



**Strengths Feedback and Turnover Intentions: The mediating role of Work Engagement and Trust as a moderator.**

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## **Abstract**

This study examines the effects of strengths feedback on engagement and turnover intentions and the moderating effect of trust. It was expected that strengths feedback from a manager to his/her employee would enhance the employee's engagement and in turn lower the turnover intention. Also, it was expected that the relationship between strengths feedback and engagement was moderated by the trust that the employee has in his/her manager. To test these hypotheses, a longitudinal research was set up with an experimental (N=41) and a waitlist-control group (N=38), where the experimental group received feedback from their manager on their strengths. The respondents received a pre-intervention, a post-intervention and a follow-up questionnaire in order to gather data. Although promising results were obtained from the analyses, no significant results were found in the regression analyses to confirm the hypotheses. Finally, limitations, directions for future research and theoretical and practical implications are discussed.

Key words: *strengths feedback intervention, strengths-based approach, positive psychology, retention, turnover intentions, engagement*

## **Introduction**

Turnover, and particularly voluntary turnover, has been subject of interest for organisational psychologists for a long time (Griffeth & Hom, 2001). Recruitment and selection are costly; it is estimated that the costs accompanied with one employee leaving the company can rise up to one year of pay and benefits (Rainlall, 2004). Therefore, it is no wonder that organisations try their very best to retain their employees (Mitchell, Holtom, Lee, Sablinski & Erez, 2001). This study aims to help the retention of employees by using a strengths feedback intervention, a positive psychology intervention where employees receive feedback from their manager on their strengths. This intervention will be explained and discussed later.

Extensive research has been done regarding retention (Frydman, 2009; Gerhart, 2010; Rynes, Gerhart & Minette, 2004; Chiu, Luk & Tang, 2002). To retain employees, a distinction can be made between affecting an employee's intrinsic or extrinsic motivation to stay (Ryan & Deci, 2000). A well-known extrinsic motivator is the monetary incentive, in the form of bonuses or higher wages (Gerhart & Rynes, 2003). Other extrinsic motivators are extra days off or other work arrangements that keep the work life balance intact. Although these extrinsic motivators help the retention of employees, they are often accompanied with high costs (Cascio, 1991). Organisational psychologists therefore are interested in ways to improve retention by affecting the intrinsic motivation (Osterman, 1987). Empirical research has already found that a good employer-employee relationship can enhance the intrinsic motivation (Robinson, Kraatz & Rousseau, 1994), as well as meaningful work and support (Hausknecht, Rodda & Howard, 2009).

In the last decade there has been a shift within the field of organisational psychology towards positive psychology. This field of research focuses on a person's strengths rather than their deficiencies and weaknesses (Seligman & Csikszentmihalyi, 2000). Seligman (1999) argued that positive psychology "is the scientific study of optimal human functioning. It aims to discover and promote the factors that allow individuals and communities to thrive". It is believed that positive psychology has a positive impact on a person's well-being and engagement. Employees who are engaged to the organisation they work for will not feel the urge to switch jobs, whereas employees who are disengaged will feel like there is more to life than their current job (Seligman & Csikszentmihalyi, 2000). From this study we can conclude that they found a negative effect of engagement on turnover intention. Therefore, the current study argues that a strengths intervention in the form of strengths feedback can reduce

turnover intentions through engagement. Moreover, satisfaction and support from colleagues or employer enhances the intrinsic motivation of employees (Schaufeli & Bakker, 2004). The current study elaborates on the shift towards positive psychology and tests the effects of strengths feedback. This intervention is seen as a positive activity for the employee. Getting feedback from your supervisor on your strengths is hypothesized to affect an employees' emotions in a positive way, since employees gain self-confidence through this. This could cause a state of engagement (Meyers & van Woerkom, 2016), which in turn could enhance an employees' intrinsic motivation and thus their turnover intention.

This study aims to find out whether strengths feedback, a positive psychology intervention, causes a state of high engagement, which in turn decreases an employees' turnover intentions. Moreover, it is interesting to know whether the amount of trust an employee has in his/her manager moderates the relationship between strengths feedback and engagement. More trust of an employee in his/her manager could enhance the positive effect of strengths feedback on engagement. Strengths feedback could lead to more engagement and, in turn, lower turnover intentions, but this effect might be reduced if the employee does not trust his supervisor. When an employee does not feel like his supervisor is sincere or honest, it is likely that the state of engagement expected from the strengths feedback will be diminished. All these factors taken together can be formulated in the following research question:

*To what extent does strengths feedback lead to an increased state of engagement and lower turnover intentions, and to what extent does the amount of trust affect this relationship?*

The hypothesized model for this study is shown in figure 1.

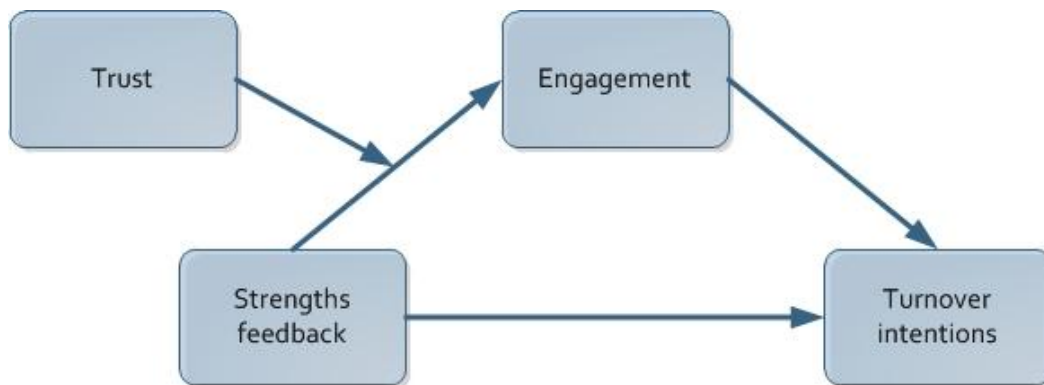


Figure 1 Hypothesized model

## **Strengths and strengths feedback**

There are many definitions of strengths found in scientific literature. Buckingham and Clifton (2001), for example, define a strength as a combination of talents, knowledge and skills. Others define strengths as “potentials for excellence” (Biswas-Diener, Kashdan & Minhas, 2011). What most definitions have in common, is that they all see a strengths as a combination of a genetical aspect and a developable aspect (Biswas-Diener et al., 2011). Moreover, Meyers & van Woerkom (2016) argue that using a strength is “intrinsically motivated, enjoyable, engaging, satisfying, energizing and beneficial to one’s health”.

