Bullying effects on performance and engagement among academics

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Abstract

Purpose – The purpose of this paper is to examine relationships between perceived bullying, work engagement and work performance among Estonian academics. Specifically, it details what forms of bullying affect work engagement and performance. Moreover, the study explores the relationship between engagement and performance among bullied academics.

Design/methodology/approach – A total of 864 faculty members from nine Estonian universities participated in an e-mail survey in Spring 2014. Bullying was measured using the Negative Acts Questionnaire-Revised (NAQ-R22), and work engagement was assessed using the nine-item Utrecht Work Engagement Scale. Respondents' perceived performance and productivity were measured on a ten-point rating scale. Structural equation modelling was used to analyse the relationship between bullying, engagement and performance.

Findings – Perceived bullying – especially "professional understating" – decreased work engagement and work performance among Estonian academics. The decrease in performance preceded the decrease in engagement or vice versa. The decrease in engagement was followed by lowered performance.

Research limitations/implications – A longitudinal study is needed to prove the specific one-way effect of (decreased) performance (because of perceived bullying) on engagement.

Practical implications – Preventing bullying and further increasing engagement and performance among Estonian academics requires getting out of policy of professional understating.

Social implications – The authors need to determine why Estonian academics experience professional understating, which includes being ordered to perform tasks below one's level of competence and having key areas of responsibility removed or replaced with more trivial or unpleasant tasks.

Originality/value – The present results prove that it is possible to differentiate between specific forms of bullying in a specific context and further reveal those factors specifically that affect work performance and work engagement. Among Estonian academics – revealed in this study – "professional understating" seems to be such a factor.

Keywords Higher education, Bullying, Workplace bullying, University, Work performance, Work engagement

Paper type Research paper

Introduction

The purpose of this study is to examine relationships between workplace bullying, work engagement and work performance among Estonian academics. Identifying bullying in daily life is not easy at all. In similar situations, one person may feel bullied, whereas another may not. In addition, conceptions related to bullying vary across different working contexts and professions, as well as between countries, because of cultural differences. Regardless, the prevalence of workplace bullying is undeniable in higher education at all levels, among

students, academics, general staff and administrators, and across all disciplines (Henning *et al.*, 2017; Sinkkonen *et al.*, 2014).

Nielsen and Einarsen (2018, p. 73) define workplace bullying as "situations where an employee repeatedly and over a prolonged time period is exposed to harassing behavior from one or more colleagues (including subordinates and leaders) and where the targeted person is unable to defend him−/herself against this systematic mistreatment". The various negative consequences of workplace bullying at an individual level, such as psychological, psychosomatic and behavioural effects, chronic diseases, and increased absenteeism, which can lead to dismissal or resignation, are widely known (see e.g. Nielsen *et al.*, 2015).

In addition, workplace bullying affects work engagement and work performance (see e.g. Rai and Agarwal, 2016; Samnani and Singh, 2012). From the viewpoint of employee relations, the nature of workplace bullying is twofold. First, poor relations between employees (i.e. the organisational and social cultures and dynamics of the workplace) may be an antecedent (cause) of the bullying (see e.g. McKay *et al.*, 2008). Second, we know that bullying affects (consequences) employee relations (Hauge *et al.*, 2007), and further performance (Devonish, 2013; Obicci, 2015; Samnani *et al.*, 2013; Schat and Frone, 2011) and engagement (Goodboy *et al.*, 2017; Park and Ono, 2017).

Intrinsic job characteristics, such as interpersonal work relationships (e.g. conflicts, social support and leadership style), career development (e.g. job insecurity and opportunities for promotion), organisational factors (e.g. organisational structure and office politics) and the home–work interface (e.g. blurred boundaries between working hours and leisure time) are typical features that bring on bullying and decrease employee relations (Hauge *et al.*, 2007).

It is noteworthy that the previously mentioned characteristics are related to horizontal as well as to vertical relations in the workplace. In organisations like universities, the bully may be a co-worker as well, and bullying is an inter-employee problem (Meriläinen *et al.*, 2016). Besides, universities are a typical example of organisations in which task-oriented expertise, autonomy and individualism are emphasised, and that is why the specific nature of academic bullying is difficult to define (Agervold, 2007). According to Meriläinen *et al.* (2016), especially among academics, bullying may manifest as "sophisticated, psychologically emphasized, inappropriate behaviour which is difficult to label as bullying", if at all. These specific characteristics make it more difficult to define specific forms of bullying and further to reveal relations between certain forms of bullying and certain forms of consequences among academics.

For example, we know that person-related bullying, in general, predicts employees' work performance (Yahaya *et al.*, 2012). However, we do not know so much about what kind of bullying (form) especially affects work engagement and performance, nor how workplace bullying influences the relationship between engagement and performance. Besides, there is a lack of detailed information concerning effects such as (decreased) engagement as a possible mediator (because of perceived bullying) in the bullying–performance relationship, and (decreased) performance as a possible mediator (because of perceived bullying) in the bullying–engagement relationship.

In this study, we examine relationships between perceived bullying, work engagement and work performance among Estonian academics. In addition, our focus is on the details of what forms of bullying affect work engagement and performance. Moreover, we explore the nature and direction of relationship between engagement and performance among academics who experience workplace bullying.

