



Inclusion in a team: The roles of newcomer proactive personality and team context

The moderating effect of informal socialization tactics and participative safety climate on the relationship between newcomer proactive personality and social inclusion

Master Thesis

Tilburg University - Faculty of Social and Behavioral Sciences
Human Resource Studies

| | |
|-----------------------|-----------------------------------|
| Author | Vasilina Chuvasheva |
| SNR | 2045667 |
| Supervisors | Dr. S. Batistič and Dr. C. Meyers |
| Second reader | Dr. M. van Engen |
| Project period | October 2019 – August 2020 |
| Project theme | Socialization |

Contents

| | |
|---|-----|
| 1. Abstract..... | 3 |
| 2. Introduction..... | 4 |
| 3. Theoretical framework..... | 7 |
| 3.1 Newcomer proactive personality and inclusion..... | 7 |
| 3.2 Moderation effect of contextual factors..... | 8 |
| 3.2a Informal socialization tactics..... | 9 |
| 3.2b Participative safety climate..... | 11 |
| 4. Methods..... | 13 |
| 4.1. Research design..... | 13 |
| 4.2. Procedure..... | 13 |
| 4.3. Sample..... | 14 |
| 4.4. Instruments..... | 16 |
| 4.5. Analysis..... | 19 |
| 5. Results..... | 22 |
| 5.1 Part 1: Results of the multilevel analysis. Team Perception..... | 22 |
| 5.2 Part 2: Results of the multi-regression analysis. Newcomer Perception..... | 25 |
| 6. Discussion..... | 29 |
| 6.1. Theoretical contributions..... | 29 |
| 6.2. Limitation and future research..... | 31 |
| 6.3. Practical implications..... | 32 |
| 7. References..... | 34 |
| 8. Appendix..... | 45 |
| 8.1. Questionnaires..... | 45 |
| 8.2. Team descriptives: Locations, nationalities, sectors, team specialities..... | 83 |
| 8.3. Confirmatory factor analysis..... | 85 |
| 8.4 HLM output..... | 91 |
| 8.5. Process Output..... | 102 |

1. Abstract

Inclusion at the workplace receives more attention among academics because it is related to employees' well-being, which in its turn is related to performance. When entering a team, a newcomer starts the socialization process, the aim of which is to become an insider. As socialization has an interactionist approach, there is mutual influence between individual characteristics and organizational factors. Basing the argumentation on trait-activation theory, this study explores the relationship between proactive personality of a newcomer and perceived newcomer inclusion and investigates if team participative safety climate and informal socialization tactics could enhance inclusion of a newcomer in a team. The conceptual model was tested with application of two perspectives: cross-sectional multi-level analysis was employed to explore the team members' perception of a newcomer's socialization (Part 1), and newcomers' perception of how he/she adjusted to the team was studied by hierarchical multiple regression (Part 2). The sample size for Part 1 of the study included 48 sets of responds. Each set of answers for this part of the research consist of data given by a manager and at least 3 team members of the same team (excluding a newcomer). Responds of 48 managers and 215 of their subordinates were used for Part 1. The second dataset included 56 sets of answers made by a newcomer and a manager of the same team. The results indicate that there is a positive relationship between newcomer proactive personality and perceived inclusion from the team members' perspective. Moreover, both analyses showed that newcomers with pronounced proactive personality are more likely to experience lower levels of perceived inclusion to a team when the use of informal socialization tactics is high. Furthermore, participative safety climate showed no significant effect on the relationships between the newcomer's proactive personality and the newcomer's perceived inclusion from both newcomer and team member perspectives, but in both cases it had a direct effect on newcomer inclusion.

Keywords: proactive personality, perceived inclusion, informal socialization tactics, participative safety climate, newcomer, team members, multi-level modelling.

2. Introduction

Being included in groups is essential for people (Correll & Park, 2005) as groups validate one's beliefs (Hogg & Abrams, 1993), enhance one's self-esteem (Leary & Baumeister, 2000), empower one's potential (Randel, Galvin, Shore, Holcombe Ehrhart, Chung, Dean, & Kedharnath, 2017), and offer acceptance (Brewer, 1991). However, despite being one of the basic human needs (Maslow, 1954), experiencing inclusion is not guaranteed and partly depends on the context (Jansen, Otten, van der Zee, & Jans, 2014; Nishii, 2013). Considering that the majority of the working population spends approximately 40 hours at work per week, it would be fair to conclude that work as a social setting is a significant environment for an individual. Recent research by of Ernst & Young Global Limited revealed an unfortunate fact: around 40% of employees feel excluded at their workplace (Twaronite, 2019). Moreover, the study showed that isolation at work was related to negative emotional state and stress (Abrams, Hogg, & Marques, 2005; Twaronite, 2019). For newcomers that could be especially harmful as entering a new organization and a new team is already accompanied by stress due to uncertainty related to a role and work processes. The current situation in organizations highlights the importance of studying mechanisms that lead to inclusion within teams starting with first steps of employee experience in the organization as it is connected to the well-being of employees, the most valuable resource of any organization. Therefore, the focus of this research is to investigate newcomer inclusion in a team.

In diversity literature inclusion is often described as the extent "to which an individual is treated as an insider by others in a work system" (Pelled, Ledford, & Mohrman, 1999, p. 1014). To become an insider a newcomer needs to adjust to the team and the organization. Usually that happens during the organizational socialization which is defined as the way an individual is taught and studies the values and behaviours that are both desirable and inappropriate in work settings (van Maanen & Schein, 1979). According to recent scholars, organizational socialization follows an interactionist perspective (Bauer & Erdogan, 2011; Batistic & Kase, 2015), meaning that there is mutual influence between individual characteristics and organizational factors. The current research aims to explore if a proactive personality of a newcomer facilitates his/her inclusion in a team and if team climate (i.e., perception of the work environment by employees) and socialization tactics (i.e., practices used to boost socialization process) as contextual factors moderate this relationship.

The interest of the study is directed on newcomers with proactive personality because this type of personality is proved to positively correlate with performance, career success and organizational commitment (Briscoe, Hall, & Frautschy DeMuth, 2006; Fuller & Marler, 2009; cra, Zhang, Thomas, Yu, & Spitzmueller, 2017). That makes it valuable to organizations to attract and retain proactive employees as they help to achieve competitive advantage in rapidly changing environments. Studies show that people with proactive personality demonstrate proactive behaviours (e.g. taking initiative and responsibility, networking, voice, persistence, bringing changes with own actions) as stable character traits (Crant, 2000; Seibert, Kraimer, & Crant, 2001). In that case the ability to build relationships may be beneficial for proactive newcomers while getting to know other team members, and their ideas and persistence in creating a positive change may bring additional value to a team performance. Such behaviour and attitude might nudge team members to accept a newcomer as an insider. However, it is impossible to study proactive personality out of the context.

According to trait activation theory, the situational context influences behaviour when triggering people's inherent personality characteristics (Tett & Burnett, 2003). This research focuses on the closest situational context of newcomers, i.e., their teams, because new hires spend most of their work time amongst their colleagues (Chen, Lu, Tjosvold & Lin, 2008), and team members' attitudes largely determine the success of socialization (Liu, 2017). Therefore, informal socialization tactics (i.e., learning on the job) that are concentrated within team, not organizational settings and participative safety climate that invites all team members into decision-making process in safe environment are considered as moderators as moderators between proactive personality and newcomer sense of inclusion. For example, structured formal socialization tactics that encourage compliance would force a newcomer to restrain own proactive behaviour and follow the rules. Contrarily, having socialization practices within the team the proactive newcomer is likely to widely use own networking behaviour in order to gain information and understand the values and rules of the team. In addition, if the newcomer perceives the team climate as safe and cooperative where employees respect and trust each other (Chen et al., 2008) he/she is more likely to proactively voice own ideas in order to bring a positive change. Therefore, in this research informal socialization tactics associated with learning from team members and participative safety climate which implies trust among team members and mutual decision making are considered to

positively moderate the relationships between newcomer proactive personality and his/her perceived inclusion.

This research makes several theoretical contributions.

Firstly, this research focuses on a newcomer and his/her team and studies newcomers in their closest context. Multiple authors (Ashford & Nurmohamed, 2012; Van Vianen & De Pater, 2012) argued that it is important to explore socialization agents as they are the holders of organizational values and team culture. However, little contextual research has been conducted in this field. This study will fill this gap as well as investigate two perspectives: how team members perceive a newcomer proactive personality and the process of his/her inclusion in the team and the way newcomers grasp how their proactiveness helps them to become insiders of a team.

Secondly, to provide a more holistic picture this study will have a multilevel approach as context moderates the relationship between lower-level variables (Klein & Kozlowski, 2000). Few studies focused on contextual factors that can facilitate or inhibit socialization practices and outcomes (Batistič, 2018), therefore informal socialization tactics and participative safety climate as contextual factors will be examined at team level. Despite the fact that both factors have a potential to enhance newcomer adjustment process, this is the first study that investigates how informal socialization tactics and participative safety climate interplay with newcomer proactive personality – newcomer inclusion relationship.

Therefore, the focal question of this research is as follows: *To what extent does proactive personality relate to a sense of inclusion and to what extent is this relationship moderated by informal socialization tactics and a participative safety climate?*

3. Theoretical framework

3.1 Newcomer proactive personality and inclusion

Bateman and Crant (1993) introduced the prototypic proactive personality as one “who is relatively unconstrained by situational forces, and who affects environmental change” (p. 105), and further research expanded upon it. Empirical studies showed no significant relation between proactive personality and experience (Kammeyer-Mueller & Wanberg, 2003), age and tenure (Erdogan & Bauer, 2005), and general mental ability (Crant, 1995). Therefore, proactive personality is a stable and distinct disposition which is not likely to be learned. At the same time proactive personality is proven to be an important antecedent to proactive behaviour (Crant, 2000; Seibert et al., 2001). That means that people with proactive personality tend to behave proactively at work because it is natural to them to look for change opportunities, show initiative, take action and persist until meaningful goals are achieved (Bateman & Crant, 1993). Previous research also argued that personality may affect how newcomers interact with insiders and how insiders respond back (Bauer & Green, 1998; Saks & Ashforth, 1997). Therefore, personality is likely to affect the process of socialization and inclusion.

Current socialization literature proposes that to be included in a group an individual’s feelings of both assimilation and differentiation are needed to be fulfilled (Salib, 2014; Jansen et al, 2014; Hedman, 2016). Shore et al. (2011) suggested an integrated definition of inclusion as “the degree to which individuals experience treatment from the group that satisfies their need for belongingness and uniqueness” (p. 1265). Based on previous research, they describe belongingness as “the need to form and maintain strong, stable interpersonal relationships”, and uniqueness is defined as “the need to maintain a distinctive and differentiated sense of self” (Shore et al., 2011, p. 1264). The following reasoning will explain how the proactive personality of a newcomer facilitates the sense of his / her belongingness and uniqueness, and therefore promotes newcomer inclusion in a team.

In relation to belongingness, the network theory perspective includes several types of employee behaviour that can facilitate formation of interpersonal relationships. In order to reduce uncertainty a newcomer needs an informational network for acquiring information and learning (Fang, Duffy, & Shaw, 2011), and in order to feel integrated into an organization and a team they need a friendship network (Morrison, 2002). Proactive personality is proven to be positively related to relationship building and networking (Gruman, Saks, & Zweig, 2006; Thompson, 2005).

That means that by building relationships with their colleagues, proactive employees get access to needed information and gain beneficial ties to be able to bring changes in future (Li, Liang, & Crant, 2010; Parker & Collins, 2010).

Despite the fact an individual wants to be comparable with others, he/she also wants to be unique and to have their individuality accepted by their social surroundings (Brewer, 1991). One way to demonstrate own uniqueness at work is by taking initiative. Employees with a proactive personality, by definition, are predisposed to change their environment. To do so they need not only to doubt the status quo but to suggest their creative ideas in order to gain support within their social network. People with proactive personalities tend to engage in creative activity because they are motivated to learn and because they often feel personal responsibility for improving situations (Kim, Hon, & Crant, 2009).

Overall, individuals with pronounced proactive personality tend to influence their working environment for better adjustment and inclusion outcomes (Cangiano & Parker, 2016; Jannesari, Wang, McCall, & Zheng, 2017; Ren, Shaffer, Harrison, Fu, & Fodchuk, 2014). They achieve social integration with the use of information seeking behaviour (Ashford & Black, 1996; Zou, Zheng, & Zhu, 2011) and by active engagement in network participation (Lee, Qureshi, Konrad, & Bhardway, 2014). According to Kim et al. (2009) people with proactive personality harness their own creativity which leads to achievements at work and the perception of oneself as an insider. Based on the above, this study argues that proactive personality fosters proactive behaviour of a newcomer in order to create and develop social networks and demonstrate one's unique value to team performance which in turn leads to the newcomer perception of being included. Therefore, the following hypothesis is developed:

Hypothesis 1: Newcomer proactive personality will be positively associated with newcomer inclusion.

