Journal of Public Health
https://doi.org/10.1007/s10389-024-02277-0

ORIGINAL ARTICLE

Incivility is systematically associated with indicators of health, stress, well-being, and the psychosocial work environment

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Received: 15 February 2024 / Accepted: 29 April 2024

Abstract

Aim Incivility is one of the most intrusive forms of antisocial behavior in the workplace. Using a newly constructed, single-item measure of incivility, the aim of the current study was to assess the possible prevalence of incivility in a sample from the Swedish retail industry, and to investigate possible associations between prevalence of incivility and a multitude of indicators of health, stress, well-being, and the psychosocial work environment.

Subject and methods A total of 1014 (20%) individuals enrolled in the cross-sectional study and responded to a questionnaire, partially or fully. We conducted *t*-tests to assess possible differences in the indicators between those responding "Yes" versus "No" regarding prevalence of incivility at their workplace.

Results Incivility at work was related to statistically significant differences in mean values in 32 out of 33 key indicators of health, well-being, stress, recovery, and the psychosocial work environment. Those reporting a prevalence of incivility systematically exhibited worse ratings.

Conclusion The findings are in line with previous research. Although this study cannot infer causality, the profoundly systematic results indicate that the prevalence of workplace incivility is a bothersome problem that should be addressed. A single item about the prevalence of workplace incivility seems to be a feasible indicator of associations to a wide range of health-, stress-, well-being-, and psychosocially oriented work-related variables.

Keywords Incivility · Health · Stress · Psychosocial work environment

Background

In recent decades, incivility and disrespectful behaviors have become increasingly common in modern society (Cortina 2008). Andersson and Pearson (1999) p. 457) have offered a commonly cited general definition of workplace incivility, i.e., "Workplace incivility is low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others." These behaviors are reported to be some of the most common intrusive forms of antisocial behaviors in the workplace (Cortina 2008; Cortina et al. 2001; Harold and Holtz 2015; Schilpzand et al. 2016). Parallel developments in related phenomena can partly explain the negative incivility trend. For instance, empathy seems to have decreased over the past few decades (Konrath et al. 2011), while narcissism appears to have simultaneously increased (Twenge et al. 2008a, b). Narcissism involves a strong focus on oneself and less focus on others, which increases the risk for lower empathy, as well as higher levels of selfishness, insensitivity, disrespect, and feelings of entitlement (Du et al. 2022; Twenge et al. 2008b). The latter entails behaving in unethical or disrespectful ways, for instance by cheating on a test or scolding someone. This involves not only the unethical or disrespectful behaviors themselves, but also the justification of these behaviors for various reasons, which of course do not make these dysfunctional behaviors acceptable.

Porath and colleagues have described how extensive this problem is and documented the negative consequences of workplace incivility in several studies (Porath 2015; Porath et al. 2015a; Porath and Gerbasi 2015; Porath and Pearson 2013, 2010). They report that 99% of the employees in their

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Published online: 14 May 2024

studies over the years have witnessed incivility, and 96% have been exposed to such behavior themselves (Porath and Pearson 2010). Numerous negative consequences of workplace incivility have been documented in these studies, including reduced creativity and productivity (Porath et al. 2015a, b; Porath and Pearson 2013, 2010), worse work atmosphere (Porath and Pearson 2013, 2010), and loss of customers (Porath and Pearson 2013, 2010). The studies also imply that, apart from the suffering, dealing with incivility is very costly, in terms of both time and money (Porath 2015; Porath et al. 2015a, b; Porath and Gerbasi 2015; Porath and Pearson 2013, 2010). They conclude that costs are significant for individual companies and enormous at the societal level. In summary, the conclusion from previous research is that incivility, when it occurs, can be a major problem in the workplace.

Although disrespectful behaviors in working life occur in all industries, very few studies have been conducted within the retail sector. A number of studies have been conducted in healthcare, showing that a good work environment and good work atmosphere are two crucial aspects for quality of care, patient safety, and staff health (Aiken et al. 2008; Geiger-Brown and Lipscomb 2010). At the same time, a multitude of studies demonstrate that a stressful and unhealthy work environment in healthcare contributes to extensive problems with high staff turnover, bullying, and sick leave (Aiken et al. 2008; Carter et al. 2013; Duffield et al. 2011; Hayes et al. 2012). Several studies have reported that unprofessional behaviors occur among healthcare professionals and that this has destructive consequences (Leape et al. 2012; Mazzocco et al. 2009; Piper 2003; Rosenstein and O'Daniel 2005a, b; Saxton et al. 2009). These studies describe the prevalence of humiliating, aggressive, and abusive behaviors, unwillingness to cooperate, and opposition to change, as well as disrespectful treatment of patients. It is not clear how widespread these behaviors are, only that they occur and have negative consequences to varying degrees.

A few Swedish studies have examined incivility in retail or other industries (Fellesson and Salomonson 2020; Holm 2020). The scopes of the studies have been different, and they have assessed incivility in different ways. For instance, Fellesson and Salomonson (2020) studied a specific form of incivility, i.e., "phubbing" (phone snubbing), wherein customers focus on their mobile phone instead of on the person they are interacting with (e.g., cashiers). In that study, employees in retail were given descriptions of different scenarios and were asked to estimate how common they were in their everyday lives and how they would react in such a situation. The results indicated that it becomes more difficult for retail employees to understand customers' needs and ultimately offer good service if an employee reacts negatively to customers' behaviors. Other Swedish studies on incivility have been conducted in areas other than retail. In a longitudinal study, Holm et al. (2021) found an association between witnessed incivility and own rude behavior over time, which supports the notion that incivility may "spread" throughout the workplace, at least for some length of time. Although witnessed incivility predicted own rude behavior 6 months later, it did not predict uncivil behavior after a year (Holm et al. 2021).

In summary, studies show, as expected, that incivility and disrespectful behaviors have negative consequences for both individuals and companies (Cortina 2008; Cortina et al. 2001; Holm 2020; Porath 2015; Porath et al. 2015a; Porath and Gerbasi 2015; Porath and Pearson 2013; Schilpzand et al. 2016; Skarlicki and Folger 1997). It leads to mental illness in the form of increased levels of work-related stress (Agervold and Mikkelsen 2004), worry/anxiety, depression (Hansen et al. 2006; Tepper 2000), physical/somatic symptoms (LeBlanc and Kelloway 2002), emotional exhaustion (Grandey et al. 2007) and mental stress (Cortina 2008; Cortina et al. 2001; Keashly et al. 1997), revenge, lower job satisfaction (Holm 2020), and reduced levels of productivity and confidence (Bies and Tripp 2005; Skarlicki and Folger 1997). Predictors for workplace incivility are primarily at the management level and include a lack of clear guidelines for collegial behavior and authoritarian or passive leadership (Aquino and Thau 2009; Harold and Holtz 2015).

In recent years, the retail industry, which employs 11% of the working population in Sweden, has reported problems with disrespectful behaviors (Leppänen 2010). From a work environment perspective, retail is particularly interesting given that it is the introduction to working life for many young adults (Handelsrådet 2017). Their experiences from the first employment may have consequences, either partially or fully, for their future working life. However, to our knowledge, no studies have investigated the prevalence of workplace incivility within the retail industry in Sweden. Consequently, incivility has not been assessed in relation to a multitude of indicators of health-, stress-, well-being-, and psychosocial work environment-related variables in a Swedish retail environment either.

