depletion are weaker when workplace self-efficacy is higher (vs. lower).

We test our hypotheses using two studies. In Study 1, we focus on incivility as generic construct that does not differentiate between coworkers who are involved in the focal friendship and non-involved others. In Study 2, we specify the relationship with one particular coworker and the behavior toward that particular coworker vs. non-involved others to parcel out the target of incivility. Specifically, employees report about their relationship to, experiences with, and behavior toward one focus person in addition to other non-involved coworkers. By specifying a focus person, we are able to disentangle the target of incivility, that is whether employees instigate incivility toward the focal person or other coworkers.

3. Study 1

3.1. Method

3.1.1. Sample and procedure

We collected three waves of data in collaboration with a certified data collection organization (i.e., Respondi) in 2019. About 5000 employees working in different industries and organizations in the United Kingdom (UK) were contacted via email if they were at least 18 years old and employed for a minimum of 20 h per week. We decided to collect a sample from employees working in different organizations to increase the generalizability of our findings and the variance in organizational contexts, which is relevant due to the contextual moderator in our model. Each participant was asked to fill out three online questionnaires with a time lag of two weeks in between. We time-separated our measures to offer a stronger causal inference (Wang et al., 2017) and to reduce common-method bias (Podsakoff et al., 2003). Two weeks were chosen as the time lag because previous research suggested the use of short time interval research designs to identify the strongest possible relations by limiting the probability of the occurrence of individual or organizational events that could override the investigated relations (Dormann & Griffin, 2015).

At Time 1, 661 participants responded to the survey (i.e., response rate of 13.2 %), of which 516 also participated at Time 2 (dropout rate = 21.9 %), and 451 at Time 3 (dropout rate = 12.6 %). We therefore had 451 participants in our final sample. Participants worked in diverse industries (i.e., 12.4 % public sector, 8.9 % professional services, 8.4 % consumer goods, 8.4 % health care, 8.4 % education and research, 7.8 % media, technology and telecommunications, 6.2 % industrial goods, 6.0 % finance and insurance, 4.2 % non-profit sector, 2.9 % energy and infrastructure, and 26.4 % other industries). On average, participants worked 38.33 h per week ($SD = 6.63$). The average age of participants was 49.54 years ($SD = 11.24$). Of all participants, 40.1 % were women.

To investigate potential attrition effects, we followed the stepwise procedure recommended by Goodman and Blum (1996). Specifically, we tested if the final sample ("stayers") differed from the group of "leavers" including participants who dropped out. We entered all variables at Time 1 in a multiple logistic regression analysis predicting the probability of being included in the final sample to assess the presence of non-random sampling. The results of the multiple logistic regression analysis revealed no effects of the control variables nor the study variables except for age and gender, indicating that older participants were more likely to remain and female participants were less likely to remain in the sample. Therefore, we also investigated the mean differences of the "stayers" and "leavers" in age and gender with *t*-tests for independent samples and found significant differences for age ($M_{\text{stayers}} = 49.54$ ($SD = 11.27$), $M_{\text{leavers}} = 47.03$ ($SD = 11.79$), ($t(659) = -2.625$, $p = .009$) and gender ($M_{\text{stayers}} = 0.40$ ($SD = 0.49$), $M_{\text{leavers}} = 0.52$ ($SD = 0.50$), ($t(659) = 2.853$, $p = .004$). Moreover, we estimated differences in variance between the "stayers" and the whole sample as suggested

by Goodman and Blum (1996). However, no significance differences in variance occurred for age ($\chi^2(450) = 432.095, p = .719$) and gender ($\chi^2(450) = 439.069, p = .635$). Finally, we conducted a sensitivity analysis to investigate whether the results differ between “stayers” and the whole sample. Results showed that the estimated relationships remained stable, which indicates that non-random sampling is not a major concern in the data at hand.

3.1.2. Measures

Unless indicated otherwise, we asked participants to respond on a five-point Likert scale ranging between 1 (*Strongly disagree*) and 5 (*Strongly agree*).

3.1.2.1. Workplace friendships. At Time 1, we measured the prevalence of workplace friendships with the six-item scale from Nielsen et al. (2000) that captures the extent to which employees have friendships at work. An example item was “I have formed strong friendships at work” (Cronbach's $\alpha = 0.90$).

3.1.2.2. Workplace friendship self-efficacy. At Time 1, we measured workplace friendship self-efficacy with four items derived from Judge et al.'s (1998) general self-efficacy scale. We adapted the scale to the work domain by adding the word “at work” to each item, and by specifically referring to managing workplace friendships. An example item was “At work, I am able to manage workplace friendships” (Cronbach's $\alpha = 0.88$).

3.1.2.3. Inter-role conflict. At Time 2, we measured inter-role conflict with five items adapted from the work-family conflict scale by Netemeyer et al. (1996). We adapted the items to the workplace friendship context, by changing references from work-family to workplace friendship based on the conceptual work by Pillemer and Rothbard (2018; see also research by Ingram & Zou, 2008; Hommelhoff, 2019). We asked participants to report whether they experienced conflict between their role as employee and workplace friend in the last two weeks. The items were introduced with “In the last two weeks...”; an example item was “Socializing with my coworkers interfered with my responsibilities at work” (Cronbach's $\alpha = 0.94$).

3.1.2.4. Resource depletion. At Time 2, we measured depletion with the five-item scale from Lanaj et al. (2014). Participants indicated how often they experienced depletion in the last two weeks on a five-point scale ranging from 1 (*Never*) to 5 (*Always*). The items were introduced with “In the last two weeks, how often did you experience the following?” An example item was “I felt drained” (Cronbach's $\alpha = 0.93$).

3.1.2.5. Instigating incivility. At Time 3, we measured instigating incivility with the seven-item scale from Bennett and Robinson (2000) that captures the extent to which employees have acted impolitely or rudely toward their coworkers on a five-point scale ranging from 1 (*Never*) to 5 (*Always*). The items were introduced with “In the last two weeks, how often did you engage in the following?” An example item was “Acted rudely toward my coworkers” (Cronbach's $\alpha = 0.92$).

Control variables

We controlled for employees' age as previous research has highlighted that with increasing age, employees may gain greater experience that helps to deal with their workplace friends and therewith avoid potential negative consequences. In this regard, meta-analytical research found that with increasing age, employees experienced less inter-role conflict (Ng and Feldman, 2010). Moreover, meta-analytical evidence suggests that with increasing age, employees engage less in deviant and counterproductive work behaviors (Mackey et al. 2021; Ng and Feldman 2008; Hall, 2011) men and women differ in their friendship expectations (in particular with regard to communion expectations, such as self-disclosure and intimacy), which may affect the experience of inter-role conflict. In addition, we controlled for employees' contact frequency with coworkers during the last two weeks (1 = *very rarely*, 5 = *very often*) to preclude that the effects were caused by mere exposure to coworkers (i.e., how often employees interact with each other at work) rather than by workplace friendship (Fasbender et al., 2020; Fasbender & Wang, 2017).

3.1.3. Analytic strategy

To test our hypotheses, we ran structural equation modeling in Mplus 8.4 (Muthén & Muthén, 2019). In doing so, the control variables (i.e., age, gender, and contact frequency) were regressed on the mediators (i.e., inter-role conflict, resource depletion) and the outcome variable (i.e., incivility).

To test the serial indirect effects of workplace friendships on incivility via inter-role conflict and subsequent resource depletion, we controlled for the direct effects of workplace friendships on resource depletion and incivility to limit the inflation of the estimated indirect effect (Preacher & Hayes, 2008). We ran parameter-based bootstrapping with the Monte Carlo method for deriving the confidence intervals of the indirect effects (Preacher & Selig, 2012) in R (R Core Team, 2017).

To test the moderating role of workplace friendship self-efficacy, we regressed the latent interaction between workplace friendship and workplace friendship self-efficacy on inter-role conflict and tested the simple slopes at higher (+1SD) and lower (−1SD) values of the moderator (Aiken and West, 1991). Finally, we ran parameter-based bootstrapping with the Monte Carlo method to estimate the confidence interval of the resulting compound coefficient and the conditional indirect effects.

3.2. Results

3.2.1. Preliminary analysis

In Table 1, we show the means, standard deviations, and correlations of Study 1 variables. In Table 2, we display the fit indices for the confirmatory factor analyses. The hypothesized five-factor model showed an excellent fit to the data, and fit better than the alternative four-, and one-factor models. In addition, the standardized factor loadings of the items on their corresponding latent factors ranged from 0.60 to 0.94 and were all significant. These results support the construct validity of the measures we used in Study 1.

3.2.2. Hypotheses testing

In Table 3, we show the coefficient estimates for the hypothesized model. In Table 4, we display the estimates for hypothesized indirect effects. Hypothesis 1a addressed the serial indirect effect of workplace friendships on incivility via inter-role conflict and subsequent resource depletion. Workplace friendships were positively related to inter-role conflict ($\gamma = 0.25, SE = 0.08, p = .001$), inter-role conflict was positively related to resource depletion ($\gamma = 0.38, SE = 0.05, p < .001$), and resource depletion was positively related to incivility ($\gamma = 0.19, SE = 0.05, p < .001$). The serial indirect effect was significant (*indirect effect* = 0.018, 95 % CI [0.005, 0.037]), supporting Hypothesis 1a.

