5

Employability and social innovation: The importance of and interplay between transformational leadership and personality

Appeared as:
Abstract

Purpose
The purpose of this chapter is to draw attention to employability being an important social innovation that potentially thrives with transformational leadership, partly depending on certain personal characteristics such as managerial role and personality.

Methodology/approach
The study was carried out among pairs of employees (314) and immediate supervisors (334) working at a large Dutch company that produces building materials. We made use of Linear Regression and Structural Equation Modeling to test our hypothesis and explore our assumptions with regard to the research model.

Findings
We have found that transformational leadership is positively related to employee and supervisor ratings of employability. Furthermore, there is some indication that transformational leadership enhances employability in some situations, demonstrating differences between categories of workers with and without a managerial function. Moreover, it appeared that after controlling for personality, only the positive relationship between transformational leadership and supervisor ratings of employability, remained for the workers not having a managerial function.

Research limitations/implications
Our study design comprised a cross sectional approach and therefore future longitudinal research is necessary to investigate causal relationships between transformational leadership, personality and employability.

Practical implications
In terms of individual career development practices, our outcomes should be translated into increased attention for aligning leadership style to meet the requirements of all types of employees across the life-span.

Social implications
By providing more insight into the increased importance of transformational leadership for certain groups of workers, this contribution is intended to come up with opportunities for increasing the employability for different types of workers.
Introduction
Lifelong employability of workers can be regarded to be one of the most typical examples of social innovation today. It entails, amongst others, increased self-steering, initiating self-development and versatile roles. The combination of fast developments (e.g., new production concepts, and new technology) together with increased commercialization put higher demands across the workforce on productivity, creativity and flexibility of individual employees. Obviously, in order to meet the current requirements, employable workers need leaders that enable (and not block) their employability orientation. In this regard, Alimo-Metcalfe, Alban-Metcalfe, and Briggs, (2002) mentioned “serving and enabling others to lead themselves” as an important characteristics of nowadays leaders.

Only around the beginning of this century, scholars have made a start with establishing relationships between human resources (e.g., leadership behaviors, and workers’ employability), on the one hand, and team and organizational performance (e.g., Camps & Rodríguez, 2011; Crook, Todd, Combs, Woehr, & Ketchen, 2011; Howell & Avolio, 1993; Jiang, Lepak, Hu, & Baer, 2012; Stoker, Looise, Fisscher, & De Jong, 2001), on the other hand.

In this contribution, we will empirically investigate the relationship between transformational leadership and employability for both employees and managers. First, we will start with a thorough explanation of the key concepts, and we will provide an outline of our research model. Next, we will continue with the methodology of our study, followed by the results and a discussion of the outcomes.

Theory
Employability of workers has the potential to boost both career and organizational outcomes (Fugate, Kinicki, & Ashforth, 2004; Van Dam, 2004; Van der Heijde & Van der Heijden, 2006). In Van der Heijde and Van der Heijden (2006), the competence-based approach to employability, being an extension of the Resource-
Based View of the firm (RBV), has been introduced, and has formed the basis for several studies aiming to better understand what determines employability and how employability contributes to career success throughout the life-span (e.g., De Vos, De Hauw, & Van der Heijden, 2011; Van der Heijde & Van der Heijden, 2006; Van der Heijden & Bakker, 2011; Van der Heijden, De Lange, Demerouti, & Van der Heijde, 2009). According to RBV, sustained competitive advantage can be obtained by human resource advantage (Boxall, 1998) referring to “a unique combination of acquiring and retaining competent workers, and adequate HR policies and practices of investing in them” (Van der Heijde & Van der Heijden, 2006, p. 451).

One of the most important determinants of workers’ employability comprises the role of the leader, or so-called manager of the individual employee. Leaders are perceived to be important stakeholders that may enable their workers to thrive (to be completely at the service of their workers), and in that sense transformational leadership is emphasized to be a key factor in nowadays management, besides transactional leadership. “It embraces Greenleaf’s concept of ‘servant leadership’ (Alimo-Metcalfe & Alban-Metcalfe, 2005).

Furthermore, we argue that personality might work as an intervening factor in this transformational leadership-employability relationship. We expect the personality of the worker to be of influence for his/her employability, possibly interacting with the transformational leadership behaviors of his/her superior.