Aim

Using a newly constructed, single-item measure of incivility, the aim of the current study was twofold:

1. To assess the possible prevalence of incivility in a sample from the Swedish retail industry
2. To investigate possible associations between prevalence of incivility and a multitude of indicators depicting health, stress, well-being, and the psychosocial work environment

Materials and methods

The current survey study had a cross-sectional design and was conducted from 2019 to 2021.

Participants and procedures

Figure 1 illustrates the flow of participants and the response rate. Thirty-three human resource (HR) representatives from different retail companies were informed about the study at a network meeting organized by the Swedish Trade Federation. The authors were given 20 minutes to inform the HR representatives about the study and convey an invitation to participate. Three companies agreed, and the rest declined due to lack of time.

A total of 5289 employees in two of the participating companies were invited via email to participate in the study. A total of 293 (5.5%) of the email addresses were incorrect (or out of date) or bounced due to various forms of long-term absence. Employees from a third participating company were invited to participate via a link on information leaflets posted on the staff room bulletin board. According to the company, about 8000 employees would be reached by the information if it was posted for a week. However, we have no information on whether the information was posted in all stores, or how long the information was posted in such case. The main reason was that this procedure coincided with the beginning of the COVID-19 pandemic. Regardless, seven employees from the third company clicked on the link, of which two completed the survey. One employee clicked on the link but did not respond to any questions, and four completed the survey almost entirely or partially. Given that the link was generic (same for everyone), the person who clicked on the link and then did not respond de facto may have responded by clicking on the link again at another time.

A total of 1014 (20%) individuals enrolled in the study and responded to the questionnaire, partially or fully. Of these, 416 (41%) participants completed (i.e., submitted) the questionnaire, and 598 (59%) completed it almost entirely or partially. Since no questions were mandatory, there were also some missing responses among those who completed the whole questionnaire (Fig. 1). Twenty-two percent of those who started to respond or who completed the survey were managers.

Deviations

Of those who partially completed the survey, 66 persons failed to state their gender, but eight of these still provided other useful data. The remaining 58 persons only consented to participate in the study and provided no further information. One person took the time to respond to just over half the questionnaire but was removed from the dataset since it was obvious that all answers had been deliberately distorted and submitted for destructive purposes.

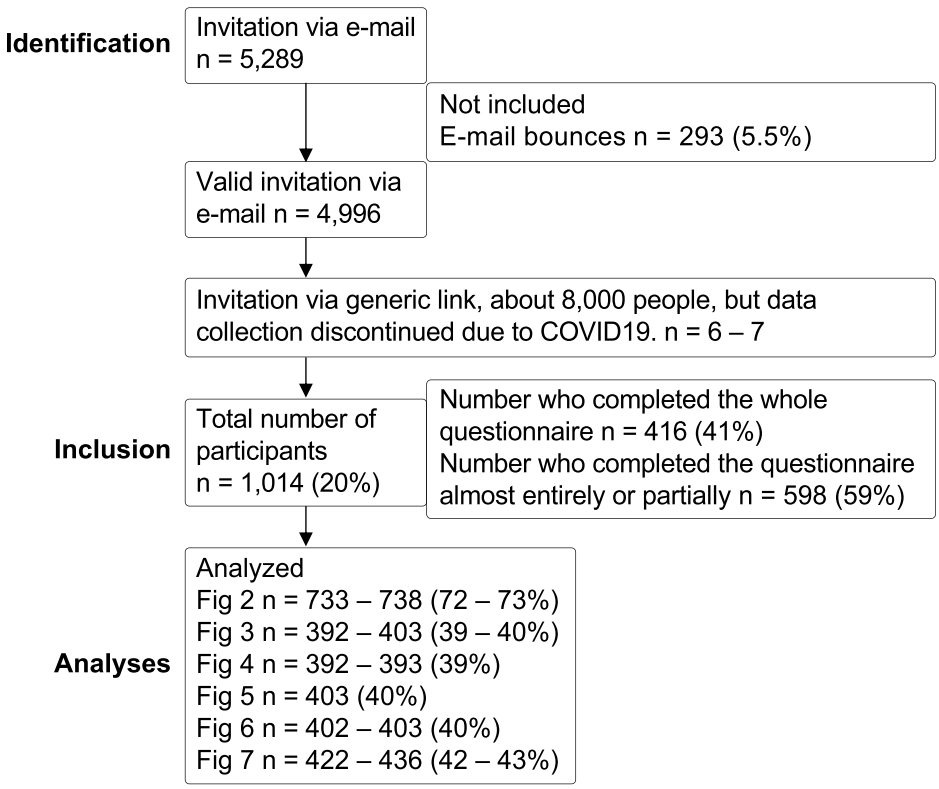

Fig. 1 STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) flow diagram of the participants. Among those who completed (i.e., submitted) the whole questionnaires, there were still some missing answers

Explanations for the low participation

The study generated far fewer participants than expected, and there are several reasons for this, some of which are known to the authors, while others are not. There was generally overwhelming interest among the companies that received information about the study. However, few companies ultimately decided to participate. The most common reason for rejecting participation was lack of time and that other issues needed to be prioritized.

At the participating companies, it was not possible to have staff respond to the questionnaire during working hours. Thus, study participants primarily responded in their spare time. Five potential participants explained that they would have participated if they had had the time or had received compensation (e.g., money).

The web-based questionnaire was extensive and automatically adapted to the responses in the sense that certain responses triggered follow-up questions. Hence, it took between approximately 25 and 45 min to complete the questionnaire. It is possible that participation and completion would have been higher if the survey had been shorter, given that the employees needed to respond during their spare time. On the other hand, the fact that 1014 individuals participated despite this shows a high level of commitment among study participants.

A very probable partial explanation for the low response rate was the COVID-19 pandemic in the spring of 2020. The third organization with 8000 possible participants had planned to enroll at the same time that the Public Health Agency in Sweden reported community-level outbreak of the virus. This led to dramatic changes in society, such as stores limiting opening hours, staff being laid off, and all citizens being advised to stay at home as much as possible to limit the spread of the virus.

Actions taken to increase participation

Due to the low response rate, seven reminders were distributed to one of the companies, and eight reminders to the other one. All reminders generated more responses. For 2 days, the authors also were on-site in two selected stores, supplying computers to staff rooms to facilitate participation. This generated a few respondents who chose to participate before or after a work shift.

Questionnaire

The web-based questionnaire included approximately 300 questions covering a multitude of civility- and incivility-related aspects, health- and well-being-related aspects, symptoms of long-term stress, health-relevant personality traits, coping strategies, and several indicators of the psychosocial work environment (e.g., demand, control, support). With the exception of some single items, all questionnaires have been previously scientifically validated and utilized in both English and Swedish in various studies (see references below). Thus, cultural and contextual validity was assumed.

Assessment of incivility

Most civility and incivility items were derived from the Social Encounters Scale (SES; Leiter 2021), and then further developed such that the response alternatives were modified and completed with a second dimension about satisfaction and dissatisfaction with the scoring. The questions were also translated to Swedish. Only one question from the SES was used in the current study: "Over the past month, how often have your colleagues/customers/manager behaved rudely towards you (e.g., gestures, facial expressions, etc.)?" The same question was repeated for each target group, and response alternatives ranged from "Very seldom/Never" to "Very often/Always." As the rest of the questions were not used in the current study, all the details will be described in a future publication. However, for the current study, the authors compiled the following straightforward item about incivility:

Incivility is defined here as disrespectful behavior such as being impolite, ruthless, or rude to someone else. Is there incivility at your workplace? The response alternatives were Yes/No/Don't know.