Hypothesis 2 addressed the moderating role of workplace friendship self-efficacy on the relation of workplace friendships with inter-role conflict. We found that workplace friendship self-efficacy buffered the positive relation of workplace friendships with inter-role conflict ($\gamma = -0.38, SE = 0.08, p < .001$). Simple slope difference tests showed that the effect of workplace friendships was non-significant at higher levels of workplace friendship self-efficacy (*simple slope* = 0.05, *SE* = 0.09, *p* = .604) and positive at lower levels of workplace friendship self-efficacy (*simple slope* = 0.46, *SE* = 0.09, *p* < .001, *slope difference* = -0.41, *SE* = 0.09, *p* < .001). We plotted the interaction in Fig. 2. These findings supported Hypothesis 2.

Hypothesis 3a addressed the moderating role of workplace friendship self-efficacy on the indirect relations of workplace friendships with incivility via inter-role conflict and subsequent resource depletion. In line with Hypothesis 3a, we found that the indirect moderation effect was negative (*compound effect* = -0.03, 95 % CI [-0.05, -0.01]). The indirect effect of workplace friendships on incivility via inter-role conflict and resource depletion was non-significant at higher levels of workplace friendship self-efficacy (*conditional indirect effect* = 0.003, 95 % CI [-0.01, 0.02]) and positive at lower levels of organizational friendship support (*conditional indirect effect* = 0.03, 95 % CI [0.01, 0.06]). The difference between the two serial indirect effects was significant (*difference* = -0.03, 95 % CI [-0.05, -0.01]). Together, these findings support Hypothesis 3a.

3.2.3. Supplementary analysis

We conducted statistical analyses to assess whether common-method variance was a concern in our data. Following the recommendation of Podsakoff et al. (2003), we used a “marker” variable (i.e., organizational friendship support; 6-item scale, Cronbach's $\alpha = 0.85$; adapted from Nielsen et al., 2000) in our model and regressed it on all study variables (including predictor, mediator, and outcome variables) to partial out the marker as a surrogate for method variance. The results indicate that our findings are robust regardless of whether we included or excluded the marker variable in the model, which greatly reduces the concern for common-method variance.

Further, we tested whether the investigated relations are robust by estimating our hypothesized model with and without age, gender, and contact frequency as our control variables (Bernerth & Aguinis, 2016). We found that the pattern of the estimated direct and indirect effects remained the same regardless of whether we ran the model with or without control variables, which further strengthens the robustness of the findings.

3.3. Discussion of Study 1 findings

In Study 1, we found that workplace friendships were related to instigated incivility at work via inter-role conflict and resource depletion. In addition, our findings showed that workplace friendship self-efficacy buffered the detrimental effects of workplace friendships on inter-role conflict and mitigated the downstream consequences on incivility. While the results of Study 1 are interesting, there are shortcomings. We captured workplace friendships as a general phenomenon and did not delineate the target of incivility. We

Table 1
Study 1. Means, standard deviations, and correlations of study variables.

Variable	M	SD	1.	2.	3.	4.	5.	6.	7.	8.
1. Age	49.54	11.24	–							
2. Gender (1 = female)	0.40	0.49	-0.06	–						
3. Contact frequency	4.43	0.74	-0.08	0.04	–					
4. Workplace friendships	3.37	0.89	-0.03	0.03	0.28	(0.90)				
5. Workplace friendship self-efficacy	4.05	0.65	0.15	-0.02	0.21	0.48	(0.88)			
6. Inter-role conflict	2.02	0.89	-0.20	-0.01	0.05	0.07	-0.16	(0.94)		
7. Resource depletion	2.52	0.96	-0.24	0.16	0.01	-0.03	-0.14	0.41	(0.93)	
8. Incivility	1.33	0.62	-0.14	-0.13	0.07	0.09	-0.03	0.28	0.30	(0.92)

Note. N = 451. Reliabilities (Cronbach's alpha) are shown in parentheses on the diagonal. Significant coefficients are highlighted in bold.

Table 2
Study 1. Confirmatory factor analysis fit indices for measurement model.

Model	χ^2	df	$\Delta\chi^2 (\Delta df)$	p-value $\Delta\chi^2 (\Delta df)$	CFI	RMSEA	SRMR
Five-factor model	710.560	314	–	–	0.960	0.053	0.044
Four-factor model ^a	1440.828	318	730.268 (4)	<0.001	0.86	0.088	0.075
Four-factor model ^b	2394.722	318	1684.162 (4)	<0.001	0.790	0.120	0.105
One-factor model	7187.791	324	6477.231 (10)	<0.001	0.306	0.217	0.232

Note. N = 451. Difference of chi-square values ($\Delta\chi^2$) was estimated to compare to the seven-factor model. CFI = Confirmatory Fit Index, RMSEA = Root Mean Square Error of Approximation, SRMR = Standardized Root Mean Square Residual.

^a Workplace friendships and workplace friendship self-efficacy on one factor.

^b Inter-role conflict and resource depletion on one factor.

Table 3
Study 1. Results of structural equation modeling including control variables.

	Inter-role conflict		
	Coeff	SE	p-value
Age	–0.014	0.004	0.001
Gender (1 = female)	–0.040	0.089	0.653
Contact frequency	0.072	0.058	0.218
Workplace friendships (A)	0.251	0.078	0.001
Workplace friendship self-efficacy (B)	–0.542	0.104	<0.001
Interaction (A × B)	–0.380	0.081	<0.001
R ²	0.137	0.036	<0.001

	Resource depletion		
	Coeff	SE	p-value
Age	–0.012	0.004	0.001
Gender (1 = female)	0.277	0.080	0.001
Contact frequency	–0.003	0.060	0.985
Workplace friendships	–0.069	0.075	0.354
Workplace friendship self-efficacy	–0.042	0.110	0.703
Inter-role conflict	0.380	0.052	<0.001
R ²	0.236	0.038	<0.001

	Incivility		
	Coeff	SE	p-value
Age	–0.002	0.003	0.442
Gender (1 = female)	–0.194	0.058	0.001
Contact frequency	0.011	0.034	0.738
Workplace friendships	0.089	0.052	0.088
Workplace friendship self-efficacy	–0.050	0.080	0.088
Inter-role conflict	0.082	0.037	0.025
Resource depletion	0.186	0.052	<0.001
R ²	0.157	0.031	<0.001

Note. N = 451. Coeff = unstandardized coefficient, SE = standard error of unstandardized coefficient. Significant coefficients are highlighted in bold.

Table 4
Study 1. Indirect effects and conditional indirect effects of workplace friendships on incivility.

	Indirect Effects		
	Coeff	CI LL	CI UL
Workplace friendships → inter-role conflict → resource depletion → incivility	0.018	0.005	0.037
At higher (+1SD) workplace friendship self-efficacy	0.003	–0.009	0.018
At lower (–1SD) workplace friendship self-efficacy	0.032	0.012	0.060
Difference between higher and lower levels of workplace friendship self-efficacy	–0.029	–0.054	–0.011
Index of moderated mediation (compound effect)	–0.027	–0.051	–0.010

Note. N = 451. Coeff = unstandardized coefficient, CI LL = lower level of bias-corrected 95 % confidence interval, CI UL = upper level of bias-corrected 95 % confidence interval. Significant coefficients are highlighted in bold.

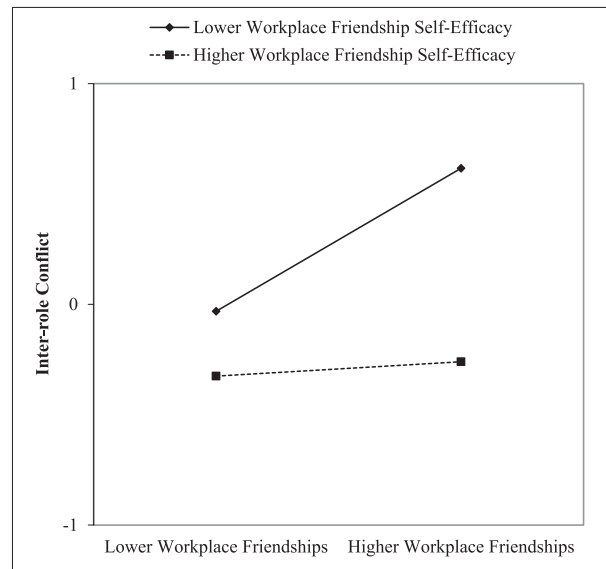


Fig. 2. Workplace friendship self-efficacy moderates the relation between workplace friendships and inter-role conflict.

thus conducted a second study to provide more specificity by asking participants to report about their relationship and experiences with one particular (randomly chosen) coworker and provide data on incivility toward that focal person and toward other coworkers.

