The Path from Ethical Organisational Culture to Employee Commitment: Mediating Roles of Value Congruence and Work Engagement

Mari Huhtala* and Taru Feldt†

Following the Job Demands-Resources model’s motivational process, this study investigates the role of person-organisation fit and work engagement as mediating processes between ethical culture and employee commitment, where ethical culture is seen as an organisational resource. It was expected that the stronger the ethical values and practices are experienced to be, the more compatible employees feel with the organisation. A good person-organisation fit was further hypothesised to act as a personal job resource for the employees, who would consequently experience higher work engagement leading to stronger affective commitment and less turnover intentions. The study used questionnaire data gathered from 270 Finnish school psychologists. The analyses were performed by using SEM and mediation modelling with the bootstrapping method. Ethical organisational culture had a significant positive association with experienced person-organisation fit, which in turn was related to higher work engagement. Both person-organisation fit and work engagement were associated with higher affective commitment and with lower turnover intentions. This study contributes to understanding the mechanisms through which ethical culture affects employee commitment by integrating the concept of person-organisation fit with the Job Demands-Resources model. Organisations can retain committed and motivated workforce through fostering a strong ethical culture, which can support employees’ affective commitment to the organisation.

Keywords: ethical culture; affective commitment; turnover intentions; person-organisation fit; work engagement

Introduction

There is strong empirical evidence that a good fit between the employee and the organisation, particularly a fit between individual and organisational values, relates positively to employees’ affective commitment and intention to stay in the organisation (for meta-analytical reviews, see Kristof-Brown, Zimmerman, & Johnson, 2005; Verquer, Beehr, & Wagner, 2003). However, understanding how person-organisation fit can be achieved, and the psychological processes that can explain why it leads to positive outcomes remain mostly unanswered questions in the literature (Memon, Salleh, Baharomn, & Harum, 2014; Peng, Lee, & Tseng, 2014). Our first aim is to address these gaps in previous research by focusing on a specific organisational resource: ethical culture (i.e., ethical values and practices within the organisation). Ethical culture has previously been studied focusing mainly on ethics-related outcomes, such as unethical behaviour and ethical decision making (Mayer, 2014), and only few studies have looked at whether organisational ethical values can promote person-organisation fit (Andrews, Baker, & Hunt, 2011; Ruiz-Palomino, Martínez-Canas, & Fontrodona, 2013; Valentine, Godkin, & Lucero, 2002). This is a significant shortcoming, because even though it is proposed that employees prefer ethical organisations (Valentine et al., 2002), there is a lack of solid empirical support to this claim.

We will further contribute to the field by investigating a pathway leading from ethical organisational culture to affective commitment and turnover intentions. This answers to the unaddressed issue concerning the nature of the mechanisms that underlie the relationship between ethical organisational culture and employee outcomes (Mayer, 2014). More specifically, we will test the mediating roles of person-organisation value fit and work engagement in this respect. We base our hypothesised model on the Job Demands-Resources theory (Bakker & Demerouti, 2014), and focus on the theory’s motivational process. In sum, we will test an integrative model with a positive attitudinal focus: whether organisations fostering ethical values can retain compatible, engaged, and more committed employees.

In this study we focus on one specific occupational group: school psychologists. Several aspects of their work...
are present also among other human service providers in
the public sector, such as teachers and health-care pro-
fessionals. The work of school psychologists is versatile,
autonomous and challenging, and includes several job
demands which can be a risk for their well-being and
motivation to stay on the job. Working in the public sec-
tor often faced with budgetary pressures, school psycholo-
gists are expected to help a large number of students, and
at the same time they should follow work-related ethical
principles (e.g., American Psychologist Association, 2002)
and provide high quality services. These kinds of compet-
ing values or competing claims (with limited resources to
answer them) can create ethical value conflicts, induce
stress, and reduce work motivation and commitment
(Coldwell, Billsberry, van Meurs, & Marsh, 2008; Thorne,
2010). Investigating whether ethical organisational cul-
ture can associate with a positive, motivational process
among school psychologists can provide results that are
most likely applicable to other human service professions
in public organisations. It will make an important con-
tribution to understanding the processes through which
organisations can support employee commitment start-
ing from the organisation’s ethical values and practices.

Theoretical background and hypotheses
development
This research is built on the interactionist approach to
organisational commitment (Chatman, 1989; Lewin, 1951;
Schneider, 1987). According to this perspective, personal
attributes and organisational (situational or contextual)
factors both influence individual behaviour. This means
that individuals who have a positive perception about
their work environment are more likely to display positive
behaviours. Thus, when employees experience that they
have similar values with the organisation (a high person-
organisation value fit), it increases the likelihood that indi-
viduals will feel more comfortable and competent in their
job, will perform not only their job role effectively but also
go beyond expectations (extra-role behaviours), and feel
more committed to the organisation (Chatman, 1989).

