Take it or Leave: A Five-Year Prospective Study of Workplace Bullying and Indicators of Expulsion in Working Life

WORKPLACE BULLYING AND EXPULSION IN WORKING LIFE

Original article

Mats GLAMBEK¹ (corresponding author); Anders SKOGSTAD¹;

Ståle EINARSEN¹

¹Department of Psychosocial Science, Faculty of Psychology, University of Bergen

¹Department of Psychosocial Science, Christies gate 12, 5015 Bergen, Norway

mats.glambek@psysp.uib.no

+47 55 58 86 25

Received: September 18, 2014
Accepted: November 21, 2014
Advance publication: December 3, 2014
Abstract

Workplace bullying is often held as a precursor of expulsion in working life, but the claim builds on sparse empirical groundwork. In the present study, bullying is investigated as an antecedent to indicators of expulsion, be it from the workplace (change of employer) or from working life itself (disability benefit recipiency and unemployment), using a nationally representative sample (n=1,613), a five-year time-lag as well as two separate measures of workplace bullying. In line with the hypotheses, logistic regression analyses revealed that both exposure to bullying behaviors and self-labeled bullying are significantly associated with change of employer (OR=1.77 and 2.42, respectively) and disability benefit recipiency (OR=2.81 and 2.95, respectively). Moreover, exposure to bullying behaviors was found to be significantly related to unemployment five years on (OR=4.6). For the self-labeling measure of bullying, this tendency only held true at the 0.1 significance level (OR=3.69, p=0.098). Together, the present results indicate that targets of bullying are at a greater risk of expulsion, both from the workplace and from working life itself, thus representing strong incentives to combat bullying both from the perspective of the individual, the organization and society at large.

Keywords: Workplace bullying, expulsion in working life, change of employer, work disability, unemployment

Introduction

Workplace bullying is still highlighted as a wide-ranging challenge in contemporary working life, in spite of significant research efforts throughout the last two decades as well as a growing recognition and awareness in organizations and among the public \(^1\). Bullying is a form of aggressive, anti-social behavior in the workplace \(^2\), involving repeated and long-lasting targeting
of an employee with negative behavior, in a context of a power imbalance that hinders effective retaliation or defense, cf. 3). Thus, bullying is not a conflict between equal parties, but is characterized by extended duration and a dynamic of power one-sidedness that may lead even subtle uncivil behavior to be experienced as stigmatizing, humiliating or frightening 2, 4). Accordingly, as the target is unable to self-protect, the bullying process will often last for years 5). On average, the estimated global prevalence for any type of exposure to bullying is just below 15 per cent 6), while severe and long-lasting bullying is experienced by 3-4 per cent of employees 7).

A broad range of injurious outcomes of bullying at work has been demonstrated in the literature, e.g. 8, 9). At the individual level, exposure to bullying is associated with health impairment 10) and job dissatisfaction 11). At the level of the organization, outcomes such as lowered productivity 12), poorer organizational climate 13) and impaired corporate reputation 14) have been reported. Furthermore, some researchers have argued that targets of workplace bullying may be at risk of expulsion from work, be it from their current job or from working life itself 4, 15-17). This notion was first postulated by Leymann, e.g. 18), who claimed that if no legitimate managerial intervention takes place during the bullying process, it will normally not stop by itself until the final “expulsion stage” is reached – where the target is pressured out of his or her job or current position. Furthermore, he held that many will experience difficulty in finding and maintaining new employment later on 15), involving a risk of being expelled from working life altogether. Later, other researchers have made similar claims. For instance, Lutgen-Sandvik 17) claims that emotional abuse at work that becomes repeated is likely to end with employee expulsion, leaving the perpetrator free to recruit new potential victims, thus regenerating the abusive cycle. However, although expulsion in working life has spreading consequences all the way up to the societal level, it has rarely been explicitly investigated as an outcome of workplace bullying. Moreover, such investigations have to the best of our knowledge not been done using time-lags greater than two years, e.g. 19), which is a serious limitation in itself because the bullying process usually lasts for extensive periods of time 5, 7).