4. Study 2

4.1. Method

4.1.1. Sample and procedure

As in Study 1, we collected the data in collaboration with a certified data collection organization (i.e., Respondi) in 2022. This time, we asked employees about their relationship to one particular coworker. To reduce the possibility of selection effects (see recommendations of Fasbender & Drury, 2022), we asked employees to provide names of three coworkers with whom they regularly interact at work. We then randomly selected one of these three coworkers to be the focal person. We programmed the survey in a way that the focal person's name was included in the respected items. Please find the full instruction in the appendix.

Again, employees working in different industries and organizations in the United Kingdom (UK) were contacted via email if they were at least 18 years old and employed for a minimum of 20 h per week. Each participant was asked to fill out three online questionnaires with a time lag of two weeks in between as in Study 1. At Time 1, 757 participants responded to the survey. We excluded 41 participants because they did not provide names of three coworkers or they provided names that did not make sense (e.g., provided only initials). Of all participants, we therefore invited 716 to take part in the follow-up surveys, of which 573 also participated at Time 2 (dropout rate = 20.0 %), and 499 at Time 3 (dropout rate = 12.9 %). We therefore had 499 participants in our final sample. Participants worked in diverse industries, most represented industries were health care and social work (13.4 %), the public sector (12.0 %), and education (11.8 %). On average, participants worked 37.85 h per week ($SD = 8.82$). The average age of participants was 45.73 years ($SD = 10.93$). Of all participants, 43.1 % were women.

As in Study 1, we investigated potential attrition effects by entering all variables at Time 1 in a multiple logistic regression analysis predicting the probability of being included in the final sample (Goodman & Blum, 1996). The results of the multiple logistic regression analysis showed no significant differences in any of the included variables, indicating that non-random sampling was not present in the data at hand.

4.1.2. Measures

Unless indicated otherwise, we asked participants to respond on a five-point Likert scale ranging between 1 (*Strongly disagree*) and 5 (*Strongly agree*).

4.1.2.1. Friendship closeness. At Time 1, we measured friendship closeness using the 1-item measure by Bridge and Baxter (1992). We used friendship closeness to account for the specific relationship to one particular person. The item was introduced with "Reflecting about the relationship with [placeholder, e.g., Lisa]...", followed by the item "How would you describe your relationship with [placeholder, e.g., Lisa]?". The scale ranged from 1 (*Just colleagues*) to 5 (*Best friends*).

4.1.2.2. Workplace friendship self-efficacy. At Time 1, we measured workplace friendship self-efficacy with the same scale as in Study 1

(Cronbach's $\alpha = 0.89$).

4.1.2.3. Inter-role conflict. At Time 1, we measured inter-role conflict with the scale used in Study 1.¹ We adapted the scale by adding the focal person to the item. An example item was "Socializing with [placeholder, e.g., Lisa] interfered with my responsibilities at work" (Cronbach's $\alpha = 0.94$).

4.1.2.4. Resource depletion. At Time 2, we measured resource depletion with the same scale as in Study 1 (Cronbach's $\alpha = 0.94$).

4.1.2.5. Instigating incivility. At Time 3, we measured instigating incivility with the 4-item scale adapted from Rosen et al. (2016). We adapted the scale to capture incivility toward the focal person vs. uninvolved others. The items were introduced with "In the last two weeks..." An example item for incivility toward focal person was "I put [placeholder, e.g., Lisa] down or acted condescending toward him/her" (Cronbach's $\alpha = 0.91$), and an example item for incivility toward uninvolved others was "I put my coworkers (other than [placeholder, e.g., Lisa]) down or acted condescending toward them?" (Cronbach's $\alpha = 0.92$).

4.1.2.6. Control variables. We controlled for employees' age, gender, and contact frequency with coworkers as in Study 1. In addition, we controlled for trait negative affect to rule out the possibility that the hypothesized negative effects of friendship closeness were caused by the mere negative affectivity. We measured negative affect using the short PANAS (Mackinnon et al., 1999; Watson et al., 1988) with five items (e.g., "upset"; $\alpha = 0.93$).

4.2. Results

We followed the same analytical strategy as in Study 1.

4.2.1. Preliminary analysis

In Table 5, we show the means, standard deviations, and correlations of Study 2 variables. In Table 6, we display the fit indices for the confirmatory factor analyses. The hypothesized five-factor model showed again an excellent fit to the data and the fit was better than for the alternative models. The standardized factor loadings of the items on their corresponding latent factors ranged from 0.75 to 0.92 and were all significant. These results support the construct validity of the measures we used in Study 2.

4.2.2. Hypotheses testing

In Table 7, we show the coefficient estimates for the hypothesized model. In Table 8, we display the estimates for indirect effects. Hypotheses 1b and 1c addressed the serial indirect effect of friendship closeness on incivility toward the focal coworker vs. other coworkers via role conflict and resource depletion. Friendship closeness positively related to inter-role conflict ($\gamma = 0.13$, $SE = 0.05$, $p = .014$). We also found a positive effect of inter-role conflict ($\gamma = 0.17$, $SE = 0.05$, $p = .001$) on resource depletion.

With regard to incivility toward the focal coworker, we found that the effect of resource depletion was not significant ($\gamma = 0.04$, $SE = 0.05$, $p = .382$). The indirect effect of friendship closeness on incivility toward the focal person via inter-role conflict and resource depletion was also not significant (*indirect effect* = 0.001, 95 % CI [-0.001, 0.003]). Hypothesis 1b was therefore not supported.

With regard to incivility toward the other coworkers, we found a positive effect of resource depletion ($\gamma = 0.15$, $SE = 0.06$, $p = .009$). Furthermore, we found a significant indirect effect of friendship closeness on incivility toward other coworkers via inter-role conflict and resource depletion (*indirect effect* = 0.003, 95 % CI [0.001, 0.006]), supporting Hypothesis 1c.

Hypotheses 2 and 3 addressed the moderating role of workplace friendship self-efficacy on the relation of friendship closeness with inter-role conflict, and its indirect effects on incivility. The moderation effect of workplace friendship self-efficacy was however not significant ($\gamma = -0.003$, $SE = 0.12$, $p = .978$). Hypotheses 2 and 3 could therefore not be supported in Study 2.

4.2.3. Supplementary analysis

As in Study 1, we conducted supplementary analyses to ensure the robustness of our findings. Again, assessed whether common-method variance was a concern using a marker variable (i.e., organizational friendship support, measured as in Study 1, Cronbach's $\alpha = 0.87$) in our model and regressed it on all study variables (including predictor, mediator, and outcome variables) to partial out method variance. The analysis showed that our findings are comparable regardless of whether we included or excluded the marker variable in the model, which lowers the concern for common-method variance.

Moreover, we tested whether the investigated relations are robust by estimating our hypothesized model with and without age, gender, contact frequency, and negative affect as our control variables. While most of the estimated direct and indirect effects remained the same, we found that the indirect effect of friendship closeness on incivility toward the focal coworker was significant in the hypothesized direction if we ran the model without control variables (which provides some support for Hypothesis 1b).

¹ Additionally, we collected data using the dual-role tensions scale of Bridge and Baxter (1992) in Study 2, which however showed deficiencies in its psychometric qualities. Nevertheless, its scale score's correlational patterns were similar to those of the inter-role conflict measure, providing further evidence for the robustness of our findings.

Table 5
Study 2. Means, standard deviations, and correlations of study variables.

Variable	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. 1. Age	45.73	10.93	–									
2. 2. Gender (1 = female)	0.43	0.50	–0.28	–								
3. 3. Contact frequency	3.83	1.14	0.03	–0.04	–							
4. 4. Negative affect	1.98	0.93	–0.18	0.13	–0.11	(0.93)						
5. 5. Friendship closeness	2.88	0.90	–0.01	–0.09	0.41	–0.08	–					
6. 6. Workplace friendship self-efficacy	4.23	0.60	0.05	–0.03	0.19	–0.34	0.30	(0.89)				
7. 7. Inter-role conflict	1.71	0.89	–0.15	–0.06	0.09	0.19	0.11	–0.21	(0.94)			
8. 8. Resource depletion	2.58	1.02	–0.24	0.18	–0.02	0.57	–0.07	–0.20	0.25	(0.94)		
9. 9. Incivility toward focal coworker	1.55	0.76	–0.13	–0.06	–0.02	0.27	–0.04	–0.32	0.46	0.28	(0.91)	
10. 10. Incivility toward other coworkers	1.60	0.82	–0.16	–0.08	0.05	0.24	0.02	–0.23	0.40	0.30	0.62	(0.92)

Note. N = 499. Reliabilities (Cronbach's alpha) are shown in parentheses on the diagonal. Significant coefficients are highlighted in bold.

Table 6
Study 2. Confirmatory factor analysis fit indices for measurement model.

Model	χ^2	df	$\Delta\chi^2$ (Δdf)	p-value $\Delta\chi^2$ (Δdf)	CFI	RMSEA	SRMR
Five-factor model	573.269	199	–	–	0.960	0.061	0.031
Four-factor model ^a	1346.951	203	773.682 (4)	<0.001	0.878	0.106	0.055
Four-factor model ^b	2823.095	203	2249.826 (4)	<0.001	0.721	0.161	0.142
One-factor model	6004.921	209	5431.652 (10)	<0.001	0.382	0.236	0.177

Note. N = 499. Difference of chi-square values ($\Delta\chi^2$) was estimated to compare to the seven-factor model. CFI = Confirmatory Fit Index, RMSEA = Root Mean Square Error of Approximation, SRMR = Standardized Root Mean Square Residual.

