Author(s): Huhtala, Mari; Kinnunen, Ulla; Feldt, Taru

Title: School Psychologists' Ethical Strain and Rumination : Individual Profiles and Their Associations with Weekly Well-Being

Year: 2017

Version:

School psychologists' ethical strain and rumination: Individual profiles and their associations with weekly well-being

Mari Huhtala[1,2], Ulla Kinnunen[1], & Taru Feldt[2]

[1]School of Social Sciences and Humanities, University of Tampere

[2]Department of Psychology, University of Jyväskylä

Abstract

We investigated school psychologists' experiences of ethical strain (the frequency of ethical dilemmas at work and the stress caused by these dilemmas), and dilemma-related rumination outside working hours. Individual latent profiles were estimated at the study baseline based on these three dimensions. The psychologists' weekly well-being (vigour, exhaustion, and sleep quality) was compared against their profile during the following three working weeks. The sample included 133 school psychologists, among whom four groups were identified: Low Ruminators (39%), an Intermediate Group (39%), High Ruminators (20%), and Atypical Outliers (2%). High Ruminators fared least well in terms of weekly well-being. Of all the groups, they reported the lowest levels of vigour, the highest levels of exhaustion and the lowest sleep quality. The study contributes to understanding how psychologists differ in their experiences of ethical strain, and highlights the role of ruminating: mental detachment from ethical demands is especially important for school psychologists' well-being.

Keywords: ethical strain, ethical rumination, well-being

School psychologists' work exposes them to many different ethical dilemmas, that is, moral questions of "rightness" or "wrongness" where no clear solution is apparent: they can face several concurrent and conflicting demands, such as balancing the needs and rights of children with the expectations and authority of parents and the goals of the school (Knauss, 2001). The fact that they often work as the only representative of their profession among teachers and other school staff, interacting with parents, teachers, and students, puts even more pressure on their decision making. Although there are codes of ethics and various practical guidelines available for school psychologists (e.g., American Psychologist Association [APA], 2002; European Federation of Psychologists' Associations, 1995; Flanagan, Miller, & Jacob, 2005), these are still not enough to cover all the complex decision-making situations they face. In addition, working in the public sector, school psychologists can often face economic restrictions, such as a scarcity of resources, which lead to further pressure in terms of workload and time.

Thus, there are a range of situations in which psychologists might have to use their professional judgment when weighing multiple and often competing demands, needs and goals (Barnett et al., 2007). These questions of right and wrong (i.e., ethical dilemmas) can create ethical strain (i.e., stress caused by dilemmas; Huhtala el at., 2011) and thinking about the dilemmas can spill over from work to non-work time, which makes it more difficult to be detached from work (i.e., causing ethical rumination). All of this can have major consequences for well-being. Of possible job stressors, the stress stemming from ethical issues has been shown to have the most significant associations with employee fatigue, job satisfaction and turnover intentions (DeTienne et al., 2012). However, previous research has failed to address the effects that demanding ethical issues can have on psychologists' well-being. This study contributes to meeting that earlier failure. Studying ethical strain using a person-centred approach (see, e.g., Bergman & Lundh, 2015) allows us to investigate how ethical dilemmas, stress, and rumination vary among school psychologists. We began by

detecting different profiles based on individual variation at the baseline measurement of our study. We also used a diary study, where we further compared school psychologists between the different profiles regarding their later levels of job-related well-being and possible changes in it. In studying well-being, we used a follow-up design where vigour, exhaustion, and sleep quality were measured once a week over a three-week time period. Thus, our research design allowed us to examine how individual tendencies to experience ethical strain and rumination are related to longitudinal levels and changes regarding well-being.

Ethical strain in school psychologists' work

We are focusing on ethical strain, which includes the prevalence of ethical dilemmas (i.e., how often they are recognised and faced in the work context) and the magnitude of stress caused by these dilemmas (see Huhtala et al., 2011). Stress caused by ethical dilemmas has previously been studied mainly among health care professionals (see, e.g., DeTienne et al., 2012). In such research, ethical or moral distress is often defined as confronting challenges in making the right decision and taking the right action in patient care, where the morally appropriate action is known but obstructed because of institutionalised obstacles such as a lack of time or lack of supervisory support. Ethical challenges in decision making are also present in other lines of work, and Chevalier and Lyon (1993) noted already in the 1990's that more research is needed into ethical decision making among school psychologists (e.g., about the processes of ethical reasoning).