**Employability**

Both findings from Strategic Human Resource Management (SHRM) as well as from career studies point into the direction of the importance of a broad competence package for all workers at the labour market. Besides the development of Human Resources or Human Capital directed towards organizational performance, another organizational strategy to reach competitiveness is to work on the flexibility or manoeuvrability of their organization (Boselie & Paauwe,
2004). One important manner to achieve this is through the qualities of the personnel. In the postulated SHRM framework (see Wright & Snell, 1998) two flexibility pillars, concerning the human capital pool are presented: “1) developing a human capital pool with a broad array of skills, and 2) promoting behavioral flexibility among employees.” As far as career studies are concerned, it is the *more general competencies* that help with the application of more specific skills, herewith stressing the importance of transfer (e.g., from education to labour market of between different labour market situations), which is the equivalent of learning. However, the supposed transfer does often not take place (Cheng & Ho, 2001), herewith seriously hindering lifelong employability, and through this, organizational success (see also Van der Heijde & Van der Heijden, 2006).

Some research findings are indicative for a positive relationship between the introduction of new production concepts and different newly required types of skills (Felstead & Ashton, 2000). Besides the fact that most organizations still function largely under the Tayloristic concept, (Taylor, 1911) they have also added new production concepts (or workforce innovations) like Total Quality Management, Lean Production, Business Process Redesign and Socio-technics for the effectivity and efficiency of the operational management (De Lange, 2001; Steijn, 2002). The similarity between the above-mentioned production concepts is the decrease in division of labour and an increase in team work (De Lange, 2001), pointing to despecializaton. This asks for different role behavior from employees in nowadays’ working organizations, and appeals more to the *versatility, flexibility and social skills* of the ones involved. To conclude, currently, working organizations are in a strong need for a broader competence package for all of their employees, besides domain-specific occupational expertise, herewith enhancing their possibilities for their broader deployment.

In our competence-based approach to employability, we define the concept of competence as the behavioral result of diverse personal capabilities and motivational and attitudinal factors while employability is defined as “the
continuous fulfilling, acquiring or creating of work through the optimal use of competences” (Van der Heijde & Van der Heijden, 2006, p. 453). As such, employability deals with functioning in complex working situations (Frei, Duell, & Baitsch, 1984), is directly connected with goals, and in that sense variable in content (Onstenk, 1997), and has a dynamic and developmental character (Onstenk, 1997; Van der Heijden, 1998). With the increase in velocity of market developments, having employee potential becomes less interesting as compared to the realisation of that specific potential.

To meet employability needs of workers and performance and flexibility needs of the organization, occupational expertise is complemented with the more broad competences of anticipation and optimization, personal flexibility, corporate sense and balance. Anticipation & optimisation and Personal flexibility are flexibility dimensions, discernible as one proactive/creative variant and a more passive adaptive variant. Corporate sense represents the needed increase for social competence. Finally, the dimension of Balance is added, taking into account all these different elements of employability that are sometimes hard to unite and need fine tuning. These 5 dimensions will be now be shortly explained.

The first dimension, being occupational expertise is growing in importance given the increase of the knowledge-intensive market (Schein, 1996), and comprises a very important human capital factor that can be regarded as a prerequisite for the employability and career outcomes of professionals (Boudreau, Boswell, & Judge, 2001). Occupational expertise is also an extremely important human capital factor for the vitality of organizations (Van der Heijden, 2000). Personnel with firm-specific knowledge, is perceived to be a highly important part of a firm’s resources and extremely difficult to replace. Occupational expertise includes knowledge, meta-cognitive knowledge, skills, and social recognition (see Van der Heijde & Van der Heijden, 2006 and Van der Heijden, 2000 for more specific details).
Anticipation and optimisation, being the second dimension of employability, does not concern a passive adaptation to the labour market, but comprises preparing for future changes in a personal manner, and striving for the best possible results. Employees have to enact jobs increasingly themselves (e.g., Weick, 1996), in a creative way due to the growing complexity of work and difficulty for employers to predict future employment content. This dimension also concerns both employers’ and employees’ interests, at an individual performance and career level, and at an organizational performance level. On the content level of the occupation, a continuous development is needed to anticipate and adapt to future occupational changes. Development becomes optimized when practised continuously (Continuing Professional Development and lifelong learning) and applying newly acquired knowledge and skills for optimal benefit. (see also Collin, Vander Heijden & Lewis, 2012)

The dimension of personal flexibility has also been considered as an important ingredient of employability by other writers [see for example Boudreau, Boswell and Judge (2001)], and Fugate, Kinicki & Ashforth (2004), and has been labelled as ‘adaptability’ by these scholars. Next to the capacity to make smooth transitions between jobs and organizations, personal flexibility encompasses adapting easily to all kinds of (unforeseen) changes on the internal and external labour market. Organizations profit because flexible and resilient workers adapt more easily to and profit more from frequently occurring changes, such as mergers and reorganizations.