^a Incivility toward focal coworker and incivility toward other coworkers on one factor.

^b Inter-role conflict and resource depletion on one factor.

4.3. Discussion of Study 2 findings

In Study 2, we partly replicated and extended the findings from Study 1 by showing that workplace friendships were indirectly related to incivility via inter-role conflict and subsequent resource depletion. Moreover, we were able to disentangle the target of incivility. We found that workplace friendships were indirectly linked to incivility toward other coworkers, but not to incivility toward workplace friends. However, we were unable to replicate the moderating effect of workplace friendship self-efficacy.

5. General discussion

With this research, we aimed at understanding the risks and side effects of workplace friendships for coworkers. Using the dialectical perspective of workplace friendships in combination with a self-regulatory perspective, we examined through which mechanisms workplace friendships can lead to low-intensity deviant behavior directed toward others at work and how employees can mitigate these risks and side effects. Across two studies, we found that workplace friendships were not correlated to instigated incivility but were indirectly linked to instigated incivility through inter-role conflict and subsequent resource depletion. Specifically, we found that workplace friendships led to instigated incivility toward coworkers, especially other coworkers rather than workplace friends, because employees experienced inter-role conflict and subsequent resource depletion. Further, we found evidence in one of the studies that employees' workplace friendship self-efficacy buffered these risks and side effects of workplace friendships.

5.1. Theoretical and practical implications

The findings of our study have implications for theorizing on workplace friendships, role conflicts, and workplace incivility. First, we extend the nomological network of the outcomes of workplace friendships by depicting its possible effects on low-intensity deviant behavior toward coworkers. This broadens current theorizing on the possible downsides of workplace friendships, which have been situated at the level of the focal individual, the group, and the organization (Pillemer & Rothbard, 2018). With our research, we add coworkers at the interpersonal level to the list of targets that might experience negative consequences. This is relevant because empirical studies so far focused on the potentially detrimental effects of workplace friendships for the focal employee. Accordingly, the seemingly incompatible instrumental and socioemotional demands of the roles as “employee” and “friend” can lead to reduced task performance (Methot et al., 2016). Hommelhoff (2019) started to extend this focus on the focal employee with a critical incident study by showing that workplace friendships can foster interpersonal conflicts between workplace friends. We complement this research by showing that workplace friendships can affect coworkers negatively in terms of incivility instigated toward them. More importantly,

Table 7
Study 2. Results of structural equation modeling including control variables.

	Inter-role conflict		
	Coeff	SE	p-value
Age	-0.011	0.004	0.003
Gender (1 = female)	-0.182	0.077	0.017
Contact frequency	0.064	0.030	0.034
Negative affect	0.121	0.058	0.040
Friendship closeness (A)	0.134	0.054	0.014
Workplace friendship self-efficacy (B)	-0.401	0.098	<0.001
Interaction (A × B)	-0.003	0.120	0.978
R ²	0.149	0.038	<0.001

	Resource depletion		
	Coeff	SE	p-value
Age	-0.010	0.003	0.004
Gender (1 = female)	0.164	0.072	0.023
Contact frequency	0.036	0.033	0.268
Negative affect	0.544	0.051	<0.001
Friendship closeness	-0.071	0.042	0.090
Workplace friendship self-efficacy	0.100	0.084	0.233
Inter-role conflict	0.166	0.052	0.001
R ²	0.384	0.040	<0.001

	Incivility toward focal coworker			Incivility toward other coworkers		
	Coeff	SE	p-value	Coeff	SE	p-value
Age	-0.005	0.003	0.088	-0.007	0.003	0.023
Gender (1 = female)	-0.130	0.063	0.038	-0.210	0.074	0.004
Contact frequency	-0.002	0.032	0.961	0.028	0.026	0.279
Negative affect	0.073	0.053	0.168	0.034	0.057	0.165
Friendship closeness	-0.017	0.036	0.640	0.018	0.038	0.640
Workplace friendship self-efficacy	-0.306	0.078	<0.000	-0.230	0.099	0.020
Inter-role conflict	0.330	0.057	<0.000	0.277	0.061	<0.000
Resource depletion	0.042	0.048	0.382	0.154	0.059	0.009
R ²	0.328	0.040	<0.001	0.272	0.052	<0.001

Note. N = 499. Coeff = unstandardized coefficient, SE = standard error of unstandardized coefficient. Significant coefficients are highlighted in bold.

Table 8
Study 2. Indirect effects of friendship closeness on incivility toward focal coworker and other coworkers.

	Indirect Effects		
	Coeff	CI LL	CI UL
Friendship closeness → inter-role conflict → incivility toward focal coworker	0.044	0.022	0.071
Friendship closeness → inter-role conflict → resource depletion → incivility toward focal coworker	0.001	-0.001	0.003
Friendship closeness → inter-role conflict → incivility toward other coworkers	0.037	0.017	0.062
Friendship closeness → inter-role conflict → resource depletion → incivility toward other coworkers	0.003	0.001	0.006

Note. N = 499. Coeff = unstandardized coefficient, CI LL = lower level of bias-corrected 95 % confidence interval, CI UL = upper level of bias-corrected 95 % confidence interval. Significant coefficients are highlighted in bold.

we provide nuance by demonstrating that uninvolved coworkers rather than workplace friends of the focal employees are likely to be the targets of incivility. This contributes to a more comprehensive portrait of the risks and side effects of workplace friendships.

Second, we specify one process through which workplace friendships are linked to incivility by showing that inter-role conflict and subsequent resource depletion explain how positive workplace relationships can facilitate negative work behavior. Our findings contribute to our understanding of how negative effects of workplace friendships manifest. Prior research argued that negative effects of workplace friendships for focal employees can be explained by perceived threats to one's self-concept (Ingram & Zou, 2008), distraction from instrumental goals (Pillemer & Rothbard, 2018), and exhaustion (Methot et al., 2016). Methot et al. (2016) called for researchers to add precision to the analysis of mediating mechanisms and specify the “difficulty” inherent in reconciling the demands of “employee” and “friend” roles at work. Utilizing the dialectical perspective on workplace friendships (Bridge & Baxter, 1992) enabled us to conceptualize the specific nature of the inter-role conflict triggered by workplace friendships. Further, integrating the

dialectical perspective on workplace friendships (Bridge & Baxter, 1992) with a self-regulatory perspective (Beal et al., 2005) enabled us to specify the sequential nature of the mediating process. We thus provide nuance to research on workplace friendships aiming to understand how interpersonal work outcomes are affected.

In addition, our findings contribute to research on role conflicts more broadly. Research on role conflicts has advanced our understanding of inter-role and intra-role conflicts. Organizational research on inter-role conflicts has examined incompatible role demands between two different life roles, such as “employee” and “parent”, which are situated in two different life domains, such as work and non-work. Accordingly, important insights have been generated on the nature, causes, and consequences of work-nonwork conflict (Allen et al., 2012, 2015; Reichl et al., 2014). Organizational research on intra-role conflicts has examined tensions between different demands or foci of the “employee” role. For example, researchers examined how employees navigate simultaneous and potentially conflicting demands of multi-team membership (e.g., Berger & Bruch, 2021) and the role-related tensions of trainee positions in terms of conflict between filling a position and learning (e.g., junior doctors who are both doctor and trainee; Schaufeli et al., 2009). We add to this discussion of work-related conflicts by examining inter-role conflict in the context of workplace friendships (i.e., conflict between “employee” and “friend” role). In doing so, we integrate the work and nonwork domains by examining a typically private or nonwork-related role of being a “friend” (Bridge & Baxter, 1992) in the work domain.

Third, we contribute to research on workplace incivility, by highlighting workplace friendships as an unanticipated precursor of instigated incivility. Despite the tremendous costs and high prevalence of workplace incivility, not much is known about its antecedents (Schilpzand et al., 2016). Past research has identified instigator attitudes (e.g., job satisfaction, Blau & Andersson, 2005), instigator characteristics (e.g., trait anger, Meier & Semmer, 2013 or machiavellianism, Lata & Chaudhary, 2020), and situational antecedents (e.g., job demands, van Jaarsveld et al., 2010) of incivility. We contribute to this research stream on antecedents of incivility by adding a relational perspective. A better understanding of relational antecedents, such as workplace friendships, matters because even when workplace friendships come with benefits for employees, if they potentially harm others through higher levels of incivility toward involved or non-involved coworkers, it is relevant to know to “develop policies and interventions to diminish the prevalence of workplace incivility” (Schilpzand et al., 2016, p. 82).