The results are exploitable at individual and at organisational level. Besides decreasing psychological, psychosomatic and behavioural effects (Nielsen *et al.*, 2015), reducing bullying increases engagement, motivation and performance at an individual level (Trepanier *et al.*, 2013). At organisation's level, employees' intentions to leave the organisation (e.g. Berthelsen *et al.*, 2011; Nielsen and Einarsen, 2012; Hollis, 2015) or the whole profession (Laschinger and Fida, 2014), or even the risk of expulsion from working life altogether, decrease (Glambek *et al.*, 2015).

All this decrease organisation's ability to function optimally, through loss of productivity, not to mention the costs of civil action, even a possible civil trial, and possible intervention programmes (Branch *et al.*, 2013).

Effects of bullying on work engagement
Work engagement is a positive feeling, a sense of fulfilment and a sense of work that promotes mental health. The key factors of work engagement are a strong dedication to work, enthusiasm and pride in work, and participation and experiencing work success (Bakker and Demerouti, 2008; Schaufeli *et al.*, 2002). The significance of engagement is obvious, and the benefits are remarkable at individual and at community level.

Engagement is also characterised by vigour, dedication and absorption. Vigour refers to an employee's high levels of energy and mental resilience. It also captures the perseverance and desire to invest in work and even handle possible difficulties. Dedication is a matter of high professionalism, enthusiasm and experiencing meaningful work. It also refers to strong involvement and feelings of significance, inspiration, pride and challenge in one's work. Absorption describes a complete focus and concentration on work. It is a state in which work becomes so involving and inspiring that one loses their sense of time and finds it difficult to detach from work (Schaufeli *et al.*, 2002).

Workplace bullying affects work engagement, directly but also indirectly (Einarsen *et al.*, 2018; Goodboy *et al.*, 2017; Park and Ono, 2017; Rai and Agarwal, 2017; Rodríguez-Muñoz *et al.*, 2009; Trepanier *et al.*, 2013). Bullying decreases engagement through an employee's unsatisfied needs for autonomy (i.e. perceiving oneself to be the original source of one's own volitional behaviour), competence (i.e. being effective at required tasks and experiencing opportunities to display one's capabilities) and relatedness (i.e. forming personal connections with others in social contexts) (Trepanier *et al.*, 2013). These three basic psychological needs are based on the self-determination theory (Ryan and Deci, 2010). According to this, autonomous (intrinsic) motivation promotes employees' high-quality performance and wellness. In this sense, engagement serves as a mediator in the bullying–performance relationship. All this demands social-contextual conditions that support the three previously mentioned basic psychological needs for competence, autonomy and relatedness. That is to say, if the working climate (e.g. job characteristics, types of justice, managerial styles and types of leadership) fulfil these needs, it also promotes autonomous motivation, and further effective performance and wellness (Deci *et al.*, 2017; Hauge *et al.*, 2007).

Park and Ono (2017) have revealed that motivational mechanisms, such as feelings of security or job satisfaction, act as mediators in the bullying–engagement relationship. They have shown that exposure to workplace bullying decreases work engagement and increases health problems because of employees' high level of perceived job insecurity. In other words, perceived job insecurity mediates the effects of bullying on engagement. However, in this study, a direct relationship between bullying and engagement was not determined. In addition, Goodboy *et al.* (2017) have revealed that workplace bullying decreases engagement (i.e. vigour, dedication and absorption), indirectly mediated by intrinsic motivation.

In addition, personal disappointments mediate the effects of bullying on engagement. Rai and Agarwal (2017, p. 47) call these kinds of disappointments psychological contract violations. They refer to bullying experiences that may cause person-related disappointments and further negative feelings related to the working environment. Besides unmet expectations, loss of trust in one's employer decreases work engagement and performance and further employee's subsequent contribution to firm (Robinson, 1996).

A typical form of bullying that may cause a psychological contract violation among university personnel is "professional understating" (Ahmad *et al.*, 2017; Rai and Agarwal, 2017). Experiences of "being ordered to perform tasks below one's level of competence" and "having key areas of responsibility removed or replaced with more trivial or unpleasant tasks" are

typical examples of the previously mentioned broken promises, based on explicit or implicit beliefs about commitments made in the working society (see also Meriläinen and Kõiv, 2018).

This previous finding is meaningful especially in relation to human resource management, because disappointments may be a sign of broken promises between the employee and the organisation or its agents, typically supervisors. As Rai and Agarwal (2017) note, the (explicit and implicit) beliefs about promises and commitments made in the exchange relationship may be transactional (e.g. obligations about pay or benefits) or relational (e.g. personal support from the manager, or the quality of subordinate–supervisor relationships). Simply avoiding broken promises and disappointments increases engagement among academics.

To our knowledge, a direct relationship between bullying and engagement is confirmed only in a few studies. Glasø, Bele, Nielsen and Einarsen (2011) have revealed a negative relation between exposure to bullying and job engagement and job satisfaction among bus drivers. Respectively, the relation was positive between bullying and intention to leave. Besides, it was shown that job engagement and job satisfaction mediated the effects of bullying on the intention to quit. In addition, Rodríguez-Muñoz *et al.* (2009) have shown a partly direct causal relationship between workplace bullying and engagement. In their model, the effect of bullying (Time 1) was seen later (Time 2) as a decrease in dedication (a dimension of engagement) among white- and blue-collar workers, as well as management.