3.2 Moderation effect of contextual factors

Johns (2006, 2017) argues that a context has a significant impact on organizational behaviour and, therefore, it is needed to be included in research. According to his research, context refers to “specific situational variables that influence behavior directly or moderate relationships between variables” (Johns, 2006, p. 363). Johns specifies three types of discrete contexts: task, social and physical (2006). This study will be focused on social context as it relates the most to research of socialization of newcomers in their closest context, namely teams, and theoretically it

will be underpinned with the trait-activation theory (Tett & Burnett, 2003) as the configuration of a Person-Environment (P-E) fit model with an elaborate and systematic depiction of E.

The trait-activation theory focuses on the person-situation interaction in order to explain an individual's behavior based on responses to trait-relevant cues found in situations (Tett & Burnett, 2003). According to Tett and Burnett, an employee feels intrinsic motivation to express his/her personality traits through personality-inherent behaviour, but situational cues moderate if an employee would freely express or suppress that behavior due to its relevance and could be followed by positive or negative reinforcement based on reactions of others (Tett & Burnett, 2003). Trait-relevant cues can be considered on three different levels: task (originated in the nature of work itself), social (derived from working with others), and organizational (based on macrolevel organizational characteristics). As mentioned earlier, the focus of this research lies on social level of cues, as informal socialization tactics and participative safety climate are the contextual characteristics of the team. Apart from relevance to a situation, the trait-activation theory declares that the strength of a cue is another characteristic crucial for personality expression (Tett & Burnett, 2003). Mischel (cited from Tett & Burnett, 2003) argued that situations vary in their capacity to encourage or hold down human agency. According to him, situations with obvious norms and rigid roles tend to constrain the expression of individual differences (i.e., strong situations), when the opposite environment permits more freedom and provides opportunities to express one's differences (i.e., weak situations). As informal socialization tactics and participative safety climate are associated with higher levels of freedom and promote manifestation of one's personality in order to develop trust among team members, it is assumed for this research that informal socialization tactics and participative safety climate will positively moderate the relationship between proactive personality and inclusion in such a way that this relationship is stronger under higher levels of informal socialization tactics.

The following two sections develop the theoretical argumentation for each of the factors as no previous research that investigated informal socialization tactics and participative safety climate as moderators in a process of inclusion of proactive personality in a team was found in inclusion, expatriate and developmental psychology literature.

3.2a Informal socialization tactics

By using a wide variety of socialization tactics, organizations help newcomers to adapt as they deal with some degree of uncertainty and disorientation when beginning their new work. Van

Maanen and Schein (cited by Ashforth, Saks, & Lee, 1997) suggested six bipolar tactics for socializing newcomers in organizations: (1) formal versus informal, i.e., formal training versus learning-on the job; (2) collective versus individual, i.e., placing newcomers in groups versus providing them with more unique process; (3) sequential versus random, i.e., a pre-described sequence of learning versus learning when is needed; (4) fixed versus variable, i.e., having a specific timeline for completing learning versus variable process; (5) serial versus disjunctive, i.e., socializing by experienced staff versus without formal support, and (6) investiture versus divestiture, i.e., socialization that builds on newcomers' personal identity and characteristics versus denying them. Later Jones (cited by Ashforth et al., 1997) classified the proposed tactics into institutionalised (i.e. formal, collective, sequential, fixed, serial, and investiture tactics) and individualised (i.e. informal, individual, random, variable, disjunctive, and divestiture tactics).

Active theoretical elaboration of socialization tactics served as a starting point of multiple empirical studies in order to investigate their influence on organizational outcomes. However, the focus of researchers' interest has shifted over time. Traditionally, socialization literature was focused on institutionalised tactics because organizational socialization was considered as a one-directional process in which organization influences the adjustment of newcomers (Van Maanen and Schein 1979; Jones 1986). Recently, with the emphasis on proactivity of employees the individualised socialization approach has started to gain importance (Batistic, 2018; Batistic & Kenda, 2018) and created a new research perspective by studying teams rather than whole organizations. The latest empirical studies confirm that most of newcomer socialization happens within the teams (Chen et al., 2008). This study focuses on informal socialization tactics as they are related mainly to the context "in which organizations provide information to newcomers" (Jones, 1986, p. 264).

Unlike formal socialization tactics that assume an organization as a context, informal socialization tactics are applied within team environments and can boost proactive behaviour of newcomers. Informal socialization tactics are associated with learning on the job (Jones, 1986). This requires face-to-face interaction of a newcomer with her/his colleagues, learning from them about work tasks, expectations, norms etc. According to trait-activation theory (Tett & Burnett, 2003), that context is more likely to trigger a newcomer's proactive behaviour, such as information seeking and networking. While asking questions and getting to know his/her colleagues, the newcomer is more likely to form emotional ties with the team members (van Kleef, Steen, Schott,

2017) which might be experienced as perceived inclusion. In contrast, if companies use only or mostly formal socialization tactics, a newcomer is usually isolated from the team while learning with other newcomers and is expected to acquire certain norms and rules. In this context, a newcomer is expected to follow a certain, relatively passive role which will obstruct his/her networking behaviour and delay the adjustment to the team members as they are not involved.

Hypothesis 2: Informal socialization tactics positively moderate the relationship between proactive personality and inclusion, in such a way that this relationship is stronger under higher levels of informal socialization tactics.

3.2b Participative safety climate

Participative safety climate is defined as “a sense that team members can participate in decision-making and can share ideas without fear of ridicule or ostracism” (West in Peltokorpi & Hasu, 2014, p.38). This definition includes two constructs: participation in decision-making and intra-group safety. The first construct explains the extent to which teams include all team members into the decision-making process and provide access to the information involved in decision-making. The second construct explains the atmosphere within the team that is characterized by mutual trust and support (Peltokorpi & Hasu, 2014).

Participative safety climate could be considered as an ideal setting for socialization and inclusion of a newcomer as it naturally provides opportunities to express one’s own differences (Johns, 2006; Tett & Burnett, 2003). A team environment where employees’ strengths are valued and appreciated by all members nudges a proactive newcomer to express his/her creative ideas and to elaborate them into action plans in order achieve higher team goals as soon as he/she sees an opportunity for a positive change. For example, Stroppa and Spieß (2011) found that proactive expatriates gain additional value from the social support they receive from colleagues because they embrace adjustment challenges, are not afraid to admit their own mistakes and seek feedback in their social interactions which leads to better performance outcomes. Additionally, when an intensive interaction and collaboration with team members starts straight after a proactive newcomer has entered the team, that should enhance his/her relationship building abilities and, therefore, become a part of learning and informal networks. On the other hand, lack of participative safety (i.e., highly structured, competitive, individualistic working environment, hiding information instead of sharing) might force a proactive newcomer to follow rules and procedures developed in advance and not to seek colleagues’ feedback. In other words, when not being

appreciated for his/her own strengths or being limited in resources (information and power) a proactive newcomer is more likely to suppress his/her aim to collaborate and share his/her own ideas which could lead to a longer period of adjustment or even a desire to leave the team. Therefore, lack of participative safety climate would be a barrier for a newcomer to feel included in a team.

Hypothesis 3: Team participative safety climate positively moderates the relationship between proactive personality and inclusion, in such a way that this relationship is stronger under the higher levels of participative safety climate.

All hypotheses are conceptualized in the figure below (Figure 1):

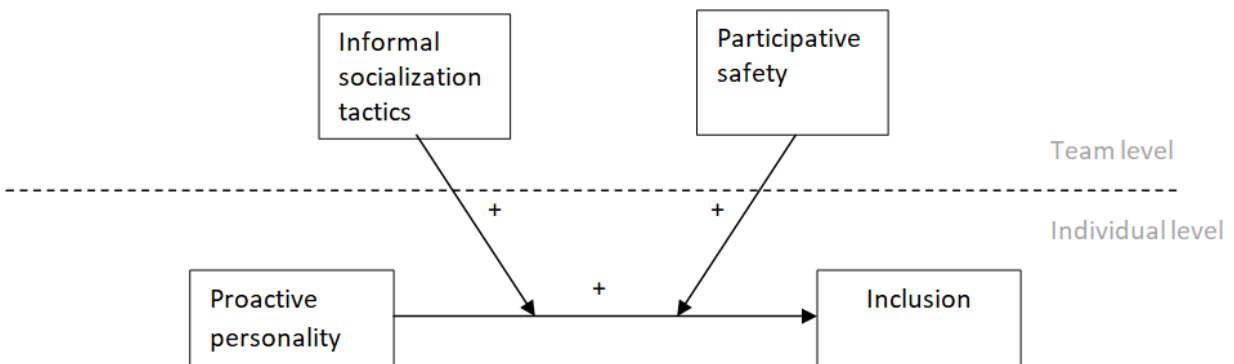


Figure 1. Conceptual model

4. Methods

4.1. Research design

This study uses a quantitative methodology using a cross-sectional survey at one point in time. Data was collected collaboratively by seven Human Resource Studies students of Tilburg University who attend the same Master thesis circle (convenience sampling). The research focus of the thesis circle is related to different aspects of newcomer socialization and talent management. Cross-sectional surveys were chosen as being relatively fast and inexpensive (Mann, 2003), and widely used in social sciences to study relationships between various variables (Lewis-Beck, Bryman, & Futing Liao, 2004). To avoid common source bias data will be collected from different sources: newcomer(s), team members, and their team manager.

The current research studies two kinds of perception - (1) team members' perception about the newcomer and (2) the newcomers' own perception. Therefore, the analysis was conducted in two parts. Part 1 involves a multi-level multi-source analysis that was executed at the individual level using data provided by team members and at the team level using aggregated data about participative safety climate provided by team members and data provided by managers concerning informal socialization tactics. A multi-level analysis allows examination of the effect of individual-level and team-level variables on individual-level outcomes (Hox, Moerbeek, & Van de Schoot, 2017). For Part 2 a multiple regression analysis was conducted based on data provided by newcomers (proactive personality, perceived inclusion, participative safety) and managers (informal socialization tactics).

4.2. Procedure

To access teams with newcomers in organizations master's students explored their networks. The organizations' representatives were contacted in person or via e-mail to examine if the team meets the set of criteria for the study, and if so, the anonymous questionnaires were distributed online. A cover letter which explains the purpose of the research, information about the anonymity of the study, and a consent form to ensure voluntary participation was attached to the questionnaire. The examples of questionnaires, cover letters and consent forms for each group of respondents are presented in the Appendix. To achieve a higher response rate, researchers sent reminders to respondents who had not filled the form within the announced period of time.

4.3. Sample

This study is part of a larger research dedicated to socialization of talents. It draws a sample of diverse organizations working in teams; therefore, no specific industry or work complexity was targeted. It was expected that the majority of the teams were located in the Netherlands, however, other countries (Australia, Belgium, Ireland, Vietnam) were included due to the diverse nationalities of students working in the thesis circle.

To be included in the research each team should have met the specific criteria. Firstly, a team is supposed to be a part of an organization with a minimum of 30 employees as organizations with a smaller number of employees are less likely to have distinctive HR systems. Secondly, each team must consist of 5-15 members (including newcomer(s) and a team manager). The minimum number of members was chosen according to guidelines by Sherbaum and Ferreter (2009) in order to conduct appropriate multi-level analysis and to detect medium level effects. The maximum number of members is set because it is assumed that a team consists of sub-teams if its overall number of members exceeds 15. Next to that, teams were considered as such if team members shared common goals relevant to organizations, aimed to achieve them, and interacted socially (Kozlowski & Bell, 2011). However, only teams formed to perform “offline” (i.e., not remote) were considered for this study, and team members could not be members of multiple teams. Yet, during the data collection stage restrictions related to the COVID-19 pandemic were in use which lead to a certain extent of remote work of originally “offline” teams. Finally, a newcomer is defined as someone who has been working in the organization or in the team up to six months. A team manager in this research is described as someone who is “primarily responsible for defining team goals and for developing and structuring the team to accomplish these missions” (Zaccaro, Rittman, & Marks, 2001, p. 452).

The thesis circle team sent out surveys to 82 teams, out of which 58 returned suitable for this research sets of responds ($M = 9.46$, $SD = 4.86$). 84% of the teams in the sample were nationally homogeneous (79% of the teams were Dutch, 3% - Irish, and 2% - Belgium) and 16% nationally diverse. Respondents were employed in 12 different sectors with the greatest number of teams in retail (22%), consultancy (19%) and manufacturing (17%). The greatest number of teams represented accountancy and finance teams (16%), marketing teams (12%), internal HR teams (10%). The full information concerning the sectors and team specialities is available in the Appendix.