In the scope of the current study, only the above global question about incivility was used for statistical analyses. The single item from the SES was used to assess whether prevalence of reported incivility in the newly constructed item was convergent with the corresponding item from the SES. Thus, another important reason to use this newly constructed single item was to investigate whether a straightforward, simple question about incivility, in the present tense and with limited response alternatives, would be a feasible way to screen for incivility. The rationale was to establish whether this single item yielded similar results as previous studies and was able to demonstrate associations of incivility exposure at work to various health- and work-related variables. The idea was that this single item could then perhaps be used as a simple screening tool in future studies and practice, where full, multiple-item questionnaires could not be utilized.

Health- and work environment-related measures

The single item about incivility was contrasted against an array of (with minor exceptions) scientifically validated questions, scales, and questionnaires. An extended version of the HealthWatch-11 questionnaire (Hasson 2005; Hasson and Villaume 2013), i.e., HealthWatch-15, consisted of 15 global single items, and was used to assess current and

fundamental indicators of health, well-being, stress, and the psychosocial work environment. The health-related items were self-rated health (SRH), sleep quality, concentration ability, stress, energy level, sense of control, and social support. The psychosocial work environment items included work efficiency, job satisfaction, workload, and work atmosphere. The four additional items asked about sense of control at work, sense of being appreciated at work, motivation to act in a health-promoting way, and sense of safety at work. All items were similar in phrasing with regard to assessing the current state. For instance, SRH was assessed by the question "How do you feel *right now*?" Energy level was assessed by "How is your energy level *right now*?" Sleep quality was assessed by "How did you sleep *last night*?" For 13 items, responses were given on verbal rating scales (VRS) with five equally distributed descriptors along the line. The remaining two items (stress and work efficiency) used visual analogue scales (VAS) with two anchors.

Symptoms of burnout were assessed using the Oldenburg Burnout Inventory (Demerouti et al. 2001) (exhaustion dimension factor loadings range 0.582–0.804, Cronbach's $\alpha = 0.775$; disengagement dimension factor loadings range 0.712–0.851, Cronbach's $\alpha = 0.821$) and with the related performance-based self-esteem scale (i.e., simplified being very ambitious; factor loadings range 0.754–0.857, Cronbach's $\alpha = 0.828$), which has been shown to be strongly related to both burnout and increased risk for long-term sick leave (Hallsten et al. 2005, 2011).

Life satisfaction was assessed using the Satisfaction With Life Scale (Diener et al. 1985; Pavot et al. 1991) (factor loadings range 0.762–0.924, Cronbach's $\alpha = 0.906$), and positive emotions were assessed using two scales based on Watson et al.'s theory on positive affect (Watson and Clark 1997; Watson et al. 1988; Watson and Tellegen 1985) (factor loadings range 0.559–0.793, Cronbach's $\alpha = 0.841$). To assess depressive symptoms, a modified version of the Major Depression Inventory (Bech et al. 2001) (factor loadings range 0.810–0.856, Cronbach's $\alpha = 0.914$) was used, and coping strategies were assessed using a slightly modified version of the Brief-COPE (Coping Orientation to Problems Experienced Inventory) scale (Carver 1997). The Karolinska Sleep Questionnaire (Nordin et al. 2013; Åkerstedt et al. 2002) was used to assess the possible prevalence of sleep problems. The 12 items assess three dimensions of sleep problems, i.e., sleep quality (difficulty falling asleep, repeated awakening, early awakening, and disturbed/restless sleep; factor loadings range 0.755–0.881, Cronbach's $\alpha = 0.856$), non-restorative sleep (difficulty waking up, not sufficiently rested when waking up, and feeling tired after waking up; factor loadings range 0.761–0.917, Cronbach's $\alpha = 0.832$), and sleepiness (sleepy during work/leisure, involuntarily falling asleep during work/leisure, struggle to stay awake; factor loadings range 0.652–0.869, Cronbach's $\alpha = 0.847$).

The following single items were used to assess recovery ability: "*Do you feel that you are getting enough sleep?*" "*In addition to sleep, do you think you are getting enough rest/relaxation between working days?*" "*Do you get enough time for yourself*?" "*Overall, do you get enough recovery?*" The response alternatives using a Likert scale were as follows: "*No, far from enough*," "*No, clearly not enough*," "*No, not really enough*," "*Yes, more or less enough*," "*Yes, definitely enough*."

With regard to indicators of the psychosocial work environment, the General Nordic Questionnaire for Psychological and Social Factors at Work (QPS Nordic) (Dallner 1999, 2000) was used as a basis to calculate indices depicting support from the immediate superior (factor loadings range 0.821–0.898, Cronbach's $\alpha = 0.920$), indicators of sense of coherence (e.g., whether work feels meaningful and involves positive challenges; factor loadings range 0.715–0.861, Cronbach's $\alpha = 0.740$), job demands (e.g., workload and work pace; factor loadings range 0.632–0.772, Cronbach's $\alpha = 0.676$) and control (e.g., ability to influence work requirements—decision latitude—based on the demand-control-support model [Karasek and Theorell 1990; Theorell 2020]; factor loadings range 0.522–0.833, Cronbach's $\alpha = 0.714$), and job-task-related clarity (e.g., clearly defined tasks; factor loadings range 0.917–0.917, Cronbach's $\alpha = 0.811$).

Data analytic approach

All variables of interest were tested for normality using the Kolmogorov–Smirnov test, but none of the variables passed this rather strict test. However, visual inspection of the distribution indicated a relatively normal distribution in all of the variables. As a precaution, nonparametric analyses were conducted on all variables.

For the present study, only those participants responding "Yes" or "No" to the global incivility item were selected, while those responding "Don't know" were excluded. The reason for this exclusion was that the aim of the current paper was only to assess possible differences in indicators between those who report workplace incivility prevalence and those to do not. Thus, the "Don't know" response alternative was beyond the scope of the study. Consequently, unpaired-samples *t*-tests and Mann–Whitney *U* tests were used to calculate possible differences between those reporting that incivility occurs in the workplace and those stating it does not. When comparing parametric and nonparametric analyses, they yielded identical results. Therefore, mean values are used in the graphs. SPSS version 27 was used for all data analyses.

Ethical considerations

All participants who chose to enroll provided their written informed consent by checking the consent box prior to

accessing the web-based survey. The study was reviewed and approved by the Swedish Ethical Review Authority, protocol approval number 2019-01513.

Results

Study population

Among participants, 77% were women and 33% were men; one person (0.1%) stated "other" as gender. The mean age was 41 years (± SD = 12.3 years), while the median age was 39 years, with age range of 18–75 years. Most respondents (75%) were 31 years or older.

Most (76%) were married or in a relationship/partnership. Regarding educational level, 53% had an academic degree (bachelor's or master's degree), 42% upper secondary school, 1% compulsory school, and 4% higher academic degree (master's or PhD). In addition, 80% described their financial situation as quite good or good; 16% described it as neither good nor bad, and 4% as quite bad or bad.

Forty-four percent had been working at their current workplace for 1–4 years, and 27% for 5–10 years. Fourteen percent had worked at their current workplace for more than 10 years, while 15% had worked there for less than a year. Eighty-five percent had worked at their current workplace for a year or more. This means that the majority of respondents probably had sufficient experience to be able to have adequate comprehension about their workplace. This is important for the validity of the responses.