However, there are still very few studies about ethical decision making and its consequences among psychologists working in schools. Dailor and Jacob (2011) are among the most recent researchers to have investigated the ethically challenging situations that school psychologists experience, in a study that was based on retrospective self-evaluations. Using multiple-choice survey questions they found that almost three quarters of the respondents had encountered at least one of eight types of ethical dilemma within the previous year. They discussed some important implications of their results for ethics training,

such as the need for more experienced school psychologists to provide support, guidance, and mentoring to less experienced practitioners (Dailor & Jacob, 2011).

Some studies have also compiled descriptions of ethically troubling situations as perceived and reported by psychologists themselves. Jacob-Timm (1999) found 19 different categories of ethically troubling situations on the basis of school psychologists' descriptions. These responses involved such situations as competing ethical principles, conflicts between ethics and the law, and the conflicting interests of multiple clients (e.g., pupils, parents) (Jacob-Timm, 1999). Similarly, Colnerud (1997) explored ethical dilemmas among psychologists in Sweden, comparing their experiences on ethical issues with results from similar studies in other countries (the USA; Pope & Vetter, 1992, Great Britain; Lindsay & Colley, 1995). Some ethical conflicts were found to be universal in the profession (e.g., conflicts of confidentiality), while others were more closely related to the national context. She concluded that even though rules and principles are important as professional guidelines, psychologists also need ethical reflection (Colnerud, 1997). That is, they need to have the ability to analyse the ethical elements of a given situation and acknowledge and discriminate between different alternatives of moral action.

The aforementioned research findings have given us some evidence of the complex ethical decisions that school psychologists may face in their work. However, the possibility that these ethical dilemmas may also constitute a risk to their occupational well-being has been neglected by previous research.

Ethical strain and rumination on the basis of the stressor-detachment model

We will be investigating the individual differences that emerge in school psychologists' experiences of ethical strain and rumination. Ethical strain (see Huhtala et al., 2011) is conceptualised using two different dimensions: how often psychologists in schools face ethical dilemmas (dilemma frequency), and how stressful the dilemmas are experienced as being (stress intensity). In this study we also investigate a third component, which relates to

the ability to detach oneself from ethical strain: how much school psychologists report

thinking and worrying about these dilemmas outside working hours (i.e., ethical rumination).

Finally, we will examine how these individual differences relate to the psychologists' weekly

well-being (exhaustion, vigour, and sleep quality).

Our investigation was based on the integrative framework of recovery from job stress

put forward by Sonnentag & Fritz (2015). According to the *stressor-detachment model*, the

three core constructs in this process are (1) job stressors, (2) strain reactions and well-being,

and (3) psychological detachment from work (Sonnentag & Fritz, 2015). The first of these,

job stressors, includes a variety of factors in the work environment such as task-related

stressors (e.g., work overload) and role stressors (e.g., role ambiguity) that may lead to strain

reactions. Secondly, these strain reactions refer to individual reactions to stressors, which

include immediate physiological responses (e.g., elevated cortisol levels), psychological

reactions (e.g., negative affect), and behavioural reactions (e.g., coping). Depending on the

stressor, the strain reactions can vary. For example, if the stressor is continuously present, it

can lead to long-term, chronic strain reactions, which is a risk for impaired health and poorer

well-being (e.g., burnout and reduced vigour). Strain reactions can also persist even though

the stressor is no longer present. This brings us to the third construct of the model:

psychological detachment. This refers to not being involved in work or work-related tasks,

and to mentally disengaging oneself from work during time away from work (Sonnentag &

Fritz, 2015). A lack of psychological detachment, on the other hand, is related to such

concepts as worry and rumination; here the key element is repetitive thought, which can also

be negatively affect-laden (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008).

The stressor-detachment model (Sonnentag & Fritz, 2015) has its theoretical roots in

the cognitive activation theory of stress (Meurs & Perrewé, 2011, Ursin & Eriksen, 2010) and

the allostatic load model (Ganster & Rosen, 2013, McEwen, 1998). The main proposition of

all these models is that the potential detrimental effects occur from *sustained activation* when

the stressor is no longer present (resulting in the absence of coping or detachment), not as a result of the acute stress reaction. We wanted to include ethical rumination in our research model because it is a concept which has not been previously addressed by ethical strain research (see DeTienne et al., 2012; Huhtala, 2013). Having a tendency to ruminate about ethical dilemmas after work can be conceptualised as a maladaptive, emotion-focused coping response (Thomsen et al., 2004) that can maintain or even increase negative mood and stress. Facing complex, stressful ethical dilemmas at work can lead employees to ruminative thinking (thoughts revolving around the stressful dilemma) and therefore hinder their ability to mentally "switch off" after work.