Fourth, corporate sense is defined as the participation and performance in different work groups, like the organization, (project) teams, occupational community, virtual community and other networks, and that have been growing in importance in the present work environment (Frese, 2000; Seibert, Kraimer, & Liden, 2001). It is about sharing responsibilities, knowledge, experiences, feelings, credits, failures, goals, etc (e.g., Chapman & Martin, 1996). In this regard, employee energy is both directed towards the performance of the group as a whole
and deployed for own interests. Important prerequisites are social capital and social skills. Besides participation and performance, corporate sense is assumed to enhance innovation given the added value of group interaction.

Finally, in the light of the fifth dimension, being balance, nowadays, working life is characterised by strongly competing demands and organisational paradoxes. Balance enables employable workers to align all the contradictory needs of organizations and the individual workers him or herself, such as being flexible while at the same time being committed, the need to both specialize and despecialize, and to deal with home-work balance.

**Leadership as a determinant for employability**

Transformational leadership (Bass, 1995, 1998) stands out as an important predictor for employability because of: 1) idealized Influence, that is, setting high values and/or moral standards and giving a good example in that sense and gain admiration for it; 2) Inspirational motivation, comprising the conveying of a (moral) vision of what the organization stands for and evoking enthusiasm for it; 3) Intellectual stimulation, referring to stimulating creativity and innovative ideas in workers; and 4) Individual consideration, that is, having eye for and pay attention to the individual (career) developmental needs of the worker.

If there is one leadership style, that has the potential to stimulate the employability and career development of workers, it would be the transformational leadership style (see Van der Heijden & Bakker, 2011). Birasnav, Rangnekar, and Dalpati, (2011) propagated training managers transformational leadership behavior, since “this behavior contributes to human capital creation by which an organization achieves competitive advantage” (p. 106). Earlier studies are exemplary for assuming relationships between transformational leadership and employability or career potential outcomes. For instance Piccolo and Colquitt, (2006), demonstrated relationships between transformational leadership and task performance and organizational citizenship behavior (OCB) (through core job characteristics being
Transformational leadership appears to be positively related to a number of desired organizational outcomes, such as organizational productivity, (leader) effectiveness, supervisor-rated performance, employee job satisfaction, and commitment as well (see e.g., Judge & Bono, 2000; Lowe, Kroeck, & Sivasubramaniam, 1996; Nemanich & Keller, 2007). Based on the theoretical outline given above, the following hypothesis has been formulated:

H1 We expect transformational leadership to be positively related with both self-rated and supervisor-rated employability

**Personality, as an intervening factor in the relationship between transformational leadership and employability**

Early studies already investigated relationships between the personality of the leader (using the Big Five dimensions of neuroticism, conscientiousness, extraversion, agreeableness, and openness) (Costa & McCrae, 1992) and transformational leadership, and reported significant effects for agreeableness, openness, and extraversion (Bono & Judge, 2004; Judge & Bono, 2000). Furthermore, personality dimensions have been found to correlate with maximum transformational leadership performance (such as assessment centres) or typical transformational leadership performance (such as a basic training situation) (Ployhart, Lim, & Chan, 2001).

The individual profile of a specific worker, depending upon his or her personality, may or may not match with the leadership style of the leader, and is assumed to interact with one another in explaining employee outcomes, such as employability. In Jung and Avolio (1999), leadership style and followers' cultural orientation appeared to interact in predicting performance in group and individual task conditions, while in Kamdar and Van Dyne, (2007) personality and social exchange relationships (LMX), appeared to interact in predicting task performance and organizational citizenship behavior.
Managers (or leaders) are a typical group of workers that also deserve attention with regard to their employability. Workers that achieved a managerial position, are thought to be highly employable, and excel on more than one level, such as intelligence, emotional intelligence, resilience, work-life balance, etc (e.g., Judge, Colbert & Ilies, 2004; Moore, 2007). We believe managers to have a different personality profile than workers without a managerial position, meaning scoring different on all personality dimensions of the big Five. We expect that for workers without a managerial function transformational leadership style is a stronger predictor for employability in comparison with workers in a managerial job, needing more guidance as their own career development is concerned.