The demographics of the overall sample were as follows: 44.6% were male; the average age was 34.2 years ($SD = 11.66$); the majority had higher vocational education (34.1%) and university education (31.9%); they were primarily employed with fixed-term contracts (56.3%). On average respondents worked 46.7 months ($SD = 79.78$) in their teams, 77.8 months ($SD = 105.09$) for their organizations, and 46.5 months ($SD = 77.87$) in their current roles. Detailed information on sample demographics divided by categories (managers, newcomers, team members) is provided in Table 1. As this study consists of two parts that require different sets of responses, the original dataset was divided into two. The first dataset was created for multilevel analysis and included 48 sets of answers of teams' managers ($N = 48$) and at least 3 team members ($N = 215$). The second dataset included 56 sets of answers made by a newcomer and a manager of the same team.

Table 1

| <i>Characteristics</i> | <i>Frequency</i> | | | |
|---|------------------|-----------------|------------------|---------------------|
| | <i>Total</i> | <i>Managers</i> | <i>Newcomers</i> | <i>Team members</i> |
| <i>Gender</i> | | | | |
| Male | 44.6% | 53.4% | 43.6% | 42.4% |
| Female | 55.4% | 46.6% | 56.4% | 57.6% |
| Age | 34.2 (sd=11.66) | 40.2 (sd=10.96) | 30.1 (sd=9.95) | 33.7 (sd=11.69) |
| <i>Education</i> | | | | |
| Junior secondary (vocational) education | 0.0% | 0.0% | 0.0% | 0.0% |
| Senior secondary (vocational) education | 6.8% | 1.7% | 9.1% | 7.6% |
| Professional education | 26.3% | 13.8% | 27.3% | 29.5% |
| Higher vocational education | 34.1% | 48.3% | 29.1% | 31.4% |
| University | 31.9% | 34.5% | 34.5% | 30.5% |
| Other | 0.9% | 1.7% | 0.0% | 1.0% |
| <i>Type of contract</i> | | | | |
| Permanent contract | 41.2% | 93.1% | 29.1% | 41.2% |
| Fixed-term contract | 56.3% | 5.2% | 69.1% | 56.3% |
| <i>Tenure (in months)</i> | | | | |
| In a team | 46.7 (79.78) | 62.4 (69.42) | 3.5 (1.59) | 53.7 (88.87) |
| In an organization | 77.8 (105.09) | 109.4 (95.53) | 15.3 (48.33) | 85.5 (112.13) |
| In a current role | 46.5 (77.87) | 56.3 (71.91) | 12.0 (29.25) | 52.9 (85.68) |

Note. $N(\text{managers}) = 58$. $N(\text{newcomers}) = 56$. $N(\text{team members}) = 215$

4.4. Instruments

Previously validated scales were included in questionnaires, and later the analysis on reliability of the scales was performed. Questionnaires were created in English and Dutch, one for the newcomer, one for team members, and one for the manager. When items had only an English version they have been translated into Dutch and then translated back into English via backward translation method (Brislin, 1970).

As mentioned above, two perceptions were examined: the newcomers' own perception (Part 2) and team members' perception about the newcomer (Part 1). Data was collected from newcomers to study their proactive personality and perceived inclusion. Team members have also been a source of information on these constructs, however, additional instruction for them was given: "In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer). The following statements relate to the newcomer's general experience, attitudes and feelings at work. Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below." All team members (including newcomers) were asked to rate the team's participative safety climate. The team managers were asked to rate informal socialization tactics, and the received data was used as a Level-2 variable in multilevel analysis (Part 1) as well as a moderator in multi-regression analysis (Part 2).

Proactive personality. Proactive personality was measured with the six-item version of the Proactive Personality Scale (Bateman & Crant, 1993). The scale consists of six items on a 7-point Likert scale, ranging from 1 = strongly disagree to 7 = strongly agree. An example item of this scale for newcomers is "No matter what the odds, if I believe in something I will make it happen", and for team members: "No matter what the odds, if the newcomer believes in something he/she will make it happen". A higher score indicates a more proactive personality. The reliability of this six-item version was acceptable for newcomers (Cronbach's $\alpha = .74$), and good for team members (Cronbach's $\alpha = .88$).

Inclusion. Inclusion was measured with the scale of inclusion developed by Salib (2014). The scale consists of nine items on a 7-point Likert scale, ranging from 1 = never to 5 = always. An example question to measure inclusion is "I feel very much a part of my work team." (for a newcomer) and "The newcomer feels very much a part of the work team." (for a team member). CFI for the scale in the original research was 1.00 (Salib, 2014) which is considered as an indicator

of a good fit (Hu & Bentler, 1999). Cronbach's alpha for the scale in the newcomer dataset was equal to .94, and for the team members sample it was .92, which is considered as excellent internal consistency (George & Mallery, 2003).

Informal socialization tactics. Informal socialization tactics were measured by using Jones' (1986) socialization tactics scale which is the most frequently used scale in the socialization tactics literature. This scale was included in the manager questionnaire. The scale consists of five items on a 7-point Likert scale, ranging from 1 = strongly disagree to 7 = strongly agree. An example question is "During the newcomers' training for this job, he/she was normally physically apart from regular organizational members". In the original scale, higher results imply the use of formal socialization tactics, and a lower score indicates the use of informal socialization tactics. For this study the items were reversed to interpret results better. Therefore, in the reversed items higher scores indicate the use of informal tactics. Cronbach's alpha for the original scale was .68 (Jones, 1986) which is considered as a questionable reliability (George & Mallery, 2003). In this research, the scale had low internal consistency (Cronbach's $\alpha = .36$) which can be explained by a small sample size ($N = 58$). By deleting one of the items Cronbach's α could increase up to .39. Since the improvement of the scales' reliability was not substantial, and the scale had a small number of items, it was used in its original form in the subsequent analyses. Considering the low reliability of this scale, results need to be examined with caution. CFA for this scale was not conducted due to a sample size smaller than 200 (Kline, 2011).

Participative safety climate. In this study, team participative safety was measured by using a short version of the Team Climate Inventory (TCI) by Kivimäki, Kuk, Elovainio, Thomson, Kalliomäki-Levanto and Heikkilä (1997). Team participative safety consists of eight items measured on a 5-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. Example of items is: "Everyone's view is listened to, even if it is in a minority". A higher score indicates a higher level of perceived participation safety. The reliability of this scale was good for both the team members' survey and the newcomers' survey with a coefficient of Cronbach's alpha of .86 and .88 respectively. However, the structure of the proposed research model showed the validity concerns related to this scale. To overcome this issue, the item with the least regression weight ("We all influence each other") was removed. When deleted, that item increased Cronbach's alpha for both team members and newcomers and created the highest reliability value possible for the given samples (.87 and .89 respectively). For Part 1 analysis, the perceived

participative safety was measured on Level 1, and after checking the data for inter-rater reliability the rating of team members from the same team was aggregated at Level 2. This step is introduced in detail in the section 4.5.3 Statistical analysis.

Control variables

Gender match. Research shows that gender dissimilarity is negatively related with psychological attachment among team members and perceived group inclusion at work (Tsui, Egan, & O'Reilly, 1992; Jansen, Otten, & van der Zee, 2017). Therefore, the conceptual model was tested controlling for gender match between newcomer gender and the gender of others in a team. Newcomer gender was compared with the gender of every team member (Part 1) and the manager (Part 2). Firstly, the gender of all respondents was measured by noting their gender as “female” (0), “male” (1). Later, the answers were compared and coded as “0” in case the gender of a newcomer differed from a team member or a manager and “1” in case they had the same gender.

Newcomer gender. For Part 2 analysis, the gender of a newcomer was used as a control variable. It is important to include newcomer gender as a control variable as studies show its strong connection to inclusion. Some scholars (Cho & Mor Barak, 2008; Fidler, Vilchinsky, & Werner, 2007) argue that men have higher perceived inclusion than women because historically they have wider access to resources. Other research (Downey, van der Werff, Thomas, & Plaut, 2015) show the opposite results. They claim that women have a higher score on social inclusion as they are oriented to create closer relationships whilst men are encouraged to be more independent. In the newcomer questionnaire, gender was measured as a dichotomous control variable and was coded as “0” for female and “1” for male.

Tenure. The newcomer tenure at a new role in a new team was used as a control variable for Part 2 analysis as studies show that socialization measurements might fluctuate over time even during the first six months a newcomer spends in a team (Chen, 2005; Bauer & Erdogan, 2011). The tenure was checked by asking newcomers the following open-ended question: “For how long have you been working in this team? (in years and months)”. An employee was considered as a newcomer if he/she has been working in a team up to 6 months, and the observations were recorded as a continuous variable, in months.

4.5. Analysis

4.5.1. Data preparation

After the responses for questionnaires had been collected, the data was entered into SPSS 26 for data preparation. Before testing the conceptual model, the dataset was checked for missing values and outliers. The missing data was analysed using Missing Completely At Random (MCAR) procedure by Little (1988). The manager data had no missing data. 3.6% of demographic data in the newcomer sample was missing (gender and newcomer team tenure). These elements are used as control variables in this study, and the cases were used in the research as the missing values did not exceed 5%. The team member dataset showed that data was missing at random ($\chi^2(18) = 13.27, p = .78$): data for scale items was missing for no more than .5% per item, while 11.6% of data for a control variable (gender comparison) was missing. To replace the missing values of the scale items with predicted values the Expectation Maximization (E-M) Algorithm (Dempster, Laird, & Rubin, 1977) was used as E-M algorithm exhibits less bias and provides the most accurate estimates of missing data at all levels (Rubin, Witkiewitz, Andre & Reilly, 2007). Missing values of the gender comparison variable were not replaced, and five teams with missing data on this control variable were deleted from the data set before conducting multilevel analysis. Additionally, datasets were checked for outliers using the outlier labelling rule (Hoaglin, Iglewicz, & Tukey, 1986; Hoaglin & Iglewicz, 1987). Two outliers were detected in the participative safety scale of the team member dataset. They were considered as valid responses because they represent extreme values of the scales. Therefore, no cases were deleted.

4.5.2 Confirmatory Factor Analysis

Confirmatory factor analysis was conducted in IBM SPSS Amos 26 to determine if the original structure of the scales worked with the data from this research. Only the team members sample ($N=215$) was tested as its size met the criteria of an appropriate minimum $N>200$ (Hoogland & Boomsma, 1998; Kline, 2011). In this study the sample sizes of the managers and newcomers are 58 and 56 respectively. Therefore, the CFA was conducted for the following scales that were used in the team members questionnaires: proactive personality, participative safety climate, and perceived inclusion.

According to the guidelines of Hu and Bentler (1998), the following indices were used to evaluate the model fit: the chi square statistic (χ^2), the comparative fit index (CFI), the Tucker-Lewis index (TLI), the root mean square error of approximation (RMSEA), and standardized root mean squared residual (SRMR). CFI and TLI values above .90 indicate good model fit, and scores

above .95 mark excellent model fit. For RMSEA, values in a range .05 - .11 demonstrate moderate fit, while scores lower .05 indicate good fit. SRMR values below .09 indicate a close fit between the data and the model. Without modification indices, the model indicated a significant chi-square ($\chi^2(226) = 443.23$, $CMID/DF = 1.96$, $p < .01$), which suggests insufficient model fit. However, recent researchers argue that a p-value greater than .05 should not be used as a strict cut-off criterion in CFA due to its high sensitivity to model complexity and sample size (Schermele-Engel, Moosbrugger, & Müller, 2003; Vandenberg, 2006). Other indices had the following results: $CFI = .92$ and $TLI = .91$ (both indices are higher than .90), $RMSEA = .07$ ($< .11$), $SRMR = .07$ ($< .09$). As given indices met the cut-off criteria for reasonable model and demonstrated a good fit with the data, modification indices were not applied.

Next, the model was tested for validity and reliability by calculating Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), and Average Shared Variance (ASV) according to guidelines by Hair, Black, Babin and Anderson (2010). The validity and reliability thresholds for every scale in the model should be as follows: $CR > .7$, $AVE > .0.5$, $MSV < AVE$. The analysis showed that the model has convergent validity issues as AVE of the participative safety scale was .46 ($< .5$) which indicated that the latent factor was not well explained by its observed variables. Malhotra and Dash (2011) claim that AVE should be considered as a strict measure of convergent validity because if to take into account only the value of CR indicator there is a high possibility that “more than 50% of the variance is due to error.” (Malhotra & Dash, 2011, p.702). Therefore, the participative safety construct was revised and the item with the least standardized regression weight (item 6) was removed in order to achieve validity and reliability thresholds ($CR = .87$, $AVE = .5$, $MSV = .23$). The model fit indices after removing the item from the participative safety construct were as follows: $CFI = .92$, $TLI = .91$, $RMSEA = .07$, $SRMR = .06$.