It is the aim of the present study to address the supposition that exposure to bullying at work is associated with subsequent expulsion in working life. Such expulsion may involve being lead or pressured to leave the workplace or being excluded from working life altogether. The
study employs the same baseline data as a related study by Berthelsen, Skogstad, Lau and
Einarsen (19), in which bullying was investigated as an antecedent to turnover intentions, change of employer, sick-leave and disability benefit recipiency over a two-year time-lag. In the present study, change of employer, disability benefit recipiency and unemployment are used as indicators of expulsion in working life, and prospective data over a five-year time-lag are employed in order to thoroughly address the long-time effects of bullying regarding the employment and occupational status of the targets.

**Change of employer**

One way through which bullying may lead to expulsion is by triggering change of employer among the targets. For instance, it is possible that bullying can result in the target being either discharged, or bought out of the organization (15). In line with this, researchers have documented a tendency for targets of bullying to become concerned about the continuity of their job (16, 20), possibly reflecting genuine threats to their employment.

An alternative reason for increased rates of change of employer over time can be that the targets choose to quit “voluntarily”. For instance, accumulated job dissatisfaction and poor organizational commitment have traditionally been seen as the main reasons for voluntary change of employer, e.g. (21, 22), and workplace bullying has been demonstrated to be a cause of both lowered job satisfaction and lowered job engagement (23). In addition, and according to the unfolding model of turnover, cf. (24), an initial “shock” is often the immediate trigger of the turnover process (22). Such a “shock” may be personal or work-related, positive or negative as well as expected or unexpected, and is described as an event that jars the individual to make deliberate judgments about their current working situation. The “shock” may drive the employee to turnover either by triggering a pre-existing *script*, or plan, for quitting, or it causes an *image violation*, which takes place when the employee discovers that values, goals and plans for goal attainment are incompatible with the working situation (22, 24). As exposure to bullying is an unsettling experience in itself, sometimes even to a traumatic degree, e.g. (25), the shock-metaphor is clearly applicable to a bullying situation (26). Moreover, such a situation is unlikely to be harmonious with the values and goals held by the target. In line with this assumption, Zapf and
Gross found that many targets want to leave the job as well as advise other targets to do the same, even after first attempting to manage the bullying situation in a more constructive manner. Similarly, bullying has been found to be prospectively associated with increased turnover rates. For instance, in a study among Danish healthcare workers, turnover was shown to increase over a time-lag of one year, and in the study by Berthelsen et al., turnover was shown to increase over a two-year time-lag for employees exposed to bullying behaviors. However, in their study, the tendency did not hold true for targets who labeled themselves as bullied, implying that longer time intervals may be needed to thoroughly establish the prospective association between bullying and change of employer.

On the basis of the presented theoretical notions and empirical findings, we hold that bullying leads to higher rates of change of employer over time, and hypothesize that:

**H1: Targets of workplace bullying have a higher probability of change of employer over a five year period as compared to non-targets.**

**Disability benefit recipiency**

Another indicator of expulsion in working life among bullying targets is disability benefits being granted as a result of health impairment. This notion relies on the premise that bullying is strongly associated with impaired health, an assumption with broad support in the literature, both theoretically and empirically (see ). According to the cognitive activation theory of stress, the non-specific stress response otherwise meant to aid the individual through short-lived dangers or challenges, may become pathogenic if the situation causing it fails to normalize. A situation that fails to normalize within a reasonable period of time is also one of the defining features of workplace bullying. Thus, the repeated targeting of someone deprived of any real opportunity to defend him- or herself, may lead to sustained physiological activation, consequently overtaxing the homeostatic system, leading to illness and disease over time, cf. . Workplace bullying may further be experienced as traumatic, and according to the cognitive theory of trauma, fundamental schemas of self-worth and of a benevolent and just world may be shattered by interpersonal traumatic events, possibly leading to outcomes of anxiety, depression and hopelessness.
As outlined, there is ample theoretical reason to expect higher rates of health impairment among targets. In line with this, empirical studies show increased levels of depression, anxiety, sleep difficulties, fatigue and cardiovascular disease among targets of workplace bullying. Additionally, even more detrimental health outcomes of bullying have been documented, including post-traumatic stress disorder and severe depression. Thus, the notion that workplace bullying may lead to work disability seems plausible. In support of this, a retrospective study by Dellve, Lagerström and Hagberg showed that Swedish home-care workers receiving disability pension were approximately twice as likely to report prior exposure to workplace bullying, both five and fifteen years earlier. Also, the study by Berthelsen et al. showed increased disability levels over a two year time-lag for targets of bullying. However, this tendency was only systematic for targets who had labeled themselves as bullied. For respondents who had been exposed to bullying behaviors according to the behavioral measure, a non-significant relationship was found, indicating that a longer time-interval may be needed to fully establish the relationship between bullying and work disability.