Prevalence of incivility

Of the 798 people who responded to the single item about prevalence of incivility in the workplace, 493 (62%) reported that it occurs, 249 (31%) that it does not, and 57 (7%) that they did not know. Of the 493 who reported that incivility occurs in the workplace, 82% reported that they themselves had been exposed to uncivil or disrespectful behaviors, and 85% that they had witnessed someone else being exposed to incivility or disrespectful behaviors. Please note that some participants may have both been exposed themselves and observed others be exposed.

The prevalence of incivility using the newly constructed item is identical to the prevalence figures derived from the SES item. Forty-two percent of the study participants indicated that customers had sometimes or often behaved rudely over the past 4 weeks, corresponding to figures for exposure to incivility from colleagues (2 + 5 = 7%) and managers (4 + 7 = 11%). Hence, the total exposure to incivility was 60% (42 + 7 + 11), which is identical to the newly constructed incivility item, where 62% indicated the prevalence of incivility.

Health-, stress-, well-being-, and psychosocial work environment-related outcomes in relation to prevalence of incivility

Figure 2 illustrates differences in the mean values for 15 central indicators of health, stress, well-being, and the psychosocial work environment (*t*-test, $p < 0.01$). All variables except workload demonstrated statistically significant differences between those reporting that incivility occurs at their workplace and those who stated that it does not. These results demonstrate that those who experience workplace incivility also feel worse, sleep more poorly, have poorer concentration ability and higher stress levels. In addition, they have lower energy levels, sense of control, satisfaction with social life, work efficiency, and job satisfaction, and experience poorer work atmosphere. Finally, they also indicated a lower sense of control at work, a lower feeling of being appreciated at work, lower motivation to act in a health-promoting way, and a lower sense of feeling safe at work than those who reported no current prevalence of workplace incivility.

The most notable difference, i.e., 23% (or 15 percentage points), between those experiencing incivility at work and those who did not was detected in perceived job satisfaction, followed by sense of control at work. At the same time, no statistically significant differences were found in workload.

Incivility in relation to stress-related outcomes

Figure 3 clearly shows that there were statistically significant differences in the indicators of burnout between those who experience incivility at work and those who do not (*t*-test, $p < 0.001$). Incivility prevalence at work is related to higher ratings of exhaustion and disengagement, which are two cardinal symptoms of burnout. Performance-based self-esteem, also related to stress-related outcomes, was likewise higher among those reporting incivility (*t*-test, $p < 0.001$).

Incivility in relation to other signs of well-being and depressive symptoms

Prevalence of incivility in the workplace was also associated with indicators of well-being and depressive symptoms (Fig. 4). For example, those who reported that incivility occurs at work also exhibited statistically significantly poorer life satisfaction (*t*-test, $p < 0.05$), lower prevalence of positive emotions (*t*-test, $p < 0.01$), and significantly higher levels of depressive symptoms (*t*-test and Mann–Whitney *U*, $p < 0.001$).

Incivility in relation to sleep and recovery

The results in Figs. 5 and 6 illustrate an association between prevalence of incivility at work and poorer sleep

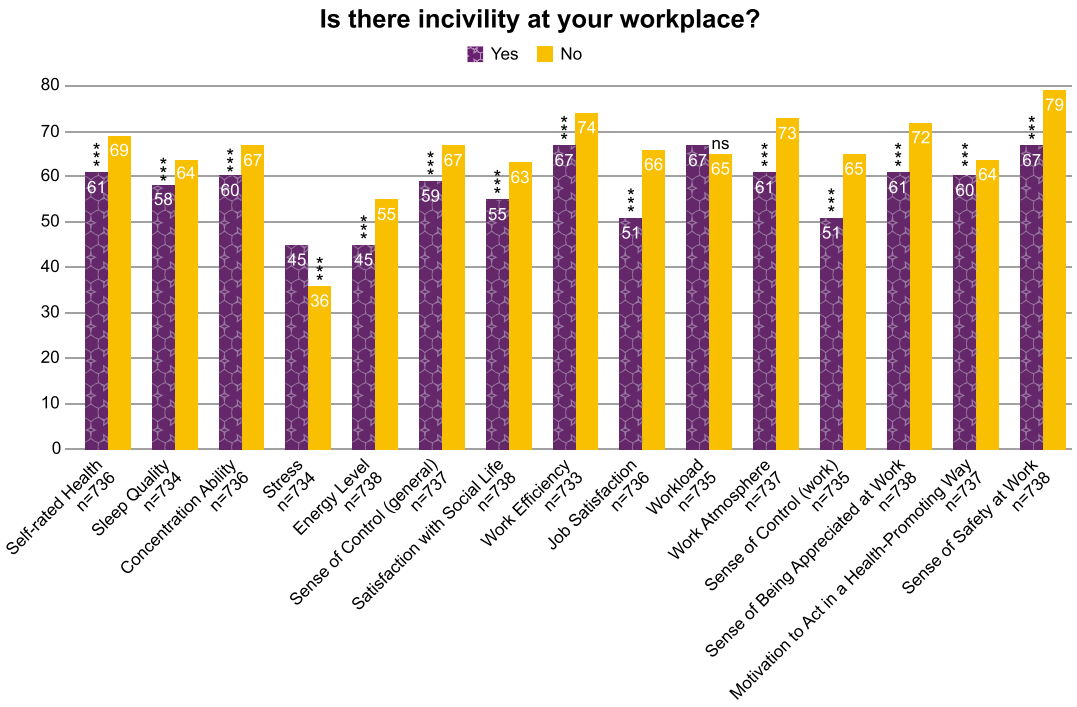

Fig. 2 Prevalence of incivility in relation to health- and psychosocial work environment-related outcomes. ns = no statistically significant difference; $^{**}p < 0.01$; $^{***}p < 0.001$

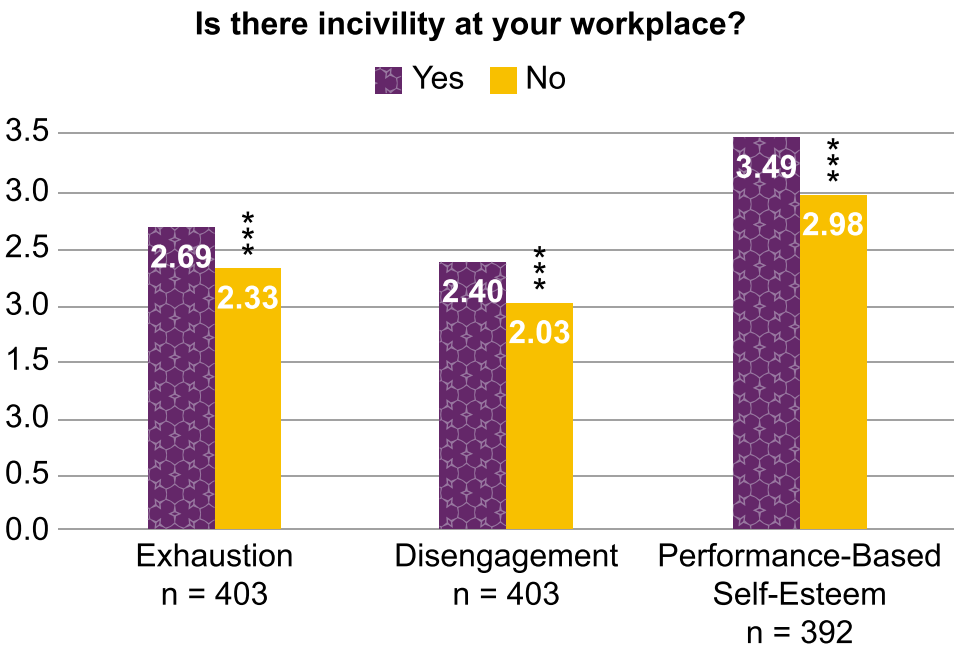

Fig. 3 Prevalence of incivility in relation to differences in measures of burnout (exhaustion and disengagement) and performance-based self-esteem. $^{***}p < 0.001$

and recovery. Perceived incivility at work was related to worse outcomes in all three Karolinska Sleep Questionnaire (KSQ) indices, i.e., sleep quality (difficulty falling asleep, repeated awakening, early awakening, and disturbed/restless sleep), non-restorative sleep (difficulty waking up, not sufficiently rested when waking up, and feeling tired after waking up), and sleepiness (sleepy during work/leisure, involuntarily falling asleep during work/leisure, struggle to stay awake). Please note that the values in Fig. 5 are reversed so that lower values indicate sleep problems, while higher values reflect better sleep quality.