We aimed to investigate individual profiles in which all three elements of the stressor-detachment model (Sonnentag & Fritz, 2015) were present at the same time. We applied the model specifically to ethical job demands and their consequences, namely, the prevalence of ethical dilemmas as job stressors, ethical stress as a strain reaction, and ethical rumination as an indicator of poor psychological detachment. We focused on individual *general tendencies* to experience these three strain dimensions at work, and these dimensions were therefore measured at the study baseline. Using a more specific measurement time frame (e.g., weekly evaluations) could lead to misleading results if, for example, the psychologists answered the questionnaire based on one single, uncommon, but particularly troubling dilemma which had caused significant stress and rumination to the participant at the time. Individuals could on the other hand also have been wrongly classified into profiles based on atypical working weeks, when they had not experienced any dilemmas, even if ethical dilemmas and strain were normally a regular feature of their work. We investigated specifically *individual* tendencies because our interest was to find protective or risk profiles for well-being. We wanted to know, for example, if we can associate certain strain types (e.g., a tendency to experience high stress or high rumination even when dilemma frequency is low) with

particular (negative or positive) well-being outcomes. Using a traditional, variable-centred approach could have left individual differences in these phenomena undetected.

We used a person-centred approach to identify latent profiles (Bergman & Trost, 2006; Bergman & Lundh, 2015; Wang et al., 2013) on the basis of individual differences in experiencing ethical strain and rumination. When using this approach, the unit of analysis is a person instead of a variable, and profiles consist of members who are similar to each other compared to the members in other profiles. Person-centred analysis can reveal heterogeneity in the sample and identify more detailed individual differences, such as atypical profiles that can represent a specific risk or be especially beneficial for well-being. In particular, atypical profiles could be masked when using a traditional, variable-centred approach that focuses on homogeneous associations between variables. Thus, the study will provide a more detailed picture of individual differences in experiencing ethical strain and their effects on well-being.

The present study: Research questions

Our expectation was that especially ethical rumination (that is, a lack of detachment from the stressor, an ethical dilemma) would associate with impaired well-being, because there is consistent evidence that a lack of psychological detachment from work during time away from work is related to increased strain and decreased well-being (Sonnentag & Fritz, 2015). We investigated this proposition by using three well-being indicators on a weekly level. First, we used emotional exhaustion as an indicator of strain. Exhaustion refers to feelings of energy depletion and fatigue, and it is generally seen as a core symptom of the burnout syndrome (González-Romá, Schaufeli, Bakker, & Lloret, 2006). Secondly, we investigated vigour as an indicator of positive well-being. Standing at the opposite extreme from exhaustion, vigour means having high levels of energy and mental resilience while working (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Thirdly, sleep disturbance was used as a weekly indicator of sleep quality. Work-related worries (Åkerstedt et al., 2002) and rumination (Thomsen, Mehlsen, Christensen, & Zachariae, 2003) have been found to

associate with self-reported sleep disturbances. However, as Kompier et al. (2012) state, there has been a surprising dearth of studies on the effects of work stress on sleep quality, although disturbed sleep and fatigue can have detrimental consequences for well-being (e.g., increased long-term sickness absences and work disability). The specific research questions that we set ourselves are the following:

1. What kind of profiles can be identified on the basis of school psychologists' experiences of ethical strain (ethical dilemmas and stress) and ethical rumination?

2. Do school psychologists in different ethical strain and rumination profiles differ from each other in their weekly well-being (exhaustion, vigour, and sleep quality), and if so, how?

Method

Participants and procedure

The data of this study were collected among Finnish school psychologists in the spring of 2014. A link to an electronic questionnaire was sent via email to all the psychologists who belonged to the Finnish Psychological Association (FPA), had given their email address to the FPA register, and had reported school psychology as their occupational field. There are approximately 4 700 certified psychologists working within different subfields of psychology in Finland, of whom over 90% belong to the FPA (2015), so this approach provided a relatively representative sample of the target group. Of the 538 psychologists who were contacted, 270 responded to the baseline general survey (response rate 50.2%). The attrition analyses comparing the participants with the whole sample showed that there were no differences between them in terms of age, $\chi^2(8) = 10.48$, *ns*; or gender, $\chi^2(1) = 1.96$, *ns*.