Strengths interventions are a rather new field of study, and come in many different forms. In this study the definition of strengths interventions, as described by Quinlan, Swain and Vella-Brodrick (2012, p. 1147), is used:

A process designed to identify and develop strengths in an individual or group. Interventions encourage the individual to develop and use their strengths, whatever they may be. Their goal is to promote well-being or other desirable outcomes (e.g. academic efficacy) through this process.

Some interventions have already been tested. For example, Meyers, van Woerkom, de Reuver, Bakk & Oberski (2015) researched the effects of a strengths intervention that was focused on strengths identification, on personal growth initiative. Moreover, Quinlan, Swain & Vella-Brodrick (2012) went more into detail on how strengths interventions work. Their main finding was that strengths interventions work when they are not only focused on the identification of the strengths, but also on their use and development. However, since identifying your own strengths is a difficult task (Buckingham & Clifton, 2001), most interventions are focused on the identification of and knowledge about strengths instead of their use and development (Quinlan et al., 2012; Govindji & Linley, 2007; Linley & Harrington, 2006).

Strengths feedback is a form of a strength intervention that has not been tested in scientific literature before. Strengths feedback is a form of feedback from the manager to an employee with a focus on employees’ strengths. Feedback from manager to employees is already used frequently, for example in (yearly) performance appraisals, but this is mostly focused on weaknesses and how to improve them (Aguinis, Gottfredson & Joo, 2012). This often has the opposite effect on performance and engagement of employees than is aimed for

(DeNisi & Kluger, 2000). Since the goal of the performance appraisal is to enhance engagement, motivation and job satisfaction (Aguinis, 2009), a more positive approach is desired. Clifton and Harter (2003) note that a strengths-based approach “does not ignore weaknesses, but rather achieves optimization of strengths” (p.111). The strength-based performance appraisal is an example of a possible intervention, developed by Bouskila-Yam and Kluger (2011). Here, an employee receives feedback on his strengths during the yearly performance appraisal. In their study, Bouskila-Yam and Kluger (2011) found that almost half of their respondents reported a higher motivation and felt empowered after the strength-based performance appraisal. This intervention is close to the intervention used in the current study, with the only difference being that the strengths feedback in the current study is independent from the official performance appraisal. This gives the opportunity to conduct this research at any time. Also, this gives some degree of control on how the feedback is given to the employee and whether the effects really come from the strengths feedback. Aguinis, Gottfredson and Joo (2012) already proposed a strengths-based approach to feedback, and the present study will test this approach in an organisational and experimental setting. The manager observes and identifies an employee’s strengths and provides him/her with feedback regarding these strengths and how to use and develop them even more. Aguinis, Gottfredson and Joo (2012) argue that highlighting these strengths will enhance the motivation to use their strengths, which will bring along more positive results, such as well-being, engagement and performance. The current study will investigate the effect of strengths feedback on engagement and indirectly on turnover intentions. This relationship is expected to be positively affected by the amount of trust between the employer and employee.

### **The relationship between strengths feedback and work engagement**

Schaufeli, Salanova, González-Romá and Bakker (2002) have defined work engagement as ‘a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption’ (p. 74). This means that employees who are engaged in their work put a lot of energy and effort in it, but also receive energy from the work itself (Schaufeli et al., 2002). Strengths feedback was found to be a trigger that can induce flow experiences (Seligman, 2002), which in turn can cause a state of engagement. Moreover, strengths-based feedback was found to have a positive effect on individual well-being and engagement (Clifton & Harter, 2003; Seligman, Steen, Park, & Peterson, 2005).

The social exchange theory from Blau (1964) can be used to explain the effect of strengths feedback on engagement. The social exchange theory states that when a person does something for someone else, he expects something in return. When a manager gives strengths feedback to one of his employees, the employee will feel happiness, but will also feel as if he owes his manager. To reciprocate, the employee in turn will be more engaged to his work and the organization.

Beside the direct effect of strengths feedback on engagement, strengths feedback also has an indirect effect on engagement. Meyers and van Woerkom (2016, p. 6) argue that a strengths intervention “can serve as a strong situational factor that triggers gains in positive affect because theory proposes that individuals who employ their strengths feel good about themselves”. Moreover, Westermann, Spies, Stahl and Hesse (1996) found that giving feedback can cause positive affect by making people feel successful. The positive affect caused by the strengths feedback was found to influence an employee’s work engagement (Meyers & van Woerkom, 2016). Since strengths feedback is a form of strengths interventions, this study expects the same outcome with respect to this relationship.

Moreover, receiving feedback on your strengths as observed by your manager also makes you aware of these strengths, or enhances your strengths knowledge. Strengths knowledge was found to have a positive effect on a person’s work engagement (Govindji & Linley, 2007; Harter, Schmidt & Hayes, 2002). This is supported by empirical research, which found that the mere identification of strengths by a manager can cause a boost in an employee’s work engagement (Seligman, Steen, Park & Peterson, 2005; Herzberg, Mausner and Snyderman, 1959). Based on these theoretical arguments and research evidence, this can be formulated in the following hypothesis:

*Hypothesis 1: Strengths feedback has a positive effect on work engagement.*

### **The relationship between strengths feedback and turnover intentions**

Turnover intentions are an employee’s intentions to leave the company voluntarily to start a job somewhere else (Shaw, Delery, Jenkins & Gupta, 1998). Turnover intentions were found to be strongly predicted by job satisfaction (Angle & Perry, 1981) and organizational commitment (Ferris & Aranya, 1983). The findings of these studies indicate that the more engaged an employee is to his job, the less he will feel the need to leave the company. Although this does not yet explain the relationship between strengths feedback and turnover

intentions, research suggests that strengths interventions can enhance work engagement (Schaufeli & Salanova, 2010). Strengths feedback that is used in the current study is a form of strengths intervention. Therefore, it is expected that strengths feedback enhances work engagement and thus lower turnover intentions.