In this regard, we further advance the literature by introducing workplace friendship self-efficacy as a moderator of the risks and side effects of workplace friendships. Systematically exploring the boundary conditions is relevant because it helps to further refine our understanding of workplace friendships and identify ways of reducing its unwanted consequences on incivility. Previous research has focused on job characteristics (e.g., task interdependence; Zhang et al., 2021) and friendship characteristics (e.g., friendship maturity; Pillemer & Rothbard, 2018), thereby overlooking individual characteristics. We contribute to this literature by investigating workplace friendship self-efficacy as an individual-level moderator that buffers the negative consequences of workplace friendships. By demonstrating that workplace friendship self-efficacy helps employees to navigate their role as workplace friend more effectively in Study 1, we add an agentic lens to the research on boundary conditions of detrimental outcomes of workplace friendships. However, we were unable to replicate this moderation effect in Study 2, potentially due to range restriction in the moderator variable (i.e., the mean was 4.23, and the standard deviation was 0.60 on a scale ranging from 1 to 5) or due to the dyadic nature of workplace friendships that might require both employees involved in the friendship to be highly self-efficacious (three-way-interaction).

Finally, our findings also offer some practical implications that can help employees and organizations to effectively manage workplace friendships. As a starting point, employees need to be aware that, while workplace friendships have several benefits and can enrich our work life in important ways, they are not without risks and side effects. Employees need to acknowledge the downsides of workplace friendships to be able to manage their social relationships at work more effectively. To do so, it might be important to set expectations about professional interactions with workplace friends. For example, establishing that challenging each other in meetings is part of one's professional role can alleviate concerns about hurting the feelings of a workplace friend. In addition, setting expectations around the boundaries of one's availability to workplace friends can be important to protect time during the day to get work done. Scheduling dedicated times, such as lunch or coffee breaks, might be more effective than having to navigate frequent interruptions by workplace friends throughout the workday.

5.2. Limitations and directions for future research

Despite its theoretical and practical contributions, our study has several limitations that need to be considered when interpreting the results. One limitation is its correlational design, which prevents us from drawing conclusions about causality and examining developments over time. We used time-lagged data across three waves to test our hypotheses, which allows us to be more confident in testing predicted relations as compared to existing research on workplace friendships that is often based on either cross-sectional (e.g., Helmy et al., 2020; Hsu et al., 2019; Methot et al., 2016; Sias et al., 2020) or qualitative (e.g., Hommelhoff, 2019; Sias & Cahill, 1998) data (cf. Wang et al., 2017). To clarify causality, future research should use (quasi-) experimental designs in which the salience of workplace friendships is manipulated. In addition, future studies may use cross-lagged panel designs measuring the variables at several time points to not only explore potential reverse causality, but also to understand how the relations between workplace friendships, role conflict, resource depletion, and deviant behavior may vary over time.

A second limitation refers to the fact that we measured all study variables via self-reported online questionnaires, which could raise concerns for common-method bias. To counteract the potential of common-method bias, we temporally separated our measures across three waves with two weeks in between each wave, because the temporal separation is thought to alleviate systematic error variance and therefore increase confidence in the empirical results (Podsakoff et al., 2003). Furthermore, our model involves a moderator (i.e., workplace friendship self-efficacy), the testing of which has been shown to be less prone to common method bias (Chang et al., 2010). Moreover, we ran statistical analyses (i.e., using a marker variable; Podsakoff et al., 2003) to test whether common-method variance

was a concern in our data and found that in both studies, the findings are robust regardless of whether a marker variable was included or not, which further reduces the concern for common-method variance. Nevertheless, we encourage future research to collect data from different sources than the self, such as data from coworkers to capture workplace friendships and deviant behavior directed toward others.

A third limitation refers to the generalizability of the results as the data we collected is from employees in the UK only. Future research thus needs to examine whether our findings generalize to different countries and cultures. It would be interesting to explore workplace friendships in other cultures because its conceptualization differs according to cultural norms (Hommelhoff, 2019). For example, a study commissioned by Snapchat found that the number of best friends dramatically varies between countries. In Saudi Arabia, people were found to have an average of 6.6 best friends, whereas in the UK, people reported only having an average of 2.6 best friends (Snap Inc, 2019). Even the term friend is used differently between countries. Whereas in the UK, the terms mate and friend are used, in the US, they just say "friend" and typically make more subtle distinctions to differentiate a friend from a friendly relation (Fischer, 1982). Future research therefore ought to investigate potential cross-cultural differences regarding the detrimental consequences of workplace friendships.

The present research also leaves certain questions unanswered, which points to areas for future research. As such, future research may focus on detrimental outcomes and ways to overcome these. It would be worth studying intentional behaviors, such as knowledge or information hiding. In this regard, it may be interesting to uncover further mechanisms apart from self-regulatory failure resulting from the experiences of inter-role conflict and resource depletion to understand how dialectical tensions foster or hinder intentional behaviors toward workplace friends versus other uninvolved coworkers. In their seminal work, Bridge and Baxter (1992) refer to the tension resulting from impartiality versus favoritism, and it would be interesting to see whether favoritism results in preferential treatment of workplace friends as opposed to unintended side effects due to self-regulatory failure. Understanding the potentially detrimental outcomes of workplace friendships, however, also comes with a responsibility to identify ways to overcome these. In this regard, it is therefore of utmost importance to explore further boundary conditions including organizational variables, such as organizational support or guidance in dealing with friendship at work, that can buffer the unwanted risks and side effects of workplace friendship.

Another direction for future research may be to uncover the mutual compared to the unilateral experiences of workplace friendships and its downstream consequences. In this regard, it may be interesting to assess the agreement or disagreement of two colleagues about their friendship and whether this (dis)agreement may pose additional challenges. In a unilateral (i.e., one-sided or non-reciprocated) friendship, it is likely that the time and effort needed to sustain the friendship tends to fall on one person, which could further intensify the self-regulatory costs for that person, while its socioemotional benefits may fall short (Lodder et al., 2017). Reciprocity or mutual agreement in the workplace friendship may thus be a critical factor that future research can shed light on to understand its risks and side effects more fully. In this regard, social network analysis using multiple regression quadratic assignment procedure (MRQAP; see for example Krackhardt & Kilduff, 1999) and dyadic analysis based on actor-partner interdependence modeling (APIM; see for example Lodder et al., 2017; Reindl et al., 2018) can help to study the bi-directional processes of workplace friendships.

Finally, we focused on the dark side of workplace friendships, thereby omitting positive mechanisms that connect workplace friendships to deviant behavior. It is conceivable that workplace friendships also lead to less deviant behavior via positive mechanisms, such as trust, sense of belonging, or empathic concern. Empirical research has yet to integrate the insights on the positive and negative mechanisms of workplace friendships for a wider variety of outcomes. Methot et al. (2016) examined the double-edged nature of workplace friendships for employees' task performance via maintenance difficulty and trust. Overall, they found that the indirect effect of workplace friendships on task performance was positive but non-significant. Future research can build on their insights and further examine the double-edged nature of workplace friendships by testing both negative and positive mechanisms to understand the total indirect effect (i.e., the sum of the positive and negative indirect effects; Preacher & Hayes, 2008). In doing so, researchers may expand their focus on task performance to include indicators of employee well-being and other-oriented behavior (e.g., deviant or prosocial behaviors). Such an analysis would enable a more detailed understanding of the magnitude of positive relative to negative consequences of workplace friendships.

6. Conclusion

With this paper, we highlight that workplace friendship is not an exclusively positive phenomenon. In line with previous theorizing (Methot et al., 2016; Pillemer & Rothbard, 2018), we revealed that employees with workplace friendships are torn between socio-emotional and instrumental demands, which leads them to experience inter-role conflict and subsequent resource depletion that in turn explain deviant behavior toward coworkers. Furthermore, we shed light on workplace friendship self-efficacy as an important individual characteristic that can buffer the detrimental consequences of workplace friendships, thus enabling employees to successfully manage their close personal relationships at work.

CRedit authorship contribution statement

Ulrike Fasbender: Conceptualization, Methodology, Resources, Investigation, Formal analysis, Data curation, Writing – original draft, Writing – review & editing, Visualization, Project administration, Funding acquisition, Supervision. **Anne Burmeister:** Conceptualization, Methodology, Resources, Writing – original draft, Writing – review & editing. **Mo Wang:** Conceptualization, Methodology, Resources, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Appendix A. Study 1 measures

Workplace friendships: 6 items (Nielsen et al., 2000).

Reflecting about the relationship with your colleagues...

1. I have formed a strong friendship with my colleagues.
2. I socialize with my colleagues outside of the workplace.
3. I can confide in my colleagues.
4. I feel I can trust my colleagues a great deal.
5. Being able to see my colleagues is one reason why I look forward to my job.
6. I feel that my colleagues are true friends.

Workplace friendship self-efficacy: 4 items (adapted from Judge et al. 1998).

At work...

1. I am able to manage workplace friendships.
2. I can trust my ability to handle personal relationships.
3. I have the experiences needed to deal with interpersonal issues.
4. I am confident in managing relationships with others.

Inter-role conflict: 5 items (adapted from Netemeyer et al., 1996).

In the last two weeks...