The Job Demands–Resources theory (JD-R theory;
Bakker & Demerouti, 2014) encompasses this interaction-
ist viewpoint, as it includes both situational and personal
antecedents of employee outcomes. The key component of
the theory is that job characteristics can be classified into
job demands (e.g., high work pressure) and job resources
(e.g., social support). These job demands and resources are
the triggers of two fairly independent, parallel processes: a
health impairment process and a motivational process. We
are focusing on the latter, where high job resources fulfill
basic psychological needs, such as the needs for autonomy,
relatedness, and competence (Bakker & Demerouti, 2014).
These resources stimulate work engagement (referring to
a positive, fulfilling, work-related state of mind that is
characterised by vigour, dedication, and absorption’;
Schaufeli, Salanova, González-Romá, & Bakker, 2002),
which promotes positive organisational outcomes such as
commitment or performance.

Our first proposition is that an ethical organisational
culture represents a job resource, which initiates the
motivational process described above. Ethical organisa-
tional culture refers to the ethical quality of a work envi-
nronment, which is defined as the shared values, norms,
and beliefs that can stimulate ethical behaviour (Kaptein,
2008; Treviño & Weaver, 2003). One prominent theory
in the field of business ethics is virtue ethics (Ferrero &
Sison, 2014), according to which virtues foster an intrinsic
motivation that drives successful organisational behav-

ior (Solomon, 2004). A core assumption of virtue ethics
is that moral values, assumptions and beliefs are desir-
able goods in themselves, and realisation of these virtues
brings about individual happiness. Thus an organisation
that has adopted ethical virtues can support human flour-
ishing and excellence (Ciulla, 2004; Weiner, 1993).

Kaptein (2008) has developed the Corporate Ethical
Virtues (CEV) model which covers the most elaborate set
of organisational virtues to date (for a more detailed dis-
cussion about the theoretical rationale and qualitative
analysis behind these virtues, please see Kaptein, 1998,
2008, 2011). These eight virtues include clear and com-
prehensive ethical standards and normative expectations
towards employees (clarity), good ethical role modelling
and integrity from managers (congruence of supervisors
and senior management), adequate resources and practical
conditions that enable ethical actions (feasibility), shared
support, trust and commitment to common organisational
values (supportability), visibility of (un)ethical behaviour
and its consequences (transparency), the possibility to
raise and discuss ethical issues (discussability), and rein-
forcement of ethical behaviour by rewarding for ethical
behaviour and punishing for unethical actions (sanctiona-
bility). Altogether these virtues represent the ethical qual-
ity of the organisational culture, which encourage ethical
behaviour among its members (Kaptein, 2008). Research
has shown that ethical organisational culture has also the
potential to support employee well-being, commitment
and general job satisfaction (for reviews, see Kish-Gephart,
Harrison, & Treviño, 2010; Mayer, 2014). One advantage
of the multidimensional CEV model is that it enables
to investigate whether different virtues have distinct
associations with certain outcomes. This is also our sec-
ondary goal: to assess if some of the virtues are more sig-
nificant than others when it comes to supporting a good
fit between the employee and the organisation. This can
have implications when allocating resources in organisa-
tions: those ethical virtues that turn out to have a primary
role should be prioritised and strengthened when aiming
to retain compatible and committed employees.

Our second proposition is that ethical virtues (as job
resources) associate positively with employees’ experi-
ences of commitment (stronger affective commitment and
less turnover intentions). Based on the virtue ethics the-
ory we suggest that ethical organisational culture has the
potential to promote employee experiences of fulfilment
of their psychological needs to feel comfortable within
the organisation and competent in their work-role, which
is a key component in promoting affective commitment
(Meyer & Allen, 1987). Affective commitment is one of
the most studied components of organisational commit-
ment (Meyer, Stanley, Herscovitch & Topolnytsky, 2002),
referring to emotional attachment to and personal identification with the organisation, being involved in, and enjoying membership in it (Allen & Meyer, 1990). Compared to other forms of organisational commitment, employees with strong affective commitment stay in the organisation because they want to, whereas employees with strong continuance commitment do so because they need to, or with strong normative commitment because they ought to (Allen & Meyer, 1990). Previous studies have shown that employees who feel that their values match the values of their employing organisation are more satisfied with their jobs, identify themselves with the organisation, and seek to maintain the employment relationship (Edwards & Cable, 2009; Kristof-Brown et al., 2005; Verquer et al., 2003). Only few empirical studies have studied the role of organisational ethics in supporting employee commitment (for a review, see Mayer, 2014), finding that employees report stronger organisational commitment when they perceive to be working in an ethical organisation.

Those employees who experience strong affective commitment can be hypothesised to remain with their organisation because they want to (Allen & Meyer, 1990), thus correlating with less turnover intentions and actual turnover, as found in a meta-analysis by Meyer et al. (2002). Also according to the attraction–selection–attrition model (ASA; Schneider, 1987) individuals are expected to be attracted to and seek to work for organisations with values and preferences that are aligned with their personal values (Goldstein & Smith, 1995). As a result of this attraction–selection–attrition cycle, employees who are willing to stay with the organisation have less value-related conflict and more similarity in preferences and goals, and thus more positive attitudinal-related outcomes, leading to less turnover intentions (Goldstein & Smith, 1995). The empirical evidence pertaining to the association between ethical organisational values and turnover intentions is also scarce, but gives tentative support linking ethical values and actions (Coldwell et al., 2008; Jose & Thibodeaux, 1999; Laufer & Robertson, 1997; Vidaver-Cohen, 1998), compared to less ethical work environments. However, empirical evidence of the association between ethical organisational values and person-organisation fit is still scarce (Andrews et al., 2011; Ruiz-Palomino et al., 2013; Valentine et al., 2002). Because the Corporate Ethical Virtues (Kaptein, 2008) include such characteristics as shared trust, support, and resources for ethical behaviour, we expect in line with the other theorists that most individuals will find a good fit with an organisation with a strong ethical culture.