Additionally, the data was checked for common method bias (CMB) that could have been caused by using a single method (e.g., an online survey). CMB was tested by including the common latent factor (CFL) to the model. To make sure that no common method bias occurred, I used Specific Bias Test plugin (Gaskin & Lim, 2017) that runs zero-constrained, equal-constrained and unconstrained bias tests. The zero-constrained bias test defines if the response bias is any different from 0. It calculates the difference of chi-square between the constrained and

unconstrained models (the result should be not significant). The analysis showed $\Delta\chi^2 = .00$, $df = 0$, $p = 1.00$. Therefore, no specific response bias that affect the model was detected.

4.5.3 Statistical analysis

For the Part 1 analysis (perception of team members in relation to newcomer) hierarchical linear modelling was conducted. Before performing the main analysis of this part, the participative safety climate scale was prepared for the aggregation to the team level as in this research it is seen as a shared team perception. To justify aggregation the inter-rater agreement r_{wg} (to validate aggregation), ICC1 (to ensure sufficient between-unit variation) and ICC2 (to ensure sufficient within-unit agreement) were calculated. The mean for value of r_{wg} across all groups was equal to .97, which according to Bliese (2000) suggests a very strong agreement. Every team had a value of interrater agreement (r_{wg}) larger than .51 so no teams were excluded from the sample at this stage of analysis (Lebreton & Senter, 2008). For the ICC, the results are $ICC(1) = .21$ and $ICC(2) = .54$ which means that the values of both indices met cut-off criteria ($ICC(1) \geq .10$ and $ICC(2) \geq .50$). As all criteria were met, the individual scores were aggregated to a team level.

Hierarchical linear modelling in HLM 6.08 Student version was conducted to test the hypotheses of the research in 4 steps: (1) intercept model, (2) the main relationship between the newcomer proactive personality and perceived inclusion was tested on the level 1, (3) the cross-level direct effect of the moderators (informal socialization tactics and participative safety climate) on the dependent variable was tested in the cross-level mode, (4) the moderation on the main effect was tested in the interaction model.

For the Part 2 analysis (perception of the newcomer) multiple regression analysis was conducted. The Process Macro model 1 by Hayes (2013) was used in order to examine the hypothesized moderation model.

5. Results

5.1 Part 1: Results of the multilevel analysis. Team Perception

As responses of 26 team members were missing the data on gender comparison with a newcomer, five teams were excluded from the dataset. Therefore, data of 45 teams has been processed for hierarchical linear modelling. Table 2 shows the descriptive statistics and correlations of the variables used in this research for the multilevel analysis.

Table 2

| <i>Descriptive statistics and correlations</i> | | | | | | | |
|--|------|------|------|------|-------|-------|----|
| Variable | Mean | SD | Min | Max | 1. | 2. | 3. |
| <i>Level 1</i> | | | | | | | |
| 1. Proactive Personality | 4.50 | 1.02 | 1.33 | 7.00 | (.88) | | |
| 2. Perceived inclusion | 5.48 | 0.91 | 2.56 | 7.00 | .44** | (.92) | |
| 3. Gender match ^a | - | - | - | - | .03 | .01 | |
| <i>Level 2</i> | | | | | | | |
| 1. Informal Socialization Tactics | 3.89 | 0.88 | 2.00 | 5.80 | (.36) | | |
| 2. Participative Safety | 3.85 | 0.40 | 2.94 | 4.71 | -.16 | (.87) | |

Note. N(level 1) = 190. N(level 2) = 43.

**p<.01, two tailed

^a Gender match variable was coded 1 (team member has a similar gender to newcomer's), 0 (team member has a different gender comparing to newcomer's)

Cronbach's alpha showed on the diagonal lines

Hierarchical linear modelling was used to examine the conceptual model. To predict team members' perception of newcomer perceived inclusion, the six models for hypothesis testing were analysed in HLM6.08 Student version. The results of the analysis are demonstrated in Table 3, including the pseudo-R² calculated with formulas by Snijders and Bosker (1999) and the deviance.

The aim of the first model was to evaluate the intercept and test if there was any difference at the group level to verify the possibility of multi-level modelling. Therefore, only the team members' perception of newcomer's perceived inclusion was added as an outcome variable. The results showed $\chi^2(42) = 99.88, p < .01$, indicating that the variance in team members' perception of newcomer's inclusion by the higher-level grouping is significant and multi-level analysis was justified. Additionally, the ICC value was calculated, and it was .24 which suggested that 24% of the variance of perceived inclusion depends on higher level.

In the second model, team members' perception of newcomer's proactive personality (group mean was centered in order to avoid misspecification and improve interpretation of the

main effect; Kreft, de Leeuw & Aiken, 1995) as well as a control variable gender match were added to the random intercept model as level one predictors. The effect of proactive personality is the same in all groups. Hypothesis 1 assumed that newcomer proactive personality is positively associated with a newcomer's inclusion. A control variable showed no significant outcomes. However, the results of team members' perception of newcomer's proactive personality on team members' perception of newcomer's inclusion were significant ($\beta = .36$, $SE = .07$, $p < .01$), indicating that H1 was supported.

In the third and fourth model, informal socialization tactics and participative safety climate (grand mean centered) respectively were used to examine their cross-level direct effect on team members' perception of newcomer's inclusion. The results of informal socialization tactics indicated that there is no significant result of any direct effect ($\beta = .08$, $SE = .06$, $p > .05$). The results of participative safety showed a significant direct cross-level relationship ($\beta = .91$, $SE = .19$, $p < .01$). When team participative safety increases by 1 point then inclusion increases by .91 points.

In the fifth and the sixth model, I examined if there would be any interaction of team informal socialization tactics and team participative safety with team members' perception of newcomer's proactive personality towards team members' perception of newcomer inclusion. Hypothesis 2 proposed that informal socialization tactics positively moderate the relationship between newcomer PP and inclusion. The result showed $\beta = -.15$, $SE = .07$, $p < .05$. Given the significant result, simple slopes were displayed in order to interpret the result better (Figure 2). Here, inclusion is shown as a function of newcomer proactive personality perceived by team members with different values of informal socialization tactics: 0 (i.e., equal to the grand mean of informal socialization tactics) in green, 1 (i.e., 1 point higher than grand mean) in red, and -1 (i.e., 1 point lower than grand mean) in blue. When informal socialization tactics increase by 1 point the effect of proactive personality on inclusion decreases by .15. Newcomers with high levels of proactive personality are more likely to experience perceived inclusion when the informal socialization tactics are low. Thus, H2 was belied.

Table 3

Results of hierarchical moderated regression analysis

| Variable | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| <i>Level 1</i> | β (SE) | β (SE) | β (SE) | β (SE) | β (SE) | β (SE) |
| Intercept | 5.47**(.09) | 5.47**(.13) | 5.47**(.13) | 5.47**(.11) | 5.46**(.13) | 5.48**(.10) |
| Proactive Personality | | .36**(.07) | .36**(.07) | .36**(.07) | .37**(.06) | .37**(.07) |
| Gender comparison | | .01(.13) | .004(.13) | .01(.12) | .01(.13) | .004(.12) |
| <i>Level 2</i> | | | | | | |
| Informal Socialization Tactics | | | .08(.06) | | .08(.06) | |
| Participative Safety | | | | .91**(.19) | | .91**(.22) |
| <i>Level 2 Interaction Effect</i> | | | | | | |
| Proactive Personality*Informal Socialization tactics | | | | | -.15*(.07) | |
| Proactive Personality*Participative Safety | | | | | | .09(.10) |
| <i>Variance components</i> | | | | | | |
| Intercept | .20 | .23 | .23 | .10 | .24 | .31 |
| Residual | .64 | .54 | .54 | .53 | .52 | .73 |
| Pseudo-R | | .07 | .06 | .27 | .07 | .27 |
| Deviance | 492.03 | 469.98 | 473.89 | 454.02 | 471.42 | 453.76 |

Note. *N*(level 1) team members = 190. *N*(level 2) team leaders = 43. Entries are estimations of fixed effects with robust standard errors.

* $p < .05$, two tailed. ** $p < .01$, two tailed

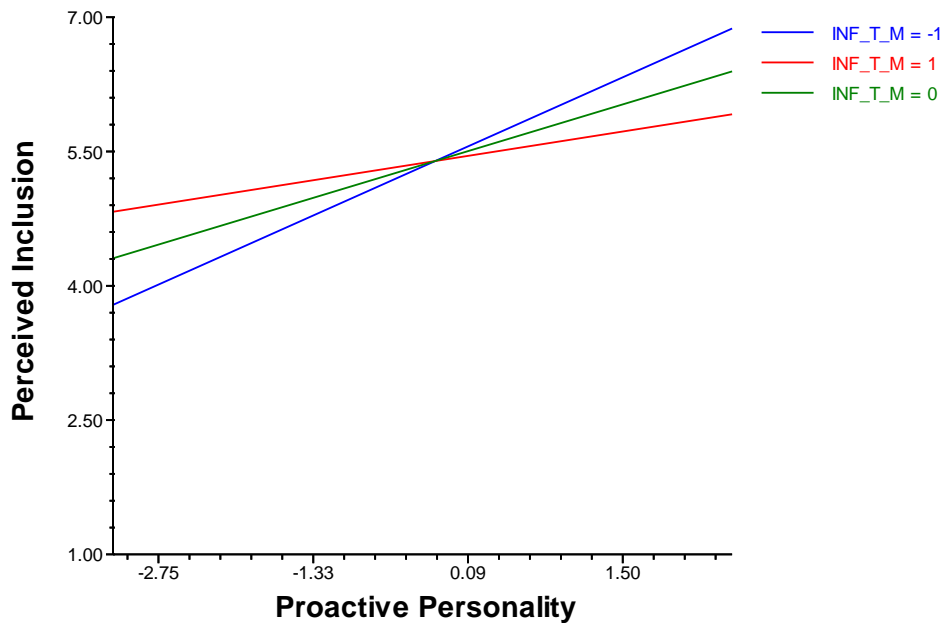


Figure 2. Simple slopes for moderating effect of informal socialization tactics on proactive personality-perceived inclusion relationship

Hypothesis 3 proposed that participative safety positively moderates the relationship between newcomer proactive personality and inclusion. The results showed $\beta = .09$, $SE = .10$, $p > .05$, indicating that H3 was not supported.

5.2 Part 2: Results of the multi-regression analysis. Newcomer Perception

Multi-regression analysis was conducted in order to test if newcomers' perspective differs from the team members' perspective about a newcomer in a team or if both perspectives have similar trends. 43.1% of the sample was male, and 56.9% was female. The average age of newcomers was 30.1 years ($SD = 9.95$).

Table 4 shows the descriptive statistics and correlations of the variables used in this research for the multiple regression analysis. Positive correlations were showed between proactive personality and perceived inclusion ($r = .28$, $p < .05$) and between perceived inclusion and participative safety ($r = .53$, $p < .01$), but the rest of the variables had no significant correlations.

Table 4

Means, standard deviations and correlations

| | M | SD | 1 | 2 | 3 | 4 | 5 | 6 |
|----------------------------------|------|------|-------|-------|-------|-------|------|------|
| 1 Proactive personality | 5.05 | .81 | (.74) | | | | | |
| 2 Perceived inclusion | 5.58 | .95 | .28* | (.94) | | | | |
| 3 Informal socialization tactics | 3.95 | .95 | .04 | .03 | (.36) | | | |
| 4 Participative safety | 4.19 | .56 | .06 | .56** | -.03 | (.89) | | |
| 5 Newcomer gender | - | - | -.04 | -.05 | -.08 | .05 | | |
| 6 Gender match | - | - | .05 | -.07 | -.11 | .10 | .10 | |
| 7 Newcomer tenure | 3.71 | 2.18 | -.08 | -.17 | .17 | -.19 | .29* | -.07 |

Note. $N = 56$. * Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

Newcomer gender was coded 0 (female), 1 (male).

Gender match variable was coded 1 (manager's gender is similar to newcomer's), 0 (manager's gender is different to newcomer's)

Newcomer tenure was estimated in months

Cronbach's alpha showed on the diagonal lines

Hayes PROCESS (2013) was used to analyse the moderating effect of informal socialization tactics (Analysis 1) and participative safety climate (Analysis 2) on the relationship between newcomer proactive personality and his/her perceived inclusion. The results of the conducted analysis are presented in Table 5. The first hypothesis proposed that newcomer proactive personality is positively associated with his/her inclusion. H1 was not supported as both analyses had no significant results (Analysis 1: $\beta = .31$, $SE = .16$, $p = .06$; Analysis 2: $\beta = .24$, $SE = .14$, $p = .10$). The results of Analysis 2 could be influenced by a "moderator effect": when entered simultaneously to the equation, the main effect of independent variable and interaction effect are corrected to each other and may overlap which will decrease an explained variance of the independent variable (Frazier, Barron, & Tix, 2004). This scenario is possible in this research because perceived inclusion has a stronger correlation with participative safety climate ($r = .56$, $p < .01$) than with newcomer proactive personality ($r = .28$, $p < .05$). Therefore, the current conceptual model needs further empirical research with a bigger sample.