In summary, previous research has focussed on the factors that mediate the effects of perceived bullying on employees' work engagement. In particular, lowered feelings of autonomy, competence and relatedness because of workplace bullying seem to decrease engagement. Similarly, perceived job insecurity decreases engagement and increases health problems. In addition, personal disappointments, because of broken promises (psychological contract violations) between the employee and the organisation, mediate the effects of bullying on engagement. However, there is relatively little empirical evidence of a direct effect of bullying on engagement, let alone of the specific forms of bullying that decrease employees' engagement directly.

So far, bullying has been measured as a one-dimensional or three-dimensional (personal bullying, work-related bullying and physical intimidating) phenomenon (Einarsen *et al.*, 2009). In this study, to understand bullying as a factor leading to decreased engagement directly, we adopt a five-dimensional theoretical model of bullying (Meriläinen and Kõiv, 2017). In this model, first, person-related bullying is understood as person-related insults such as "repeated reminders of your errors or mistakes" and 'being ignored or facing a hostile reaction when you approach". Second, work-related blaming is usually related to experiences like "being humiliated or ridiculed in connection with your work" and "excessive monitoring of your work". Third, professional understating is "being ordered to do work below your level of competence" or "having key areas of responsibility removed or replaced with more trivial or unpleasant tasks". Fourth, unreasonable work-related demands consist of "being given tasks with unreasonable deadlines" and "being exposed to an unmanageable workload". Fifth, work-related malpractices refer to situations in which "you have recognised that somebody is intentionally delaying their work" and "you have found out that somebody is purposely wasting resources (e.g. working time) doing something other than what belongs in their own work". Therefore, we present the first hypothesis as follows:

H1. A (direct) negative relationship exists between five first-order bullying factors ("person-related insulting", "work-related blaming", "professional understating", "unreasonable work-related demands" and "work-related malpractices") and perceived work engagement (see Figure 1).

Relationship between bullying and performance

Individual work performance is a multi-dimensional and dynamic concept that includes both a process aspect (i.e. behavioural) and an outcome aspect. The behavioural aspect
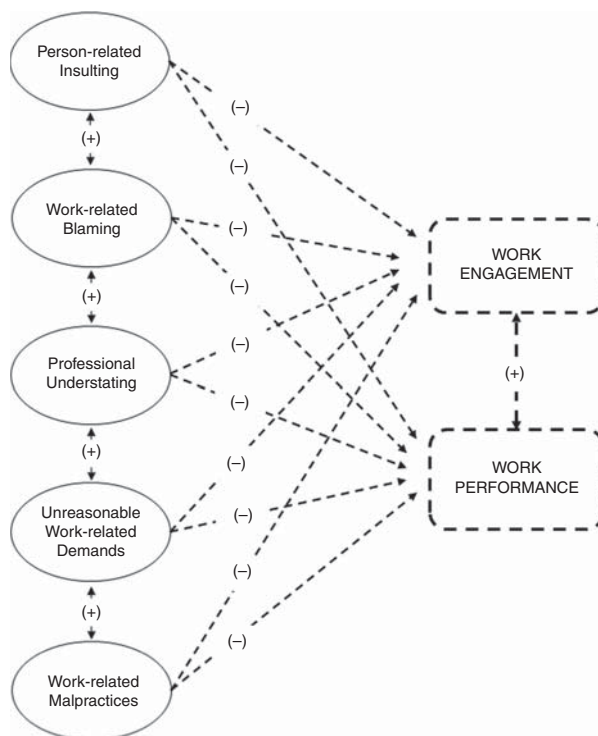
Figure 1.
The hypothesised
theoretical
relationships between
perceived bullying,
work engagement and
work performance
among Estonian
academics

refers to what people do at work – the action itself (i.e. goal-oriented behaviour) –while the
outcome aspect refers to the result of the individual's behaviour (e.g. productivity)
(Sonnentag *et al.*, 2008).

Performance can also be divided into task-specific and context-specific categories. Task
performance is characterised as job specific, predicted mainly by ability and the related in-role
behaviour and partly by the formal job description. On the other hand, contextual performance
is comparable for almost all jobs, predicted by motivation and personality, defined as extra-role
behaviour, considered discretionary and often not recognised by formal reward systems or
indirectly by the management. Task-specific performance typically covers the requirements set
by the employment contract, while contextual performance includes behaviours that may not
contribute to the productivity of the organisation, *per se*, but that support the organisational,
social and psychological work environment (Sonnentag *et al.*, 2008).

The negative effects of workplace bullying on work performance are demonstrated in
several studies (Obicci, 2015; Samnani *et al.*, 2013; Schat and Frone, 2011; Yahaya *et al.*, 2012)
(see also Nielsen and Einarsen, 2012). According to Devonish (2013), different work-related
stress theories and models, such as job demands-control-support and the social psychology of
organisations models, have been discussed in the literature on bullying (as a kind of stressor)
and its effect on performance. These theories and models describe and explain how various job-
related demands and stressors (e.g. role conflict, interpersonal conflict and social stressors) in
the work environment influence employee health and performance behaviours. Devonish (2013)
also refers to Spector and Fox (2002), whose emotion-centred model posits that a number of
organisational conditions, including various categories of job stressors, can influence individual
performance outcomes through their influence on emotions or affective-based variables.