Likewise, managers attain higher ratings of career success than followers (i.e. salary, promotions, e.g., Van der Heijde & Van der Heijden, 2006). Several studies demonstrated relationships between the “Big Five” personality dimensions (neuroticism, conscientiousness, extraversion, agreeableness, and openness) and objective and subjective career success measures (e.g., Seibert, & Kraimer, 2001). On an explorative basis we will look into the relationships between the dimensions of personality, transformational leadership and self-rated and supervisor-rated employability for workers with and without a managerial position.

Methods

Sample and procedure
Respondents were from a large Dutch firm that produces building materials (data gathering in 2002). Two nominally identical versions of the questionnaire were used: one employee version (the self-rating version) and one supervisor version, for validity enhancement reasons (Van der Heijde & Van der Heijden, 2006). The supervisors filled out a questionnaire that contained amended items worded to express the extent of employability of their respective employees. Nearly all employees were included in the study and were asked directly by their supervisors.
to participate. Questionnaires were limited to a maximum of three employees per supervisor for practical (time restrictions) and reliability reasons (Van der Heijden, 2000).

The selection of employees was restricted to those with at least middle educational levels of functioning, in order to provide data that could be generalized for future use in organizations. It was necessary to allow for the possibility that current workers, might not be comparable with employees hired by companies in, say, 20 years (see also Van der Heijden, 2005). Our final research sample consisted of 314 employees and 334 immediate supervisors (i.e., comprised 290 pairs). The employees worked in numerous types of jobs at middle and higher educational levels. For the employees, 83.3% were male, 84.8% of them were married or cohabiting, 11.2% were single, and 3.9% were divorced at the time of the study. Regarding their education level, 0.8% had only a primary education, 40.9% had a high school degree (or recognized equivalent), 30.8% had basic vocational education (or recognized equivalent), 15.3% had a BA, and 2.2% had an MA.

Measures
Van der Heijde and Van der Heijden’s (2006) multi-dimensional measurement instrument was used to evaluate employability. It included five scales measuring: (1) occupational expertise (15 items); (2) anticipation and optimization (8 items); (3) personal flexibility (8 items); (4) corporate sense (7 items); and (5) balance (9 items). The instrument concerns a domain-independent operationalization. Examples were: “By virtue of my experience with him/her, I consider him/her … competent to be of practical assistance to colleagues with questions about the approach to work” (ranging from “not at all” to “extremely”) (occupational expertise), “(S)he is … focused on continuously developing him/herself” (ranging from “not at all” to “a considerable degree”) (anticipation and optimization), “(S)he adapts to developments within the organization …” (ranging from “very
badly” to “very well”) (personal flexibility), “(S)he manages to exercise … influence within the organization” (ranging from “very little” to “a very great deal”) (corporate sense), and “The time (s)he spends on his/her work and career development on the one hand, and his/her personal development and relaxation on the other are . . . evenly balanced” (ranging from “not at all” to “a considerable degree”) (balance). The item sets for the employees and the supervisors are nominally identical and all scored on a six-point rating scale. All employability measures demonstrated good internal consistencies, with Cronbach’s α’s ranging from .78 to .90 for the self-ratings, and from .83 to .95 for the supervisor ratings (Table 1).

Five of the nine original subscales of the Transformational Leadership Questionnaire (Alimo-Metcalfe & Alban-Metcalfe, 2001) were used in our study, given their assumed predictive validity regarding employability enhancement. The anchors for each item for all five subscales ranged from strongly disagree (1) to strongly agree (6). (1) the Concern subscale (13 items) is focused on "genuine interest in staff as individuals; values their contributions; develops their strengths; coaches, mentors; has positive expectations of what their staff can achieve"; (2) the Empowerment subscale (6 items) is focused on the employer’s ability to [trust] staff to make decisions/take initiative on important matters; [delegate] effectively; [develop]s staffs' potential"; (3) the Openness subscale (9 items) is described as "open to criticism and disagreement; consults and involves others in decision making; regards values as integral to the organization"; (4) the Encouragement subscale (8 items) "encourages questioning traditional approaches to the job, encourages new approaches/solutions to problems, encourages strategic thinking"; and (5) the Support subscale (9 items) is described as "supportive when mistakes are made, and encourages critical feedback of him- or herself and the service provided.". All transformational leadership scales demonstrated good internal consistencies, with Cronbach’s α’s ranging from .82 to .95. (see Table 1).
Personality was measured using the 60-item short version of the thoroughly validated Dutch translation (Hoekstra, Ormel, & De Fruyt, 1996) of the NEO Five Factor instrument (Costa & McCrae, 1992). All items were scored using a five-point rating scale ranging from: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, to (5) strongly agree. Example items were: ‘I am not a worrier’ (for Neuroticism) (12 items), “My life is fast-paced” (for Extraversion) (12 items), “I often enjoy playing with theories or abstract ideas” (for Openness to experience) (12 items), “I would rather cooperate with others than compete with them” (for Agreeableness) (12 items), and “I have a clear set of goals and work toward them in an orderly fashion” (for Conscientiousness) (12 items). All personality scales demonstrated reasonable internal consistencies, with Cronbach’s α’s ranging from .60 to .73. (see Table 1).