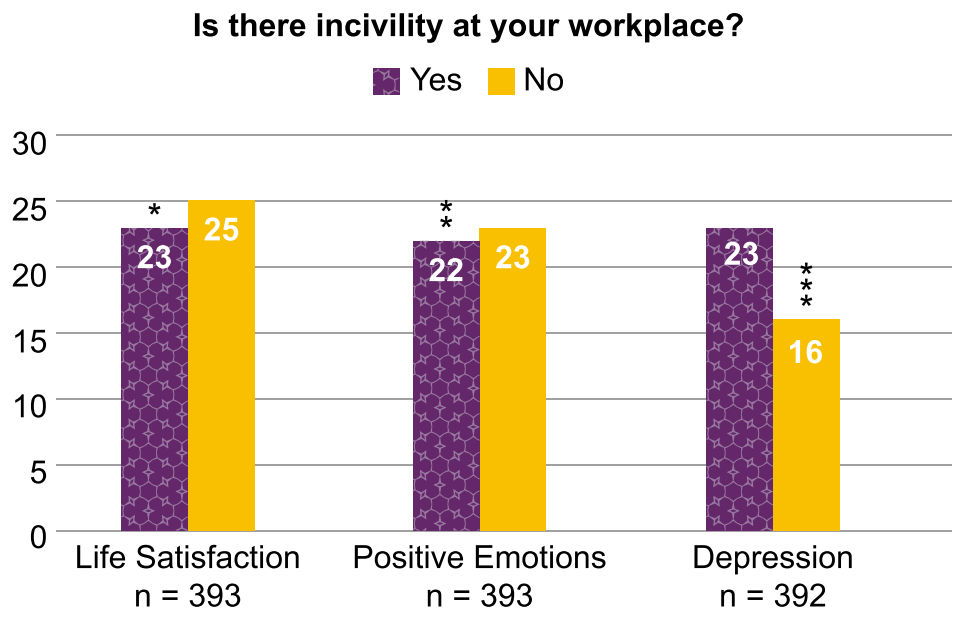

Fig. 4 Prevalence of incivility in relation to life satisfaction, positive emotions, and depressive symptoms. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

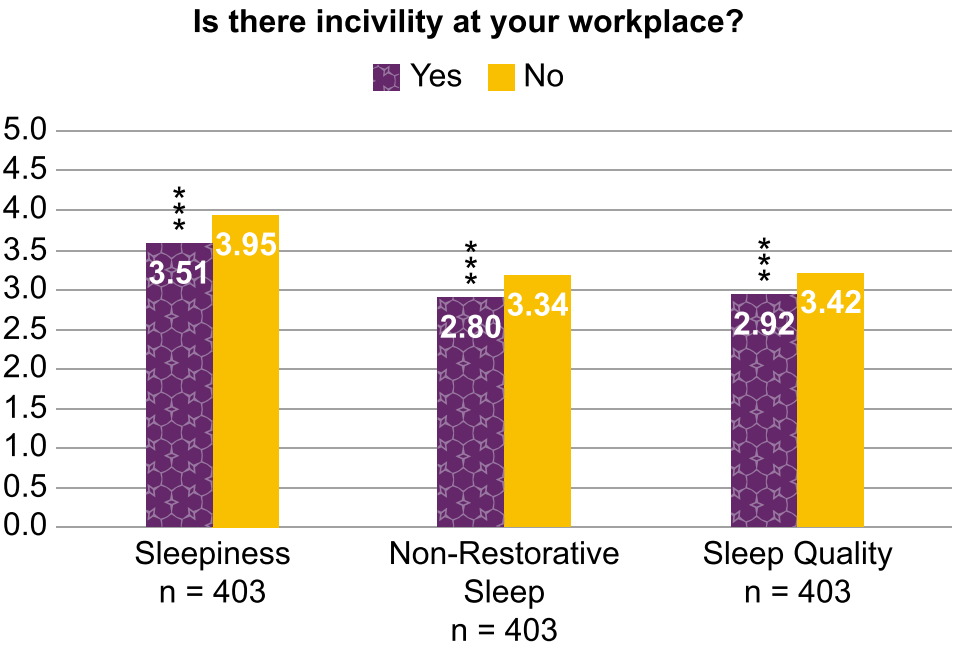

Fig. 5 Prevalence of incivility in relation to the KSQ, illustrating the dimensions sleepiness, non-restorative sleep, and sleep quality. Please note that lower values indicate sleep problems, while higher values imply good sleep. ***$p < 0.001$

Corresponding results were found in terms of recovery. Figure 6 clearly demonstrates that those who experienced incivility at work exhibited poorer results in all assessed indicators of recovery. In summary, the results show significantly and systematically worse values in all measures of sleep quality and recovery among those who indicated that incivility occurs in the workplace.

Incivility in relation to indicators of the psychosocial work environment

When it comes to how prevalence of workplace incivility is related to different outcomes in the psychosocial work environment, the results turned out to be as systematic as for the other variables. Figure 7 shows statistically significant differences in all assessed indicators of the psychosocial

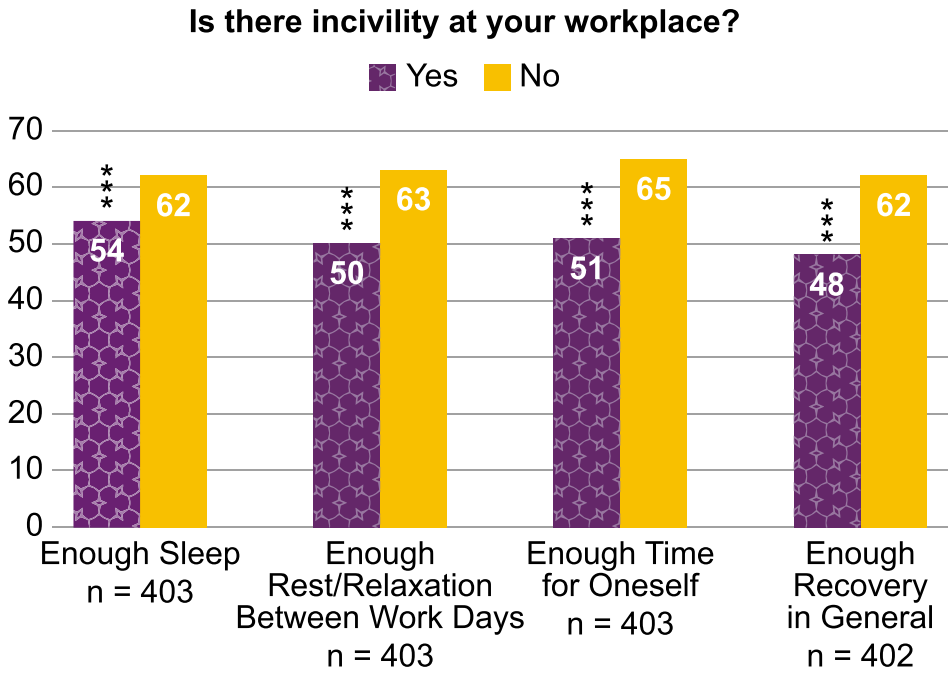

Fig. 6 Prevalence of incivility in relation to differences in having enough sleep, enough rest between workdays, enough time for oneself, and enough recovery in general. ***$p < 0.001$