Misattributions of bullying behaviour have also been explored in the investigation of the relationship between bullying and performance (Samnani *et al.*, 2013). Typically, targets' attributions are vital to the explanation of the relationship between workplace bullying and key dimensions of performance. It is important to determine how bullying is experienced individually (different attributions) to understand the differential effects on the targets' work performance. In addition, the overall impact of workplace bullying on individuals' lives should be considered (see Ahmad and Sheehan, 2017), as well as differences in the coping mechanisms used to deal with the impact (Van den Brande *et al.*, 2016) and the role of the cultural and societal differences at workplaces (Ahmad *et al.*, 2017).

The above-mentioned features of contextual performance (Sonnentag *et al.*, 2008) are closely related to the effects of perceived bullying, such as depression, lowered work motivation, decreased ability to concentrate, poor productivity, lack of commitment to work and poor relationships with managers and colleagues (Yildirim, 2009). Interestingly, Nielsen and Einarsen (2012) did not find a significant relationship between workplace bullying and performance ($r = -0.12$; $p > 0.05$) in their meta-analysis of previous works on bullying outcomes (based only on three previous studies).

Interestingly, bullying effects are noted on employees' contextual performance, such as organisational citizenship behaviour (OCB) and interpersonal counterproductive work behaviour (CWB), but not on task performance (Devonish, 2013). Task performance represents in-role job behaviours directly related to the performance of one's assignments or tasks, whereas OCBs represent extra-role job behaviours that are intended to benefit either individual members (e.g. OCB-I) or the organisation as a whole (e.g. OCB-O). CWBs refer to negative workplace behaviours that are intended to harm individual members or the entire organisation. In this sense, bullying generates undesirable behaviours among employees (see also Branch *et al.*, 2013) and even malpractices among academics (Bennett and Robinson, 2000).

Yahaya *et al.* (2012, pp. 19-20) investigated the impact of (personal- and task-related) workplace harassment on work performance, and they found a significant positive link between performance and personal harassment ($r = 0.514$), as well as between performance and personal bullying ($r = 0.469$). Traditional forms of bullying, such as belittling and ongoing criticism of work, are known to have a direct impact on the employee, and thus work performance.

According to Devonish (2013), workplace bullying as a form of social stressor that influences the psychosocial work environment is likely to have indirect effects on employee performance via affective-based variables, but it is possible that it also has direct effects on performance behaviours (see also Rowe and Fitness, 2018). In addition, Schaufeli *et al.* (2002) have highlighted the importance of negative emotions, such as anxiety, turmoil and powerlessness, on a teacher's work performance, even if the cause is not within the classroom. If not addressed, this may lead to problems in daily teaching within the university or school, and subsequently in learning outcomes. Ultimately, these problems can result in financial losses to the organisation and the employee themselves, especially if the employee leaves the job because of bullying (Yahaya *et al.*, 2012, pp. 25-27). Based on previous findings concerning the relationship between workplace bullying and work performance, we set a second hypothesis as follows:

H2. A negative relationship exists between five first-order bullying factors ("person-related insulting", "work-related blaming", "professional understating", "unreasonable work-related demands" and "work-related malpractices") and perceived work performance (see Figure 1).

Relationship between engagement and performance

The linkage between engagement and performance is well known, but there is no consensus on the causality. Increased engagement is typically understood as an explanation for better

performance, or engagement is considered to mediate between working environment factors and employees' performance (Kim *et al.*, 2012). As mentioned earlier, work-related stressors (e.g. bullying) are factors that influence engagement and further, performance. In such cases, engagement is a mediator that passes the effects of bullying onto performance. As far as we know, there is no study that addresses the effects of perceived bullying on performance and further on engagement. Moreover, it has not been carried out in a university setting.

We know that engaged employees perform better than non-engaged, and they exhibit better in-role and extra-role performance (Bakker and Demerouti, 2008). According to Bakker and Bal (2010), work engagement also predicts higher performance among new teachers, especially those who are highly conscientious. It is assumed that work engagement can be improved by creating engagement-evoking working environments through work (re)design approaches (Bakker *et al.*, 2012). Autonomy, performance, feedback and opportunities for development are essential job resource factors that enhance employees' work engagement. On the other hand, if organisations fail in their work (re)design approach – if employees feel professionally understated – engagement decreases (Bakker and Bal, 2010).

Bakker and Demerouti (2008) proposed that job resources and personal resources, independently or together, predict work engagement. When (job and personal) resources positively affect engagement, they, in turn, have a positive impact on job performance. This idea is based on the premise that engagement and performance create (job and personal) resources, which foster engagement again over time and create a positive gain spiral. On the other hand, Devonish (2013) has shown that bullying affects both employees' OCB and interpersonal CWB. Thus, bullying is as a factor that influences employees' (in-role) working and performance at a personal level and their (extra-role) behaviour at a workplace level, and subsequently their engagement.

The positive consequences of engagement in work affect an individual's health, performance, work-related attitudes and behaviours (Simbula *et al.*, 2011, p. 300). On the other hand, in a study on workplace bullying in universities, McKay *et al.* (2008) noticed that bullying experiences (e.g. stress, frustration, anger, asthma and anxiety) and feelings of tiredness and irritability affect employees' performance and quality of work. Completed workload and quality of work diminish, and the intention to quit increases. At the same time, the effects of bullying on loss of engagement manifest as a change in view about the job, reduced interest in work, sleep disorders, changes in flexibility while handling people, and challenges and changes in concentration. In other words, loss of engagement decreases employee performance and vice versa. Based on previous theoretical aspects, we set our third hypothesis as follows:

H3. A positive relationship exists between perceived work performance and work engagement among bullied university personnel (see Figure 1).