In sum, there is reason both theoretically and empirically to expect that targets of bullying in the long run are at risk of expulsion in working life in the form of becoming work disabled, as proposed in our second hypothesis:

**H2: Targets of workplace bullying have a higher probability of being recipients of disability benefits five years on, as compared to non-targets.**

**Unemployment**

Leymann not only described a bullying process that ended with expulsion from organizations, but also one that could make it difficult for targets to find a way back into the job market. There are good reasons to speculate about such a downward spiral. For instance, many targets may suffer health problems without being recipients of disability benefits, and studies have demonstrated associations between health problems and unemployment. In fact, there is support both for a selection model (i.e. illness increases the probability of job-loss and/or continued unemployment) and a causation model (i.e. unemployment causes ill health), e.g. 40, 41. Thus, not only may the health effects of bullying lead to job-loss and hinder later re-employment,
continued unemployment may also reinforce the health detriment already suffered by targets of bullying. In addition, studies show that bullying is linked to a perceived loss of professional reputation among targets \(^{42,43}\), to bad references given \(^{44}\), to motivational problems \(^{37}\), and to a loss of self-confidence \(^{45}\). As targets of bullying also are less likely to stay in the same job as compared to non-targets, cf. \(^{19}\), we hold, in line with the above, that the probability for unemployment is greater for this group in the long run. Accordingly, the third and last hypothesis states that:

\[ H3: \text{Targets of workplace bullying have a higher probability of being unemployed five years on, as compared to non-targets.} \]

**Method**

**Sample**

A total of 4,500 employees were randomly drawn from the Norwegian Central Employee Register by Statistics Norway (SSB) and asked to participate in a survey about their psychosocial working conditions \(^{46}\). An information letter was included with the request, informing that participation was voluntary, that the participants could resign from the study at any time, that the information provided would be treated confidentially and that the participants could later ask to have the information deleted. Thus, they were not asked to give their consent prior to this, as the response itself is seen as an informed consent. All potential respondents were between the ages of 18 and 65 years and working a minimum of 15 hours per week in a company with at least five employees. The baseline data collection in 2005 (T1) yielded a response rate of 56.4 per cent \((n=2,539)\) and consisted of 52 per cent women and 48 per cent men. Age ranged from 19 to 66 years, the mean age was 43.8 years \((SD=11.52)\), and 90.1 per cent were either full- or part time employed. The first follow-up (T2) was conducted two years after the baseline data collection, and yielded a response rate of 70 per cent \((n=1,775)\) see \(^{19,47}\). The second follow-up (T3) was conducted in 2010, five years after baseline data collection. At T3, 72 per cent of those responding at T2 \((n=1,323)\) and 11.4 per cent \((n=290)\) who had participated at T1, but not T2, returned the survey \((n=1,613)\). For the purpose of the present study, the baseline data collection
and the second follow-up form the basis for all analyses (T1 and T3). The study was approved by the Regional Committee for Medical Research Ethics in Western Norway.

**Measures**

Workplace Bullying was measured by using both a self-labeling procedure and a record of exposure to bullying behaviors, in line with the recommendations in the literature, e.g.\(^{48,49}\).