From a theoretical viewpoint, Champagne and McAfee (1989) applied Maslow's hierarchy of needs (Maslow, 1943) to the workplace. This hierarchy of needs distinguishes between fundamental needs like food and a home, and more advanced needs like love, safety and esteem. On the top of the hierarchy is self actualisation, reaching a person's full potential. Champagne and McAfee (1989) argued that the use of praise is part of the second highest need, esteem. Managers who use more praise and rewards, according to Champagne and McAfee (1989), have more satisfied employees who will less feel the need to leave the organisation. This is confirmed in a more recent study from Boswell and Boudreau (2000). Strengths feedback as used in this study is assumed to be a form of praise, which would make employees more satisfied. Following this line of reasoning, it can be argued that strengths feedback has a negative effect on turnover intentions. This can be formulated in the following hypothesis:

*Hypothesis 2: Strengths feedback decreases an employee's turnover intentions.*

### **The mediating role of work engagement on the relationship between strengths feedback and turnover intentions**

Where most empirical research focuses on work engagement with respect to employee well-being, the present study is interested in the effects of work engagement regarding employees' motivation and commitment to the organisation, in the form of turnover intentions. Turnover intentions are closely related to work engagement (Schaufeli & Bakker, 2004) and most research focuses on work engagement instead of turnover intentions. Moreover, Mitchell et al. (2001) have found that job embeddedness, which includes engagement to the organisation and the job, is a strong predictor for voluntary turnover. They argue that when people are embedded in their organisation, they have a sense of stuckness and inertia that will not make them want to leave the organisation.

Moreover, Schaufeli and Bakker (2004) use the Job Demands Resource model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001) to research the role of job resources on work engagement, and indirectly on turnover intentions. The Job Demands Resource model



(Demerouti et al., 2001) defines job demands as what is asked of the employee, i.e. the input he/she needs to give. These demands are exhausting and disengaging. Job resources on the other hand are the resources an employee has to fulfil his job demands and to facilitate growth and development. For an employee to function properly, it is important that job demands and resources are well balanced. The more resources an employee has, the more he is able to grow, develop himself and function properly (Demerouti et al., 2001). Schaufeli and Bakker (2004) argue that performance feedback and social support are forms of job resources. Strengths feedback can be seen as a form of performance feedback and social support, and thus as a job resource. It provides insights in an employee's performance and enhances an employee's self-confidence and self-efficacy. They found that job resources enhance work engagement and thus lower an employee's turnover intentions. Based on these theoretical arguments, the following hypothesis is formulated:

*Hypothesis 3: The relationship between strengths feedback and an employee's turnover intentions is partially mediated by work engagement such that strengths feedback enhances an employee's work engagement and in turn lowers his/her turnover intentions.*

### **The moderating role of trust on the relationship between strengths feedback and work engagement**

Trust between employees and managers is essential for organisations, since it can affect communication, information sharing and indirectly organisational performance (Costa, 2003; Tyler, 2003; Zaheer, McEvily & Perrone, 1998). Trust in general is defined as "the generalized expectancy that the statements of others can be relied on or promises will be fulfilled" (Rotter, 1971, p. 444). George and Zhou (2007) also distinguish cognition-based trust, which is defined as "the belief that another party is dependable, reliable, responsible, and competent" (p. 609). It is the latter definition that is applicable to the current study, since this study is interested in the effects of trust on the state of work engagement of the employee, after receiving strengths feedback. As Lewis and Weigert (1985) found, employees who have cognition-based trust in their manager believe that their manager is professional and knowledgeable. I.e. the extent to which the employee thinks his/her manager is reliable and competent in telling the truth is expected to depend on whether or not the employee will feel engaged to his work after receiving strengths feedback.

Jones and George (1998) have researched the relationship between trust and both positive and negative affect, and found that people who have more trust in a person

experience more positive affect when communicating with each other. Moreover, O'Reilly and Anderson (1980) have researched the moderating role of trust on the relationship between feedback and satisfaction, and found that trust does moderate this relationship. In other words, what employees do with the feedback they get from their manager and how they respond to it depends on whether the employee trusts his manager. Following this line of reasoning, the current study expects an enhanced effect of strengths feedback on work engagement when the employee trusts his manager (on a cognitive level). When you trust your managers' intentions and value his/her opinion, the effect of feedback on your strengths will likely be enhanced. On the other hand, if you distrust your manager and his intentions and opinions, the effect of strengths feedback on work engagement could be decreased. Consequently, the following is hypothesized:

*Hypothesis 4: Trust is a moderator in the relation between strengths feedback and work engagement in such a way that the strength of the relationship is enhanced when the amount of trust between an employee and his/her manager is high.*

## **Methods**

### ***Design and procedure***

This study used a quasi-experimental field experiment to test the hypotheses. The Pretest-Posttest Control Group Design (Singleton & Straits, 2005) was used to test the effects of a strengths feedback intervention. This design uses two groups, of which one group is given the treatment. The control group gets no treatment, but receives exactly the same questionnaires. This allows the researchers to compare the two groups and measure the effects of the intervention. For this study, for each manager that participated (N=54 (75.9%)), two of his employees participated as well. The employees of each manager were divided into an experimental group (N=54 (75.9%)) and a waitlist-control group (N=54 (70.4%)). The research design was the following:

*Table 1 Research design*

Experimental group	T1	SF	T2	T3	
Waitlist-control group	T4		T5	T6	SF

*Note: SF= Strengths Intervention*

## *Sample*

The sample consisted of 79 employees. This sample was created by approaching various managers from different organizations to participate, together with two of his employees. Since these managers had the choice to participate or not, the sample used in this study was a convenience sample. However, the division of employees in the experimental or waitlist-control group was done randomly. All respondents were Dutch, with age ranging from 18 to 60 ( $M=40$ ,  $SD=11,3$ ). The sample contained 49 males and 55 females.

First, the respondents from both the experimental group and waitlist-control group were asked to fill out an online survey which measured strengths use at work, strengths knowledge, turnover intentions and other variables (T1 & T4, pre-intervention). After the first survey, the managers were asked to give strengths feedback to the experimental group (SF). This was done electronically via a website, Qualtrics, which gave us the opportunity to receive the strengths feedback as well. Directly following this intervention, the employees from both the experimental and waitlist-control group were asked to fill out a second online survey (T2 & T5, post-intervention), which was focused on the emotional state of the respondents regarding work engagement. A month later, a third follow-up survey was conducted among the employees, which was focused on the long term effect of strengths feedback (T3 & T6, post-intervention). To encourage participation and collaboration from respondents, and in fairness to all respondents, the waitlist-control group received strengths feedback as well, but after the last survey.