Highest educational qualification, age of the employee and age of the supervisor were used as control variables. According to Ostroff and Atwater (2003), gender of the supervisor effects compensation levels but not performance ratings. Therefore, we have not included this demographic into our study. As far as transformational leadership is concerned, differences between male and female leaders are small (Eagly, Johannesen-Schmidt, & Van Engen, 2003), and, moreover, in our study the percentage of female leaders was low (only 5% female supervisors).

Results

The transformational leadership – employability relationship
We used Structural Equation Modeling (SEM) to test our hypothesis’, using the maximum likelihood method, with the AMOS computer program (Arbuckle, 2003). Transformational leadership was included as an exogenous factor, and self-reported and supervisor-rated employability were included as latent endogenous factors (see Figure 1). The SEM analysis was conducted using the mean scores of
the scales, instead of the scale items. Previous results of Confirmatory Factor Analysis (Van der Heijde & Van der Heijden, 2006; Van der Heijden et al., 2009) supported the suggested factor structure of employability. In the analysis, the measurement errors of the parallel dimensions (supervisor and employee version) were allowed to correlate.

Figure 1 A social innovation model of employability, enhanced by transformational leadership

To test the fit between our proposed model and the data, the traditional $\chi^2$ value, the Comparative Fit Index (CFI), the Normed Fit Index (NFI) and the Root Mean Square Error of Approximation (RMSEA) were calculated. As a rule of thumb, a CFI $\geq .90$, NFI $\geq .90$, and a RMSEA $\leq .08$ indicate a reasonable fit between the model and the data.
The model for the total sample appeared to have a reasonable fit ($\chi^2 = 418.58$, df = 127, CFI=.91, NFI = .88, RMSEA = .09, see Model 1, Table 2 for specific outcomes). The significant structural paths showed that transformational leadership was indeed positively related to supervisor ($\beta = .23$, $p < .001$) and employee ($\beta = .17$, $p < .01$) ratings of employability, herewith providing support for Hypothesis 1. The proportion of explained variance in this model was .23 for supervisor-rated employability and .04 for self-rated employability.

Table 2. Goodness of Fit Indices for Proposed Models

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>NFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) TL-&gt; employability/ all workers</td>
<td>418.579</td>
<td>127</td>
<td>.91</td>
<td>.88</td>
<td>.09</td>
</tr>
<tr>
<td>Null</td>
<td>3388.382</td>
<td>171</td>
<td>.00</td>
<td>.00</td>
<td>.25</td>
</tr>
<tr>
<td>(2) TL-&gt; employability/ Management/no management</td>
<td>571.473</td>
<td>255</td>
<td>.90</td>
<td>.84</td>
<td>.07</td>
</tr>
<tr>
<td>Null</td>
<td>3492.731</td>
<td>342</td>
<td>.00</td>
<td>.00</td>
<td>.18</td>
</tr>
<tr>
<td>(3) TL-&gt; employability/ Management/no management Personality included</td>
<td>699.83</td>
<td>374</td>
<td>.91</td>
<td>.83</td>
<td>.05</td>
</tr>
<tr>
<td>Null</td>
<td>4116.82</td>
<td>552</td>
<td>.00</td>
<td>.00</td>
<td>.15</td>
</tr>
</tbody>
</table>
Difference between managers and non-managers as regards the predictive value of transformational leadership for employability

We first used linear regression aimed to investigate whether managers scored significantly different on the personality dimensions of the big five (Costa & McCrae, 1992), controlling for age, and educational qualification (see Table 3). Having or not having a managerial function appears to be significantly related to neuroticism ($\beta = .17, p < .01$), with lower scores for managers in comparison with employees without a managerial position. Furthermore, whether or not a worker has a management function is also significantly related to extraversion ($\beta = -.20, p < .01$) and conscientiousness ($\beta = -.14, p < .05$), with higher scores for managers for both personality dimensions. As far as openness and agreeableness were concerned, we did not find significant relationships between type of position (managerial or not).