Self-labeled Bullying was measured by presenting the respondents with a definition of bullying, and asking them to indicate whether they had experienced workplace bullying in the last six months (see also\(^ {50}\)). The definition was presented as follows:

Bullying (for example harassment, torment, freeze-out or hurtful teasing) is a problem in some workplaces and for some employees. To be able to call something bullying, it has to occur repeatedly over a certain period of time, and the bullied person has difficulty in defending him- or herself. It is not bullying when two persons of approximately equal “strength” are in conflict, or if it is a single situation.

The response categories were presented using a five-point Likert-type scale, ranging from; (1) no, (2) sometimes, (3) now and then, (4) about weekly to (5) several times a week. Self-labeled Bullying was defined as any answer above 1.

Exposure to Bullying Behaviors was measured using the Negative Acts Questionnaire-Revised NAQ-R;\(^ {51}\). NAQ-R is a 22-item list of bullying behaviors, and the respondents are asked to indicate how often they have experienced each behavior during the last six months, using a five-point Likert-type scale. Examples of bullying behaviors are “been humiliated or ridiculed in relation to work; that gossip or rumors have been spread about you; physical assault or threats of such assault”, and the response categories were (1) never, (2) now and then, (3) monthly, (4) weekly and (5) daily. In line with the cut-off point established by Notelaers and Einarsen\(^ {52}\), any total score equal to or above 33 was defined as exposure to bullying behaviors. Reliability analyses showed acceptable internal stability for this measure at both T1 (\(\alpha = .90\)) and T3 (\(\alpha = .88\)).
Change of Employer was measured directly at T2, by asking whether the respondents had changed employer since the first measurement. At T3, change of employer was measured by asking the respondents to indicate which year they started working for their current employer. Respondents who indicated having changed employer *during* 2005 but who did not participate at the T2 measurement were excluded from the analyses (n=12), because it could not be determined whether they had changed jobs before or after the baseline measurement in 2005.

Disability Benefit Recipiency was measured by asking the respondents to indicate whether they were currently a recipient of disability pension or doing vocational rehabilitation.

Unemployment was measured by asking the respondents to indicate whether or not they were currently unemployed. The disability benefit recipiency and unemployment measures were both presented in the same list of current work-status alternatives, and were thus mutually exclusive.

**Analyses**

Statistical analyses were performed using the statistical package IBM SPSS Statistics 19.

Logistic regression analyses were performed in order to obtain odds-ratios on the hypothesized relationships. For each hypothesis, both self-labeled bullying and exposure to bullying behaviors were used as predictor variables in separate analyses. Moreover, in all analyses, age and gender were entered as control variables before the respective bullying measure. All outcome variables were dichotomous. For the outcome change of employer, no change of employer was used as the reference category, and for the outcomes of being granted disability benefits and unemployment, the reference category was being full-time employed.

---

**Results**

At T1, 4.6 per cent self-labeled as targets of workplace bullying (n=108), while 12.7 per cent scored above the cut-off point of 33 on the Negative Acts Questionnaire-Revised (n=286). Summing up the two measures, 13.9 per cent had experienced either self-labeled bullying and/or
exposure to bullying behavior at T1 (n=310). At T3, 32.9 per cent reported having changed employer since T1 (n=455), 4.5 per cent were recipients of disability benefits (either disability pension or vocational rehabilitation, n=71), and 1.1 per cent were unemployed (n=17). See Table 1 for a more detailed overview of demographic- and variable statistics.

Results of the logistic regression analyses

H1 stated that workplace bullying is associated with an increased probability of changing employer during the subsequent five years. The first test of H1 revealed that exposure to bullying behaviors at T1 was significantly associated with having changed employer at T3 (OR=1.77). Moreover, the full regression model explained between 13.1 per cent (Cox & Snell R Square) and 18.3 per cent (Nagelkerke R Square) of the variance in change of employer, correctly classifying 72.8 per cent of the cases. The test for model fit yielded support for the full model with a significant chi-square (p<.000) and a non-significant Hosmer and Lemeshow test (p=.83). The second test of H1 revealed that self-labeled bullying at T1 was also significantly associated with having changed employer five years later (OR=2.42). The full regression model explained between 13.4 per cent (Cox & Snell R Square) and 18.8 per cent (Nagelkerke R Square) of the variance in change of employer, correctly classifying 72.3 per cent of cases. The test for model fit yielded support for the full model with a significant chi-square (p<.001) and a non-significant Hosmer and Lemeshow test (p=.63). Thus, H1 was supported by the present analyses. These results are presented in further detail in Table 2.