Hypothesis 2: Ethical organisational culture will be positively associated with perceptions of person-organisation value fit.

As it has been repeatedly found in previous research (meta-analyses; Kristof-Brown et al., 2005; Verquer et al., 2003), we further propose the following:

Hypothesis 3: Value fit will be a) positively associated with affective commitment and b) negatively associated with turnover intentions.

As the fourth proposition of our study we hypothesise a positive association to exist between value fit and work engagement, which is based on the value-congruency perspective. As Van Den Broeck, Van Ruysseveldt, Smulders, and Witte (2011) summarise, ‘the fit between employees’ personal values and the characteristics of their jobs may be a crucial determinant of their well-being’ (p. 582). Both organisational and individual values are fundamental and relatively enduring characteristics (Kristof, 1996), and when they are experienced to be in congruence, it is likely to lead to increased compatibility with the organisation (Greguras & Diefendorff, 2009). As Rich, Lepine, & Crawford (2010) theorise, organisational values communicate appropriate and expected work role performances to the employee, whereas individual values reflect personal behavioural standards and desires involved in one’s self-image. Thus, when a good fit exists, employees perceive that organisational role expectations are congruent with their preferred self-images. As a result they will find more meaningfulness in their work, which leads to higher work engagement (Rich et al., 2010). Surprisingly, Rich and colleagues remain thus far the only ones who have explored the possibility that value congruence increases work engagement. Based on the value-congruence perspective we posit the following:

Hypothesis 4: Value fit will be positively associated with work engagement.
As for the final link and fifth proposition in our suggested integrative model, we expect work engagement to associate with stronger affective commitment and less turnover intentions. As theorised by Bakker, Albrecht, and Leiter (2011) and Fleck and Inceoglu (2010), engagement is a distinct motivational construct from commitment and turnover intentions, and the latter are better conceptualised as outcomes of engagement. There is also research evidence suggesting that work engagement may be a central mechanism explaining the connection between the working environment and a range of behavioural and attitudinal outcomes (e.g., Alves, Shantz, Truss, & Soane, 2013; Boon & Kalshove, 2014; Christian, Garza, & Slaughter, 2011; Scrima, Lorito, Parry, & Falgares, 2014), and especially concerning (higher) commitment and (lower) turnover intentions (Halbesleben, 2010). As work engagement is characterised by a high level of energy and strong identification with one’s work, engaged employees are more likely to be satisfied with their job and with working for their organisation, and psychologically and physically devoted to their work (Yalabik, van Rosenburg, Kinnie, & Swart, 2014). They are also more likely to remain with the organisation for a longer period of time (Schaufeli & Bakker, 2004). Based on the aforementioned theoretical claims and empirical evidence, we pose the following hypotheses:

Hypothesis 5: Work engagement will be a) positively associated with affective commitment and b) negatively associated with turnover intentions.

Finally, we hypothesise a mediating link from ethical culture to commitment, which integrates organisational ethics with one of the leading job stress and well-being theories, namely, the JD-R theory (Bakker & Demerouti, 2014). In line with the JD-R theory’s motivational process, we propose that ethical culture acts as a job resource that associates with higher value fit (a personal job resource) and higher work engagement (a personal motivational mechanism), and finally associates with stronger employee commitment.

Hypothesis 6: Value fit and work engagement will mediate the relationship between a) ethical organisational culture and affective commitment and b) ethical organisational culture and turnover intentions.

Method
Participants and procedure
This study is a part of the research project School psychologists’ occupational well-being, done in collaboration with The Finnish Psychological Association. The data of this study was collected among Finnish school psychologists in the spring of 2014. A link to an electronic questionnaire was sent via email to all psychologists who belonged to the Finnish Psychological Association, had given their email address, and had reported school psychology as their occupational field. There are approximately 4700 certificated psychologists working within different subfields of psychology in Finland, of whom over 90% belong to the Finnish Psychological Association (2015), so this approach provided a relatively representative sample of the target group.

The questionnaire link was sent to altogether 548 school psychologists, of whom ten could not be contacted because of a non-active email address. The email included an explanation about the aims of the research, and a short description about the possibility to participate both to a general survey and a diary study, which included two online surveys per week (on Mondays and Fridays) for a three-week period. The general survey investigated the ethical dimensions of school psychologists’ work and their well-being, whereas the diary study focused on the school psychologists’ experiences of ethical strain during the work days and recovering from the strain during the weekends. The email highlighted voluntary participation in both studies and guaranteed the respondent’s anonymity. Only the general survey data was used in the current research. From the 538 psychologists who were contacted, 270 responded to the general survey questionnaire (response rate 50.2%). Age and gender were the only available background information concerning all the contacted psychologists. The attrition analyses comparing the participants with the whole sample showed that there were no differences between them in terms of age, χ²(8) = 10.48, ns; or gender, χ²(1) = 1.96, ns.