Table 5

Results of multi-regression analysis

| <i>Variable</i> | β | <i>SE</i> | <i>t</i> | R^2 |
|--|---------|-----------|----------|-------|
| <i>Analysis 1: F(6,49)=2.90*</i> | | | | .22 |
| Proactive Personality | .31 | .16 | 1.92 | |
| Informal Socialization Tactics | .13 | .14 | .94 | |
| Proactive Personality * Informal Socialization Tactics | -.56** | .18 | -3.13 | |
| Newcomer gender | .14 | .27 | .52 | |
| Gender match | -.13 | .28 | -.48 | |
| Newcomer tenure | -.10 | .07 | -1.52 | |
| <i>Analysis 2: F(6,49)=6.68**</i> | | | | .43 |
| Proactive Personality | .23 | .14 | 1.67 | |
| Participative Safety | .94** | .24 | 3.89 | |
| Proactive Personality * Participative Safety | -.29 | .34 | -.85 | |
| Newcomer gender | -.05 | .24 | -.20 | |
| Gender match | -.33 | .26 | -1.26 | |
| Newcomer tenure | -.02 | .05 | -.39 | |

Note. N=56. Unstandardized regression coefficients are reported. * $p < .05$, two-tailed. ** $p < .01$, two-tailed

The second hypothesis assumed that informal socialization tactics positively moderate the relationship between newcomer proactive personality and his/her perceived inclusion. The results revealed the significant interaction of informal socialization tactics on newcomer proactive personality and inclusion, but the outcomes indicated negative effect ($\beta = -.56$, $SE = .18$, $p < .01$). When informal socialization tactics increase by 1 point the effect of proactive personality on inclusion decreases by .56. The analysis showed that due to the moderation effect R^2 increased by 9.8% ($F(1,49) = 9.79$, $p < .01$). A plot was built to visualize the results (Figure 3). Newcomers with pronounced proactive personality are more likely to experience perceived inclusion to a team where informal socialization tactics are low, but in similar circumstances non-proactive newcomers tend to experience low levels of inclusion. By contrast, a proactive newcomer is likely to feel less included than a non-proactive newcomer when informal socialization tactics are actively used in a team. Thus, H2 was disproved.

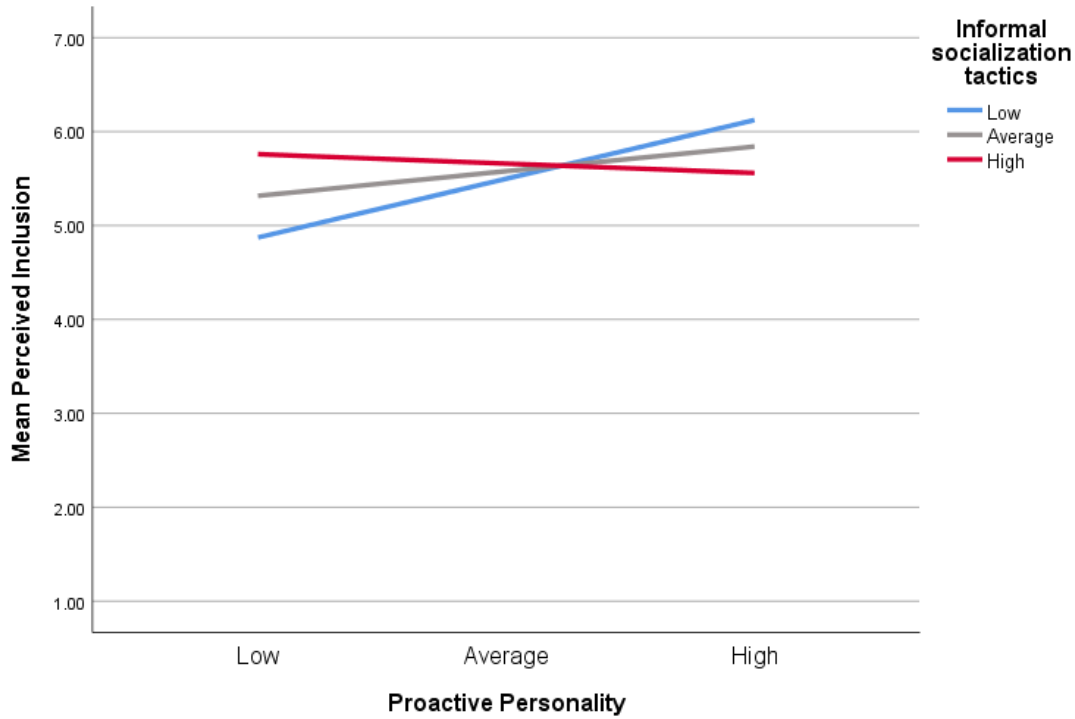


Figure 3. Simple slopes for moderating effect of informal socialization tactics on proactive personality-perceived inclusion relationship

The third hypothesis proposed a positive moderation effect of participative safety on the relationship between newcomer proactive personality and his/her perceived inclusion. The outcomes showed that team participative safety is significantly related to newcomer perceived inclusion ($\beta = .94, SE = .24, p < .01$), but no significant interaction of participative safety on newcomer proactive personality and perceived inclusion was revealed ($\beta = -.29, SE = .34, p = .40$). Therefore, H3 was not supported.

6. Discussion

Following the interactionist approach, this study aims to examine how the proactive personality of a newcomer is connected to his/her experience of inclusion in a team, and how contextual factors such as informal socialization tactics and participative safety team climate influence these relationships. In order to examine the conceptual model, two perspectives were applied to the research: the team members' perception of a newcomer's socialization was explored by a cross-sectional multi-level analysis (part 1) and newcomers' perception of how they adjusted to the team was studied by hierarchical multiple regression (part 2). The results indicate that there is a positive relationship between newcomer proactive personality and perceived inclusion from the team members' perspective. Moreover, informal socialization tactics negatively moderate these relationships in both conducted analyses (Part 1 and Part 2). Furthermore, there is no significant interaction of participative safety climate on the relationships between the newcomer's proactive personality and the newcomer's perceived inclusion from both newcomer and team member perspectives, but in both parts of analysis participative safety climate is positively related to perceived inclusion of a newcomer. These findings are interpreted in detail in the following sections.

6.1. Theoretical contributions

This research fills several theoretical gaps. Firstly, previous studies have mainly investigated the socialization of newcomers focusing mostly on exploring the relationship between a newcomer and an organization (Ashforth, Sluss & Harrison, 2007) or a newcomer and a manager (Sluss & Thompson, 2012). This research focuses on the socialization process of newcomers in their closest context – the team context. While investigating the team members' perception of a newcomer's proactive personality and how it affects his/her perceived inclusion (part 1), the two variables appeared to be significantly positively related. Similar results appear in one of the analysis of newcomers' perception. In line with social network theory (Liu, Sidhu, Beacom, & Valente, 2017), this finding suggests that proactive personality might be considered as a strength that helps to gain personal influence in the team while creating ties and connections. Non-significant positive relations between main variables in both analyses of Part 2 could be explained by a limited sample (56 observations). Another reason could be connected to the epidemiological situation in the world and newcomers' subjective estimation of his/her status. The significant

period of the research including the data collection stage fell during a lockdown period due to the COVID-19 pandemic. Because of that most employees were working remotely which would affect the socialization of newcomers. In the given circumstances newcomers could experience frequent virtual meetings with colleagues which gives less opportunities for informal interaction. One of the expatriate studies proved that those who experience more frequent virtual support from colleagues have lower levels of adjustment comparing to those for whom face-to-face interaction with colleagues is more prevalent (Claus, Maletz, Casoinic, & Pierson, 2015).

Secondly, while having a multi-level research design, this study answers the suggestion made by Crant (2000) to examine personality along with environment variables. To my knowledge, the inclusion of newcomers with proactive personality moderated by these contextual factors has never been studied before. Despite theoretical arguments, both parts of this study show that informal socialization tactics do not enhance the inclusion of a proactive newcomer to a team. On the contrary, high levels of informal socialization tactics could hinder the socialization process. In both perceptions, newcomers with a pronounced degree of proactive personality are likely to feel highly included in the teams with a low level of informal socialization tactics but feel less included in teams with high levels of informal socialization tactics. These results could be explained in accordance with trait-activation theory. As informal socialization tactics are associated with learning on the job, some initiatives of proactive newcomers might be erroneous or unaware of important situational cues (of any level) which would lead to negative outcomes (Campbell, 2010). The number of mistakes might rise in teams where socialization is based mostly on newcomers' questions, and open and clear communication of team's values and expectations is not allocated to certain practices or procedures. In contrast, in teams that use a certain extent of formal socialization tactics, newcomers absorb important information in a shorter period and create initiatives in accordance with expectations, and therefore, become insiders in a shorter time. Another explanation as to why in this research informal socialization tactics did not support inclusion of proactive newcomers in their teams could also be related to the pandemic situation. As many newcomers in the sample were isolated from their team members, they were likely to get more structured socialization practices that were assigned in advance. In order to eliminate the effect of the external influence of COVID-19 it is recommended to study the proposed conceptual model in future when employees will be back to their respective offices.

As for participative safety climate, the study did not reveal any conditional effect where newcomers with proactive personality would socialize differently under different levels of participative safety in the team.. However, in both analyses, participative safety climate showed a direct positive relationship to the perceived inclusion of a newcomer. The framework by Tett and Burnett (2003) implies a theoretical possibility when the situational main effect on a dependent variable (perceived inclusion) is powerful enough to wash out trait effects. However, authors note that it is unlikely that such powerful work situations exist. A more plausible explanation for a significant direct (but not moderating) effect of participative safety on newcomer perceived inclusion in the current conceptual model is that characteristics of participative safety as a construct has a semantic overlap with an extrinsic motivation construct in trait-activation theory. Tett and Burnett (2003) describe an extrinsic motivation as a response of team members to newcomer expression of trait behaviour with praise, acceptance, and appreciation. In other words, “an ideal work situation for any individual is one that offers cues for trait expression per se and one where trait-expressive behaviour is valued positively by others” (Tett & Burnett, 2003, p. 505). That description is highly similar to a description of participative safety climate as a work environment where all members feel safe to express themselves (Peltokorpi & Hasu, 2014). Therefore, this research additionally contributes to trait-activation theory as it broadens the range of dependent variables beyond job performance (suggested by Johns, 2018) and at the same time starts a discussion about widely used contextual factors that could have limited results within this framework.

6.2. Limitation and future research

This section determines some limitations that should be considered while interpreting the results of the current research and suggests propositions for future research. The strength of the study design in this research is the use of three sources: the newcomers’ self-report, team members’ assessment of newcomers’ socialization, and managers’ overview of informal socialization tactics. For each part of the analysis two sources were used which also helped to eliminate common method bias. However, the current research design has some weaknesses that potentially limited the results. The first limitation is connected to various aspects of the sample. The sample size for Part 2 is relatively small (56 observations). According to Green (1991), the minimum required sample size for a regression analysis with 6 predictors (including control variables) is 110 observations. Additionally, due to the limited time for data collection the organizations were

approached via the network of the master students, i.e., convenience sampling. One of the limitations of that type of sampling is reduced representation (Ritchie et al., 2013). Even though the sample includes teams of various nationalities from different sectors, future research could make use of a bigger sample size and random sampling to achieve a broader representation of the working population.

Second, the cross-sectional design of this research which implies that the data was collected at one point in time has a limitation: it is not possible to find a causal relationship between variables. Other studies show that socialization measurements might fluctuate over time (Chen, 2005; Bauer & Erdogan, 2011). Collecting data several times might reveal underlying mechanisms of the development of a newcomer's sense of perceived inclusion as well as information about the changes in accuracy of team member perceptions of a newcomer's socialization process. Therefore, it is recommended for future research to use a longitudinal design, to collect the information about newcomer socialization and inclusion in perception of team members and newcomers themselves and to compare the results.

Lastly, this study uses a bipolar socialization tactics typology, and this scale consistently shows a low level of reliability which might compromise the results. Sometimes it is hard to make the distinction between informal and formal socialization tactics (Ashforth et al., 2007; Batistič, 2018). For example, studies show that informal network-building is facilitated by formal socialization tactics (van Kleef et al., 2017). Most organizations and teams combine both types of tactics, and switch between them over time. It is likely that in the beginning a newcomer is mostly exposed to formal socialization methods (e.g., welcome training programs) and later to more informal practices (e.g., chats at the coffee machine). Therefore, longitudinal research is recommended to explore further the proposed model.

6.3. Practical implications

The results of this study showed that a newcomer's proactive personality positively relates to his/her perceived inclusion. In other words, proactive people use proactive behaviour to create connections with other people. As prior research showed that perceived inclusion could be considered as a predictor of individuals well-being (Findler et al., 2007; Mor Barak & Levin, 2002), there is a reason to assume that proactive people are less likely to experience burn-out. Therefore, that is another reason for organizations to recruit and retain proactive employees.