H2 stated that workplace bullying is associated with an increased probability of disability benefit recipiency five years later. The first test of H2 showed that exposure to bullying behaviors at T1 was significantly associated with being on disability benefits five years later (OR=2.81). Moreover, the full regression model explained between 3.5 per cent (Cox & Snell R Square) and 11.2 per cent (Nagelkerke R Square) of the variance in the disability benefit recipiency variable, correctly classifying 95.3 per cent of cases. The test for model fit yielded support for the full model with a significant chi-square (p<.001) and a non-significant Hosmer and Lemeshow test (p=.63). Secondly, self-labeled bullying at T1 was also found to be significantly associated with disability benefit recipiency five years later (OR=2.95). The full regression model explained
between 4 per cent (Cox & Snell R Square) and 11.9 per cent (Nagelkerke R Square) of the variance in the disability benefits variable, correctly classifying 94.7 per cent of cases. The test for model fit yielded support for the full model with a significant chi-square ($p<.001$) and a non-significant Hosmer and Lemeshow test ($p=.27$). Thus, H2 was supported by the present analyses. These results are presented in further detail in Table 2.

H3 stated that workplace bullying is associated with an increased probability of unemployment five years later. The first test of H3 revealed that exposure to bullying behaviors at T1 was significantly associated with unemployment five years later (OR=4.6). The variance in unemployment explained by the full regression model was between 0.6 per cent (Cox & Snell R Square) and 4.9 per cent (Nagelkerke R Square), and the rate of correctly classified cases was 98.7 per cent. However, the test for model fit yielded a non-significant chi-square ($p=.1$) and a non-significant Hosmer and Lemeshow test ($p=.78$). Thus, even though exposure to bullying behavior at T1 is uniquely associated with unemployment at T3, the results concerning the contribution of the full model are ambiguous. The second test of H3 revealed that self-labeled bullying at T1 was only significantly associated with unemployment at follow-up at a .1 significance level (OR=3.69, $p=.098$). In addition, the test for model fit did not support the full model, with a non-significant chi-square ($p=.28$) and a significant Hosmer and Lemeshow test ($p<.05$). In sum, it is concluded that the present analyses yielded at least partial support for H3, keeping in mind that the result concerning self-labeled bullying and unemployment should be interpreted with caution. These results are presented in further detail in Table 2.

Discussion

The present study set out to investigate the claim that workplace bullying is a precursor of expulsion in working life, e.g. \cite{17,18}. Employing nationally representative data, a prospective design with a five-year time-lag and two different measurements of workplace bullying, the results were largely in support of this notion. Firstly, and in accordance with hypothesis 1, both exposure to bullying behaviors (OR=1.77) and self-labeled bullying (OR=2.42) were associated with an increased probability of having changed employer during the five year period after
reporting exposure to bullying. Secondly, and in accordance with hypothesis 2, both exposure to bullying behaviors (OR=2.81) and self-labeled bullying (OR=2.95) were significantly associated with disability benefit recipiency five years on. Lastly, exposure to bullying behaviors (OR=4.6) was found to be significantly associated with unemployment five years later, but for self-labeled bullying this held true only at the .1 significance level (OR=3.69, \( p=.98 \)). Thus, the partial support for hypothesis 3, that bullying increases the probability of unemployment, should be interpreted with some caution.