1. I had to put off doing things at work because I listened to my colleagues' problems and concerns.
2. The personal demands of my colleagues interfered with job-related duties.
3. Things I wanted to do at work didn't get done because of I supported my colleagues on personal issues.
4. Socializing with my colleagues interfered with my responsibilities at work.
5. The time I spent engaging in personal conversations with my colleagues put me behind at work.

Resource depletion: 5 items (Lanaj et al., 2014).

In the last two weeks, how often did you experience the following?

1. I felt drained.
2. My mind felt unfocused.
3. It was hard to concentrate on something.
4. My mental energy was running low.
5. I felt like my willpower was gone.

Instigating incivility: 7 items (Bennett & Robinson, 2000).

In the last two weeks, how often did you engage in the following?

1. I made fun of my colleagues.
2. I said something hurtful to my colleagues.
3. I made an ethnic, religious, or racial remark about my colleagues.
4. I cursed at my colleagues.
5. I played a mean prank on my colleagues.
6. I acted rudely toward my colleagues.
7. I publicly embarrassed my colleagues.

Organizational friendship support: 6 items (adapted from Nielsen et al., 2000).

In this organization...

1. Close relationships between colleagues are encouraged.
2. There are opportunities to get to know colleagues outside the formal work setting.
3. Communication among employees is encouraged.
4. Informal talk is tolerated as long as the work is completed.
5. Informal conversations and visits are supported.
6. Workplace friendships are encouraged.

Appendix B. Study 2 instruction and measures

Randomized selection of a colleague

Participants were presented the following instruction:

In this survey, we would like to understand your work relationship to your colleagues better. In the following, we will ask you to provide three names of your colleagues that you regularly interact with. With regular interaction, we mean that you are in touch with them on a day-to-day basis. Based on the three names that you provide, we will randomly select one of your colleagues and ask you to respond to your relationship with that particular colleague. Note: Your colleague will not see any of your answers; the data is fully anonymous and confidentially stored.

Please provide three names of colleagues that you regularly interact with at work (example: Colleague 1: Paul, Colleague 2: Lisa, Colleague 3: Mike).

Colleague 1:

Colleague 2:

Colleague 3:

Friendship closeness: 1 item (Bridge & Baxter, 1992).

Reflecting about the relationship with [placeholder, e.g., Lisa]...

How would you describe your relationship with [placeholder, e.g., Lisa]?

[scale ranged from 1 (*Just colleagues*) to 5 (*Best friends*)].

Workplace friendship self-efficacy: 4 items (adapted from Judge et al. 1998)

At work...

1. I am able to manage workplace friendships.
2. I can trust my ability to handle personal relationships.
3. I have the experiences needed to deal with interpersonal issues.
4. I am confident in managing relationships with others.

Inter-role conflict: 5 items (adapted from Netemeyer et al., 1996).

In the last two weeks...

1. I had to put off doing things at work because I listened to [placeholder, e.g., Lisa]'s problems and concerns.
2. The personal demands of [placeholder, e.g., Lisa] interfered with job-related duties.
3. Things I wanted to do at work didn't get done because of I supported [placeholder, e.g., Lisa] on personal issues.
4. Socializing with [placeholder, e.g., Lisa] interfered with my responsibilities at work.
5. The time I spent engaging in personal conversations with [placeholder, e.g., Lisa] put me behind at work.

Resource depletion: 5 items (Lanaj et al., 2014).

In the last two weeks, how often did you experience the following?

1. I felt drained.
2. My mind felt unfocused.
3. It was hard to concentrate on something.
4. My mental energy was running low.
5. I felt like my willpower was gone.

Incivility toward focal coworker: 4 items (adapted from Rosen et al., 2016).

In the last two weeks...

1. I put [placeholder, e.g., Lisa] down or acted condescending toward him/her.
2. I paid little attention to [placeholder, e.g., Lisa]'s statements or showed little interest in his/her opinion.
3. I ignored or excluded [placeholder, e.g., Lisa] from professional camaraderie.
4. I doubted [placeholder, e.g., Lisa]'s judgment on a matter over which he/she has responsibility.

Incivility toward other coworkers: 4 items (adapted from Rosen et al., 2016).

In the last two weeks...

1. I put my coworkers (other than [placeholder, e.g., Lisa]) down or acted condescending toward them.
2. I paid little attention to my coworkers (other than [placeholder, e.g., Lisa]) statements or showed little interest in their opinion.
3. I ignored or excluded my coworkers (other than [placeholder, e.g., Lisa]) from professional camaraderie.
4. I doubted my coworkers (other than [placeholder, e.g., Lisa]) judgment on a matter over which they have responsibility.

Organizational friendship support: 6 items (adapted from Nielsen et al., 2000).

In this organization...

1. Close relationships between colleagues are encouraged.
2. There are opportunities to get to know colleagues outside the formal work setting.
3. Communication among employees is encouraged.
4. Informal talk is tolerated as long as the work is completed.
5. Informal conversations and visits are supported.
6. Workplace friendships are encouraged.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage Publications.
- Alessandri, G., Borgogni, L., Schaufeli, W. B., Caprara, G. V., & Consiglio, C. (2015). From positive orientation to job performance: The role of work engagement and self-efficacy beliefs. *Journal of Happiness Studies*, 16, 767–788. <https://doi.org/10.1007/s10902-014-9533-4>
- Allen, T. D., French, K. A., Dumani, S., & Shockley, K. M. (2015). Meta-analysis of work-family conflict mean differences: Does national context matter? *Journal of Vocational Behavior*, 90, 90–100. <https://doi.org/10.1016/j.jvb.2015.07.006>
- Allen, T. D., Johnson, R. C., Saboe, K. N., Cho, E., Dumani, S., & Evans, S. (2012). Dispositional variables and work-family conflict: A meta-analysis. *Journal of Vocational Behavior*, 80(1), 17–26. <https://doi.org/10.1016/j.jvb.2011.04.004>
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *The Academy of Management Review*, 24(3), 452. <https://doi.org/10.2307/259136>
- Bagci, S. C., Cameron, L., Turner, R. N., Morais, C., Carby, A., Ndhlovu, M., & Leney, A. (2019). Cross-ethnic friendship self-efficacy: A new predictor of cross-ethnic friendships among children. *Group Processes & Intergroup Relations*. <https://doi.org/10.1177/1368430219879219>
- Bagwell, C. L. (2004). Friendships, peer networks, and antisocial behavior. In J. B. Kupersmidt, & K. A. Dodge (Eds.), *Children's peer relations: From development to intervention* (pp. 37–57). American Psychological Association. <https://doi.org/10.1037/10653-003>.
- Bamberger, P. A., Geller, D., & Doveh, E. (2017). Assisting upon entry: Helping type and approach as moderators of how role conflict affects newcomer resource drain. *Journal of Applied Psychology*, 102(12), 1719–1732. <https://doi.org/10.1037/apl0000243>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- Barling, J., & Frone, M. R. (2017). If only my leader would just do something! Passive leadership undermines employee well-being through role stressors and psychological resource depletion. *Stress and Health*, 33, 211–222. <https://doi.org/10.1002/smi.2697>
- Barling, J., & Macintyre, A. T. (1993). Daily work role stressors, mood and emotional exhaustion. *Work and Stress*, 7(4), 315–325. <https://doi.org/10.1080/02678379308257071>
- Baxter, L. (1988). A dialectical perspective on communication strategies in relationship development. In S. W. Duck (Ed.), *Handbook of personal relationships* (pp. 257–273). John Wiley & Sons.
- Beal, D. J., Weiss, H. M., Barros, E., & MacDermid, S. M. (2005). An episodic process model of affective influences on performance. *Journal of Applied Psychology*, 90, 1054–1068. <https://doi.org/10.1037/0021-9010.90.6.1054>
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85, 349–360. <https://doi.org/10.1037/0021-9010.85.3.349>
- Berger, S., & Bruch, H. (2021). Role strain and role accumulation across multiple teams: The moderating role of employees' polychronic orientation. *Journal of Organizational Behavior*, 42(7), 835–850. <https://doi.org/10.1002/job.2521>
- Berman, E. M., West, J. P., & Richter, M. N. (2002). Workplace relations: Friendship patterns and consequences (according to managers). *Public Administration Review*, 62, 217–230. <https://doi.org/10.1111/0033-3352.00172>
- Bernerth, J. B., & Aguinis, H. (2016). A critical review and best-practice recommendations for control variable usage. *Personnel Psychology*, 69(1), 229–283. <https://doi.org/10.1111/peps.12103>
- Blau, G., & Andersson, L. (2005). Testing a measure of instigated workplace incivility. *Journal of Occupational and Organizational Psychology*, 78(4), 595–614. <https://doi.org/10.1348/096317905X26822>
- Bridge, K., & Baxter, L. A. (1992). Blended relationships: Friends as work associates. *Western Journal of Communication*, 56, 200–225. <https://doi.org/10.1080/10570319209374414>
- Brown, S. P., Ganesan, S., & Challagalla, G. (2001). Self-efficacy as a moderator of information-seeking effectiveness. *Journal of Applied Psychology*, 86, 1043–1051. <https://doi.org/10.1037/0021-9010.86.5.1043>
- Chang, S.-J., van Witteloostuijn, A., Eden, L., & Eden, L. (2010). From the editors: Common method variance in international business research. *Journal of International Business Studies*, 41, 178–184. <https://doi.org/10.1057/jibs.2009.88>
- Christian, M. S., & Ellis, A. P. J. (2011). Examining the effects of sleep deprivation on workplace deviance: A self-regulatory perspective. *Academy of Management Journal*, 54, 913–934. <https://doi.org/10.5465/amj.2010.0179>
- Ciairano, S., Rabaglietti, E., Roggero, A., Bonino, S., & Beyers, W. (2007). Patterns of adolescent friendships, psychological adjustment and antisocial behavior: The moderating role of family stress and friendship reciprocity. *International Journal of Behavioral Development*, 31(6), 539–548. <https://doi.org/10.1177/0165025407080573>
- Cortina, L. M., Kabat-Farr, D., Leskinen, E. A., Huerta, M., & Magley, V. J. (2013). Selective incivility as modern discrimination in organizations: Evidence and impact. *Journal of Management*, 39(6), 1579–1605. <https://doi.org/10.1177/0149206311418835>
- DeWall, C. N., Baumeister, R. F., Stillman, T. F., & Gailliot, M. T. (2007). Violence restrained: Effects of self-regulation and its depletion on aggression. *Journal of Experimental Social Psychology*, 43(1), 62–76. <https://doi.org/10.1016/j.jesp.2005.12.005>
- Dietz, L., & Fasbender, U. (2022). Age-diverse workplace friendships: A systematic literature review and recommendations for future research. *Work, Aging and Retirement*, 8(2), 163–197. <https://doi.org/10.1093/workar/waab028>
- Dormann, C., & Griffin, M. A. (2015). Optimal time lags in panel studies. *Psychological Methods*, 20(4), 489–505. <https://doi.org/10.1037/met0000041>