The sample of this study consisted of 133 school psychologists (49% of the baseline participants) who took part in both the general survey and the diary study, which included two online surveys per week (on Mondays and Fridays) for a three-week period. The diary study was launched a month after the general survey. The majority of the participants were

women (94.7%) and their average age was 38.02 years (range 25–64, $SD = 9.53$). Of the participants, 83.5% worked in local education administration, while the others (16.5%) worked in a variety of contexts, including social administration, special education schools, or in child and family services. The ratio of students to psychologists was on average 1155:1 (range 80–5000, $SD = 645.21$). The participants mostly worked full time (90.2%) and had a permanent contract (83.5%). The participants had worked with the same employer for an average of 5.60 years (range 0–38, $SD = 6.77$) and their weekly working hours (including paid or unpaid overtime work) were on average 37.04 (range 8–50, $SD = 4.12$). There were no significant differences between the diary study participants and the baseline sample in terms of age, $t(268) = -.99$, *ns*; or gender, $\chi^2(1) = .04$, *ns*.

Measures

Variables for ethical strain in the general survey

Ethical strain was assessed with two items. First, *ethical dilemmas* were measured using the following question: "Sometimes one needs to evaluate the rightness and goodness of one's own actions, choices or decisions at work. These situations are often ethically challenging because it can be unclear what the right thing to do is. How often do you face such ethically challenging situations in your work?" The item was scored on a 7-point frequency-based rating scale from 1 (*never*) to 7 (*every day*). Second, *stress caused by ethical dilemmas* was assessed with another single question: "Do you experience stress due to these situations (if you are unsure of the right thing to do)?" This question was scored on a 4-point frequency-based rating scale from 1 (*not at all*) to 4 (*very much*). These items were modified from a previously used ethical strain measure (Huhtala et al., 2011). *Ethical rumination* was measured with a question formulated for the purposes of this study: "Do you feel that the ethical dilemmas bother you also after working hours?" The question was scored on a 7-point frequency-based rating scale from 1 (*never*) to 7 (*every day*). In all the questions a higher score indicates a higher level of ethical strain or rumination.

Variables for well-being on a weekly basis

All well-being outcomes were measured weekly on the Friday with questions about experiences during the previous working week. We focused only on the Friday measures because the goal was to examine work-related well-being rather than experiences during the weekends (measured on Mondays). We assessed state *vigour* by using three items from the short version of the Utrecht Work Engagement Scale (UWES-9; Schaufeli, Bakker, & Salanova, 2006). We adapted the items so that they assessed vigour during the working weeks of data collection ("Please choose the option that best describes your feelings during the last work week"; e.g., "At work I felt full of energy."). The answers were given on a 7-point frequency scale from 1 (*completely disagree*) to 7 (*completely agree*), higher mean scores indicating a higher level of vigour.

Weekly *exhaustion* was measured with three items from the Bergen Burnout Inventory (BBI-9; Salmela-Aro, Rantanen, Hyvönen, Tilleman, & Feldt, 2011; see also Feldt, Rantanen, Hyvönen, Mäkikangas, Huhtala, Pihlajasaari, & Kinnunen, 2013) adjusted for weekly assessment ("Please choose the option that best describes your feelings during the last work week"; e.g., "I felt snowed under with work."). The answers were given on a 6-point frequency scale from 1 (*completely disagree*) to 6 (*completely agree*), higher mean scores indicating a higher level of exhaustion.

Weekly *sleeping problems* were measured with three items ("How often did you experience the following sleep-related problems during this week?"; e.g., "Repetitively waking up during the night and having trouble to fall back asleep."). The answers were given on a 4-point scale from 1 (*not at all*) to 4 (*every day*), higher mean scores indicating a poorer quality of sleep. The items were based on the Karolinska Sleep Diary (see Kecklund & Åkerstedt, 1997).

Background variables: Weekly working hours and the student ratio were used as potential control variables as these work-related factors can have a significant effect on

school psychologists' well-being (see, e.g., Mills & Huebner, 1998). We also compared the following personal and work-related background variables between the ethical strain profiles: age, tenure, employment type (full- or part-time; permanent or fixed-term), family type (living alone/with a partner/with children), and whether they worked in elementary school, secondary school, or upper secondary school. We included these additional variables because the differences between experiences of ethical dilemmas and stress could be related to the type of work and professional experience (e.g., psychologists with less work experience could find the dilemmas more stressful), and rumination (or rather, detachment) could be related to the type of family in which the psychologists are living.