To the best of our knowledge, no overarching theory has been offered to provide one uniform account of the “expulsion stage” in the bullying process, cf. \(^15,17\). However, due to the heterogeneity of bullying situations and the multitude of ways in which an employee can be pressured out of the job, attempting to offer such an account may be futile. Instead, it may be fruitful to search for different theories and explanations for the different forms of expulsion. Our finding that bullying increases the probability for change of employer (H1), is in line with turnover theory, which states that a “shock” is often the immediate antecedent to voluntary quitting, causing the individual to re-evaluate his or her working situation, and consequently their incentives for staying \(^22,24\). The finding is also in line with previous empirical work, demonstrating that bullying can be an antecedent to turnover intention \(^16,33\) as well as actual change of employer \(^19,26\). Based on the results by Berthelsen et al. \(^19\), however, it may seem as though a long-term study was needed to fully test this hypothesis, as only exposure to bullying behaviors, and not self-labeled bullying, could predict change of employer over the two-year time-lag employed in their study.

The finding that bullying increases the probability of being granted disability benefits (H2) also has strong theoretical support. According to the cognitive activation theory of stress, persistent stressors may cause illness if the person affected assesses that the situation is unlikely to normalize within a reasonable period of time \(^28\), a feature characteristic of most bullying scenarios, cf. \(^3\). Moreover, from the perspective of trauma theory, bullying may shatter a person’s fundamental view of the world as benign and meaningful and of the self as worthy, cf. \(^30\). These core views, sometimes called adaptive illusions, are normally associated with good health \(^53,54\),...
and, if shattered, physical as well as psychological health impairment may reasonably be expected.

According to Berthelsen et al. 19), the probability of being granted disability benefits has increased already after two years, but only among targets labeling themselves as bullied. In the present study, both reporting being exposed to bullying behaviors and self-labeling of bullying represent a clear risk of disability benefit recipiency five years later. This implies that the negative health outcomes of workplace bullying more quickly reaches a level consistent with work disability when the targets feel bullied, but that in the long run, the bullying behavior in itself can have the same effect irrespective of how the target labels the experience. A matter of some caution here is, however, that the relationship between bullying and health may be reciprocal, constituting a vicious circle of events (see 27), implying that bullying may not be the sole reason for later disability.

Theoretical support for H3 is less direct, but even so there is good reason to expect both an enhanced risk of unemployment as well as a more difficult way back into the labor market for targets of bullying. Firstly, the probability that a target of workplace bullying will quit or lose a job is greater than for non-targets, as argued in the present paper, and as supported by research showing that bullying increases the risk of turnover 26), even when the targets have no new job to go to 55). Secondly, accomplishing re-employment is a resource-demanding process for any applicant, and getting hired may depend on such things as the frequency and efficacy of one’s job search behavior and ability to persuasively represent and promote oneself. In such a process, the health detriment experienced by many targets of bullying c.f. 10), may reasonably be a significant hinder, as evidenced by the association between unemployment and poor health 40, 56). In addition, research has indicated that one’s work reputation may be one of the most deciding factors in the process of selecting a new employee 57). This may represent yet an obstacle in the re-employment process for targets of bullying, as they do not always leave the job with their reputation undamaged 18, 43), a factor that may be particularly important in a relatively small and transparent labor marked such as the Norwegian one. Moreover, professional self-efficacy and self-esteem as well as one’s desire and eagerness for work in general may very well be impaired in the wake of a long-lasting bullying process, further enhancing the targets’ proneness to remain unemployed.
A word of caution is however that self-labeled bullying in the present study was only significantly associated with unemployment five years on at a .1 significance level. Thus, this result should be interpreted with some caution, even though it can be argued that a more liberal significance level than the standard of .05 might be appropriate in cases where the N in the analysis is low, e.g. \(^{58}\), as is the case here, with 108 participants reporting self-labeled bullying at T1, and only 17 being unemployed at T3. In sum, the tests of H3 are at least partly supporting the assumption that bullying and unemployment are associated, but the hypothesis should be addressed in future studies employing a larger sample.