Thus, the final sample consisted of 270 school psychologists. The majority of the participants were women (94.4%) and their average age was 38.6 years (range 25–64, SD = 9.92). Of the participants 80.8% worked in municipal educational administration and 13.0% in municipal social administration (others, 6.1%, worked in special education schools or in child and family services, for example), and the amount of pupils in their area of responsibility was on average 1159 (range 80–5000, SD = 640.42). The participants worked mostly full time (77.4%) with a permanent contract (77.8%). The participants had worked with the same employer on average 6.27 years (range 0–38, SD = 7.41) and their weekly working hours were on average 36.57 (range 8–50, SD = 4.83).

Measures
Ethical culture was measured using the shortened, 32-item version (DeBode, Armenakis, Field, & Walker, 2013) of the Corporate Ethical Virtues questionnaire (Kaptein, 2008). The scale includes eight dimensions, each measured with four items: clarity (e.g., “The organisation makes it sufficiently clear to me how I should deal with confidential information responsibly”), congruency of supervisors (e.g., “My supervisor sets a good example in terms of ethical behaviour”), congruency of senior management (e.g., “The conduct of the Board and (senior) management reflects a shared set of norms and values”), feasibility (e.g., “I have adequate resources at my disposal to carry out my tasks responsibly”), supportability (e.g., “In my immediate working environment, a mutual relationship of trust prevails between employees and management”), transparency (e.g., “If a colleague does something which is not permitted, my manager will find out about it”), discussability (e.g., “In my immediate working environment, there is adequate opportunity to discuss unethical conduct”), and...
sanctionability (e.g., “In my immediate working environment, ethical conduct is rewarded”). Participants rated these items on a Likert scale from 1 (strongly disagree) to 6 (strongly agree), a higher score referring to a higher level of ethicality. The eight-factor structure of the original, 58-item scale, including a second-order factor for overall ethical culture has been shown to be valid among a managerial sample (Huhtala, Feldt, Lämsä, Mauno, & Kinnunen, 2011), and the factorial group invariance has been supported by a previous study using four organisational samples (Kangas, Feldt, Huhtala, & Rantanen, 2013). The shortened version has been validated in two previous studies (DeBode et al., 2013; Novelskaite & Pucetaite, 2014).

Value fit was assessed with items from the perceived fit measure developed by Cable and DeRue (2002). The full measure with a three-dimensional structure has been found valid among two organisational samples (Cable & DeRue, 2002). We used three items that measure person–organisation value congruence (e.g., “My personal values match my organization’s values and culture”) using a 7-point scale (1 = strongly disagree, 7 = strongly agree), higher mean scores indicating a better value fit.

Work engagement was measured with the short version of the Utrecht Work Engagement Scale (UWES-9, Schaufeli, Bakker, & Salanova, 2006). The short version has shown good internal consistency and test-retest reliability (Schaufeli et al., 2006; Seppälä et al., 2009), and better factorial validity than the longer version when studied with Finnish occupational groups (Seppälä et al., 2009). The UWES-9 includes three dimensions that reflect the underlying dimensions of engagement: vigour (3 items; e.g., “At my job, I feel bursting with energy”); dedication (3 items; e.g., “My job inspires me”); and absorption (3 items; e.g., “I am immersed in my work”). Responses were given on a 7-point frequency scale from 1 (never) to 7 (every day), higher mean scores indicating a higher level of work engagement.

Affective commitment was assessed with the Affective commitment scale (Allen & Meyer, 1990), including five items (e.g., “This organisation has a great deal of personal meaning to me”). The items were rated on a 5-point scale ranging from 1 (completely disagree) to 5 (completely agree), higher mean scores indicating higher commitment.

Turnover intentions were measured with one item: “It is likely that I will change my job in the near future”. Responses were given on a 7-point scale from 1 (completely disagree) to 7 (completely agree), higher score reflecting higher turnover intentions. The use of a single item is justifiable here, as the intention for turnover can be seen as a construct which is unidimensional (a conscious will to look for a job outside the current organisation), clear to the respondent, and sufficiently narrow (Sackett & Larson, 1990) to be measured with one item.

We included age, full-time work (0 = no, 1 = yes), and form of employment contract (1 = permanent, 2 = fixed term) as potential background variables. These variables were chosen based on previous empirical evidence, showing that younger employees working with a fixed-term contract have more turnover intentions (e.g., Mauno, Kinnunen, Mäkikangas, & Näätä, 2005) and lower job commitment (e.g., De Cuyper et al., 2008) than older, permanent workers. We did not include gender as a background variable, as a clear majority of the respondents were women. The descriptive information regarding all the study variables is displayed in Table 1.