To investigate the role of personality in the transformational leadership-employability relationship for both managers and workers without a managerial function, we first performed a SEM analysis testing our model of the transformational leadership - employability relationship, adding work role (i.e., managerial function or not) into the model as a moderator (see Model 2, Table 2, and Figure 2). The model had a satisfactory fit to the data, $\chi^2 = 571.47$, df = 255, CFI = .90, NFI = .84, RMSEA = .07.

More specifically, for the category of employees without managerial activity, the significant structural path showed that transformational leadership was positively related to supervisor ratings of employability ($\beta = .35, p < .001$), while the relationship appeared not to be significant for employee ratings. The proportion of explained variance (R square) in this model was .26 for supervisor-rated employability and .02 for self-rated employability.
For the category of workers having a managerial position, the significant structural paths showed that transformational leadership was positively related to both supervisor (β = .17, p < .05) and employee (β = .22, p < .01) ratings of employability. The proportion of explained variance in this model was .22 for supervisor-rated employability and .08 for self-rated employability.

We also tested this model, including personality as a control factor, (see Model 3, Table 2, and Figure 3). In this case, the model had an even more satisfactory fit to the data, χ² = 699.83, df = 374, CFI = .91, NFI = .83, RMSEA = .06. As regards supervisor ratings of employability in the non-managerial category, the regression coefficient of the significant structural path (from Transformational leadership) nearly stayed the same (β = .31, p < .01); whilst the path in the managerial category was not significant anymore. Moreover, the significant
structural path (from Transformational leadership) to employee ratings of employability in the managerial category changed into a trend ($\beta = .12, p = .07$).

Figure 3 Employability enhanced by transformational leadership, depending on work role (e.g., managerial role) and personality

These outcomes imply that we did find some support for our assumptions that for workers without a managerial function transformational leadership style is a stronger predictor for employability in comparison with workers in a managerial job, when including personality (at least for the supervisor ratings). It appears as if the group of workers in a managerial position is less dependent on transformational leadership as a determinant, yet more dependent upon their personality, in case we want to better understand their employability (or career potential). The proportion of explained variance in this model was .22 for supervisor-rated employability and .54 for self-rated employability for the category without managerial activity, while
it was .21 for supervisor-rated employability and .53 for self-rated employability for the category with managerial activity.

**Discussion**

We have found positive and significant relationships between transformational leadership and employability, both for employees, as well as for managers. Managers do score significantly different as regards personality (neuroticism, etc). When we controlled for personality, not all of the previously found positive and significant relationships between transformational leadership and employability subsisted, suggesting a compensating mechanism between transformational leadership and personality.

We argued that categories of employees, such as the ones with a managerial job versus the ones without a managerial position do differ, in terms of personality, and in that sense, there is also a difference to what they need for their employability development. Certain workers need more encouragement, and guidance to fully develop their employability, that is to say, a transformational leader, whilst others (such as managers), are more self-reliant in that sense. With these outcomes, we may conclude that social innovation, in our particular case, lifelong employability enhancement, may be stimulated by certain leadership competencies.

Our study design comprised a cross sectional approach and therefore future longitudinal research is necessary to investigate causal relationships between transformational leadership, personality and employability. Another fruitful approach might be looking at combinations of personality dimensions, so-called personality profiles (Semeijn & Van der Heijden, 2012), and their predictive value in studying the impact of leadership style upon career outcomes. Furthermore, a broader inclusion of personal characteristics, such as age, gender, emotional intelligence, coping style etcetera may contribution to our understanding of possible ways to increase the amount of explained variance. Likewise, job-related
characteristics, such as career history patterns, may be taken into account in models aimed at predicting employability and social innovation at work. Finally, organizational factors, such as mentorship, training and development opportunities, just to mention but a few, may be important explaining variables to take into account.

Practical implications of our study are that obtaining more knowledge about the interplay of possible individual, job-related and organizational factors, leads us to gain more insight about what categories of workers (with or without a managerial position) benefit, in particular, from more transformational leadership. In terms of individual career development practices, our outcomes should be translated into increased attention for aligning leadership style to meet the requirements of all types of employees across the life-span.