Although the present study offers general support for an expulsion stage in the bullying process, future research efforts are needed to disentangle the nuances of this stage. Firstly, different forms of expulsion, such as unwanted internal relocation, long- and short-term sick-leave and early retirement should be investigated in order to further describe this expulsion stage. Secondly, there is a need for investigations of explanatory variables in the bullying-expulsion relationship. For instance, the presence or absence of social exclusion in the bullying situation may help explain the tendency for targets to leave the organization. Similarly, the working context may be of importance. A job characterized by cooperation with others, for instance, such as team-work settings, can possibly intensify the experience of being victimized. Moreover, “voluntary” change of employer in response to bullying may depend both on how embedded the employee is in the organization \(^{59}\) as well as on the current availability of alternative jobs \(^{60}\). Similarly, characteristics of the health care system, the welfare system and the rate of employment can reasonably influence the associations, factors that also may vary across national contexts. For instance, the relatively high employment-rate in Norway may lead targets of bullying to have better job opportunities in the Norwegian labor market as compared to those of other countries. This may weaken the association between bullying and unemployment in the Norwegian working life context compared to other Western countries, but can also increase the rate at which targets change employer, because jobs are more readily available. More studies on how different forms of health impairment relates to different forms of expulsion among bullied employees are also necessary in order to achieve a more complete understanding of the expulsion process.
Methodological issues

The major strengths of the present paper are its use of a large, nationally representative sample as well as a true prospective design where the relationships between bullying and new cases of change of employer, disability benefit recipiency and unemployment are analyzed. Prospective designs have repeatedly been called for within the workplace bullying research field, e.g. \textsuperscript{61, 62}. Also, whereas most studies use either a behavioral measure or a self-labeling measure of workplace bullying, the present study uses both in order to provide a more thorough test of the research questions, cf. \textsuperscript{48, 49}. To the best of our knowledge, no other study has investigated the present hypotheses in a long-term perspective such as the one employed here, representing a significant strength in this kind of research. Because the bullying process in many cases goes on for years, long time-lags are needed in order to unveil the full risk of expulsion in working life among targets of bullying.

In spite of these strengths, some potential limitations should be addressed. First, although the present response rate of 56.4 per cent at baseline is above the average for this kind of research \textsuperscript{63}, there is always a chance that non-respondents differ from the respondents with regard to the study variables. For instance, we know from previous research that targets of bullying can have a somewhat higher drop-out rate than non-targets, at least between measurements, e.g. \textsuperscript{16, 64}. Thus, there is a chance that the bullying prevalence of the Norwegian working population is underestimated in the present study, in which case the results may have been influenced to some degree. Secondly, the present study’s use of self-reported data should be mentioned. Measuring both the dependent and the independent variables from the same, subjective source may be problematic \textsuperscript{65}, although the use of a time-lag is generally viewed as preventive with regard to same source biases \textsuperscript{66}. Also, as all outcome variables are dichotomous, reflecting specific and objective work life statuses, we hold that the occurrence and influence of such biases is likely minor. The most important weakness is, however, our lack of any explanatory and mediating variables in the observed bullying-expulsion relationships, something that need to be addressed in future studies.

Conclusion and implications
The present study demonstrates that workplace bullying can be a risk factor for subsequent expulsion in the form of change of employer, work disability and unemployment. This indicates that many targets of bullying seem to reach the expulsion stage of the bullying process, thus being deprived of the opportunity to freely participate in working life. Even though employment is important for individual well-being \(^{(67)}\), both due to the financial and social benefits associated with work \(^{(68)}\), this category of outcomes has to the best of our knowledge not previously been systematically and fully explored using a representative sample in a prospective, long-term design. Thus, the study adds to the knowledge about how employees may suffer as a result of workplace bullying, and, from an individual perspective, once more underscores the need to take the problem seriously. In addition, there are economic aspects to the occurrence of bullying that becomes evident in light of the present study. For example, turnover – and especially dysfunctional turnover – is a costly process \(^{(69)}\). It involves separation costs, replacement costs and training costs including reduction of productivity \(^{(70)}\), adding up to significant economical detriment for the organization. Furthermore, work disability and unemployment represents significant costs at the societal level. Thus, the present results should not only represent clear incentives to combat workplace bullying from an individual perspective, but also from the perspective of organizations and of society at large.