Statistical analyses

We started by investigating the correlations between the study variables. Next, a latent profile analysis (LPA) with MLR as the method of estimation (maximum likelihood estimation with robust standard errors) was performed using the Mplus statistical program. The three variables of ethical strain (dilemmas, stress and rumination) were used to determine the number and composition of the latent profiles. LPA seeks to identify the smallest number of latent profiles that adequately describes the mean profiles of these observed continuous variables. We determined the adequate number of latent profiles based on the following statistical criteria (Nylund, Asparouhov, & Muthén, 2007; Tolvanen, 2007). The first of these, the sample-size adjusted Bayesian Information Criterion (aBIC) is a standard information criterion wherein lower values represent incremental improvement of fit. Secondly, the Lo-Mendell-Rubin test (LMR) was used as it provides a statistical comparison of the estimated model against a solution containing one fewer classes. Finally, the quality of the classification, i.e., the distinctiveness of the latent profiles, was evaluated with the entropy for the most likely latent profile membership. Entropy values range from 0 to 1, and high entropy values (>.90) indicate that the profiles are highly discriminative.

After identifying the profiles, they were further investigated using SPSS 20. That is, we tested whether the participants in the profiles differed from each other regarding their background variables and, finally, in their weekly well-being outcomes (vigour, exhaustion and sleep quality). These analyses were done using analysis of variance (ANOVA), χ^2-tests, and analysis of variance for repeated measures (MANOVA).

Results

Descriptive results

As seen in Table 1, school psychologists faced ethical dilemmas on average several times a month, but the dilemmas caused only moderate amounts of stress. On average, the psychologists reported ruminating about the dilemmas during their time off only a few times a month. Dilemma frequency correlated positively with dilemma rumination, but not with stress caused by the dilemmas. Stress caused by dilemmas, however, had a significant correlation with rumination. That is, the more often the school psychologists faced ethical dilemmas, the more often they worried about them after working hours; and the more they experienced stress due to the dilemmas, the more they ruminated about them. Dilemma stress and rumination also had significant correlations with the weekly well-being outcomes: stress and rumination were associated with less vigour, more exhaustion and more sleep problems.

Profiles of ethical strain

We tested altogether seven different latent profile solutions, and even though the fit indices (see Table 2) did not provide unanimous support for one particular model, we chose the 4- and 5-group solutions for further inspection. This was done because after the 5-group solution the subgroup sizes started to get significantly smaller and no new profiles emerged that would bring a theoretically meaningful clarification to the 5-group solution. Comparing the 4- and 5-group solutions, we rejected the 5-group solution because of its poorer entropy and poorer latent class membership probabilities (range of 1.00–.89 versus 1.00–.87). Thus, the 4-group solution was chosen as the best fitting latent profile model. We decided to exclude the

smallest group ($n = 3$) from the subsequent analyses, as these three individuals represented outliers of the data (the same deviant group was found also in the 3-, 5-, and 6-group solutions) and they had mostly missing data regarding the well-being variables.

The final three ethical strain profiles are presented in Figure 1. We also tested the between-group differences for the three ethical strain dimensions, all with significant results (see Table 3). Post-hoc comparisons showed several significant differences between the profiles, but rumination was the dimension that distinguished all the profiles from each other ($p < .01$–.001). Thus, the profiles were named as *High ruminators* ($n = 26$), the *Intermediate group* ($n = 52$), and *Low ruminators* ($n = 52$). High ruminators had clearly the highest level of rumination, but also the highest dilemma frequency (see Table 3). The Intermediate group had average means for each ethical strain dimension, whereas Low ruminators had the lowest levels of both rumination and stress. Finally, both the Low ruminators and the Intermediate group had similar dilemma frequency, and both the High ruminators and the Intermediate group experienced similar levels of stress due to the dilemmas.

Differences in background factors and well-being outcomes between the subgroups of ethical strain

We examined whether the school psychologists in these three profiles differed from each other in their personal and/or work-related background factors. We found no significant differences in terms of age, weekly working hours, tenure (years working as a psychologist and years working in the same job), or student ratio (all ANOVAs were insignificant, $p > .05$). There were also no significant differences between the profiles regarding the psychologists' employment type (full- or part-time; permanent or fixed-term), family type (living alone/with a partner/with children), or whether they worked in elementary school, secondary school, or upper secondary school (yes/no to each item) (all χ^2-tests were insignificant, $p > .05$). Consequently, none of the investigated background variables were included in our further MANOVAs.