This research also reveals a significant moderating effect of informal socialization tactics on relationships between proactive personality and perceived inclusion. Companies could conclude that it is important to take into account the personality of a newcomer when planning the onboarding process. This study shows that low levels of informal tactics (and presumably high levels of formal socialization tactics) create situations for people with non-proactive personalities where perceived inclusion is at its lowest, whereas the use of informal socialization tactics facilitates higher levels of their perceived inclusion. Therefore, organizations could promote buddy systems for newcomers, and team managers need to support team members in being open and empathetic towards new hires. On the other hand, people with high levels of proactive personality feel less included when teams provide many informal socialization opportunities. As mentioned above, that could be caused by faulty initiatives a proactive newcomer might take due to the lack of guidance in team values and expectations (van Maanen & Schein, 1979; Campbell, 2010). As a result, these faulty initiatives could lead a newcomer to misunderstandings and conflicts with other team members. To prevent possible faulty assumptions and initiatives made by proactive new hires, it is critically important to include formalized elements to a newcomer's socialization process and to start the communication of a team's expectations and values to a newcomer as soon as possible (Campbell, 2010).

The results of both parts of the study showed no significant interaction of participative safety climate with newcomer proactive personality – perceived inclusion relationships. However, this research emphasizes the significance of participative safety climate on a newcomer's perceived inclusion. A practical implication in regard to this result is that the team climate is important for newcomers and their wellbeing. Organizations should promote participative safety climate among managers of their companies, as this climate creates an environment of trust, encourages people to share their ideas and participate in decision-making (in Peltokorpi & Hasu, 2014, p.38). This environment can be fostered by developing managers' skills in coaching and their ability to set higher-level goals that will be perceived by team members as valuable for them, the organization and society in general (Arraya, Pellisier, & Preto, 2015). Another possibility for organizations to facilitate participative safety climate is to provide team members with training programmes that aim to discover thinking biases and to introduce to team members new ways of collaboration and decision-making (e.g., design-thinking). When participative safety is accepted as a value in the team and in the organization, it can enhance the proactive behaviour of employees.

7. References

- Abrams, D., Hogg, M. A., & Marques, J. M. (2005). *A Social Psychological Framework for Understanding Social Inclusion and Exclusion*. In D. Abrams, M. A. Hogg, & J. M. Marques (Eds.), *The social psychology of inclusion and exclusion* (p. 1–23). Psychology Press.
- Adams, B., Meyers, C., & Sekaja, L. (2020). Positive leadership: Relationships with employee inclusion, discrimination, and well-being. *Applied Psychology: An International Review*, (2020). doi: 10.1111/apps.12230
- Arraya, M., Pellisier, R. & Preto, I. (2015). Team goal-setting involves more than only goal-Setting. *Sport, Business and Management: an International Journal*, 5(2), 157-174. <http://dx.doi.org/10.1108/SBM-11-2012-0046>.
- Ashford, S. J., & Black, J. S. (1996). Proactivity during organizational entry: The role of desire for control. *Journal of Applied Psychology*, 81(2), 199–214. <https://doi.org/10.1037/0021-9010.81.2.199>
- Ashford, S. J., & M. S. Taylor (1990). Adaptation to work transitions: An integrative approach. *Research in Personnel and Human Resource Management*, 8(2), 1–39.
- Ashford, S., & Nurmohamed, S. (2012). From past to present and into the future: A hitchhiker's guide to socialization literature. In C. Wanberg (Ed.), *The Oxford handbook of organizational socialization* (pp. 8–26). New York: Oxford University Press.
- Ashforth, B. E., Sluss, D. M., & Harrison, S. H. (2007). Socialization in organizational contexts. In G. P. Hodgkinson & J. K. Ford (Eds.), *International review of industrial and organizational psychology: Vol. 22. International Review of Industrial and Organizational Psychology 2007* (p. 1–70). John Wiley & Sons Ltd. <https://doi.org/10.1002/9780470753378.ch1>
- Ashforth, B.E., Saks, A., & Lee, R. (1997). On the dimensionality of Jones' (1986) measures of organizational socialization tactics. *International Journal of Selection and Assessment*, 5(4), 200-214. doi:10.1111/1468-2389.00061
- Bateman, T., & Crant, J. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(2), 103-118. doi: 10.1002/job.4030140202

- Batistic, S. (2018). Looking beyond - socialization tactics: The role of human resource systems in the socialization process. *Human Resource Management Review*, 28(2), 220-233. doi: <https://doi.org/10.1016/j.hrmr.2017.06.004>
- Batistič, S., & Kaše, R. (2015). The organizational socialization field fragmentation: A bibliometric review. *Scientometrics*, 104(1), 121-146. doi: <https://doi.org/10.1007/s11192-015-1538-1>
- Batistič, S., & Kenda, R. (2018). Toward a model of socializing project team members: An integrative approach. *International Journal of Project Management*, 36(5), 687-700. doi: [10.1016/j.ijproman.2018.03.003](https://doi.org/10.1016/j.ijproman.2018.03.003)
- Bauer, T. N., & Green, S. G. (1998). Testing the combined effects of newcomer information seeking and manager behavior on socialization. *Journal of Applied Psychology*, 83(1), 72-83. <https://doi.org/10.1037/0021-9010.83.1.72>
- Bauer, T.N., & Erdogan, B. (2011). *Organizational socialization: The effective onboarding of new employees*. In S. Zedeck (Ed.), *APA handbooks in psychology®. APA handbook of industrial and organizational psychology, Vol. 3. Maintaining, expanding, and contracting the organization* (p. 51–64). American Psychological Association. <https://doi.org/10.1037/12171-002>
- Bauer, T.N., Bodner, T., Erdogan, B., Truxillo, D., & Tucker, J. (2007). Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. *The Journal of Applied Psychology*, 92(3), 707-21. doi:<http://dx.doi.org/10.1037/0021-9010.92.3.707>
- Bliese, P. D. (2000). *Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis*. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (p. 349–381). Jossey-Bass.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17(5), 475–482. doi: [10.1177/0146167291175001](https://doi.org/10.1177/0146167291175001)
- Briscoe, J., Hall, D., & Frautschy DeMuth, R. (2006). Protean and boundaryless careers: An empirical exploration. *Journal of Vocational Behavior*, 69(1), 30-47. doi:[10.1016/j.jvb.2005.09.003](https://doi.org/10.1016/j.jvb.2005.09.003)

- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216. <https://doi.org/10.1177/135910457000100301>
- Campbell., D.J. (2000). The proactive employee: Managing workplace initiative. *Academy of Management Perspectives*, 14(3), 52-66. doi: 10.5465/AME.2000.4468066
- Cangiano, F., & Parker, S. K. (2016). *Proactivity for mental health and well-being*. In S. Clarke, T. M. Probst, F. Guldenmund, & J. Passmore (Eds.), *Wiley Blackwell handbooks in organizational psychology. The Wiley Blackwell handbook of the psychology of occupational safety and workplace health* (p. 228–250). Wiley Blackwell.
- Chen, G. (2005). Newcomer adaptation in teams: Multilevel antecedents and outcomes. *The Academy of Management Journal*, 48(1), 101–116. Retrieved from: <https://www.jstor.org/stable/20159643>.
- Chen, N. Y.-F., Lu, J.-F., Tjosvold, D., & Lin, C. (2008). Effects of team goal interdependence on newcomer socialization: An experiment in China. *Journal of Applied Social Psychology*, 38(1), 198-214. <https://doi.org/10.1111/j.1559-1816.2008.00302.x>
- Cho, S., & Mor Barak, M. (2008). Understanding of diversity and inclusion in a perceived homogeneous culture: A study of organizational commitment and job performance among Korean employees. *Administration in Social Work*, 32(4), 100-126. doi: 10.1080/03643100802293865
- Chong, J.X.Y., Beenen, G., Gagné, M. *et al.* Satisfying Newcomers' Needs: The Role of Socialization Tactics and Supervisor Autonomy Support. *J Bus Psychol* (2020). <https://doi.org/10.1007/s10869-019-09678-z>
- Claus, L., Maletz, S., Casoinic, D., & Pierson, K. (2015). Social capital and cultural adjustment of international assignees in NGOs: Do support networks really matter? *International Journal of Human Resource Management*, 26(20), 2523-2542. doi: 10.1080/09585192.2014.1003083
- Correll, J., & Park, B. (2005). A model of the ingroup as a social resource. *Personality and Social Psychology Review: An Official Journal of the Society for Personality and Social Psychology, Inc*, 9(4), 341-359. doi: 10.1207/s15327957pspr0904_4
- Crant, J. M. (1995). The Proactive Personality Scale and objective job performance among real estate agents. *Journal of Applied Psychology*, 80(4), 532-537. <https://doi.org/10.1037/0021-9010.80.4.532>

- Crant, J. M., & Bateman, T. S. (2000). Charismatic leadership viewed from above: the impact of proactive personality. *Journal of Organizational Behavior*, 21(1), 63-75. doi: 10.1002/(SICI)1099-1379(200002)21:13.3.CO;2-A
- Crant, J.M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462. doi: 10.1016/S0149-2063(00)00044-1
- Dempster, A.P., Laird, N.M., Rubin, D.B. (1977). *Journal of the Royal Statistical Society. Series B (Methodological)*, 39(1), 1-38.
- Downey, S., Van der Werff, L., Thomas, K., & Plaut, V. (2015). The role of diversity practices and inclusion in promoting trust and employee engagement: Diversity practices and engagement. *Journal of Applied Social Psychology*, 45(1), 35-44. doi:10.1111/jasp.12273
- Erdogan, B., & Bauer, T. (2005). Enhancing career benefits of employee proactive personality: The role of fit with jobs and organizations. *Personnel Psychology*, 58(4), 859-891. doi:10.1111/j.1744-6570.2005.00772.x
- Fang, R., Duffy, M., & Shaw, J.D. (2011). The organizational socialization process: Review and development of a social capital model. *Journal of Management*, 37(1), 127-152. <https://doi.org/10.1177/0149206310384630>
- Findler, L., Vilchinsky, N., & Werner, S. (2007). The multidimensional attitudes scale toward persons with disabilities (MAS). *Rehabilitation Counseling Bulletin*, 50(3), 166-176. <https://doi.org/10.1177/00343552070500030401>
- Frazier, P. A., Barron, K. E., & Tix, A. P. (2004). Testing moderator and mediator effects in counseling psychology. *Journal of Counseling Psychology*, 51(1), 115-134. doi: 10.1037/0022-0167.51.1.115
- Fuller, B., Jr., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, 75(3), 329–345. <https://doi.org/10.1016/j.jvb.2009.05.008>
- Gaskin, J. & Lim, J. (2017), "CFA Tool", AMOS Plugin. *Gaskination's StatWiki*. Retrieved from: http://statwiki.kolobkreations.com/index.php?title=Confirmatory_Factor_Analysis
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.
- Green, S.B. (1991). How many subjects does it take to do a regression analysis. *Multivariate Behavioral Research*, 26(3), 499-510. doi: 10.1207/s15327906mbr2603_7

- Gruman, J., Saks, A., & Zweig, D. (2006). Organizational socialization tactics and newcomer proactive behaviors: An integrative study. *Journal of Vocational Behavior*, 69(1), 90-104. doi:10.1016/j.jvb.2006.03.001
- Hair, J., Black, W., Babin, B., and Anderson, R. (2010). *Multivariate data analysis* (7th ed.): Prentice-Hall, Inc. Upper Saddle River, NJ, USA.
- Hayes, A. F. (2013). Introduction to mediation, moderation and conditional process analysis: A regression-based approach. New York, NY. The Guilford Press.
- Hedman, B. K. (2016). Developing a Measure of Inclusiveness: Factors, Reliability, and Relationship to Job Satisfaction and Intention to Quit. *Electronic Theses and Dissertations*. Retrieved from: <https://digitalcommons.du.edu/etd/1163>
- Hoaglin, D.C., Iglewicz, B. (1987). Fine tuning some resistant rules for outlier labelling. *Journal of American Statistical Association*, 82(400), 1147-1149.
- Hoaglin, D.C., Iglewicz, B., & Tukey, J.W. (1986). Performance of some resistant rules for outlier labelling. *Journal of American Statistical Association*, 81(396), 991-999.
- Hogg, M. A., & Abrams, D. (1993). *Towards a single-process uncertainty reduction model of social motivation in groups*. In M. A. Hogg, & D. Abrams (Eds.), *Group motivation: Social psychological perspectives* (pp. 173–190). Harvester Wheatsheaf.
- Hoogland, J. & Boomsma, A. (1998). Robustness studies in covariance structure modeling: An overview and a meta-analysis. *Sociological Methods & Research*, 26(3), 329-367. 10.1177/0049124198026003003.
- Hox, J., Moerbeek, M., & Van de Schoot, R. (2017). *Multilevel analysis: Techniques and applications, third edition* (3rd ed., Quantitative methodology series) [3rd.]. Routledge. (2017).
- Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Jannesari, M., Wang, Z., McCall, J., & Zheng, B. (2017). Psychological availability between self-initiated expatriates and host country nationals during their adjustment: The moderating role of supportive supervisor relations. *Frontiers in Psychology*, 8, Article 2049. <https://doi.org/10.3389/fpsyg.2017.02049>