Method
For data collection, a private e-mail with a link to the questionnaire was sent to all the staff members across nine large-scale public universities ($N = 3,756$) in the Spring of 2014.

Participants
The data gathering covered all Estonian universities under public law. Private professional higher education institutions and state professional higher education institutions were not included in the sample. The whole sample consists of 2,141 women (57 per cent) and 1,615 men (43 per cent). In total, 864 Estonian university members answered the questionnaire, and the response rate was 23 per cent. In total, 67 per cent of the respondents were women ($n_{WOMEN} = 575$) and 33 per cent men ($n_{MEN} = 289$). Even the representation of male and

female respondents in the data is in relation to the sample; the over-representation of female must be kept in mind when generalising the results.

Respondents' ages ranged from 21 to 80 years ($M = 44.37$; SD $= 12.4$), and their tenure at the universities varied between 1 and 52 years ($M = 13.94$; SD $= 11.34$). A total of 54 (6.3 per cent) respondents were 65 years or older. More than two-thirds (68 per cent) of the respondents were 30–55 years old ($n_{30-50} = 585$) and had been working at the university for 12 years, on average. More than one-fifth (21.5 per cent) of the Estonian respondents had open-ended working contracts, whereas almost four-fifths (78.5 per cent) had fixed-term contracts.

Data collection

Data were collected using a questionnaire. A private e-mail was sent to all the staff members across nine large-scale public universities ($N = 3,756$) in the Spring of 2014. Apart from fields for background information, the questionnaire carried items on bullying experiences and their possible consequences, respondents' perceptions of their work environment, self-efficacy, job satisfaction, job self-efficacy, work engagement, and well-being and general satisfaction with life. The questionnaire comprised a total of 158 items, including both Likert-type and open-ended questions. In this analysis, we focussed on the data related to bullying experiences, performance and engagement.

Measures

Experiences of bullying and/or inappropriate behaviour were measured using the Negative Acts Questionnaire-Revised (NAQ-R). NAQ-R comprises 22 items that are "indicators of inappropriate behaviours that one may experience, but should not normally, let alone regularly experience at work" (Einarsen *et al.*, 2009). Our questionnaire included eight additional statements to cover specific forms of bullying: sexual harassment (Fitzgerald *et al.*, 1995), cyber bullying (O'Moore, 2012) and work-related malpractices (Bennett and Robinson, 2000) among university personnel. These forms of bullying are missing from most of the questionnaires used in recent decades, including the original NAQ-R22.

Work engagement was measured with the help of the nine-item Utrecht Work Engagement Scale (Hakanen, 2009). Perceived work performance was measured using the following statement: "Rate your present performance and productivity on a scale of 1–10 (1 = very poor; 10 = very good)". We realised that measuring work performance with a single-item measure is problematic in terms of predictive validity (Diamantopoulos *et al.*, 2012). However, as Wanous *et al.* (1997) argue, there are also several justifications for using a single-item measure (SI). They refer to constructs such as expectancy values and overall job satisfaction, for which measurement with an SI has been acceptable (p. 247).

In the present study, measuring work performance is somehow a facet of both the previously mentioned phenomena. The personal conception of work performance is narrow enough to measure with an SI. As in job satisfaction research, measuring work performance using an SI describes and reveals an employee's thoughts related to their work performance. Besides, we wanted to measure performance with one item as unambiguously as possible, not to mention making the overall questionnaire shorter and more meaningful to answer.

Data analysis

The factor structure used in this study was analysed beforehand in two steps. First, the nature of bullying among academics was analysed with the help of exploratory factor analysis (Hurley *et al.*, 1997), presented in detail in another article (Meriläinen *et al.*, 2018). Second, the revealed structure was confirmed with the help of confirmatory factor analysis (Kline, 2011), presented in another article (Meriläinen and Kõiv, 2017). Both earlier published

analyses are repeated in following chapters. Statistical descriptions of the confirmatory model are presented in Table I.

At the exploratory stage, the items were estimated using principal axis factoring (PAF). Prior to real factor analysis, the correlation matrix and inter-item correlations covering all items measuring bullying experiences were checked ($r > 0.30$). Later, four items were excluded because of communality or factor loading (< 0.30). The remaining 26 items were consolidated into four factors: "Personal insults, negative work-related remarks, and ostracism", "Malpractice related to work tasks and work overload", "Work-related threats of violence and humiliation", and "Professional understating". The statistical parameters proved that the model was acceptable (Pattern Matrix (PAF): K–M–O measure of sampling adequacy $= 0.93$; Bartlett's test of sphericity $(325) = 11,872.217$, $p < 0.00$). The convergent validity of the factors was satisfactory; Cronbach's α varied between 0.74 and 0.91.

The correlation between the factors (0.33–0.57) was predictable when using the direct oblimin-rotation model, which extracted (12 iterations) a more explicit model, instead of the orthogonal (varimax) one. At the same time, categorised open-ended answers confirmed the revealed factor structure and affirmed the models' discriminant validity. The qualitative approach revealed five categories: "Personal insults, negative work-related remarks, and ostracism" ($f = 173$), "Malpractices related to work tasks and work overload" ($f = 77$), "Work-related threats of violence and humiliation" ($f = 114$), "Professional demotion" ($f = 27$) and "Some other indefinable comments" related to sexual harassment, cyber bullying, or benefits to which one was entitled ($f = 52$).