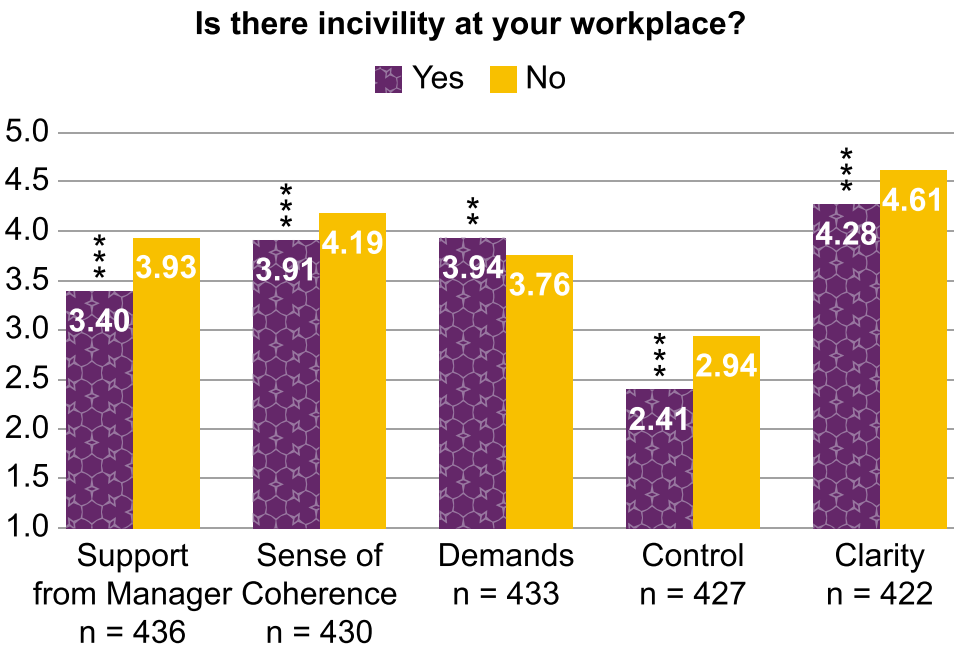

Fig. 7 Prevalence of incivility in relation to differences in central indicators of the psychosocial work environment. ***$p < 0.001$

work environment. Those who reported that incivility occurs at work also indicated significantly lower ratings of support from the manager, lower sense of coherence, higher demands, lower sense of control, and less work task clarity than those who stated that it did not occur (t-test, $p < 0.0001$).

Gender-related differences in outcomes

Four persons who failed to state their gender were excluded. Gender-stratified analyses revealed that there were some differences between women and men with regard to the aforementioned outcomes. For women, there was a statistically

significant difference in the HealthWatch-15 item "workload" between those reporting prevalence of incivility (mean = 67.45) and those who did not (mean = 63.8, $p < 0.05$). For men, there were no statistically significant differences in the HealthWatch-15 variables "sleep quality," "stress," or "motivation to act in a health-promoting way." Also, no statistically significant difference was found for men in the single item "Do you feel that you are getting enough sleep?", even if this finding was borderline ($p = 0.067$).

With regard to the indices, no statistically significant differences were detected for women in "life satisfaction." For men, no statistically significant differences were found in the KSQ indices "non-restorative sleep" or "sleep quality," nor for the indices "demands," "control," and "clarity."

Discussion

The aim of the current study was to assess, using a newly constructed single item of incivility, the possible prevalence of workplace incivility in a sample from the Swedish retail industry, and to investigate possible associations between prevalence of incivility and several indicators depicting health, stress, well-being, and the psychosocial work environment. The results clearly demonstrated that incivility occurs and that the prevalence of incivility is systematically related to worse outcomes in all but one of the indicators.

The incivility prevalence as measured by the newly constructed item, i.e., 62%, corresponded to the results of the previously validated item from the SES, i.e., 60%. This implies face validity and likely also convergent validity. The similarity between the newly constructed, straightforward question, formulated in the present tense, and the SES item assessing the past 4 weeks may indicate that the current situation influences retrospective ratings, which is supported by previous research (Gorin and Stone 2001; Holte et al. 2003) + (Hasson 2005; Hasson and Arnetz 2005). Further evidence is presented by Leiter (2021), who report that the SES is only moderately correlated in repeated assessments 6 months apart. This means that ratings of incivility exposure, to some extent, seem to change over time. If this is true, it highlights a potential validity issue in previous studies, where prevalence of incivility has been assessed retrospectively, as far back as the past year (Blau and Andersson 2005; Cortina et al. 2011; Porath and Pearson 2012) or 5 years (Cortina et al. 2001), for instance. If incivility ratings fluctuate over time, one or more years of retrospective ratings may yield misleading results. However, ratings of the current situation and the past 4 weeks seem to yield similar results, which indicates that these time spans may be used interchangeably.

All results, except the finding on workload, are completely in line with previous research (Cortina et al. 2001; Leiter et al. 2011; Porath 2015; Porath et al. 2015a, b; Porath and Pearson 2013, 2010). The fact that the findings were systematic and showed statistically significant differences in all but one outcome further confirms that experiencing workplace incivility is reliably and profoundly associated with negative outcomes. Consequently, the findings are clearly not random effects, and it is evident beyond reasonable doubt that the experience of workplace incivility is related to more negative ratings of health, stress, well-being, and the psychosocial work-environment.

Outcomes in the psychosocial work environment

This study confirmed previous findings regarding incivility in relation to aspects of the psychosocial work environment (Clark et al. 2013; Cortina 2008; Cortina et al. 2001; Harold and Holtz 2015; Leiter et al. 2011; Rodriguez and Zhou 2023; Schilpzand et al. 2016; Torkelson et al. 2016). Workplace incivility was significantly associated with for instance lower job satisfaction, poorer work atmosphere, lower perceived managerial support, lower overall control at work, and lower sense of coherence. The only variable where no statistically significant differences were found was workload. This finding needs to be addressed. To our knowledge, no previous studies have explicitly assessed workload in relation to workplace incivility. However, workload is one aspect of job demands, and previous studies have investigated job demands in relation to incivility (Koon and Pun 2017; Torkelson et al. 2016). These studies report that high job demands constitute risk factors for workplace incivility. Our study confirms that job demands certainly are significantly associated with the prevalence of workplace incivility (see Fig. 7). However, there was no significant difference in workload, which is a *central* aspect of job demands.