- Jansen, W.S., Otten, S. & van der Zee, K.I. (2017). Being different at work. How gender dissimilarity relates to social inclusion and absenteeism. *Group Processes & Intergroup Relations*, 20(6), 879-893. doi: 10.1177/1368430215625783.
- Jansen, W.S., Otten, S., van der Zee, K.I., & Jans, L. (2014). Inclusion: Conceptualization and measurement. *European Journal of Social Psychology*, 44(4), 370-385. doi:10.1002/ejsp.2011
- Johns, G. (2006). The essential impact of context on organizational behavior. *The Academy of Management Review*, 31(2), 386-408. <https://doi.org/10.2307/20159208>
- Johns, G. (2017). Reflections on the 2016 decade award: Incorporating context in organizational research. *Academy of Management Review*, 42(4), 577-595. <https://doi.org/10.5465/amr.2017.0044>
- Johns, G. (2018). Advances in the Treatment of Context in Organizational Research. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(1), 21-46. <https://doi.org/10.1146/annurev-orgpsych-032117-104406>
- Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. *Academy of Management Journal*, 29(2), 262–279. <https://doi.org/10.2307/256188>
- Kammeyer-Mueller, J. D., & Wanberg, C. R. (2003). Unwrapping the organizational entry process: Disentangling multiple antecedents and their pathways to adjustment. *Journal of Applied Psychology*, 88(5), 779-794. <https://doi.org/10.1037/0021-9010.88.5.779>
- Kim, T., Hon, A. H. Y., & Crant, J. M. (2009). Proactive personality, employee creativity, and newcomer outcomes: A longitudinal study. *Journal of Business and Psychology*, 23, 93–103. <https://doi.org/10.1007/s10869-009-9094-4>
- Kivimaki, M., Kuk, G., Elovainio, M., Thomson L., Kalliomaki-Levanto, T., & Heikkila, A. (1997). The team climate inventory (TCI)—four or five factors? Testing the structure of TCI in samples of low and high complexity jobs. *Journal of Occupational and Organizational Psychology*, 70, 375-389
- Klein, K. J., & Kozlowski, S. W. J. (Eds.). (2000). *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (Frontiers of industrial and organizational psychology, 12th bk). San Francisco: Jossey-Bass

- Kline, R. B. (2011). *Methodology in the Social Sciences. Principles and practice of structural equation modeling (3rd ed.)*. Guilford Press.
- Kozlowski, S. W. J. & Bell, B. F. (2001). *Work groups and teams in organizations*. Retrieved from Cornell University, ILR School site: <http://digitalcommons.ilr.cornell.edu/articles/389/>
- Kreft, I. G. G., de Leeuw, J., & Aiken, L. S. (1995). The effect of different forms of centering in hierarchical linear models. *Multivariate Behavioral Research*, 30(1), 1–21. https://doi.org/10.1207/s15327906mbr3001_1
- Leary, M. R., & Baumeister, R. F. (2000). *The nature and function of self-esteem: Sociometer theory*. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, Vol.32 (p. 1–62). Academic Press. [https://doi.org/10.1016/S0065-2601\(00\)80003-9](https://doi.org/10.1016/S0065-2601(00)80003-9)
- Lebreton, J. M., & Senter, J. L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods*, 11(4), 815-852. doi: <https://doi.org/10.1177/1094428106296642>
- Lee, S., Qureshi, I., Konrad, A., & Bhardwaj, A. (2014). Proactive personality heterophily and the moderating role of proactive personality on network centrality and psychological outcomes: A longitudinal study. *Journal of Business and Psychology*, 29(3), 381-395. doi:10.1007/s10869-013-9320-y
- Lewis-Beck, M. S., Bryman, A., & Liao, T. F. (Eds.). (2004). *The Sage encyclopedia of social science research methods (3rd ed.)*. Thousand Oaks, California: Sage Publications Inc.
- Li, N., Liang, J., & Crant, J. (2010). The role of proactive personality in job satisfaction and organizational citizenship behavior: A relational perspective. *The Journal of Applied Psychology*, 95(2), 395-404. doi:10.1037/a0018079
- Little, R.J.A. (1988). A Test of Missing Completely at Random for multivariate data with missing values. *Journal of the American Statistical Association*, 83(404), 1198-1202. doi: 10.2307/2290157
- Litwin, G.H. & Stringer, R.A. Jr. (1968). Motivation and organisational climate. Division of Research, Harvard Business School, Boston.
- Liu, W., Sidhu, A., Beacom, A., & Valente, T. (2017). Social Network Theory. 10.1002/9781118783764.wbieme0092.
- Liu, Y. (2017). Newcomer socialization in teams: An agent-based model and a lab study. Dissertation. Gainesville: University of Florida

- Malhotra N. K., & Dash S. (2011). *Marketing Research an Applied Orientation*. London: Pearson Publishing.
- Mann, C.J. (2003). Observational research methods. Research design II: cohort, cross sectional, and case-control studies. *Emerg Med J.*, 20(1). 54-60. doi: 10.1136/emj.20.1.54
- Maslow, A.H. (1954). *Motivation and Personality*. Harpers.
- Mor Barak, M., & Levin, A. (2002). Outside of the corporate mainstream and excluded from the work community: A study of diversity, job satisfaction and well-being. *Community, Work & Family*, 5(2), 133–157. <https://doi.org/10.1080/13668800220146346>
- Morrison, E. (2002). Information seeking within organizations. *Communication Abstracts*, 25(5), 591-750. doi: <https://doi.org/10.1111/j.1468-2958.2002.tb00805.x>
- Nishii, L. H. (2013). The benefits of climate for inclusion for gender-diverse groups [Electronic version]. *Academy of Management Journal*, 50(6), 1754-1774. doi: 10.5465/amj.2009.0823
- Parker, S., & Collins, C. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, 36(3), 633-662. doi: 10.1177/0149206308321554
- Pelled, L.H., Ledford, J., & Albers Mohrman, S. (1999). Demographic dissimilarity and workplace inclusion. *Journal of Management Studies*, 36(7), 1013-1031. doi:10.1111/1467-6486.00168
- Peltokorpi, V., & Hasu, M. (2014). Transactive memory systems and team innovation a curvilinear approach. *Team Performance Management*, 20(5-6), 262-272. doi:10.1108/TPM-04-2014-0031
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539-569. doi: doi:10.1146/annurev-psych-120710-100452
- Randel, A. E., Galvin, B. M., Shore, L. M., Ehrhart, K. H., Chung, B. G., Dean, M. A., & Kedharnath, U. (2018). Inclusive leadership: Realizing positive outcomes through belongingness and being valued for uniqueness. *Human Resource Management Review*, 28(2), 190–203. <https://doi.org/10.1016/j.hrmr.2017.07.002>
- Ren, H., Shaffer, M. A., Harrison, D. A., Fu, C., & Fodchuk, K. M. (2014). Reactive adjustment or proactive embedding? Multistudy, multiwave evidence for dual pathways to expatriate retention. *Personnel Psychology*, 67(1), 203–239. <https://doi.org/10.1111/peps.12034>

- Ritchie, J., Lewis, J., Nicholls, C.M. and Ormston, R., Eds. (2013). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. Sage, Thousand Oaks, CA.
- Roberson, Q. M. (2006). Disentangling the meanings of diversity and inclusion in organizations. *Group & Organization Management*, 31(2), 212–236. doi: 10.1177/1059601104273064
- Rubin, L.H., Witkiewitz, K., Andre, J.S., & Reilly S. (2007). Methods for handling missing data in the behavioral neurosciences: Don't throw the baby rat out with the bath water. *J Undergrad Neurosci Educ*, 5(2), 71-77.
- Saks, A. M., & Ashforth, B. E. (1997). Organizational socialization: Making sense of the past and present as a prologue for the future. *Journal of Vocational Behavior*, 51(2), 234-279. <https://doi.org/10.1006/jvbe.1997.1614>
- Salib, E., & Rutgers University. Graduate School--New Brunswick. (2014). *A model of inclusion and inclusive leadership in the U.S* (Unpublished doctoral dissertation). Rutgers University.
- Scherbaum, C. A., & Ferreter, J. M. (2009). Estimating statistical power and required sample sizes for organizational research using multilevel modeling. *Organizational Research Methods*, 12(2), 347–367. <https://doi.org/10.1177/1094428107308906>
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the Fit of Structural Equation Models: Tests of Significance and Descriptive Goodness-of-Fit Measures. *Methods of Psychological Research*, 8(2), 23–74.
- Seibert, S., Kraimer, M., & Crant, J. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, 54(4), 845-874. doi:10.1111/j.1744-6570.2001.tb00234.x
- Serrano Archimi, C., Reynaud, E., Yasin, H.M. and Bhatti, Z.A. (2018), “How perceived corporate social responsibility affects employee cynicism: the mediating role of organizational trust”, *Journal of Business Ethics*, Vol. 151 No. 4, pp. 907-921.
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Holcombe Ehrhart, K., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, 37(4), 1262–1289. doi: 10.1177/0149206310385943
- Sluss, D.M., & Thompson, B.B. (2012). Socializing the newcomer: The mediating role of leader–member exchange. *Organizational Behavior and Human Decision Processes*, 119(1), 114-125. doi: <https://doi.org/10.1016/j.obhdp.2012.05.005>

- Snijders, T. A. B., & Bosker, R. J. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. (2nd (1st edition 1999) ed.) London: SAGE Publications Inc.
- Stroppa, C., & Spieß, E. (2011). International assignments: the role of social support and personal initiative. *International Journal of Intercultural Relations*, 35(2), 234-245. doi: 10.1016/j.ijintrel.2010.09.008
- Sundstrom, E. (1999). *Supporting work team effectiveness: Best management practices for fostering high performance* (1st ed., The jossey-bass business and management series). San Francisco, Calif: Jossey-Bass.
- Tett, R., & Burnett, D. (2003). A personality trait-based interactionist model of job performance. *The Journal of Applied Psychology*, 88(3), 500-17. <https://doi.org/10.1037/0021-9010.88.3.500>
- Thompson, J. (2005). Proactive personality and job performance: A social capital perspective. *Journal of Applied Psychology*, 90(5), 1011-1017. doi:10.1037/0021-9010.90.5.1011
- Tsui, A., Egan, T., & O'Reilly, C. (1992). Being Different: Relational Demography and Organizational Attachment. *Administrative Science Quarterly*, 37(4), 549-579. doi:10.2307/2393472
- Twaronite, K. (2019). Five findings on the importance of belonging. Retrieved from: https://www.ey.com/en_us/diversity-inclusiveness/ey-belonging-barometer-workplace-study
- Van Kleef, D., Steen, T., & Schott, C. (2019). Informal socialization in public organizations: Exploring the impact of informal socialization on enforcement behaviour of Dutch veterinary inspectors. *Public Administration*, 97(1), 81-96. doi:10.1111/padm.12375
- Van Maanen, J., & E. H. Schein (1979). Toward of Theory of Organizational Socialization. *Research in Organizational Behavior*, 1: 209-264. Retrieved from: https://pdfs.semanticscholar.org/eb8b/4aa450019035f8c4d72c3c19126615121d65.pdf?_ga=2.207571347.1840883049.1593441149-2034968010.1568905876
- Van Vianen, A.E., & De Pater, I.E. (2012). Content and development of newcomer person-organization fit: An agenda for future research. In C. Wanberg (Ed.), *The Oxford handbook of organizational socialization* (pp. 139–157). New York: Oxford University Press.

- Vandenberg, R. J. (2006). Statistical and Methodological Myths and Urban Legends. *Organizational Research Methods*, 9(2), 194-201. doi: 10.1177/1094428105285506
- Wanberg, C. (2012). *The Oxford handbook of organizational socialization* (Oxford library of psychology). New York: Oxford University Press.
- Wang, Z., Zhang, J., Thomas, C., Yu, J. & Spitzmueller, C. (2017). Explaining benefits of employee proactive personality: The role of engagement, team proactivity composition and perceived organizational support. *Journal of Vocational Behavior*, 101, 90-103. doi: 10.1016/j.jvb.2017.04.002.
- Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team Leadership. *Leadership Quarterly*, 12(4), 451-483. doi: [http://dx.doi.org/10.1016/S1048-9843\(01\)00093-5](http://dx.doi.org/10.1016/S1048-9843(01)00093-5)
- Zenger, T., & Lawrence, B. (1989). Organizational demography: The differential effects of age and tenure distributions on technical communication. *The Academy of Management Journal*, 32(2), 353-376. doi: 10.2307/256366
- Zou, W., Zheng, Y., Zhu, J. (2011). Information seeking as a mediator between proactive personality and adjustment. *Systems Engineering Procedia* 1, 294-300. doi: 10.1016/j.sepro.2011.08.045

8. Appendix

8.1. Questionnaires

8.1.1. English questionnaire. Team manager

Dear participant,

Thank you for agreeing to participate in the Socialization of Talents research project. This questionnaire is about the socialization of newcomers and about the effects of an organization's talent management approach.