## *Data analysis*

SPSS version 23 was used in this study to test the hypotheses. For each variable in this study, validated scales were used. Principal component analysis was used to determine the number of constructs in the scale. Kaiser-Meyer-Olkin's criterion ( $> .600$ ) was used to assess the factorability of the data, as well as Bartlett's test of sphericity ( $p < .05$ ). Also, the eigenvalues and scree-plots were taken into account.

After the Principal Component analyses, Cronbach's  $\alpha$  was measured to check for the reliability of the scales, to see if all items in a scale measured the same construct. Values above .70 are considered acceptable, but values above .80 are preferable (Pallant, 2013). Also, Pearson's correlations were measured between all variables, including control variables. This already gave insight in the presence and direction of correlations.

Next, to check for differences between the groups pre-intervention, a multivariate analysis of variance (MANOVA) was conducted. Since this study used a convenience sample, complete random sampling is not possible. Although this was compensated by the fact that the employees were randomly divided in the experimental or waitlist-control group, there could be differences between the experimental group and the waitlist-control group. This could influence the outcomes in the regression analyses. The MANOVA-test checks for this possibility by testing the scores of both the experimental and waitlist-control group at the baseline.

Moreover, it is interesting to see whether there has been a significant change in turnover intentions between the pre-intervention survey (T1/T4) and the post-intervention survey (T3/T6). To test this, a mixed between-within subject analysis of variance (ANOVA) was used, with experimental condition as between-subject factor (whether the respondent had received strengths feedback or not), and time as within-subject factor (Pallant, 2013).

So far, all statistical analyses that were conducted were exploratory. To test the hypotheses, however, an explanatory analysis was required. The hypotheses were tested using multiple regression analysis. First, only the dependent variable work engagement and the control variables were added to the model as predictors. In the second block, the independent variable strengths feedback were added to the model. This was done to test the direct effect of strengths feedback on work engagement (hypothesis 1). In order to test the fourth hypothesis, an interaction variable was created, consisting strengths feedback times trust. These variables were first centred in order to be able to interpret the results correctly. In the third block of the regression analysis, trust was added to the model as an independent variable. In the last block, the interaction variable strengths feedback  $\times$  trust was added to the model as independent variable.

After that, a new regression analysis was conducted with again the control variables as predictors in the baseline model, and this time turnover intention as dependent variable. Also, the score on turnover intention on T1 was added to the model as a control variable. To test hypothesis 2, the predictor strengths feedback was added to the model. In the third block, the mediator work engagement was also added to the model to test whether the possible effect of turnover intentions was (partially) mediated by work engagement (hypothesis 3).

## *Measures*

*Strengths feedback* is the central topic of this study and was conducted electronically. The manager received a short survey, after which he/she was asked to give strengths feedback to one of his employees. This strengths feedback was sent to back to the researchers. This gave the researchers the chance to send the feedback together with the second questionnaire, in order to limit the time between reading the feedback and starting the second questionnaire.

*Work engagement:* Work engagement was measured using a Dutch translation of the UWES scale for engagement (Schaufeli, Bakker & Salanova, 2006). This scale assesses engagement not as a fixed or long-term state but rather as a fluctual state that changes the same way emotions change. This gave the opportunity to test the state of engagement directly after receiving strengths feedback and test its influence on the intention to stay, which is believed to be more stable and will only change after a period of time (Bakker, Schaufeli, Leiter & Taris, 2008). In this study, this period was one month after receiving the strengths feedback. The scale consists of 9 items that are answered on a seven-point Likert scale (1= totally disagree, 7= totally agree).

Factor analysis showed a Kaiser-Meyer-Olkin value for the items of .863 at T1 and .903 at T2 and Bartlett's test of sphericity was significant at both times ( $p = .000$ ). Therefore, the conditions for conducting factor analysis were met. Principal Component Analysis for work engagement at T1 showed a clear one factor solution, with an eigenvalue of 5.47, explaining a total variance of 60.8 %. Cronbach's  $\alpha$  were .915 (T1) and .932 (T3).

*Turnover Intentions:* Employee's turnover intention was measured using a scale developed by Van Veldhoven and Meijman (2008) (VBBA 2.0), with three items that are answered on a five-point Likert scale. The items used in this scale were "I intent to switch jobs in the next year", "I intent to keep my current job for at least two years" and "I'm thinking about switching to another job" (1= totally disagree, 5 = totally agree). The items were coded in such way that all items measured in the same direction. A low score reflects a low turnover intention and a high score means that the respondent has the intention to switch jobs.

The Kaiser-Meyer-Olkin values were respectively .755 ( $p < .001$ ) at T1 and .680 ( $p < .001$ ) at T3. Principal Component Analysis for turnover intentions at T1 showed a one factor solution, with an eigenvalue of 2.64, explaining a total variance of 88.1%. When looking at

the screeplot, a one factor solution was supported. Cronbach's  $\alpha$  were .926 (T1) and .863 (T3).

*Trust:* Robinson (1996) developed a 7-item scale to measure trust. This scale contains items like "I believe my employer has high integrity" and "In general, I believe my employer's motives and intentions are good" that are answered on a five-point Likert scale (1= totally disagree, 5= totally agree). The scale not only contains items that are formulated in a positive way, but also some negatively formulated items, such as "I'm not sure whether I fully trust my employer" and "My employer is not always honest and truthful".

Factor analysis showed a Kaiser-Meyer-Olkin value for the items of .860 at T1 and Bartlett's test of sphericity was significant ( $p = .000$ ). Principal Component Analysis for trust at T1 showed a one factor solution, with an eigenvalue of 4.32, explaining a total variance of 71.9 %. This was supported by the screeplot. Cronbach's  $\alpha$  value was .910 (T1).

This study also controlled for *gender*, *age* and *tenure*. Gender may be of influence on turnover intentions, since Xu (2008) found that females have higher turnover rates than males. Moreover, Arnold and Feldman (1982) found that tenure and age can also influence turnover intentions. According to them, the older an employee is and the longer he/she is working in the organization, the less he/she is thinking about leaving the organisation. To make sure that potential effects were actually from work engagement and strengths feedback and not false effects due to gender, age or tenure, the current study controlled for these factors.

## **Results**

### *Correlations*

Table 1 shows the means, standard deviations, number of participants and Pearson's correlations between all variables used in this research. On average, the respondents have been working for the same organisation for almost ten years ( $M=9,9$  years). *Age* and *tenure* are strongly positively correlated ( $r = .680$ ,  $p < 0,01$ ).