Analytical strategy
All of the statistical analyses were performed using the Mplus (Version 7, Muthén & Muthén, 1998–2012) using the Structural Equation Modelling (SEM) methodology. SEM includes two submodels: a measurement model (which defines the relations between observed and unobserved latent variables) and a structural model (which defines the relations between the latent variables; Byrne, 2013). Because the shortened CEV scale (DeBode et al., 2013) was used for the first time in a Finnish context, we began by testing the fit of the CEV measurement model to our data using confirmatory factor analysis (CFA) with robust standard errors (MLR). We estimated a second-order factor model, which included eight first-order virtue factors and a higher level CEV factor (see Kapteyn, 2008) and compared it with a null model (all intercorrelations between factors set to zero) and a one-factor model (all items set to one factor). When comparing the most restricted model to the previous, less restricted model, we used the Satorra-Bentler scaled difference chi-square test (Satorra & Bentler, 1999), which produces a nonsignificant loss of fit between the models if the restriction assumption is supported. After establishing the fit of the CEV model, we tested the fit of one measurement model including all the latent study variables simultaneously (the one-item measure for turnover intentions and background variables were excluded).

After establishing the fit of the measurement models, we tested altogether four different mediation models (structural models) using MLR estimation to find the best fitting model. First, a null structural model (all the parameters between the constructs were fixed at zero), where no associations were posited between the study constructs. Second, a full mediation model was estimated, with no direct paths from ethical culture or from value fit to affective commitment and turnover intentions. This was done to be able to compare the fit of the hypothesised partial mediation model with this fully mediated model. Third, we estimated a partial mediation model, where direct paths from value fit to affective commitment and turnover intentions were included to the model. Fourth, we tested a second partial mediation model where also the direct paths from ethical culture to commitment and turnover intentions were estimated. We used latent factors in the SEM models, but because of the large number of parameters in the model in relation to our sample size (see, e.g., Marsh, Hau, Balla, & Grayson, 1998; there should be a 5:1 ratio of sample size to number of free parameters), we used mean sum scores when constructing the ethical culture and work engagement factors instead of a two-level factor structure.

The statistical significance of the mediating effects was tested by using the bootstrapping procedure. Instead of the Baron and Kenny’s (1986) traditional approach (which is based on regression analyses) we used bootstrap sampling
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<td>5 (1–5)</td>
<td>3.18 (0.86)</td>
<td>.83</td>
<td>.45***</td>
<td>.35***</td>
<td>.28***</td>
<td>.37***</td>
<td>.42***</td>
<td>.21**</td>
<td>.32**</td>
<td>.31***</td>
<td>.45***</td>
<td>.54***</td>
<td>.57***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Turnover intentions</td>
<td>1 (1–7)</td>
<td>3.92 (1.83)</td>
<td>-</td>
<td>.32***</td>
<td>.24***</td>
<td>.20**</td>
<td>.34***</td>
<td>.19**</td>
<td>.21**</td>
<td>-.15*</td>
<td>-.31***</td>
<td>-.51***</td>
<td>-.32***</td>
<td>-.60***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Age</td>
<td>1 (25–64)</td>
<td>38.62 (9.92)</td>
<td>-</td>
<td>.16**</td>
<td>.06</td>
<td>.06</td>
<td>.18**</td>
<td>.04</td>
<td>.05</td>
<td>.03</td>
<td>.06</td>
<td>.09</td>
<td>.06</td>
<td>.19**</td>
<td>.24***</td>
<td>-.38***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Employment contract</td>
<td>1 1–2</td>
<td>- - - -</td>
<td>-</td>
<td>-.14*</td>
<td>.01</td>
<td>-.03</td>
<td>-.07</td>
<td>-.09</td>
<td>-.07</td>
<td>.02</td>
<td>.06</td>
<td>-.05</td>
<td>-.14*</td>
<td>-.07</td>
<td>-.20**</td>
<td>.33***</td>
<td>-.27***</td>
<td></td>
</tr>
<tr>
<td>16. Full-time work</td>
<td>1 0–1</td>
<td>- - - -</td>
<td>.06</td>
<td>.03</td>
<td>.03</td>
<td>.10</td>
<td>-.00</td>
<td>.14*</td>
<td>.01</td>
<td>.09</td>
<td>.07</td>
<td>.08</td>
<td>.05</td>
<td>-.02</td>
<td>-.06</td>
<td>.06</td>
<td>.05</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Descriptive Results for Study Variables (N = 270).

Note. CLAR = Clarity; COSU = Congruency of supervisor; COSM = Congruency of senior management; FEAS = Feasibility; SUPP = Supportability; TRAN = Transparency; DISC = Discussability; SANC = Sanctionability; CEV = Corporate ethical virtues (total ethical culture); employment contract (1 = permanent, 2 = fixed term); full-time work (0 = no, 1 = yes). *p < .05; **p < .01; ***p < .001, two-tailed.
(MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2004) in order to assess the mediation hypothesis with more statistical rigour. Bootstrapping is a reliable method for testing the significance of indirect effects, as it generates repeatedly drawn random samples with replacements from the original sample (1,000 resamples in the current study). This resampling is one way to construct accurate confidence intervals (CIs). The CIs include estimates of the entire sampling distribution for the effects, and when the interval does not include a value zero, the test statistic significantly differs from zero (Preacher & Hayes, 2004). The benefits of this approach are that it does not require a normal distribution of variables, it provides high statistical power, and it provides a significance test for the total indirect association (MacKinnon et al., 2004).