**Acknowledgement**

The present study is a result of a collaborative project between the University of Bergen and Statistics Norway, the latter being in charge of collecting the data. The study was made possible by joint grants from two Norwegian employer associations (the Confederation of Norwegian Enterprises and the Norwegian Association of Local and Regional Authorities), and by two grants from the Norwegian Government (the National Insurance Administration), and their programme FARVE. Thanks to Bengt Oscar Lagerstrøm, Aina Holmøy and Maria Høstmark of Statistics Norway, and Stig Berge Matthiesen and Morten B. Nielsen at the Faculty of Psychology, University of Bergen, for their contribution to the data collection. The authors have no conflict of interest.

**References**


Table 1. Descriptive statistics for all respondents at T1, and for those responding at T1 and T3

<table>
<thead>
<tr>
<th>Variable</th>
<th>T1</th>
<th>T1 &amp; T3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Number of participants</td>
<td>2539</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1217</td>
<td>47.9</td>
</tr>
<tr>
<td>Female</td>
<td>1322</td>
<td>52.1</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;30</td>
<td>325</td>
<td>12.8</td>
</tr>
<tr>
<td>30-39</td>
<td>643</td>
<td>25.3</td>
</tr>
<tr>
<td>40-49</td>
<td>688</td>
<td>27.1</td>
</tr>
<tr>
<td>50-59</td>
<td>639</td>
<td>25.2</td>
</tr>
<tr>
<td>&gt;59</td>
<td>244</td>
<td>9.6</td>
</tr>
<tr>
<td>Self-labeled Bullying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>108</td>
<td>4.6</td>
</tr>
<tr>
<td>No</td>
<td>2261</td>
<td>95.4</td>
</tr>
<tr>
<td>Exposure To Bullying Behavior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>286</td>
<td>12.7</td>
</tr>
<tr>
<td>No</td>
<td>1963</td>
<td>87.3</td>
</tr>
<tr>
<td>Change Of Employer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time employed</td>
<td>1801</td>
<td>71.6</td>
</tr>
<tr>
<td>Part time employed</td>
<td>466</td>
<td>18.5</td>
</tr>
<tr>
<td>On sick-leave</td>
<td>65</td>
<td>2.6</td>
</tr>
<tr>
<td>On leave of absence</td>
<td>52</td>
<td>2.1</td>
</tr>
<tr>
<td>On vocational rehabilitation</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>Receiving disability pension</td>
<td>18</td>
<td>0.7</td>
</tr>
<tr>
<td>Unemployed</td>
<td>41</td>
<td>1.6</td>
</tr>
<tr>
<td>Retired</td>
<td>13</td>
<td>0.5</td>
</tr>
<tr>
<td>Under full-time education</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>Self-employed</td>
<td>12</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Table 2. Results of logistic regression analyses of prospective relationships between workplace bullying and indicators of expulsion in working life

<table>
<thead>
<tr>
<th></th>
<th>OR</th>
<th>95% CI</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1. Change Of Employer before T3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullying Behaviors</td>
<td>1.77</td>
<td>1.22 – 2.57</td>
<td>.003</td>
</tr>
<tr>
<td>Self-labeled Bullying</td>
<td>2.42</td>
<td>1.38 – 4.24</td>
<td>.002</td>
</tr>
<tr>
<td><strong>H2. Disability Benefit Recipiency at T3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullying Behaviors</td>
<td>2.81</td>
<td>1.32 – 6.01</td>
<td>.008</td>
</tr>
<tr>
<td>Self-labeled Bullying</td>
<td>2.95</td>
<td>1.22 – 7.15</td>
<td>.017</td>
</tr>
<tr>
<td><strong>H3. Unemployment at T3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullying Behaviors</td>
<td>4.6</td>
<td>1.43 – 14.78</td>
<td>.01</td>
</tr>
<tr>
<td>Self-labeled Bullying</td>
<td>3.69</td>
<td>.79 – 17.34</td>
<td>.098</td>
</tr>
</tbody>
</table>

Note. OR = odds ratio, 95% CI = 95% confidence interval

Note 2. Control variables are; age and gender in all analyses