**Table 2 Means, Standard Deviations and Pearson Correlations**

	<i>M</i>	<i>SD</i>	<i>N</i>	<i>Alpha</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1. Gender	.52	.503	79	.	.							
2. Age	39.0	11.47	79	.	.075	.						
3. Tenure	9.90	8.84	79	.	.090	.680**	.					
4. Strengths feedback	.52	.503	79	.	-.116	-.021	.080	.				
5. Engagement T1	5.438	.751	79	.915	.211	.003	-.125	-.200	.			
6. Engagement T2	5.477	.840	79	.932	.204	.093	.041	.000	.579**	.		
7. Trust T1	4.234	.720	79	.910	-.007	-.035	-.122	-.181	.494**	.324**	.	
8. Turnover Intentions T1	1.862	1.089	79	.926	-.086	-.128	-.066	.078	-.245*	-.186	-.219	.
9. Turnover Intentions T3	2.040	1.129	79	.863	-.252*	-.136	.010	-.140	-.339**	-.253*	-.093	.758**

\*:  $p < 0.05$ , \*\*:  $p < 0.01$ ; Note: (4) Experimental group=1, Waitlist-control group=0; (1) male=0, female=1

Moreover, the scores on *work engagement* at T1 and T2 strongly correlate ( $r = .579$ ,  $p < 0,01$ ), as well as *Turnover Intentions* at T1 and T3 ( $r = .758$ ,  $p < 0,01$ ). Furthermore, *Turnover Intentions* at T1 negatively correlates with *work engagement* at T1 ( $r = -.245$ ,  $p < 0,05$ ). *Turnover Intentions* at T3 also negatively correlate with *work engagement* at both T1 and T2 (respectively  $r = -.339$ ,  $p < 0,01$  and  $r = -.253$ ,  $p < 0,05$ ) and with *age* ( $r = -.252$ ,  $p < 0,05$ ). This means that the older a person is, the less likely it is that he is leaving the organisation he works at. Finally, Trust at T1 shows a rather strong correlation with *work engagement* at both T1 and T2 (respectively  $r = .494$ ,  $p < 0,01$  and  $r = .324$ ,  $p < 0,01$ ).

#### *Multivariate analysis of variance (MANOVA)*

In this study a convenience sample was used, which means that there was no random sampling. Within this sample however, the two employees that participated from each manager could be divided randomly in the experimental group and the waitlist control group. Since the sample is a rather small convenience sample it is important to check whether the two groups (experimental group and waitlist control group) are significantly different on the baseline level (T1). This was done using a Multivariate Analysis of Variance (MANOVA) for all independent variables (Work Engagement, Turnover Intention and Trust). The results of these tests show that there is no significant difference between the experimental and the waitlist-control group ( $F(3,100)=1,05$ ,  $p=.37$ ; Wilks' Lambda=.97; partial  $\eta^2=.03$ ).

When looking at each individual independent variable, no significant differences are found as well. Work engagement scores of the MANOVA test were ( $F(1,102)=1,84$ ,  $p=.18$ ,

partial  $\eta^2=.02$ ). For turnover intention, the scores were ( $F(1,102)=.17$ ,  $p=.68$ , partial  $\eta^2=.00$ ). Last, for trust, the scores were ( $F(1,102)=2.72$ ,  $p=.10$ , partial  $\eta^2=.03$ ).

*Mixed within-between subjects analyses of variance (ANOVA)*

To assess whether the two groups (experimental versus waitlist-control) differed in their scores on the dependent variables over time, two mixed between-within-subjects analysis of variance (ANOVA) were used. In these analyses, the experimental condition was the between-subjects factor and time was the within-subjects factor. First, the effect of time and experimental condition were tested on *turnover intentions*. No statistically significant effect of time was found on turnover intentions ( $F(1, 77) = 1.658$ ,  $p = .202$ , partial  $\eta^2 = .021$ ) and no interaction effect was found between the different conditions and time on turnover intentions ( $F(1, 77) = .848$ ,  $p = .360$ , partial  $\eta^2 = .011$ ). Table 2 shows the means and standard deviations for both the experimental and control group at T1 and T3 for *turnover intentions*.

**Table 3 Turnover Intentions scores for different groups at different points in time**

		<i>Experimental group</i>			<i>Waitlist-control group</i>		
		<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
1.	Turnover Intentions T1	41	1.91	.155	38	1.77	.160
2.	Turnover Intentions T3	41	2.14	.165	38	1.93	.170