Results

Descriptive results

Means, standard deviations, Cronbach’s alphas and correlations for all study variables are presented in Table 1. All the CEV dimensions had significant positive correlations with value fit, indicating that the stronger the ethical culture, the higher the experiences of perceived fit. However, only clarity, congruency of supervisors, feasibility and supportability had significant positive correlations with work engagement dimensions: the stronger these virtues, the higher experienced work engagement among the employees. All the ethical virtues had significant positive correlations with affective commitment, and negative correlations with turnover intentions. Thus, the stronger the ethical culture, the more employees reported affective commitment towards their organisation and the less they reported turnover intentions.

Measurement and mediation models

The second-order factor model for CEV provided a good fit to the data \( \chi^2(456) = 880.56, p < .001, \text{CFI} = 0.91, \text{TLL} = 0.91, \text{RMSEA} = 0.060, \text{SRMR} = 0.063 \). The results from the Satorra-Bentler \( \chi^2 \) test indicated that the second-order factor model showed a better fit to the data than the null model \( \chi^2(464) = 1723.62, p < .001, \Delta \chi^2(8) = 627.83, p < .001 \) or one-factor model \( \chi^2(464) = 2442.20, p < .001, \Delta \chi^2(8) = 674.47, p < .001 \). Thus, both the null model and one-factor model were rejected, and the second-order factor measurement model was found to fit the data best.

The fit indices for the full measurement model and all of the tested mediation (structural) models are presented in Table 2. We used the Satorra-Bentler scaled \( \chi^2 \) difference test (Satorra & Bentler, 1999), which tests the statistical difference between two nested models; a restricted model with less free parameters and more degrees of freedom, and a less restricted model with more free parameters and less degrees of freedom. If the \( \chi^2 \) test is significant, the restricted model should be favoured and the less restricted model rejected. As seen in Table 2, based on the goodness-of-fit indices (CFI, TLI, RMSEA and SRMR) and the \( \chi^2 \) test significance, the null model was rejected in relation to both the measurement model and the full mediation model. However, both the full mediation model and the partial mediation model 2 were rejected in relation to the partial mediation model 1, which was selected as the best-fitting model.

In the following step we added the following covariates to the model in order to control for their effects in estimating the final results: age (in years), employment contract \((1 = \text{permanent}, 2 = \text{fixed-term})\), and full-time job \((0 = \text{no}, 1 = \text{yes})\). The fit indices for this model were: \( \chi^2(218) = 518.99, p < .001, \text{CFI} = 0.91, \text{TLL} = 0.89, \text{RMSEA} = 0.073, \text{SRMR} = 0.070 \), indicating an acceptable model fit. As shown in Figure 1, all estimated paths except from employment contract to affective commitment and to turnover intentions were statistically significant. The stronger the ethical culture was evaluated, the higher the value fit, which was related to higher affective commitment and less turnover intentions. Higher value fit was also associated with higher work engagement, which also had significant relationships with higher commitment and less turnover intentions. Thus, hypotheses 2, 3a, 3b, 4, 5a, and 5b were supported.

Our results showed that the true standardised total indirect effect from ethical culture was estimated to lie between 0.081 and 0.239 for affective commitment \((\beta = 0.149)\), and between -0.240 and -0.060 for turnover intentions \((\beta = -0.129)\) with 95% confidence. Because the value

<table>
<thead>
<tr>
<th>Tested models</th>
<th>( \chi^2(\text{df}) )</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>Model comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1: Measurement model</td>
<td>287.06 (146)</td>
<td>.95</td>
<td>.94</td>
<td>.061</td>
<td>.060</td>
<td>–</td>
</tr>
</tbody>
</table>
| M2: Null model\(^a\)     | 755.82 (171)             | .78   | .76   | .116  | .276 | M2 vs. M1: 478.28 (25)**
| M3: Full mediation model | 407.46 (166)             | .91   | .90   | .075  | .108 | M2 vs. M3: 381.66 (5)**
| M4: Partial mediation model 1 | 367.53 (164)             | .93   | .91   | .070  | .064 | M3 vs. M4: 33.66 (2)**
| M5\(^b\): Partial mediation model 2 | 362.25 (162)             | .93   | .91   | .069  | .061 | M4 vs. M5: 5.27 (2) ns |

Table 2: Fit Indices for Measurement and SEM Models.

Note: \(^a\)Satorra-Bentler difference test; **\(^b\) p < .001.

\(^a\)Models M2–M5 represent SEM structural models (relations among latent variables, which have first been validated using CFA; measurement model M1).

\(^b\)All hypothesised direct paths are estimated in the model.

\(^c\)Only the direct paths from value fit to affective commitment and turnover intentions are estimated in the model.
zero was not included in the 95% confidence intervals, we can conclude that the indirect effects were significantly different from zero at \( p < .05 \), supporting hypotheses 6a and 6b.