The MANOVAs were used to investigate differences in weekly well-being between the psychologists in the three different profiles. No significant time or group-by-time effects were found (see Table 4), indicating that there were no significant changes over time in the well-being indicators. However, there was a significant group effect showing that High ruminators experienced more weekly exhaustion compared to the Low ruminators, and less weekly vigour and more sleeping problems compared to the Low ruminators and the Intermediate group.

Discussion

The aim of our study was to use a person-centred approach to identify profiles of ethical strain and rumination among school psychologists. Focusing on individual profiles allowed us to investigate the differences between individual school psychologists in relation to their tendency to experience ethical strain in their work. Following the key elements of the stressor-detachment model of Sonnentag and Fritz (2015), we used three dimensions to identify the profiles: how often school psychologists faced ethical dilemmas, to what extent they experienced strain reactions due to the dilemmas, and how often the dilemmas led to poor detachment (ethical rumination). The second aim was to compare school psychologists belonging to different profiles in relation to their weekly well-being in terms of the exhaustion, vigour, and sleep problems they experienced.

Our findings highlighted the importance of taking individual differences into consideration when investigating ethical strain and rumination, and their associations with well-being. On the average (variable centered) level, the amount of stress and rumination caused by ethical dilemmas among the school psychologists was quite low. However, when investigating individual differences we found three profiles in which the amount of ethical rumination clearly differed from one psychologist to another. The first profile, *High ruminators*, included psychologists who experienced dilemmas several times a week, and ruminated about these dilemmas often (on a weekly level), but they reported only an average

amount of stress due to the dilemmas. The second profile, the *Intermediate group*, was made up of psychologists who experienced dilemmas only a few times a month, and reported average levels of stress and rumination due to the dilemmas. The final profile, *Low ruminators*, also experienced dilemmas monthly, but of the groups, this one had the lowest level of stress, and clearly the lowest level of rumination (taking place less than once a month).

Regarding their weekly well-being, the high ruminators were the most disadvantaged group: they experienced more exhaustion, more sleeping problems, and less vigour than the other groups. In comparison, the low ruminators were the least disadvantaged group, as they showed the most positive outcomes regarding the three well-being outcomes. Thus, ethical rumination seems to be the most significant dimension in differentiating between individuals in terms of their experiences of ethical strain and consequently, their weekly well-being. This finding supports the cognitive activation theory of stress (Meurs & Perrewe, 2011), which emphasizes that the sustained activation of stress, in which the stress reaction extends after the stressor is no longer present, is more detrimental to well-being than an acute reaction (Sonnentag & Fritz, 2015). The current study supports the view that even though psychologists may have similar experiences of the frequency of ethical dilemmas and of the stress caused by these dilemmas, the tendency to worry about dilemmas outside working hours differentiates them in relation to their well-being. Thus, psychologists with a strong tendency to ruminate were the risk group in our study.

The final significant finding was that the psychologists belonging to the three profiles did not differ from each other in relation to any individual factors, personal or work-related. This means that regardless of the psychologists' type of work, the amount of work experience in the field, or their family type, they had different experiences of ethical strain (dilemmas, stress, and rumination). It seems that the individual tendency to ruminate about ethical dilemmas, which proved to be the most important dimension of ethical strain so far as well-

being was concerned, does not depend on the psychologist's work or family situation. What is called for, then, are measures to help all psychologists leave their ethical problem-solving at the work place, regardless of their personal background.

Practical implications

Our results have several practical implications for school psychologists. Our findings point to the conclusion that it is important to acknowledge that although the majority of psychologists are able to detach themselves from complex ethical decisions when they close their office door behind them, there are also individuals who find themselves ruminating about these kinds of dilemmas. Although it is important to be able to identify, reflect on, and try to solve ethical issues at work, it is equally important to acknowledge that negatively laden affective rumination on ethical issues can be a significant risk for well-being. One obvious way to improve the situation would be to provide practitioners in schools with opportunities to reflect on these issues during the working day and also to give them the opportunity to discuss their dilemmas with others. For example, having access to a significant mentoring influence (from an older, more experienced individual) can offer very valuable help, support, and advice (Guest, 2000), also when solving ethical dilemmas. Such mentoring relationships can be more or less informal. They should also be accompanied with more formal training and clinical counselling. Providing these kinds of formal opportunities for professional reflection can help to reduce the risk of ethical dilemmas causing personal rumination after working hours.