Employability of workers, as mentioned in the introduction section of this chapter, is a typical example of social innovation. We advocate for an increasing awareness amongst leaders for their understanding that they do play a key role in increasing their workers’ employability. If we miss out on these opportunities, the social implications are that workers are less employable than they could have been, with all of its possible consequences, both on the level of the individual career, and as a result, implying consequences at an organizational level too.
References


### Table 1: Means, Standard deviations, Reliability Coefficients (Cronbach’s α; on the diagonal), and Correlations between the Model Variables, N= 314 employees and 334 immediate supervisors

<table>
<thead>
<tr>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Age Employee</td>
<td>41.10</td>
<td>9.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Highest Educ. Qual. Employee</td>
<td>2.77</td>
<td>0.85</td>
<td>-28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Age Supervisor</td>
<td>42.94</td>
<td>7.94</td>
<td>11</td>
<td>00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Neuroticism</td>
<td>2.05</td>
<td>0.47</td>
<td>-13</td>
<td>-09 (71)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Extraversion</td>
<td>3.54</td>
<td>0.42</td>
<td>-06</td>
<td>09</td>
<td>-80 (66)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Openness</td>
<td>3.02</td>
<td>0.45</td>
<td>-09</td>
<td>13</td>
<td>02</td>
<td>-36 (65)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) Agreeableness</td>
<td>3.78</td>
<td>0.34</td>
<td>-16</td>
<td>-03</td>
<td>09</td>
<td>-26</td>
<td>17</td>
<td>20</td>
<td>(60)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) Conscientiousness</td>
<td>4.04</td>
<td>0.48</td>
<td>-04</td>
<td>08</td>
<td>08</td>
<td>-38</td>
<td>31</td>
<td>31</td>
<td>(73)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9) Concern</td>
<td>4.14</td>
<td>0.83</td>
<td>-02</td>
<td>06</td>
<td>04</td>
<td>-13</td>
<td>16</td>
<td>04</td>
<td>01</td>
<td>11</td>
<td>(95)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10) Empower</td>
<td>4.33</td>
<td>0.79</td>
<td>-01</td>
<td>-02</td>
<td>08</td>
<td>-21</td>
<td>21</td>
<td>05</td>
<td>02</td>
<td>18</td>
<td>83</td>
<td>(83)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(11) Integrity, openness</td>
<td>3.37</td>
<td>0.67</td>
<td>-03</td>
<td>-01</td>
<td>13</td>
<td>-17</td>
<td>13</td>
<td>03</td>
<td>05</td>
<td>14</td>
<td>81</td>
<td>74</td>
<td>(85)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(12) Encourages</td>
<td>4.08</td>
<td>0.90</td>
<td>-03</td>
<td>-03</td>
<td>02</td>
<td>-11</td>
<td>18</td>
<td>02</td>
<td>00</td>
<td>09</td>
<td>86</td>
<td>80</td>
<td>75</td>
<td>(91)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(13) Supportive</td>
<td>4.11</td>
<td>0.63</td>
<td>-06</td>
<td>06</td>
<td>04</td>
<td>-12</td>
<td>12</td>
<td>03</td>
<td>06</td>
<td>12</td>
<td>81</td>
<td>73</td>
<td>77</td>
<td>74</td>
<td>(82)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employability Supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(14) Occupational expertise</td>
<td>4.39</td>
<td>0.68</td>
<td>-17</td>
<td>08</td>
<td>24</td>
<td>-13</td>
<td>05</td>
<td>-06</td>
<td>05</td>
<td>17</td>
<td>15</td>
<td>20</td>
<td>20</td>
<td>09</td>
<td>14</td>
<td>(95)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(15) Anticipation &amp; optimization</td>
<td>3.52</td>
<td>0.71</td>
<td>-30</td>
<td>18</td>
<td>22</td>
<td>-23</td>
<td>17</td>
<td>03</td>
<td>00</td>
<td>13</td>
<td>13</td>
<td>19</td>
<td>18</td>
<td>10</td>
<td>11</td>