High workload has been associated with various forms of negative determinants, correlates, and outcomes related to ill health and poor work environment (Bowling et al. 2015). Furthermore, in Sweden, there is a profound emphasis on "unhealthy workload" in parts of the Work Environment Act (Swedish Work Environment Authority 2015). Therefore, it may be particularly remarkable that workload was *not* related to the prevalence of incivility, while job demands were. If workload is to be regarded as a risk factor, and at the same time is not at all related to incivility that is obviously statistically significantly associated with *all other* indicators in the current study, it implies that workload is a deficient indicator of these variables. This conclusion is further reinforced by the finding that incivility was strongly associated with symptoms of stress-related ill health (see Fig. 3). The results clearly demonstrate that there were statistically significant differences in measures of burnout between those

who experienced incivility at work and those who did not. If workload were a valid indicator of health-, stress-, and psychosocial work environment-related outcomes, surely incivility would also be statistically significantly associated to workload. In fact, a recent study has reported that a unidimensional assessment of workload may not constitute valid measure with regards to health and work-related outcomes in multiple repeated assessments over time (Hasson et al. 2023). Rather, a two-dimensional assessment of workload seems to yield more valid results. So, a two-dimensional assessment of workload may have exhibited the expected association with incivility, which the unidimensional approach used in the current study did not.

Outcomes related to health and general well-being

Our study also shows that those who reported prevalence of workplace incivility also indicated for example poorer self-rated health, lower energy, and worse ability to concentrate, and were less motivated to act in a health-promoting way. In addition, they exhibited more signs of depression, lower life satisfaction, and lower positive affect. On the one hand, these results are completely in the expected direction, and the systematic findings in an array of health- and well-being-related indicators suggest a profound association. On the other hand, the findings also point to the complexity and multi-dimensionality of incivility as a measure or construct. It seems to entail a multitude of various emotional states or traits, as well as perceptions of health and well-being. Future studies need to further investigate the complexity of incivility as a construct. A better understanding of possible confounders (e.g., personality) that can influence the responses may perhaps partly explain the systematic and broad nature of the associations.

It makes sense that the antisocial behaviors that incivility encompasses are related to lower life satisfaction, less positive emotion, and more signs of depression. Certainly, experiencing workplace incivility may yield a more negative perception of the world. Conversely, negative attitudes and emotions may make individuals more prone to perceive behaviors as being uncivil and disrespectful (Naimon et al. 2013). Our cross-sectional study cannot infer causality, but a bidirectional relationship is indeed plausible. Taken together, the systematic associations with health- and well-being-related variables suggest that incivility should be taken seriously when it occurs. Indeed, there are successful examples of workplace interventions to counteract incivility and increase civility. For example, Leiter et al. (2011) demonstrated profound effects on health-related outcomes such as exhaustion and cynicism. Future intervention studies should investigate whether similar effects can be obtained on a broader array of health- and well-being-related outcomes that encompass both positive and negative aspects. Similarly, it would be interesting to evaluate whether stress-management and health-promoting interventions at work could contribute to a reduction in workplace incivility, and thereto related improvements in health and well-being.

Outcomes related to stress, sleep, and recovery

In line with previous studies, our results demonstrate statistically significant differences in symptoms of burnout-related variables between those who reported a prevalence of incivility at work and those who did not (Leiter et al. 2011). Symptoms of burnout were assessed using the Oldenburg Burnout Inventory (Demerouti et al. 2001), as well as with the related measure of performance-based self-esteem, which has been shown to be strongly related to both burnout and increased risk for long-term sick leave (Hallsten et al. 2005, 2011). The fact is that incivility prevalence at work is related to higher ratings of exhaustion and disengagement, which are two cardinal symptoms of burnout. In addition, performance-based self-esteem was higher, which combined with high exhaustion levels can lead to 2.84 times higher odds (OR = 2.84; 95% CI: 1.61—5.01) for going on long-term sick leave in the following year (Hallsten et al. 2011).

The fact that incivility occurs in the workplace is thus associated with higher levels of negative outcomes when it comes to stress-related symptoms and an increased risk of long-term sick leave. It is indeed recognized that stress, sleep, and recovery are related phenomena that affect each other. Therefore, if we consider incivility as a stressor, there should also be an association between such prevalence and sleep and recovery. It is furthermore well established that sleep- and recovery-related disturbances can lead to various stress-related disorders, such as burnout (Ekstedt et al. 2006; Åkerstedt 2006; Åkerstedt et al. 2002). Stress, sleep, and recovery have all been linked with workplace incivility (Demsky et al. 2019; Holm 2020; Leiter et al. 2011). Equivalent associations were found in the current study, using multiple sleep- and recovery-related measures. In summary, the results demonstrated significantly and systematically worse values in all measures of sleep quality and recovery among those who indicated that incivility occurs in the workplace. Sleep problems and lack of recovery are well-established risk factors for stress-related disorders.

Several theories about the sleep-recovery-stress and incivility relationship have been presented. For instance, previous studies have suggested that exposure to incivility leads to rumination, which in turn impairs unwinding, falling asleep, sleep quality, and recovery (Demsky et al. 2019; Holm 2020; Leiter et al. 2011). On the other hand, impaired sleep and recovery can increase irritability and vulnerability as well as worsen mood and impulse control, which may yield uncivil behaviors. The mechanisms behind the uni- or

bidirectional causality between the prevalence of workplace incivility and sleep, recovery, and stress-related outcomes need to be further investigated. Also, possible protective factors, such as personality, coping, and working conditions, should be assessed. A better understanding could help tailor future interventions to more adequately address workplace incivility when it occurs. Such interventions may not only counteract negative sleep- and stress-related outcomes, but possibly also reduce the prevalence of incivility, given the probable bidirectional relationship.

Incivility at work—a powerful and systematically significant variable

The newly formulated, simple, and straightforward question in the present tense about incivility turned out to be a powerful indicator of several outcomes. This single item yielded statistically significant differences in all but one of the assessed variables. Based on previous research, it was surely expected that exposure to incivility would be related to several negative outcomes (Leiter et al. 2011; Porath 2015; Porath et al. 2015a, b; Porath and Pearson 2013, 2010). However, the finding that a single indicator was statistically significantly related to all but one outcome exceeded all expectations. This finding clearly implies the importance of this single item as a possible and general indicator of health, stress, and well-being, and indicator of the psychosocial work environment.

To our knowledge, such a question has not been used in previous studies, and the results clearly show that this item systematically relates to several key aspects of health, stress, and the psychosocial work environment. This simple and straightforward question may thus prove to be a simple "litmus test" to obtain a snapshot reflecting associations to a range of health- and work-related variables. Apart from workload, the prevalence of workplace incivility was systematically associated with poorer outcomes in all other measures. It does not get clearer than this. The current study cannot infer causality, but the findings nevertheless speak for themselves. The associations are most likely bidirectional in such a way that, for example, poorer health and work environment and the prevalence of incivility negatively impact each other. The results are bothersome regardless of whether incivility leads to poorer health, well-being, and psychosocial work environment or whether the opposite or both are true.

The fact that incivility at work is so systematically, clearly, and sometimes profoundly associated with poorer health, well-being, and indicators of the psychosocial work environment reinforces the importance of assessing workplace incivility. Put another way, in accordance with the saying "a picture is worth a thousand words," assessing prevalence of workplace incivility also seems to reveal central aspects of employees' health, well-being, and psychosocial work environment. To our knowledge, no other measure has so systematically and clearly decisively been shown to be associated with such an extensive and diverse number of variables. This highlights the importance of further studies of workplace incivility. Future studies need to be longitudinal to enable the inference of causality. In addition, they need to be large-scale and preferably include at least 5000 participants so that subgroup analyses can be conducted. Such analyses would enable conclusions with higher precision so that, for instance, one could determine the circumstances under which incivility seems to pose a risk for work-related ill health and sick leave, and for whom. In accordance with Leiter et al. (2011), future studies also need to assess interventions that can ensure, maintain, and promote civility at work, while at the same time preventing incivility.