- Dutton, J. E., & Heaphy, E. D. (2003). The power of high quality connections at work. In K. Cameron, J. Dutton, & R. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 263–278). Berrett-Koehler.
- Eissa, G., & Wyland, R. (2018). Work-family conflict and hindrance stress as antecedents of social undermining: Does ethical leadership matter? *Applied Psychology: An International Review*, 67(4), 645–654. <https://doi.org/10.1111/apps.12149>
- Fasbender, U., Burmeister, A., & Wang, M. (2020). Motivated to be socially mindful: Explaining age differences in the effect of employees' contact quality with coworkers on their coworker support. *Personnel Psychology*, 73(3), 407–430. <https://doi.org/10.1111/peps.12359>
- Fasbender, U., & Drury, L. (2022). One plus one equals one: Age-diverse friendship and its complex relation to employees' job satisfaction and turnover intentions. *European Journal of Work and Organizational Psychology*, 31(4), 510–523. <https://doi.org/10.1080/1359432X.2021.2006637>
- Fasbender, U., & Wang, M. (2017). Negative attitudes toward older workers and hiring decisions: Testing the moderating role of decision makers' core self-evaluations. *Frontiers in Psychology*, 7(2057), 1–10. <https://doi.org/10.3389/fpsyg.2016.02057>
- Fischer, C. S. (1982). What do we mean by "friend"? An inductive study. *Social Networks*, 3, 287–306. [https://doi.org/10.1016/0378-8733\(82\)90004-1](https://doi.org/10.1016/0378-8733(82)90004-1)
- Fitzpatrick, S., & Bussey, K. (2014). The role of perceived friendship self-efficacy as a protective factor against the negative effects of social victimization. *Social Development*, 23, 41–60. <https://doi.org/10.1111/sode.12032>
- Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17, 183–211. <https://doi.org/10.5465/amr.1992.4279530>
- Goodman, J. S., & Blum, T. C. (1996). Assessing the non-random sampling effects of subject attrition in longitudinal research. *Journal of Management*, 22(4), 627–652. [https://doi.org/10.1016/S0149-2063\(96\)90027-6](https://doi.org/10.1016/S0149-2063(96)90027-6)
- Grandey, A. A., & Cropanzano, R. (1999). The conservation of resources model applied to work-family conflict and strain. *Journal of Vocational Behavior*, 54(2), 350–370. <https://doi.org/10.1006/jvbe.1998.1666>
- Hall, J. A. (2011). Sex differences in friendship expectations: A meta-analysis. *Journal of Social and Personal Relationships*, 28, 723–747. <https://doi.org/10.1177/0265407510386192>
- Helmy, I., Adawiyah, W. R., & Setyawati, H. A. (2020). Fostering frontline employees' innovative service behavior: The role of workplace friendship and knowledge sharing process. *Organizacija*, 53(3), 185–197. <https://doi.org/10.2478/orga-2020-0012>
- Hill, T., Smith, N. D., & Mann, M. F. (1987). Role of efficacy expectations in predicting the decision to use advanced technologies: The case of computers. *Journal of Applied Psychology*, 72, 307–313. <https://doi.org/10.1037/0021-9010.72.2.307>
- Hommelhoff, S. (2019). Having workplace friends is not always fun: A critical incident study. *Zeitschrift Für Arbeits- Und Organisationspsychologie*, 63, 152–164. <https://doi.org/10.1026/0932-4089/a000300>
- Hsu, F. S., Liu, Y. A., & Tsaur, S. H. (2019). The impact of workplace bullying on hotel employees' well-being: Do organizational justice and friendship matter? *International Journal of Contemporary Hospitality Management*, 31, 1702–1719. <https://doi.org/10.1108/IJCHM-04-2018-0330>
- Ingram, P., & Zou, X. (2008). Business friendships. *Research in Organizational Behavior*, 28, 167–184. <https://doi.org/10.1016/j.riob.2008.04.006>
- Jahanzeb, S., & Fatima, T. (2018). How workplace ostracism influences interpersonal deviance: The mediating role of defensive silence and emotional exhaustion. *Journal of Business and Psychology*, 33(6), 779–791. <https://doi.org/10.1007/s10869-017-9525-6>
- Jehn, K. A., & Shah, P. P. (1997). Interpersonal relationships and task performance: An examination of mediating processes in friendship and acquaintance groups. *Journal of Personality and Social Psychology*, 72, 775–790. <https://doi.org/10.1037/0022-3514.72.4.775>
- Jex, S. M., & Bliese, P. D. (1999). Efficacy beliefs as a moderator of the impact of work-related stressors: A multilevel study. *Journal of Applied Psychology*, 84(3), 349–361. <https://doi.org/10.1037/0021-9010.84.3.349>
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology*, 83(1), 17–34. <https://doi.org/10.1037//0021-9010.83.1.17>
- Kahn, R. L., Wolfe, D., Quinn, R., Snoek, J., & Rosenthal, R. (1964). *Organizational stress: Studies in role conflict and ambiguity*. Wiley.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd). New York, NY: Wiley.
- Kossek, E. E., & Lee, K.-H. (2017). Work-family conflict and work-life conflict. In *Oxford research encyclopedia of business and management* (pp. 1–22). Oxford University Press. <https://doi.org/10.1093/acrefore/9780190224851.013.52>
- Krackhardt, D., & Kilduff, M. (1999). Whether close or far: Social distance effects on perceived balance in friendship networks. *Journal of Personality and Social Psychology*, 76(5), 770–782. <https://doi.org/10.1037/0022-3514.76.5.770>
- Lanaj, K., Johnson, R. E., & Barnes, C. M. (2014). Beginning the workday yet already depleted? Consequences of late-night smartphone use and sleep. *Organizational Behavior and Human Decision Processes*, 124, 11–23. <https://doi.org/10.1016/j.obhdp.2014.01.001>
- Lata, M., & Chaudhary, R. (2020). Dark triad and instigated incivility: The moderating role of workplace spirituality. *Personality and Individual Differences*, 166 (December 2019), Article 110090. <https://doi.org/10.1016/j.paid.2020.110090>
- Lent, R. W., Brown, S. D., & Larkin, K. C. (1987). Comparison of three theoretically derived variables in predicting career and academic behavior: Self-efficacy, interest congruence, and consequence thinking. *Journal of Counseling Psychology*, 34, 293–298. <https://doi.org/10.1037/0022-0167.34.3.293>
- Lin, S. H., Ma, J., & Johnson, R. E. (2016). When ethical leader behavior breaks bad: How ethical leader behavior can turn abusive via ego depletion and moral licensing. *Journal of Applied Psychology*, 101(6), 815–830. <https://doi.org/10.1037/apl0000098>
- Liu, Y., Wang, M., Chang, C. H., Shi, J., Zhou, L., & Shao, R. (2015). Work-family conflict, emotional exhaustion, and displaced aggression toward others: The moderating roles of workplace interpersonal conflict and perceived managerial family support. *Journal of Applied Psychology*, 100(3), 793–808. <https://doi.org/10.1037/a0038387>
- Lodder, G. M. A., Scholte, R. H. J., Goossens, L., & Verhagen, M. (2017). Loneliness in early adolescence: Friendship quantity, friendship quality, and dyadic processes. *Journal of Clinical Child and Adolescent Psychology*, 46(5), 709–720. <https://doi.org/10.1080/15374416.2015.1070352>
- Lu, J. G., Hafenbrack, A. C., Eastwick, P. W., Wang, D. J., Maddux, W. W., & Galinsky, A. D. (2017). "Going out" of the box: Close intercultural friendships and romantic relationships spark creativity, workplace innovation, and entrepreneurship. *Journal of Applied Psychology*, 102, 1091–1108. <https://doi.org/10.1037/apl0000212>
- Mackey, J. D., McAllister, C. P., Ellen, B. P., & Carson, J. E. (2021). A meta-analysis of interpersonal and organizational workplace deviance research. *Journal of Management*, 47(3), 597–622. <https://doi.org/10.1177/0149206319862612>
- Mackinnon, A., Jorm, A. F., Christensen, H., Korten, A. E., Jacomb, P. A., & Rodgers, B. (1999). A short form of the positive and negative affect schedule: Evaluation of factorial validity and invariance across demographic variables in a community sample. *Personality and Individual Differences*, 27(3), 405–416. [https://doi.org/10.1016/S0191-8869\(98\)00251-7](https://doi.org/10.1016/S0191-8869(98)00251-7)
- Martinko, M. J., Harvey, P., Brees, J. R., & Mackey, J. (2013). A review of abusive supervision research. *Journal of Organizational Behavior*, 34(S1), S120–S137. <https://doi.org/10.1002/job.1888>
- Meier, L. L., & Semmer, N. K. (2013). Lack of reciprocity, narcissism, anger, and instigated workplace incivility: A moderated mediation model. *European Journal of Work and Organizational Psychology*, 22(4), 461–475. <https://doi.org/10.1080/1359432X.2012.654605>
- Methot, J. R., Lepine, J. A., Podsakoff, N. P., & Christian, J. S. (2016). Are workplace friendships a mixed blessing? Exploring tradeoffs of multiplex relationships and their associations with job performance. *Personnel Psychology*, 69, 311–355. <https://doi.org/10.1111/peps.12109>
- Methot, J. R., Melwani, S., & Rothman, N. B. (2017). The space between us: A social-functional emotions view of ambivalent and indifferent workplace relationships. *Journal of Management*, 43, 1789–1819. <https://doi.org/10.1177/0149206316685853>
- Morrison, R. (2004). Informal relationships in the workplace: Associated with job satisfaction, commitment and turnover. *New Zealand Journal of Psychology*, 33, 114–128.
- Muthén, L. K., & Muthén, B. O. (2019). *Mplus user's guide* (8th ed.). Muthén & Muthén.
- Netemeyer, R. G., Boles, J. S., & McMurrain, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81, 400–410. <https://doi.org/10.1037/0021-9010.81.4.400>