At the confirmatory stage, a five-factor model was affirmed, and the construct validity of the model was estimated with the help of structural equation modelling. Based on the exploratory model, it was reasonable to assume that the factor "Malpractice related to work tasks and work overload" covered two dimensions: malpractices and work overload. A confirmed model of five separate bullying factors covered "personal insults", "work-related blame" (like humiliation), "professional understating", "unreasonable work-related demands" and "work-related malpractice".

	Model of the five first-order bullying factors among Estonian academics (see Meriläinen and Kõiv, 2017)	Model of the overall relationship between bullying, performance and engagement among Estonian academics (Figure 2)
Model fit		
χ^2	$\chi^2(25) = 37.958$, $p = 0.047$	$\chi^2(35) = 60.158$, $p = 0.005$
Comparative fit index	CFI $= 0.99$	CFI $= 0.98$
Tucker–Lewis index	TLI $= 0.98$	TLI $= 0.97$
Root mean square error of approximation	Estimate RMSEA $= 0.025$ 90% CI: 0.003–0.040 Probability RMSEA$\leqslant$0.05–0.998	Estimate RMSEA $= 0.029$ 90% CI: 0.016–0.041 Probability RMSEA$\leqslant$0.05–0.998
Standardised root mean square residual	SRMR $= 0.028$	SRMR $= 0.027$
Normed fit index (NFI)	$1-(37.958 : 1,308.836) = 0.97$	$1-(60.158 : 1,620.139) = 0.96$
Scaling correction factor for MLR	1.996	1.751
Information criteria		
Akaike	AIC $= 13,042.456$	AIC $= 22,203.377$
Bayesian	BIC $= 13,231.887$	BIC $= 22,463.845$
Sample-size-adjusted BIC ($n^* = (n+2)/24$)	Adjusted BIC $= 13,104.859$	Adjusted BIC $= 22,289.182$

Notes: $n = 842$. According to Bentler–Bonett's test variance, $\geqslant$0.90 of the data are acceptable (Bentler and Bonett, 1980), whereas Hu and Bentler (1999) recommend that the cut-off criteria for the NFI should be$\geqslant$0.95

Table I.
Model fit and information criteria for the factor models

This factor structure was confirmed with an MLR estimation procedure. This is an Mplus option for estimating maximum likelihood with potentially robust standard errors (MLR). The factor loadings of every single item were tested to determine whether their relations with the expected underlying factors were significant. After this, the contents of the items loaded onto each factor were reassessed if they diverged from the hypothesis.

Global fit statistics indicate the overall fit of the model to the data. In this case, the statistical parameters indicated a satisfactory (global) model fit to the model of five separate bullying factors: $\chi^2(25) = 37.958$, $p = 0.047$; comparative fit index $= 0.99$; Tucker–Lewis index $= 0.98$; root mean square error of approximation $= 0.025$; standardised root mean square residual $= 0.028$; and normed fit index (NFI) $= 0.97$. The goodness of fit was estimated with an χ^2-test. Because the χ^2 value was close to significant ($\chi^2(25) = 37.958$, $p = 0.047$), obviously because of the large sample size, we also estimated the NFI $= 1 - (\chi^2$ test of model fit: χ^2 test of model fit for the baseline model).

Two items were loaded for each latent first-order factor. The reliability estimate of the items' internal consistency was moderate. Cronbach's α varied between 0.62 and 0.76 ("personal insults" $\alpha = 0.72$ (95% CI: 0.68–0.75); "work-related blame" $\alpha = 0.62$ (95% CI: 0.57–0.67); "professional understating" $\alpha = 0.76$ (95% CI: 0.73–0.79); "unreasonable work-related demands" $\alpha = 0.60$ (95% CI: 0.54–0.65); and "work-related malpractice" $\alpha = 0.76$ (95% CI: 0.73–0.79)). Because factors consisted of only two items, Spearman–Brown reliability estimates were also reported. These estimates were also moderate, as the coefficients varied between 0.62 and 0.78.

The factor determinacies, which can range from 0 to 1 and represent the correlation between the estimated and true factor scores, were satisfactory: "personal insults" $= 0.91$; "work-related blame" $= 0.89$; "professional understating" $= 0.91$; "unreasonable work-related demands" $= 0.87$; and "work-related malpractice" $= 0.90$. The correlations between factors varied between 0.37 and 0.89. As in NAQ-R22, the comparatively high correlation (0.89) between "personal insulting" and "work-related blame" is a sign of the overlap between personal and work-related bullying.

Because of the minimum number of items per factor, the local fit analysis that specifies the item-level reliability (i.e. residual statistics) was also conducted (Kline, 2011, p. 171). Absolute correlation residuals < 0.10 indicated that the model properly explained the corresponding sample correlation. Further analysis of the correlation residuals for pairs of bullying items included in the model also indicated a moderate (local) model fit at the variable level. Only 2 item pairs out of 45 pairs exceeded the correlation residual value greater than 0.10.

In addition, the overall relationships between perceived forms of bullying and work engagement and work performance, as well as between engagement and performance, were analysed using structural equation modelling (Figure 2). For this, the summed score for engagement was calculated for each respondent (0–54). Perceived work performance varied between 1 and 10 (1 = very poor; 10 = very good).