Methodological considerations

Prevalence of incivility. The 62% of participants reporting that incivility occurs in the workplace is significantly lower than the 96–98% reported in previous studies (Porath 2015; Porath et al. 2015a, b; Porath and Gerbasi 2015; Porath and Pearson 2013, 2010). However, a major part of this difference is probably attributable to the fact that we only asked about the prevalence in the present tense and did not specify a time period. Other studies have asked about the prevalence during the past year or 5 years. Thus, the response to the straightforward question, formulated in the present tense, is probably perceived to a large extent as a description of the current situation. If so, this could partly explain the significantly lower prevalence of incivility at work in the current study than in previous ones. In addition, our question does not distinguish between witnessed, instigated, or experienced incivility, or the source of the incivility (e.g., supervisor, coworker, customer). This also most likely contributes to the difference in prevalence compared to other studies.

There are advantages and disadvantages to having formulated the question in the present tense. Among the advantages is that the current situation is easy to remember and thus to account for more correctly. At the same time, there is a risk that the current situation is not representative of the usual circumstances. There is thus a risk that this way of asking underestimates the prevalence of workplace incivility from a more general perspective. At the same time, long time periods, such as 1 or 5 years, mean that one probably overestimates the prevalence or significance of incivility—not least since it is unlikely that incivility would not have occurred during such a long time. Indeed, it is not possible to reliably recall 1–5 years back, which makes retrospective ratings less valid and surely susceptible to recall bias (Coughlin 1990).

All incivility does not have to pose a problem either. One or more uncivil incidents that have occurred 1–5 years earlier can already be psychologically processed, while incidents that have occurred recently may not be. In other words, the results from the current study can to a greater extent account for problems that are current, which in such cases are also likely to have a more significant impact on all results. An ongoing conflict should, for example, be more burdening than one that was ongoing or ended 1 or 2 years ago. Taking this into account, the advantages of asking about the current situation outweighs the disadvantages.

In summary, to our knowledge, such a direct question, formulated in the present tense, has not been used in previous studies. Thus, perhaps this simple and straightforward question can be a simple way to yield a snapshot that reflects a breadth of health- and work-related variables. The current prevalence of incivility probably constitutes a greater problem than closed incidents that occurred one or more years earlier. Future, in-depth analyses will identify whether there are individual (e.g., age, gender, coping, personality) and work environment-related (e.g., demands–control support, leadership) factors associated with higher or lower reported prevalence of incivility at work.

Implications of the cross-sectional design and of the low response rate for the study conclusions

As this is a cross-sectional study, no conclusions about causality can be inferred. It is possible to describe associations, but not to determine which of the variables affects the other or whether they affect each other. However, other studies using designs that allow for such conclusions, e.g., Leiter et al. (2011), provide guidance on possible causality. Nevertheless, even if previous studies infer causality between exposure to incivility and negative outcomes, the causality is most likely bidirectional. Negative outcomes in indicators of health, stress, well-being, and the psychosocial work environment can evidently be caused by incivility. Conversely, people who experience stressors (for example, imbalance between efforts and rewards) are likely to feel frustration and negative affect and engage in uncivil behaviors themselves (Meier and Semmer 2013).

Given the low response rate and the fact that, in practice, only two companies participated, the results need to be interpreted with some caution with regard to generalizability. Low response rates can, for instance, increase the risk for selection bias, which means that the risk of responses not being representative of the entire population increases. The fact that only two companies participated also means that temporary or permanent circumstances at these particular companies may have influenced the responses so that they are not representative of other companies. At the same time, all results are in line with previous studies, which may serve as an indication of the generalizability of the current findings. Also, the wide distribution noted in most of the responses may indicate that the results are possibly generalizable.

Possible confounders

The current results have not accounted for possible confounders that may, fully or partially, explain or affect the outcomes. In future publications, more detailed analyses will be conducted to assess possible personal and organizational preconditions that may confound the results. This knowledge will be important when it comes to pedagogical approaches to interventions for counteracting various forms of incivility and for actively promoting civility. Such knowledge can for instance increase awareness about how one's own expectations of others' behavior can constitute a problem, while others may need to learn what colleagues or peers perceive as uncivil. Age may be an example of such a confounder. Most respondents (75%) in the present study were 31 years or older. This implies that the majority had some years of work experience, which may be important for the outcomes of the study. In accordance with the Cognitive Activation Theory of Stress (CATS) theory (Ursin and Eriksen 2004), repeated exposure to stressors can lead to habituation or sensitization. In other words, years of working experience may have contributed either to better abilities to handle incivility and gain more emotional distance when it occurs or to becoming more sensitive and vulnerable. The COVID-19 pandemic negatively influenced the sample size in this study, and it is possible that the pandemic may have influenced outcomes to some extent. However, about 90% of the responses were provided before the pandemic, and possible effects on general well-being would have been prevalent for both those experiencing workplace incivility and for those who did not. Thus, it is unlikely that this would have confounded the results. Other possible confounders that will be analyzed in future publications include gender, socioeconomic status, personality traits, coping strategies, and health- and work environment-related issues.

Conclusion

The most important finding in this study is that the reported current prevalence of incivility at work was systematically related to statistically significant differences in key

indicators of health, stress, well-being, recovery, and the psychosocial work environment. This is completely in line with previous research. Although this study cannot infer causality, the profoundly systematic results imply that the prevalence of workplace incivility is a bothersome problem that should be addressed. A single item about the prevalence of workplace incivility seems to be a powerful measure that can perhaps act as a litmus test that yields a snapshot reflecting associations to a wide range of health-, stress-, well-being-, and work-related variables.

Acknowledgements We would like to extend our warmest thanks to all study participants and companies who took the time to participate in this study. Special thanks to our contact persons Katarina Lodin, Matilda Åhs and Pernilla Bodén for their persistent and friendly commitment and help in enabling the implementation of this research study.

Our deepest gratitude to The Swedish Retail and Wholesale Council (Handelsrådet) for funding and good collaboration. Special thanks to Lena Strålsjö, Andreas Hedlund and Linn Eliasson. We would like to thank the steering group, Katrin Dagergren from the Swedish Trade Federation and Stefan Carlén from the Union of Commercial Employees for invaluable and kind help and support. We would like to thank Dr. Cecilia Berlin at Chalmers University for excellent and invaluable collaboration in the design and execution of this study, as well as systems architect Jens Pettersson for support with the data collection.

Author contributions Both authors designed and conducted the study and collected the data. Both analyzed the data, and DH compiled the first draft of the manuscript, which was edited and revised with essential input from KV. Both authors have read and approved the final version of this manuscript.

Funding Open access funding provided by Karolinska Institute. This work was supported by The Swedish Retail and Wholesale Council [grant number 4-3169/2018],https://handelsradet.se. There was no additional external funding received for this study.

Data availability statement Data will be made available upon reasonable request to dan.hasson@ki.se, given that adherence to the General Data Protection Regulation (EU) 2016/679 can be established.

Declarations

Competing interests None declared.

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