In the final phase we investigated whether individual ethical virtues would have different associations with the hypothesised outcomes. Because of the high correlations between the eight dimensions of the CEV model, we could not estimate one model including all the different dimensions simultaneously as the results could have been affected with multicollinearity. Thus, we estimated eight individual mediation models (using latent factors for each virtue based on observed items) separately and compared their results with each other in a descriptive manner (by looking at the magnitude of the estimates regarding each individual model and how they differed from estimates in the other seven models). These results are shown in Figure 2. For those results that remained mostly identical in all of the eight tested models, a range between the minimum and maximum range for the estimates are shown. All CEV estimates are shown separately. (The eight SEM models with all factor loadings, \( \beta \)-coefficients, fit indices,

**Figure 1:** Partial mediation model with total ethical culture.

**Figure 2:** Individual partial mediation models for each virtue.

1The range of values is shown for estimates that remain similar across all eight models. Significantly differing estimates are shown separately. *Clarity; *Congruency of supervisors; *Congruency of senior management; *Feasibility; *Supportability; *Transparency; *Discussability; *Sanctionability.
and bootstrap-based confidence intervals and estimates are available on request from the authors.) Of the eight ethical virtues, feasibility, supportability, discussability, and sanctionability had the strongest associations with value fit. All of the significant results also held when using the bootstrapping procedure (zero was not included in any of the significant results’ confidence intervals).

Discussion
The aim of this study was to test an integrative two-media
tor model including the associations between ethical cul
ture, perceived value fit, work engagement, affective com
mitment and turnover intentions. We demonstrated the role of ethical culture as an organisational resource that supports value fit between the employee and the organisation. We also integrated ethical virtues with the psycho
logical JD-R theory (Bakker & Demerouti, 2014), bringing more understanding about the mediating role of work engagement as a personal motivational mechanism in the relationship between ethics and employee commitment. We found support for a partially mediated connection, where value fit had also direct associations with stronger affective commitment and less turnover intentions.

Our study supports the overall positive connection between ethical culture and value fit, which adds to the so far scarce empirical findings on this relationship (Andrews et al., 2011; Ruiz-Palomino et al., 2013; Valentine et al., 2002). Ruiz-Palomino et al. (2013) remain the only ones who have studied this connection using a multidimen
tional measure for ethical culture, who also found that person-organisation fit partially mediated the associa
tion between ethical culture and employee commitment. However, they did not test separate associations using different ethical culture dimensions, and they settled for a conclusion that employees have only a global impres
sion of ethical culture. Our study contradicts this finding, and brings a more detailed contribution to the literature about the differences between different ethical culture dimensions, as we will describe next.

We found that sanctionability, feasibility, discussability and supportability had the most significant associations with school psychologists’ experienced value fit with their organisation. The important role of having suffi
cient resources allocated to make ethical behaviour pos
sible (i.e., feasibility; such as enough time, money and knowledge to act ethically), possibilities to discuss ethical issues (discussability) and to get support from the work community (supportability) in relation to value fit is easi
ly understandable. School psychologists face multiple job demands such as balancing the needs and rights of chil
dren between the expectations and authority of parents and the purposes of the school. They often work as the only representative of their profession among teachers and other school staff, interacting with parents, teachers, and students, which can bring more pressure to their deci
sion making. Although there are codes of ethics and differ
ten practical guidelines available for school psychologists (e.g., American Psychologist Association, 2002), they are still insufficient to cover all the complex decision mak
ing situations. Therefore an organisation that provides an open and supportive culture can be experienced as an especially compatible work place in terms of individual value fit. In addition, school psychologists who work in the public sector can often face economic restrictions such as scarce resources leading to workload and time pressure. Thus, it is comprehensible that they feel most compatible with organisations that can provide adequate resources for doing their job according to personal and professional values and ethics. Feasibility has had the most significant associa
tions also with employee well-being in previous studies (Huhtala et al., 2011; Huhtala, Tolvanen, Mauno, & Feldt, 2014), and support from supervisors emerged as the most influential contributor to school psychologists’ well
being in one previous study (Huibner, 1994).

An interesting finding was the strong positive associa
tion between the virtue of sanctionability and value fit. This result implies that school psychologists feel espe
cially compatible with organisations that provide rewards for ethical conduct, and where unethical behaviour is punished. It is possible that as a professional group, psy
cologists have a heightened moral awareness (as they often work with vulnerable individuals in sensitive situa
tions) which leads them to value organisations that dem
onstrate clear appreciation of ethical conduct and hold employees responsible for their actions. This can signal to the employees that the organisation is truly acting according to a value-based way, where ethical behaviour is acknowledged and rewarded, and unethical conduct is not tolerated. Ethical values are not only a part of official statements or just talked about, but they are actually prac
ticed and followed through.

A major contribution of our study was to bring new understanding about the mechanisms that explain why a good value fit can lead to positive employee outcomes. We found support to the mediating role of work engagement, which acted as a motivational state between good value congruence and commitment (affective commitment and turnover intentions), as we theorised based on the JD-R model. This supports the previous finding by Alves et al. (2013), who found that work engagement acted as a mech
anism between HRM practices and individual behaviour. Employees who had a positive perception of their organisa
tion’s HRM practices were more likely to be engaged with their jobs and were thus more likely to remain with the organisation. As Alves et al. (2013) suggest, ‘more research is needed to explore the features of the working environment that may be relevant in directing and focus
ning individuals’ levels of engagement in positive ways’. We found that ethical organisational culture can be one such feature. Furthermore, Jenkins and Delbridge (2013) have argued that work engagement can be supported through a ‘soft approach’: by creating a positive work environment that promotes employee engagement in itself, instead of a ‘hard’ approach, which strives to increase engagement just to gain competitive advantage through increased pro
ductivity. Our study showed that ethical organisational culture can be this kind of a soft organisational resource, leading to stronger employee identification with their organisation (i.e., a better value fit) and further to stronger work engagement.
Finally, a methodological contribution of this study was to test the factorial validity of a new, shortened version of a scale for measuring the CEVs (DeBode et al., 2013). So far only one study (Novelskaite & Pucetaite, 2014) has empirically tested this instrument, resulting in some suggested changes in the scale structure within a Lithuanian context. We found support to the original, eight-factor structure of the shortened CEV scale, and it can thus be recommended for future research use. The shortened scale can be more easily and broadly applicable, requires less time from the respondents, and can hopefully provide better response rates and reduce the likelihood of attrition in future studies.