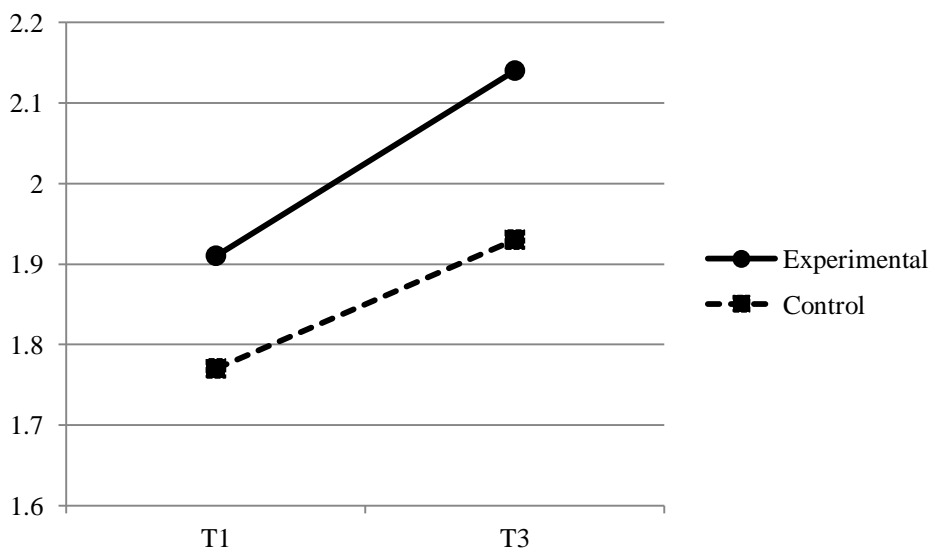


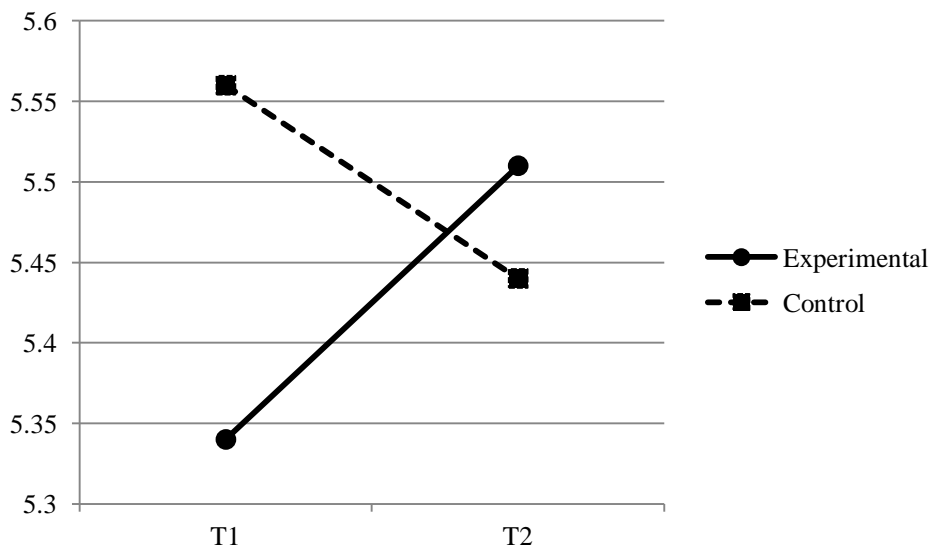
Figure 2 Graphic representation of mean score differences on Turnover Intentions between groups on two different points in time



Second, the effect of time on the mediator *work engagement* from the research model was measured for the two groups. Here, no significant effect of time on *work engagement* was found ( $F(1, 98) = .010, p = .919, \text{partial } \eta^2 = .000$ ), but a significant interaction effect was found between the different conditions and time on *work engagement* ( $F(1, 98) = 5.776, p = .018, \text{partial } \eta^2 = .056$ ). This means that over time, the work engagement of the waitlist control-group decreased, while the work engagement of the experimental increased. This is presented graphically in figure 2.

**Table 4** Engagement scores for different groups at different points in time

		<i>Experimental group</i>			<i>Waitlist-control group</i>		
		<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
1.	Engagement T1	51	5.34	.106	49	5.56	.107
2.	Engagement T2	51	5.51	.118	49	5.44	.119



*Figure 3* Graphic representation of mean score differences on Work Engagement between groups on two different points in time

### *Testing hypotheses with regression analyses*

To test the hypotheses formulated before, two regression analyses were used. The first hypothesis predicted an effect of *strengths feedback* on *work engagement*. The results of this regression analysis is shown in table 4. First, the baseline model with only the control

variables was tested. In the second model, *work engagement* at T1 was added to the analysis. As could be expected, this shows a strong predictor for the engagement at T2. The third model shows the regression analysis where the predictor of the first hypothesis *strengths feedback* was added. With a significance level of  $p = .052$  hypothesis 1 cannot be supported by this analysis. However, since the sample size is small, it is likely that an effect could be found in a similar study with a larger sample size.

In the fourth and fifth model, hypothesis 4 was tested by adding trust and an interaction between the *group* (experimental or waitlist control-group) and *trust* to the model. As can be seen in the model in table 4, there was no significant effect of these predictors on *work engagement* at T2. Therefore, hypothesis 4 cannot be supported. However, an interesting result from these last two models of this regression analysis is that by the addition of trust and the interaction term  $\text{trust} \times \text{group}$  the *group* (experimental or waitlist control-group) now shows a positive significant effect on *work engagement*. In other words, work engagement is significantly higher for the respondents in the experimental group compared to the waitlist control-group when controlling for the level of trust in the manager.

**Table 5 Results regression analysis: the effect of a strengths feedback intervention on work engagement and the moderating effect of Trust**

	Model 1			Model 2			Model 3			Model 4			Model 5		
	b	SE	$\beta$	b	SE	$\beta$	b	SE	$\beta$	b	SE	$\beta$	b	SE	$\beta$
(Constant)	-.15	.39		-.07	.30		-.25	.31		-.31	.31		-.37	.32	
Age	-.00	.01	-.03	-.00	.01	-.05	-.00	.01	-.04	-.00	.01	-.03	-.00	.01	-.01
Gender <sup>1</sup>	.20	.19	.10	.06	.15	.03	.09	.15	.05	.10	.15	.05	.11	.15	.06
Tenure	.02	.01	.14	.02	.01	.18	.02	.01	.18	.02	.01	.17	.02	.01	.16
Engagement (T1)				.62	.08	.63***	.35	.09	.36***	.58	.09	.59***	.56	.09	.57***
Group <sup>2</sup>							.15	.10	.15	.31	.15	.16*	.32	.15	.16*
Trust										.13	.10	.12	.21	.14	.20
Group x Trust													-.14	.18	-.10
R <sup>2</sup>			.027			.413			.436			.446			.450
$\Delta R^2$			.027			.386			.023			.010			.004

Dependent variable: Engagement T2

Note: b = unstandardized regression coefficient, SE = standard error,  $\beta$  = standardized regression coefficient

\* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$

<sup>1</sup> 0 = male, 1 = female

<sup>2</sup> 0 = waitlist-control group, 1 = experimental group

To test the second and third hypothesis, another regression analysis was conducted with Turnover Intentions at T3 as the dependent variable. The results of this analysis are shown in table 5. As in the first regression analysis, first a baseline model was tested with the control variables as predictors only. The control variable *gender* shows a significant negative effect on *turnover intentions* at T3. This means that women have lower intentions to leave an organization compared to men. In the second model, *turnover intentions* (T1) was added to the model. As was expected, the results show that this has a significant effect on *turnover intentions* (T3). The third model tests hypothesis 2, regarding the direct effect of strengths feedback on turnover intentions. This is not a significant effect and the hypothesis can therefore not be supported. In the last model *work engagement* (T2) was added to the model to test the mediating effect of work engagement on the relationship between strengths feedback and turnover intentions. Again, no significant results were found. Hypothesis 3 can therefore also not be supported.