In this case, the statistical parameters also indicated a satisfactory (global) model fit for the model of five separate bullying factors: $\chi^2(35) = 60.158$, $p = 0.005$; comparative fit index $= 0.98$; Tucker–Lewis index $= 0.97$; root mean square error of approximation $= 0.029$; standardised root mean square residual $= 0.027$; and NFI $= 0.96$. The goodness of fit was estimated using a χ^2-test. Because the χ^2 value was close to significant ($\chi^2(35) = 60.158$, $p = 0.005$), obviously because of the large sample size, we also estimated the NFI $= 1 - (\chi^2$ test of model fit: χ^2 test of model fit for the baseline model) (see Table I).

The means, standard deviations, Cronbach's alpha values and correlations between the variables are presented in Table II.

Figure 2.
The overall
relationship between
perceived bullying,
performance and
engagement among
Estonian academics

Results

The relationship between perceived bullying and work engagement

The relationship between perceived bullying, performance, and engagement among Estonian academics is presented in Figure 2. The first hypothesis – a negative relationship between five first-order bullying factors ("person-related insulting", "work-related blaming", "professional understating", "unreasonable work-related demands" and "work-related malpractices") and work engagement – was confirmed partly, because a negative relationship was found between perceived "professional understating" and work engagement (-0.18, $p < 0.01$), but not between other first-order bullying factors and engagement. This is a signal that especially feelings of "professional understating" decrease work engagement among Estonian academics. In daily academic life, experiences like "being ordered to do work below your level of competence" or "having key areas of responsibility removed or replaced with more trivial or unpleasant tasks" affect employee engagement and ruin vertical trust between employees and employers, but also horizontal trust between employees.

The relationship between perceived bullying and work performance

The second hypothesis – a negative relationship between five first-order bullying factors and work performance – was also confirmed only for one bullying factor. A negative relationship was observed between "professional understating" and work performance (-0.26, $p < 0.01$).

The relationship between work performance and work engagement among bullied academics

With regard to the third hypothesis, a positive relationship was revealed between work performance and work engagement among academics in Estonia (0.31, $p < 0.000$) (Figure 2).

Variable	M	SD	Cronbach's α	1	2	3	4	5	6	7
1. Person-related insulting	1.30	0.52	0.72	–						
2. Work-related blaming	1.18	0.39	0.62	0.60	–					
3. Professional understating	1.35	0.63	0.76	0.50	0.46	–				
4. Unreasonable work-related demands	1.55	0.68	0.60	0.47	0.35	0.35	–			
5. Work-related malpractices	1.38	0.60	0.77	0.46	0.28	0.38	0.52	–		
6. Work performance (1–10)	7.82	1.37	–	–0.10	–0.10	–0.22	–0.07*	–0.11	–	
7. Work engagement (0–54)	37.4	10.86	0.92	–0.20	–0.16	–0.22	–0.09	–0.15	0.34	–

Notes: $n = 842$. *, **Correlation is significant at the 0.05 and 0.01 levels, respectively (two-tailed)

Table II.
Means, standard deviations, Cronbach's α values and correlations among variables

Additionally, we tested whether the relationship between performance and engagement could be reciprocal among bullied academics. The one-way effect of (decreased) performance (because of perceived bullying) on engagement was statistically acceptable (0.31, $p < 0.000$), and the effect of (decreased) engagement (because of perceived bullying) on performance was acceptable, as well (0.31, $p < 0.000$).

After this, to reveal the nature of the relationships between bullying, engagement and performance, possible mediator effects were also tested. First, we tested whether engagement acts as a mediator in the bullying–performance relationship, and second, we tested whether performance acts as a mediator in the bullying–engagement relationship. Please note that, in these models, bullying affects only engagement (B → E → P) or performance (B → P → E), not both simultaneously. The further analysis confirmed both explanations: there was a one-way path from bullying to engagement and further to performance (0.34, $p < 0.000$), as well as from bullying to performance and further to perceived engagement (0.34, $p < 0.000$). Both models were statistically acceptable.

Specifically, the analysis of one-way effects from performance to engagement, and vice versa from engagement to performance, revealed neither indirect effects between bullying and performance nor between bullying and engagement. Direct effects indicate that bullying, and especially professional understing, first affects an employee's work-related performance and subsequently their work-related engagement (Figure 2). However, because of the cross-sectional setting, a further longitudinal study is needed to prove the specific one-way effect of (decreased) performance (because of perceived bullying) on engagement.

Discussion

We examined the relationships between perceived bullying, work engagement and work performance among Estonian academics. Specifically, work engagement and work performance were explored in relation to five sub-dimensions of bullying: person-related insulting, work-related blaming, professional understating, unreasonable work-related demands and work-related malpractices (Meriläinen and Kõiv, 2017).

Along with confirmation of the first hypothesis (*H1*), a negative relationship was revealed between perceived "professional understating" and work engagement. A similar relation was revealed between "professional understating" and work performance (*H2*). However, departing from our first and second hypotheses, there were no direct relations between other first-order bullying factors and work engagement, nor between other first-order bullying factors and performance. While the other forms of bullying influenced both engagement and performance indirectly by perceived "professional understating", this is a signal that, in particular, feelings of "professional understating", as a specific form of bullying, decrease engagement and performance among Estonian academics (see also Ahmad *et al.*, 2017; Rai and Agarwal, 2017).