Our results also suggest that being confronted by ethical dilemmas or even experiencing stress due to them are not in themselves detrimental to well-being. Rather, the most significant factor of the stressor-detachment model (Sonnentag & Fritz, 2015) regarding well-being is the ability to mentally detach oneself from stressful dilemmas after the working day is over. There is some evidence that training interventions may help people to learn how to recover and become more detached from job stress, which would further lead to

improvements in sleep quality, stress and negative affect (Hahn, Binnewies, Sonnentag, & Mojza, 2011). Thus, providing school psychologists with recovery training (e.g., workshops) could enhance awareness of the importance of detachment and increase their skills, giving them, for example, strategies for physically and cognitively separating work and non-work. There are, in short, many possible ways of supporting ethical decision making and detachment from ethical dilemmas among school psychologists. Accumulating empirical evidence shows that detachment from work in general is a key factor in promoting well-being (Sonnentag & Fritz, 2015), which further emphasizes the importance of paying attention to psychologists' recovery from work.

Study limitations and conclusions

The most evident limitation of this study stems from the use of data gathered via self-reports from a rather small sample, covering only one national context (Finland). This limits the generalizability of the results. However, the sample was representative of the target group and the response rate was adequate (50%). Furthermore, school psychologists are a growing professional group, at least in Finland: following the enactment of the new Pupil and Student Welfare Act in 2014 (which includes the obligation to provide pupils and students with an opportunity to talk personally with a psychologist or a school social worker within seven working days of such a request being made), it is likely that the number of psychologists working in the field of education will increase. A study of this professional group and their occupational well-being therefore makes an important contribution to the field.

Another limitation was that we focused on ethical strain profiles based only on one type of dilemma (where choosing the right way to act is unclear). However, there are also other types of dilemma, e.g., where the dilemma stems either from acting against organisational norms or rules or from acting against personal values (Nash, 1993; see also Huhtala, 2013). In these situations the chosen behaviour can be a result of organisational pressures which force the employee to go against their personal values, for example. It is possible that these

kinds of dilemmas can cause even more stress and rumination, and future research could shed more light on this issue. It is also a limitation that our study focused only on the prevalence of ethical strain and rumination. Future studies could investigate these phenomena also in terms of qualitative content. Some research has already shown what kinds of ethical dilemmas are typically encountered in school psychologists' work (see, e.g., Dailor & Jacob, 2011; Jacob-Timm, 1999), but a more detailed understanding of what causes stress when facing these dilemmas, and of the actual dimensions of rumination and worry (e.g., whether thoughts are related to trying to solve the dilemma or more to affective rumination) could be the aims of future studies.

Gathering information about school psychologists' experiences of ethical strain and its consequences for well-being can help in the design of ways to support school psychologists in the challenging work they do. This study has made an important contribution in this respect. As rumination turned out to be a significant factor in differentiating individual tendencies to experience ethical strain, future studies could also focus on a more detailed analysis and comparison of other types of rumination. For Ja example, affective, negatively laden rumination, which was the focus of this study, could be compared with more adaptive forms of rumination such as problem-focused coping strategies (Nolen-Hoeksema, Wisco & Lyubomirsky, 2008) or proactive coping (Greenglass & Fiksenbaum, 2009). If future studies found that different rumination styles lead to different outcomes, school psychologists might benefit from learning more about problem-focused solving, in addition to interventions aimed at increasing their knowledge and skills on how to detach oneself from ethically challenging work situations after working hours. Proactive coping strategies could help psychologists to see future ethical demands as challenges and not threats, and to give up reactive coping that focuses on dealing with a stressful event in the past. Combining proactive coping with proper detachment skills could help school psychologists to maintain or even enhance their well-

being at work, even when they are faced with the most challenging ethical decision-making

situations.