**Table 6 Results regression analysis: the effect of a strengths feedback intervention on Turnover Intentions and the mediating role of work engagement**

	Model 1			Model 2			Model 3			Model 4		
	b	SE	$\beta$	b	SE	$\beta$	b	SE	$\beta$	b	SE	$\beta$
(Constant)	.88	.42		.57	.28		.51	.30		.49	.30	
Age	-.02	.01	-.26	-.01	.01	-.15	-.01	.01	-.14	-.01	.01	-.14
Gender <sup>1</sup>	-.49	.21	-.25*	-.38	.14	-.20**	-.37	.14	-.19***	-.34	.14	-.17***
Tenure	.02	.02	.20	.02	.01	.18	.02	.01	.17	.02	.01	.16
Turnover Intentions (T1)				.81	.08	.73***	.81	.08	.73***	.80	.08	.72***
Strengths Feedback <sup>2</sup>							.09	.14	.05	.09	.14	.05
Engagement (T2)										-.09	.08	-.08
R <sup>2</sup>			.101			.627			.629			.635
$\Delta R^2$			.101			.526			.002			.006

Dependent variable: Turnover Intentions T3

Note: b = unstandardized regression coefficient, SE = standard error,  $\beta$  = standardized regression coefficient

\* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$

<sup>1</sup> 0 = male, 1 = female

<sup>2</sup> 0 = waitlist-control group, 1 = experimental group

## Conclusion

The aim of this study was to research the effect of a strengths feedback intervention on work engagement and turnover intentions, while taking into account the moderating effect of trust on work engagement. To research these effects, a quasi-experimental longitudinal study design was used with 79 respondents, of which 41 were in the experimental group and 38 were in the waitlist control-group. The main question in this study was: *“To what extent does strengths feedback lead to an increased state of engagement and lower turnover intentions, and to what extent does the amount of trust affect this relationship?”*. The executed regression analyses show that there is a significant effect of strengths feedback on engagement when controlled for trust, there is no significant effect of strengths feedback on turnover intentions and no mediating effect of engagement on the relationship between strengths feedback and turnover intentions. Although not all hypotheses could be confirmed, this does not mean that the research has not been useful. It has given insights in the effects of strengths feedback and provides a basis for other researcher to elaborate on.

The first hypothesis was about the effect of the strengths feedback intervention on work engagement. Following the social exchange theory from Blau (1964) and previous research from Seligman, Steen, Park & Peterson (2005) and Herzberg, Mausner and Snyderman (1959), it was expected that a strengths feedback intervention has a positive effect on a person’s work engagement. The mixed within-between subjects analyses of variance already suggested a positive relationship. This was confirmed in the regression analyses, which show a significant effect on engagement when controlled for trust. This means that strengths feedback can help to enhance an employees work engagement if the employee trusts his/her manager. Empirical research shows that engagement not only could decrease turnover intentions as researched in this study, but could also enhance performance, which is beneficial for the organisation as well (Halbesleben & Wheeler, 2008; Rich, Lepine & Crawford, 2010).

The second hypothesis concerned the direct effect of strengths feedback on turnover intentions. This hypothesis was based on Champagne and McAfee (1989), who applied Maslow’s hierarchy of needs (1943) to the workplace and argued that the use of praise is part of the second highest need, esteem. The regression analysis did not show any significant results to support this hypothesis. However, one surprising result was the significant effect of the control variable gender on turnover intentions. This is opposite to what was found in the literature, as for example Xu (2008) found that females have higher turnover rates than males.

A possible explanation for the non-significant result of strengths feedback on turnover intentions in the regression analysis could be the selection process for the respondents. To find respondents for this study, managers were approached and asked to pick two of his/her employees who would be willing to participate. By selecting respondents this way, the sample could be biased. Managers are likely to pick two of his/her employees with whom he has a good (work) relationship, so that it is easy for him/her to give them feedback on their strengths. Other employees for whom it is harder for the manager to come up with strengths are neglected but could yield different results.

Moreover, the strengths feedback that was used in this research was given to the respondents in writing. Also, the feedback did not come directly from the manager, but was sent by the researchers together with the second questionnaire. These two factors could have made the strengths feedback impersonal and could diminish the effects of the feedback. Oral feedback in a one on one conversation between the manager and the employee could yield different results, since it immediately becomes clear if the employee understands the feedback that is given. If this is not the case, the employee can ask for more clarification.

The third hypothesis tested the (partial) mediation effect of work engagement on the relationship between strengths feedback and an employee's turnover intentions. This (partial) mediation effect was expected based on the Job Demands Resource model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001). Again, no significant results were found in the regression analyses.

This could be caused by the nature of the strengths feedback that was given by the managers. The feedback was rather superficial and in most cases written in third person instead of directly to the employee. Also, even though the managers were asked to give feedback on an employee's strengths, they sometimes still made a little remark on when not to use this strength or how the strength can also be seen as something bad. This may have weakened the effect of the strengths feedback on work engagement, and/or the duration of the effect to also last in the long term with decreased turnover intentions. Furthermore, not only was the strengths feedback given by managers fairly brief, with some managers filling up the required amount of words by just typing "xxxx", the time that managers took to come up with and explain at least two strengths of his/her employee was also rather short. 23 out of the 54 managers that were asked to give feedback on the strengths of their employee did so in less than 15 minutes. Since this is a rather short time to think about very personal strengths instead

of some general strengths, it is plausible that employees felt like they could not identify with the feedback that was given. This may have contributed to the lack of significant results on the (partially) mediating effect of work engagement on the relationship between strengths feedback and turnover intentions.

As an additional test, to see if the time it took for managers to fill in the feedback form indeed makes a difference, the respondents from managers who wrote their feedback in less than 15 minutes were removed from the sample. After that, the regression analyses were executed again. The results of these analyses can be found in the appendix. Although these results indicate that after removal of these respondents the effects become more visible, additional research with a larger sample size should be done to confirm this.

Last, the fourth hypothesis tested the moderating effect of trust on the relationship between strengths feedback and work engagement. It was expected that trust from the employee in the manager would enhance the effects of strengths feedback on work engagement. This hypothesis was based on the findings of Jones and George (1998) and O'Reilly and Anderson (1980) in their research about the effects of trust respectively on positive affect and on the relationship between feedback and satisfaction. No significant results were found in the regression analyses.

The lack of significant results to support this hypothesis may be due to the fact that there is a rather high correlation between trust and work engagement, as can be found in the correlation matrix (table 1) that was shown before. This could mean that, since trust and work engagement are already highly correlated, it is harder to find a significant effect of trust on the relationship between strengths feedback and work engagement.