**Evaluation of the study and avenues for future research**

Our study was a new opening towards integrating organisational ethics with work psychology, and thus bringing new insights to support employee well-being and commitment. We showed that ethical culture can support employee’s experiences of personal fit to the organisation, which can initiate an affective-motivational process. Employees who perceive their organisation to carry out ethical values and practices experience better value fit with their workplace. Subsequently, they experience higher work engagement, stronger affective commitment with the organisation and less turnover intentions. This is an important finding for organisations and managers, because it gives evidence of the positive effects that ethical values and practices can have on an individual employee level, which then generates stronger commitment, turning also into an organisational advantage. By fostering ethical virtues organisations can attract employees who feel that their personal values are aligned with those of the organisation, and generate positive attitudes and behaviours in employees.

There are nevertheless some limitations that should be considered when applying the study results. Firstly, our sample covers only one occupational group, which may limit the generalizability of the results. However, as we mentioned in the introduction, there are several aspects of school psychologists’ work which are present among other human service professions in public organisations. Thus, the main findings of this study are presumably applicable to those vocations. Future studies should nevertheless investigate whether our findings hold among other occupational samples, and both in the public and private sector. Secondly, our research was based on a cross-sectional single source data. We employed some procedural remedies (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) to address problems that can arise from having a common rater: We used measures from established questionnaires, which were found to have good psychometric properties, and the items in different measures had different scale anchors. This reduces the risk of adopting a personal response style (e.g., midpoint versus extreme response style) regardless of the item content. The most evident limitation with our cross-sectional data is that longitudinal processes including causality inference cannot be made. The advantage of future studies with longitudinal designs would be that they can be used to examine complex causal relations. For example, does ethical culture support stronger commitment and lead to less turnover intentions, or do employees already having low affective commitment or clear turnover intentions give lower ratings of ethical culture based on their attitudinal state of mind?

Thirdly, it is possible that the participants have preferred socially desirable answers. This social desirability bias could be addressed in the future by using multi-rater questionnaires or more objective measures such as actual turnover rates. Regarding our current study, it can also be assumed that the school psychologists were motivated to provide unembellished answers, as they were answering with complete anonymity. They were also promised to get preliminary descriptive results and feedback from the study based on their answers (on a group mean level) during the Finnish school psychologists’ in-service training day. Finally, although it is recommended to using a balanced approach when applying the JD-R model (Schaufeli & Taris, 2014), we focused only on the motivational process, and did not include the health impairment process in this study. Thus the negative employee effects (e.g., strain, burnout, health impairment) of working in an unethical organisation with possibly low levels of fit remain to be investigated in further studies.

Another important avenue for future research is investigating potential non-linear relationships regarding ethical culture and person-organisation fit. As suggested by Kaptein (2011), and following Aristotle’s original idea of virtue ethics (see Solomon, 2004), virtue is the mean between two extremes, for example clarity being the desirable mean between ambiguity and rigidity. When embedding this framework into the JD-R model, an important question arises: Can we find curve-linear associations, where ethical virtues turn from a positive resource into a more negative job demand when moving from the desired mean towards the excessive or deficient extremes? Also person-organisation fit could be investigated in terms of optimal levels of fit. As Chatman (1989) has theorised, extremely high levels of fit could lead to ineffective individual and organisational behaviour such as conformity, inertia, and reduced innovation and adaptability. This idea of excessive fit has also been expressed by Kristof (1996), who proposed that organisations employing only people with high levels of fit will become extremely homogeneous. This homogeneity, in turn, can be a risk for problems such as upheld conformity and rigidity, which discourages the organisation from reacting to changes. Longitudinal studies would enable these kinds of non-linear analyses in the future.

**Conclusions**

The most important message of this study is that ethical values and practices should be understood as an organisational resource, which can trigger a positive, motivational process among employees. When organisations and managers invest effort to ethical aspects, it can contribute to increased work engagement, increased affective employee commitment and less turnover intentions. Based on our
results, organisations should especially pay attention to their reward and punitive systems, which should endorse ethical values. This can be an important way to attract employees who will find a good fit with the organisation, and further developing into the motivational process. When employees perceive that their organisation truly puts virtues into action, they are more likely to invest time, energy and involvement in their work, leading to beneficial outcomes for both the individual employee and the whole organisation.

Competing Interests
The authors declare that they have no competing interests.

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