- Ng, T. W. H., & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *Journal of Applied Psychology*, 93(2), 392–423. <https://doi.org/10.1037/0021-9010.93.2.392>
- Ng, T. W. H., & Feldman, D. C. (2010). The relationships of age with job attitudes: A meta-analysis. *Personnel Psychology*, 63, 677–718. <https://doi.org/10.1111/j.1744-6570.2010.01184.x>
- Nielsen, I. K., Jex, S. M., & Adams, G. A. (2000). Development and validation of scores on a two-dimensional workplace friendship scale. *Educational and Psychological Measurement*, 60, 628–643. <https://doi.org/10.1177/00131640021970655>
- Pillemer, J., & Rothbard, N. P. (2018). Friends without benefits: Understanding the dark sides of workplace friendship. *Academy of Management Review*, 43, 635–660. <https://doi.org/10.5465/amr.2016.0309>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Porath, C. L., & Pearson, C. M. (2012). Emotional and behavioral responses to workplace incivility and the impact of hierarchical status. *Journal of Applied Social Psychology*, 42(S1), 326–357. <https://doi.org/10.1111/j.1559-1816.2012.01020.x>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891. <https://doi.org/10.3758/BRM.40.3.879>
- Preacher, K. J., & Selig, J. P. (2012). Advantages of Monte Carlo confidence intervals for indirect effects. *Communication Methods and Measures*, 6, 77–98. <https://doi.org/10.1080/19312458.2012.679848>
- R Core Team. (2017). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. <https://www.r-project.org/>.
- Rawlins, W. K. (1989). A dialectical analysis of the tensions, functions, and strategic challenges of communication in young adult friendships. In J. Anderson (Ed.), *12. Communication yearbook* (pp. 157–189). Sage.
- Reichl, C., Leiter, M. P., & Spinath, F. M. (2014). Work–nonwork conflict and burnout: A meta-analysis. *Human Relations*, 67(8), 979–1005. <https://doi.org/10.1177/0018726713509857>
- Reindl, M., Tulis, M., & Dresel, M. (2018). Associations between friends, academic emotions and achievement: Individual differences in enjoyment and boredom. *Learning and Individual Differences*, 62(October 2016), 164–173. <https://doi.org/10.1016/j.lindif.2018.01.017>
- Ritter, K. J., Matthews, R. A., Ford, M. T., & Henderson, A. A. (2016). Understanding role stressors and job satisfaction over time using adaptation theory. *Journal of Applied Psychology*, 101, 1655–1669. <https://doi.org/10.1037/apl0000152>
- Rivkin, W., Diestel, S., & Schmidt, K. H. (2015). Psychological detachment: A moderator in the relationship of self-control demands and job strain. *European Journal of Work and Organizational Psychology*, 24, 376–388. <https://doi.org/10.1080/1359432X.2014.924926>
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15, 150. <https://doi.org/10.2307/2391486>
- Rosen, C. C., Gabriel, A. S., Koopman, J., & Johnson, R. E. (2016). Who strikes back? A daily investigation of when and why incivility begets incivility. *Journal of Applied Psychology*, 101(11), 1620–1634. <https://doi.org/10.1037/apl0000140>
- Schaufeli, W. B., Bakker, A. B., van der Heijden, F. M. M. A., & Prins, J. T. (2009). Workaholism, burnout and well-being among junior doctors: The mediating role of role conflict. *Work & Stress*, 23(2), 155–172. <https://doi.org/10.1080/02678370902834021>
- Schilpzand, P., De Pater, I. E., & Erez, A. (2016). Workplace incivility: A review of the literature and agenda for future research. *Journal of Organizational Behavior*, 37(1), S57–S88. <https://doi.org/10.1002/job.1976>
- Sharifirad, M. S. (2016). Can incivility impair team's creative performance through paralyzing employee's knowledge sharing? A multi-level approach. *Leadership and Organization Development Journal*, 37(2), 200–225. <https://doi.org/10.1108/LODJ-05-2014-0092>
- Sias, P. M., & Cahill, D. J. (1998). From coworkers to friends: The development of peer friendships in the workplace. *Western Journal of Communication*, 62, 273–299. <https://doi.org/10.1080/10570319809374611>
- Sias, P. M., Tsetsi, E., Woo, N., & Smith, A. D. (2020). With a little help from my friends: Perceived task interdependence, coworker communication, and workplace friendship. *Communication Studies*, 71(4), 528–549. <https://doi.org/10.1080/10510974.2020.1749863>
- Snap Inc. (2019). The friendship report. <https://downloads.ctfassets.net/inb32lme5009/7BkRT92AEhVU51ElzXXUHB/37749c3cf976dd10524021b8592636d4/The-Friendship-Report.pdf>.
- van Jaarsveld, D. D., Walker, D. D., & Skarlicki, D. P. (2010). The role of job demands and emotional exhaustion in the relationship between customer and employee incivility. *Journal of Management*, 36(6), 1486–1504. <https://doi.org/10.1177/0149206310368998>
- Wang, M., Beal, D. J., Chan, D., Newman, D. A., Vancouver, J. B., & Vandenberg, R. J. (2017). Longitudinal research: A panel discussion on conceptual issues, research design, and statistical techniques. *Work, Aging and Retirement*, 3(1), 1–24. <https://doi.org/10.1093/workar/waw033>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070. <https://doi.org/10.1037/0022-3514.54.6.1063>
- Wheeler, A. R., Halbesleben, J. R. B., & Whitman, M. V. (2013). The interactive effects of abusive supervision and entitlement on emotional exhaustion and co-worker abuse. *Journal of Occupational and Organizational Psychology*, 86(4), 477–496. <https://doi.org/10.1111/joop.12034>
- Zappalà, S., Sbaa, M. Y., Kamneva, E. V., Zhigun, L. A., Korobanova, Z. V., & Chub, A. A. (2022). Current approaches, typologies and predictors of deviant work behaviors: A scoping review of reviews. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.674066>
- Zhan, X., Li, Z., & Luo, W. (2019). An identification-based model of workplace incivility and employee creativity: Evidence from China. *Asia Pacific Journal of Human Resources*, 57(4), 528–552. <https://doi.org/10.1111/1744-7941.12204>
- Zhang, Y., Sun, J. M., Shaffer, M. A., & Lin, C. H. (2021). High commitment work systems and employee well-being: The roles of workplace friendship and task interdependence. *Human Resource Management*, 1–23. <https://doi.org/10.1002/hrm.22093>