### **Limitations & Directions for future research**

Although this study was conducted using a carefully selected research method, there are some limitations to this study. The first limitation to this study is the sample size. 54 managers were approached and agreed on participating in this research with two of his/her employees. This would mean that 108 employees would participate, divided in two groups (experimental and waitlist-control group) of 54 respondents. However, only 41 managers remained at the end of the third questionnaire, with 41 respondents in the experimental group and 38 in the waitlist-control group who finished all three questionnaires and could be used for our analyses. A small sample size makes it more difficult to find significant results and may have contributed

to the lack of hypotheses that could be confirmed in this study. Conducting a similar study with a larger sample size can provide a definitive answer on the effects of strengths feedback.

Another limitation to this study was the strengths feedback and the transfer of this feedback to the respondents. As this was the first research to use this intervention, there was no prior research available to serve as a basis on how to conduct and transfer this strengths feedback. A limitation for this study and a direction for future research, is that the strengths feedback in this study was in writing, and was transferred to the respondents via the researchers. This gave the feedback an impersonal touch, which may have diminished the results from the feedback on the respondents. Traditional feedback usually is given in writing first after which a conversation takes place with the manager to discuss the feedback that is given (Brislin, 1980). Future research could apply this traditional feedback method to the strengths feedback intervention to test the difference between this strengths feedback in writing and oral strengths feedback. Moreover, by sending the strengths feedback via e-mail, there is no control on when and where the strengths feedback is read and what the conditions are that may influence the results. This problem would mainly be solved with oral feedback. Also, if the strengths feedback is given in writing, the content of the feedback should be checked before sending it to the respondent. This way, the researchers can determine if the feedback is focused enough on strengths, and remove the respondent if this is not the case. Furthermore, a direction for future research could be to give the managers some sort of training on how to give proper feedback and make it more personal instead of sticking to the general competencies. This way, employees might take the feedback a little more serious and the effects on work engagement and turnover intentions could become visible.

Finally, since the research was not conducted in an experimental setting, there may have been many other factors influencing the results of this study that are out of the control of the researchers. Also, this study applied a convenience sample where managers were asked to participate with two of his/her employees, instead of using a random sample. This may have caused biased results. Therefore, it is recommended for future research to apply a random sample and to use a more experimental research setting.

Last, the significant effect of gender on turnover intentions in this study could be a direction for future research. This study found that women have lower turnover intentions than men, which is supported by a study of Xu (2008). Policies regarding retention could focus on this finding by focusing more on the different needs of men and women. However,

before adjusting policies, extensive research should be done to find out what attracts and retains men and women. After that, policies can be adjusted to these needs and preferences.

### **Theoretical and Practical implications**

Even though this study yields only one supported hypothesis, and therefore could not contribute much to the understanding of the effects of strengths feedback on turnover intentions, a significant effect was found of strengths feedback on engagement. Also, a lot of empirical research shows promising results regarding this positive approach on feedback. This study shows that engagement can indeed be enhanced by such a simple intervention as strengths feedback. This could reduce expenses on selection and recruitment of new employees. Moreover, engaged employees are more productive (Bakker & Bal, 2010; Halbesleben & Wheeler, 2008), since they are highly motivated. Therefore, even though the long term effects of strengths feedback on reduced turnover intentions could not be confirmed in this study, the use of a strengths intervention like the one used in this study is recommended to enhance engagement.



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## Appendix

**Table 7 Results regression analysis: the effect of a strengths feedback intervention on work engagement and the moderating effect of Trust after removal of respondents of whom the manager took less than 15 minutes to fill in the strengths feedback**

	Model 1			Model 2			Model 3			Model 4			Model 5		
	b	SE	$\beta$	b	SE	$\beta$	b	SE	$\beta$	b	SE	$\beta$	b	SE	$\beta$
(Constant)	5.49	.35		1.73	.53		1.61	.54		1.34	.62		1.44	.63	
Age	-.01	.01	-.17	-.01	.01	-.18	-.01	.01	-.17	-.01	.01	-.18	-.01	.01	-.16
Gender <sup>1</sup>	.38	.18	.25*	.24	.13	.16	.27	.13	.17*	.27	.13	.17*	.28	.13	.18*
Tenure	.03	.01	.34*	.03	.01	.31**	.03	.01	.30**	.03	.01	.30**	.02	.01	.28**
Engagement (T1)				.71	.09	.66***	.77	.11	.72***	.77	.11	.72***	.75	.11	.69***
Group <sup>2</sup>							.13	.13	.08	.13	.09	.08	.15	.13	.10
Trust										-.08	.10	-.09	.02	.12	.02
Group x Trust													-.17	.15	-.13

Dependent variable: Engagement T2

Note: b = unstandardized regression coefficient, SE = standard error,  $\beta$  = standardized regression coefficient

\* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$

<sup>1</sup> 0 = male, 1 = female

<sup>2</sup> 0 = waitlist-control group, 1 = experimental group

**Table 8 Results regression analysis: the effect of a strengths feedback intervention on Turnover Intentions and the mediating role of work engagement after removal of respondents of whom the manager took less than 15 minutes to fill in the strengths feedback**

	Model 1			Model 2			Model 3			Model 4		
	b	SE	$\beta$	b	SE	$\beta$	b	SE	$\beta$	b	SE	$\beta$
(Constant)	2.94	.55		2.81	.58		.95	.46		2.36	1.01	
Age	-.02	.02	-.18	-.02	.02	-.17	-.01	.01	-.14	-.01	.01	-.08
Gender <sup>1</sup>	-.68	.28	-.30*	-.65	.29	-.29*	-.37	.14	-.19**	-.48	.20	-.21**
Tenure	.01	.02	.12	.01	.02	.11	.02	.01	.17	.02	.01	.14
Turnover Intentions (T1)				.76	.09	.71***	.73	.09	.68***	.73	.09	.68***
Strengths Feedback <sup>2</sup>							.08	.19	.04	.11	.19	.05
Engagement (T2)										-.25	.16	-.14**

Dependent variable: Turnover Intentions T3

Note: b = unstandardized regression coefficient, SE = standard error,  $\beta$  = standardized regression coefficient

\* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$

<sup>1</sup> 0 = male, 1 = female

<sup>2</sup> 0 = waitlist-control group, 1 = experimental group