<td>69</td>
<td>(49)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(16) Personal flexibility</td>
<td>3.93</td>
<td>0.65</td>
<td>-33</td>
<td>13</td>
<td>24</td>
<td>16</td>
<td>01</td>
<td>06</td>
<td>09</td>
<td>19</td>
<td>21</td>
<td>24</td>
<td>17</td>
<td>15</td>
<td>71</td>
<td>75</td>
<td>(48)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(17) Corporate sense</td>
<td>3.93</td>
<td>0.71</td>
<td>-09</td>
<td>09</td>
<td>26</td>
<td>-17</td>
<td>13</td>
<td>-07</td>
<td>05</td>
<td>13</td>
<td>11</td>
<td>18</td>
<td>14</td>
<td>32</td>
<td>30</td>
<td>77</td>
<td>67</td>
<td>70</td>
<td>(46)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(18) Balance</td>
<td>4.18</td>
<td>0.55</td>
<td>-13</td>
<td>-03</td>
<td>12</td>
<td>-30</td>
<td>15</td>
<td>-15</td>
<td>03</td>
<td>16</td>
<td>19</td>
<td>23</td>
<td>13</td>
<td>12</td>
<td>60</td>
<td>55</td>
<td>58</td>
<td>50</td>
<td>(83)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employability Employee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(19) Occupational Expertise</td>
<td>4.78</td>
<td>0.42</td>
<td>05</td>
<td>03</td>
<td>08</td>
<td>-44</td>
<td>25</td>
<td>-23</td>
<td>03</td>
<td>16</td>
<td>50</td>
<td>08</td>
<td>15</td>
<td>09</td>
<td>07</td>
<td>11</td>
<td>26</td>
<td>22</td>
<td>21</td>
<td>22</td>
<td>18</td>
<td>(90)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(20) Anticipation &amp; optimization</td>
<td>3.72</td>
<td>0.65</td>
<td>-13</td>
<td>18</td>
<td>-05</td>
<td>30</td>
<td>42</td>
<td>27</td>
<td>03</td>
<td>32</td>
<td>20</td>
<td>21</td>
<td>15</td>
<td>23</td>
<td>15</td>
<td>05</td>
<td>21</td>
<td>19</td>
<td>10</td>
<td>09</td>
<td>42</td>
<td>(83)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(21) Personal flexibility</td>
<td>4.43</td>
<td>0.49</td>
<td>-16</td>
<td>18</td>
<td>04</td>
<td>-41</td>
<td>38</td>
<td>36</td>
<td>18</td>
<td>27</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>08</td>
<td>17</td>
<td>32</td>
<td>39</td>
<td>24</td>
<td>12</td>
<td>59</td>
<td>49</td>
<td>(79)</td>
<td></td>
</tr>
<tr>
<td>(22) Corporate Sense</td>
<td>4.14</td>
<td>0.71</td>
<td>08</td>
<td>08</td>
<td>15</td>
<td>-39</td>
<td>45</td>
<td>20</td>
<td>15</td>
<td>30</td>
<td>18</td>
<td>28</td>
<td>17</td>
<td>27</td>
<td>15</td>
<td>22</td>
<td>28</td>
<td>26</td>
<td>37</td>
<td>21</td>
<td>55</td>
<td>53</td>
<td>54</td>
<td>(83)</td>
</tr>
<tr>
<td>(23) Balance</td>
<td>4.30</td>
<td>0.51</td>
<td>02</td>
<td>03</td>
<td>05</td>
<td>-42</td>
<td>24</td>
<td>09</td>
<td>09</td>
<td>31</td>
<td>20</td>
<td>22</td>
<td>18</td>
<td>15</td>
<td>19</td>
<td>14</td>
<td>30</td>
<td>33</td>
<td>06</td>
<td>29</td>
<td>45</td>
<td>35</td>
<td>34</td>
<td>33</td>
</tr>
</tbody>
</table>

Note: Correlations between .06 ≤ r ≤ .08 are significant at p<.05 while correlations r ≥ .09 are significant at p<.01.

### Table 3: Regression analysis, standardized coefficients

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Neuroticism</th>
<th>Extraversion</th>
<th>Openness</th>
<th>Agreeableness</th>
<th>Conscientiousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictor/step</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
</tr>
<tr>
<td>Age</td>
<td>.03</td>
<td>-.02</td>
<td>.00</td>
<td>.00</td>
<td>-.06</td>
</tr>
<tr>
<td>Educational qualification</td>
<td>-13*</td>
<td>-.09</td>
<td>.02</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Management (yes: 0no: 1)</td>
<td>.17**</td>
<td>.17**</td>
<td>.05**</td>
<td>.03**</td>
<td>-.20**</td>
</tr>
<tr>
<td>Overall</td>
<td>F=4.46</td>
<td>dB</td>
<td>3,287</td>
<td>Overall</td>
<td>F=4.86</td>
</tr>
</tbody>
</table>

*p<.05  ** p<.01