The third hypothesis (*H3*) conclusively proved the positive relationship between perceived work performance and work engagement among Estonian academics. The results showed that bullying decreases both engagement and performance. Further, decreased work performance reduces engagement and, vice versa, decreased engagement reduces performance (see McKay *et al.*, 2008). Experiences of "professional understating" that decrease performance and engagement among Estonian academics are captured in the form of two problems: "being ordered to perform tasks below one's level of competence" and "having key areas of responsibility removed or replaced with more trivial or unpleasant tasks".

The present results show that, besides working environment (Meriläinen and Kõiv, 2018) and work-related well-being (Nielsen *et al.*, 2015), workplace bullying is related to work engagement and work performance, and no doubt further to productivity at a community level (see Balducci *et al.*, 2011; Bartlett and Bartlett, 2011; Giorgi, 2012; Samnami and Singh, 2012; Trepanier *et al.*, 2013).

Besides individuals' well-being, workplace bullying increases employees' absenteeism and intentions to leave the organisation (e.g. Berthelsen *et al.*, 2011; Glasø, Vie, Holmdal and Einarsen, 2011; Hollis, 2015; McCormack *et al.*, 2009; Nielsen and Einarsen, 2012; Hollis, 2015) or the whole profession (Laschinger and Fida, 2014), and raises the risk of expulsion from working life altogether (Glambek *et al.*, 2015). All this affects an organisation's ability to function optimally, through loss of productivity, not to mention the costs of civil action and even possible civil trial, and possible intervention programmes (Branch *et al.*, 2013).

Even these results are only indicative, as it appears that the one-way effect of (decreased) performance (because of perceived bullying) on engagement is more probable than the effect of (decreased) engagement on performance. We argue that bullying affects employees' work performance almost immediately, and if it remains unaddressed, it affects work engagement. This is why a longitudinal study is needed on the effects of workplace bullying on work engagement and performance.

As stated, bullying may first decrease employees' performance, leading to a breakdown in their task performance, as well as their contextual behaviour. It may also lead to CWB, which is negative and harmful to individual members or the entire organisation (Devonish, 2013). Moreover, there is a risk that as bullied employees' productivity declines, they will become bullies themselves and promote the bullying culture. If this (invisible) effect of bullying on performance is not addressed, it is likely to result in engagement problems at an individual level, apart from other forms of adverse effects, not to mention effects on a community level.

Along with these results, we suppose that it is easier to approach this phenomenon in forthcoming research in other contexts and, importantly, we expect that this will help us (leaders) to recognise what prevailing practices at our own workplace may bring on bullying experiences and further reduce performance and engagement. Recognising these practices requires that we become aware of how we ourselves behave among other employees. In particular, it requires leaders to become aware that their role in allowing or preventing bullying at the workplace is related to their leadership style. However, co-workers are also required to become aware of what is suitable behaviour and what is not.

Further research is needed to understand the origin and reasons for Estonian academics' feelings of "professional understating". It may be a sign of certain cultural aspects embedded firmly in leadership styles (Aasland *et al.*, 2010; Hoel *et al.*, 2010). Alternatively, it may be a sign of collegial interaction that promotes undesirable behaviour and indirectly contributes to bullying at the university. Older Estonian managers, as well as older faculty personnel, may have different views of what is appropriate organisational behaviour (see Alas *et al.*, 2006).

One of the limitations of this study is that the data are based on a self-reported survey instrument. To prevent the results from being skewed in any way, we used an MLR procedure during data analysis. However, in the future, we recommend the use of a longitudinal setting to explore the overall relationships between bullying, performance and (types of) engagement and to prove the specific one-way effect of (decreased) performance (because of perceived bullying) on engagement.

In addition, to determine where and why feelings of "professional understating" originate, we suggest using multi-methodological step-by-step data gathering. This is essential to identify whether bullying is rooted in a certain cultural and temporal context (Rai and Agarwal, 2016).

Despite the limitations above, the present results are based on a relatively representative sample of Estonian academics. In fact, the total of 864 respondents accounts for almost one-quarter (23 per cent) of all Estonian university members. Moreover, the gender distribution of the respondents, as well as the variations in age, tenure, working contract and nature of work, improves the reliability of the data and the results.

As a practical implication, if we want to prevent bullying and further increase engagement and performance among Estonian academe, we have to get out of policy of professional understating. In addition to legislative proposals for action, we suggest the formulation of clear guidelines on how to address workplace bullying wherever it exists (TTK – The Centre for Occupational Safety, 2018). Every employee should know what to do and how to get help in case of bullying. This is a challenge for HR departments, but especially it is a challenge for improving the leadership practices in Estonian universities. It should be remembered that greater communication and civil interactions between all faculty members is an expectation of every member of the Estonian university system, as well as elsewhere. There is also a need for legislative guidelines in the case of bullying within Estonian universities, and in other workplaces as well. For example, Finnish law concerning occupational health obliges an employer to intervene in bullying incidents (Finlex, 2017), whereas there is not yet a special law against bullying in Estonia or an employment law that stipulates prevention and intervention responsibilities (see also Eurofound, 2015).

As a social implication, we need to determine why Estonian academics experience professional understating, which includes being ordered to perform tasks below one's level of competence and having key areas of responsibility removed or replaced with more trivial or unpleasant tasks.

Theoretically, the present results prove that it is possible to differentiate between specific forms of bullying in a specific context and further reveal relations between these forms of bullying and work engagement and performance. This indicates a need for future research in several other contexts. Recognising prevailing practices at the workplace that may bring on bullying experiences is crucial if we want to prevent bullying and maintain employees' work engagement and performance.

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Further reading

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