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Table 1

Means, standard deviations, and correlations between study variables

Variable	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. Dilemma frequency[a]	4.29	1.44													
2. Dilemma stress[b]	2.62	.55	.16												
3. Dilemma rumination[a]	3.30	1.39	.58***	.53***											
4. Vigour week 1	4.15	1.30	-.10	-.31***	-.31**										
5. Vigour week 2	4.08	1.48	-.04	-.21*	-.21*	.62***									
6. Vigour week 3	4.37	1.46	-.07	-.19*	-.22*	.62***	.70***								
7. Exhaustion week 1	2.82	1.02	.10	.32***	.32***	-.36***	-.35***	-.37***							
8. Exhaustion week 2	2.88	1.12	.06	.18	.20*	-.20*	-.42***	-.43***	.68***						
9. Exhaustion week 3	2.74	1.09	.01	.24**	.21*	-.26**	-.37***	-.44***	.69***	.74***					
10. Sleep problems week 1	1.79	.60	.16	.11	.33***	-.44***	-.47***	-.49***	.39***	.38***	.42***				
11. Sleep problems week 2	1.81	.64	.01	.03	.14	-.42***	-.49**	-.51***	.29**	.42***	.45***	.66***			
12. Sleep problems week 3	1.86	.64	.12	.19*	.26**	-.46***	-.48**	-.64***	.42***	.49***	.53***	.63***	.67***		
13. Weekly working hours	37.04	4.12	-.10	.01	-.01	.19*	.07	.15	-.12	-.08	.08	-.18*	.00	-.15	
14. Student ratio	1154.8	645.2	.13	-.02	-.04	.04	.02	.05	-.04	.10	-.05	-.01	.12	-.08	.04

Note: [a]1 = never, 2 = a few times a year, 3 = once a month, 4 = a few times a month, 5 = once a week, 6 = a few times a week, 7 = daily
[b]1 = not at all, 2 = quite little, 3 = quite a lot, 4 = very much
p < .05; **p* < .01; ***p* < .001

Table 2

Fit indices for the ethical strain profiles with different numbers of latent groups (latent profile analyses)

Number of classes	Log L	Entropy	aBIC	LMR	Latent class proportions, *n* (%)
1	-576.800	-	1163.964	-	133 (100)
2	-492.061	1.00	1001.393	0.000	81 (61), 52 (39)
3	-407.967	1.00	840.116	0.000	52 (39), 3 (2), 78 (59)
4	-378.288	0.92	787.667	0.000	26 (20), 52 (39), 52 (39), 3 (2)
5	-366.681	0.90	771.360	0.000	39 (29), 45 (34), 33 (25), 13 (10), 3 (2)
6	-345.684	0.93	736.275	0.000	40 (30), 29 (22), 12 (9), 29 (22), 3 (2), 20 (15)
7	-342.471	0.93	736.758	0.000	40 (30), 1 (1), 29 (22), 20 (15), 12 (9), 29 (22), 2 (1)

Table 3

Differences in ethical strain dimensions between the ethical strain profiles (ANOVA)

	(1) High ruminators (n = 26)	(2) Intermediate group (n =52)	(3) Low ruminators (n = 52)	Group differences (pairwise comparisons[1])
	M (S.E.)	M (S.E.)	M (S.E.)	F value
Ethical dilemma frequency	5.96 (.16)	3.79 (.14)	3.98 (.20)	32.24*** (1 > 2, 3)
Ethical stress intensity	3.00 (.00)	3.00 (.00)	1.98 (.02)	2098.49*** (1, 2 > 3)
Ethical rumination frequency	5.31 (.16)	2.98 (.12)	2.46 (.11)	108.63*** (1 > 2, 3; 2 > 3)

Note. [1] Bonferroni comparisons. ***$p < .001$.

Table 4

Differences in well-being outcomes between the three profiles of ethical strain (MANOVA)

	(1) High ruminators (n = 26)			(2) Intermediate group (n =52)			(3) Low ruminators (n = 52)			Group differences (pairwise comparisons[1])	Time effect	Group x time effect
	M (S.E.)			M (S.E.)			M (S.E.)					
	T1	T2	T3	T1	T2	T3	T1	T2	T3	F value	F value	F value
Exhaustion	3.35 (.21)	3.23 (.24)	3.02 (.23)	2.74 (.14)	2.73 (.16)	2.71 (.15)	2.43 (.14)	2.70 (.16)	2.44 (.16)	3.93* (1 > 3)	2.27 ns	1.41 ns
Vigour	3.30 (.27)	3.42 (.33)	3.78 (.32)	4.19 (.18)	4.18 (.22)	4.47 (.22)	4.65 (.18)	4.46 (.22)	4.57 (.22)	5.48** (3, 2 > 1)	2.75 ns	0.91 ns
Sleeping problems	2.20 (.12)	2.08 (.14)	2.22 (.14)	1.66 (.08)	1.67 (.09)	1.79 (.09)	1.70 (.08)	1.80 (.09)	1.71 (.09)	6.00** (1 > 2, 3)	0.75 ns	1.52 ns

Note. [1] Bonferroni comparisons. *$p < .05$; **$p < .01$.

Figure 1. Ethical strain profiles.