Anonymity

By participating in this research, you contribute to a large database that will be analyzed by the two principal investigators and their master students mentioned below. Strict anonymity of your answers is guaranteed, and all personal information will be deleted from the dataset. Furthermore, only the research team of Tilburg University will have access to your answers and will be used for education and research purposes only. For future research, a completely anonymous data file will be stored for ten years on the secure servers of our university.

Due to anonymity of the respondents, we will therefore ask you to fill in the unique identifying code the researcher provided you with, in order to indicate your team membership. Note that we never report back answers of individual team members to their team manager. In addition, the Ethical Review Board of Tilburg University has approved this research.

Please read the following instructions before completing the questionnaire:

1. We kindly ask you to answer the questions yourself, without consultation with others.
2. For the questions that regard teams: please select the answer option that in your opinion most closely matches the situation in your team.
3. The questionnaire consists of a part where we ask you to rate a newcomer in your team. A newcomer is a person who has entered the team no longer than 6 months ago.
4. The questionnaire asks for your opinion, so you can never give a wrong answer!
5. Do not think about single questions for too long but select the answer category that comes to mind first.
6. The same questions are sometimes asked in different ways to increase the reliability of the questionnaire.
7. Completing this questionnaire will take about 15-20 minutes.

Permission statement

I have read and understood this form. I understand the purpose of the research and understand what is asked of me. I understand that I can stop my participation in this research at any time and that I can decide not to answer questions. I understand that participation is confidential and that no conclusions are drawn on the basis of my individual contribution. I understand that the anonymized data from this research will be kept for 10 years on a secure server, as per protocol. I voluntarily participate in this research. I understand that I can ask questions about the research to the following people: Christina Meyers: m.c.meyers@uvt.nl and Sasa Batistic: s.batistic@uvt.nl.

By clicking 'YES', you agree with the conditions mentioned above.

Thank you in advance for your cooperation in the research!

On behalf of the research team:

Kelsey Bovens (k.s.r.bovens@uvt.nl), Vasilina Chuvashева (v.chuvashева@uvt.nl), Geert Compen (g.j.t.compen@uvt.nl), Mandy de Krieger (m.a.m.dekrieger@uvt.nl), Laurien Sturms (l.m.j.sturms@uvt.nl), Dave Vissers (d.p.a.vissers@uvt.nl), Chantal de Vries (c.m.devries@uvt.nl), Dr. Christina Meyers (m.c.meyers@uvt.nl), Dr. Sasa Batistic (s.batistic@uvt.nl).

For any comments or complaints about this research, you can also contact the Ethics Review Board of Tilburg School of Social and Behavioral Sciences via ERB@tilburguniversity.edu.

Do you agree with the above conditions? By clicking YES, you agree to fill in this questionnaire.

- Yes
- No

Please give the name of YOUR ORGANIZATION. This information is used for matching purpose only.

Please fill in the code the researcher provided you with. We need this information to be able to compare and link the aggregate data. No one, including your supervisor, will get to see your answers (except the Tilburg University research team).

The following questions are about the use of socialization tactics in your team. Please indicate the extent to which you agree with each of the statements below. Please tick only one answer category. Please tick the answer that comes first to your mind and is most applicable to your team.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------------------|----------|-------------------|---------------------------|----------------|-------|----------------|
| Strongly disagree | Disagree | Somewhat disagree | Neither agree or disagree | Somewhat agree | Agree | Strongly agree |

In the last six months, the newcomer in my team have been extensively involved with other new recruits in common, job related training activities.

1. 2. 3. 4. 5. 6. 7.

Newcomers in my team have been instrumental in helping each other to understand their job requirements.

1. 2. 3. 4. 5. 6. 7.

My team puts all newcomers through the same set of learning experiences.

1. 2. 3. 4. 5. 6. 7.

Most of the newcomer his/her training has been carried out apart from other newcomers in my team.

1. 2. 3. 4. 5. 6. 7.

There is a sense of "being in the same boat" amongst newcomers in this team.

1. 2. 3. 4. 5. 6. 7.

The newcomer in my team has been through a set of training experiences, which are specifically designed, to give them a thorough knowledge of job related skills.

1. 2. 3. 4. 5. 6. 7.

During the newcomer his/her training for this job, he/she was normally physically apart from regular team members.

1. 2. 3. 4. 5. 6. 7.

The newcomer in my team did not perform any of their normal job responsibilities until they were thoroughly familiar with departmental procedures and work methods.

1. 2. 3. 4. 5. 6. 7.

Much of the newcomer his/her job knowledge in my team has been acquired informally on a trial and error basis.

1. 2. 3. 4. 5. 6. 7.

The newcomer has been very aware that he/she are seen as "learning the ropes" in my team

1. 2. 3. 4. 5. 6. 7.

The following questions are about the use of socialization tactics in your team. Please indicate the extent to which you agree with each of the statements below. Please tick only one answer category. Please tick the answer that comes first to your mind and is most applicable to your team.

| | | | | | | |
|-------------------|----------|-------------------|---------------------------|----------------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly disagree | Disagree | Somewhat disagree | Neither agree or disagree | Somewhat agree | Agree | Strongly agree |

The newcomer has been made to feel that their skills and abilities are very important in this team.

1. 2. 3. 4. 5. 6. 7.

Almost all colleagues have been supportive of the newcomer personally.

1. 2. 3. 4. 5. 6. 7.

The newcomer has had to change their attitudes and values to be accepted in this organization.

1. 2. 3. 4. 5. 6. 7.

My colleagues have gone out of their way to help the newcomer adjust to this team.

1. 2. 3. 4. 5. 6. 7.

The newcomer feels that experienced team members have held the newcomer at a distance until he/she conforms to their expectations.

1. 2. 3. 4. 5. 6. 7.

There is a clear pattern in the way one role leads to another or one job assignment leads to another in my team.

1. 2. 3. 4. 5. 6. 7.

Each stage of the training process for newcomers in my team has, and will, expand and build upon the job knowledge gained during the proceeding stages of the process.

1. 2. 3. 4. 5. 6. 7.

The movement from role to role and function to function to build up experience and a track record is very apparent newcomers in my team.

1. 2. 3. 4. 5. 6. 7.

My team does not put newcomers through an identifiable

1. 2. 3. 4. 5. 6. 7.

sequence of learning experiences.

The steps in the career ladder are clearly specified in my team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The following questions are about the use of socialization tactics in your team. Please indicate the extent to which you agree with each of the statements below. Please tick only one answer category. Please tick the answer that comes first to your mind and is most applicable to your team.

| | | | | | | |
|-------------------|----------|-------------------|---------------------------|----------------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly disagree | Disagree | Somewhat disagree | Neither agree or disagree | Somewhat agree | Agree | Strongly agree |

Experienced team members see advising or training newcomers as one of their main job responsibilities in this organization.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer is gaining a clear understanding of his/her role in this organization from observing my senior colleagues.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer has received little guidance from experienced team members as to how he/she should perform his/her job.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer has little or no access to people who have previously performed his/her role in this team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer has been generally left alone to discover what his/her role should be in this team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer in my team can predict his/her future career path by observing other people's experiences.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer has a good knowledge of the time it will take him/her to go through the various stages of the training process in my team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The way in which the newcomer progress through in my team will follow a fixed timetable of events that has been clearly communicated.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer has little idea when to expect a new job assignment or training exercise in my team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

Most of the newcomer his/her knowledge of what may happen to

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

him/her in the future comes informally, through the grapevine, rather than through regular organizational channels.

The following questions are about the use of HR systems in your team. Please indicate the extent to which you agree with each of the statements below. Please tick only one answer category. Please tick the answer that comes first to your mind and is most applicable to your team.

| 1 | 2 | 3 | 4 | 5 |
|-------------------|----------|----------------------------|-------|----------------|
| Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |

| | | | | | |
|---|---|---|---|---|---|
| Employees perform jobs that allow them to routinely make changes. | 1 | 2 | 3 | 4 | 5 |
| Employees perform jobs that are extremely simple. | 1 | 2 | 3 | 4 | 5 |
| Employees perform jobs that are well-defined. | 1 | 2 | 3 | 4 | 5 |
| Employees perform jobs that empower them to make decisions. | 1 | 2 | 3 | 4 | 5 |
| Employees perform jobs that have a high degree of job security. | 1 | 2 | 3 | 4 | 5 |
| Employees perform jobs that include a wide variety of tasks. | 1 | 2 | 3 | 4 | 5 |
| Employees perform jobs that involve job rotation. | 1 | 2 | 3 | 4 | 5 |
| The recruitment/selection process for employees emphasizes promotion from within. | 1 | 2 | 3 | 4 | 5 |
| The recruitment/selection process for employees focuses on selecting the best all-around candidate, regardless of the specific job. | 1 | 2 | 3 | 4 | 5 |
| The recruitment/selection process for employees focuses on their ability to contribute to our strategic objectives. | 1 | 2 | 3 | 4 | 5 |
| The recruitment/selection process for employees places priority on their potential to learn (e.g., aptitude). | 1 | 2 | 3 | 4 | 5 |
| Training activities for employees are comprehensive. | 1 | 2 | 3 | 4 | 5 |
| Training activities for employees are continuous. | 1 | 2 | 3 | 4 | 5 |
| Training activities for employees focus on compliance with rules. | 1 | 2 | 3 | 4 | 5 |
| Training activities for employees require extensive investments of time/money. | 1 | 2 | 3 | 4 | 5 |
| Training activities for employees seek to increase short-term productivity. | 1 | 2 | 3 | 4 | 5 |
| Our training activities for employees strive to develop firm-specific skills/knowledge. | 1 | 2 | 3 | 4 | 5 |

- | | | | | | |
|--|---|---|---|---|---|
| . Performance appraisals for employees are based on input from multiple sources (peers, subordinates, etc.). | 1 | 2 | 3 | 4 | 5 |
| . Performance appraisals for employees assess compliance with preset behaviors, procedures and standards. | 1 | 2 | 3 | 4 | 5 |
| . Performance appraisals for employees emphasize employee learning. | 1 | 2 | 3 | 4 | 5 |
| . Performance appraisals for employees focus on their contribution to our strategic objectives. | 1 | 2 | 3 | 4 | 5 |
| . Performance appraisals for employees include developmental feedback. | 1 | 2 | 3 | 4 | 5 |
| . Compensation/rewards for employees are based on hourly pay. | 1 | 2 | 3 | 4 | 5 |

The following questions are about performance in your team. Please indicate the extent to which you agree with each of the statements below. Please tick only one answer category. Please tick the answer that comes first to your mind and is most applicable to you.

| | | | | |
|-------------------|----------|----------------------------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |

- | | | | | | |
|---|---|---|---|---|---|
| . This team achieves its assigned performance goals. | 1 | 2 | 3 | 4 | 5 |
| . This team is productive. | 1 | 2 | 3 | 4 | 5 |
| . The members of this team produce work of high quality | 1 | 2 | 3 | 4 | 5 |
| . The team meets its deadlines. | 1 | 2 | 3 | 4 | 5 |
| . This team is able to finish tasks within the assigned budget. | 1 | 2 | 3 | 4 | 5 |

The following questions are about talent management in your organization. Please indicate the extent to which you agree with each of the statements below. Please tick only one answer category. Please tick the answer that comes first to your mind and is most applicable to your organization.

| | | | | |
|-------------------|----------|----------------------------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |

- | | | | | | |
|---|---|---|---|---|---|
| . Within this organization, only a select group of employees are considered as talents. | 1 | 2 | 3 | 4 | 5 |
| . Within this organization, all employees get the opportunity to develop their talent. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|--|---|---|---|---|---|
| . Within this organization, everyone has the chance to advance to a higher function. | 1 | 2 | 3 | 4 | 5 |
| . Within this organization, one invests only in a select group of employees. | 1 | 2 | 3 | 4 | 5 |
| . Within this organization, some employees get more opportunities than others. | 1 | 2 | 3 | 4 | 5 |
| . Within this organization, differentiation is made between employees with much and little growth potential. | 1 | 2 | 3 | 4 | 5 |

What is your gender?

- Male
- Female
- Other, namely: _____

What is your age? (in years)

What is your highest level of education?

- Junior secondary (vocational) education
- Senior secondary (vocational) education
- Professional education
- Higher vocational education (e.g., university of applied sciences)
- University
- Other, namely: _____

What is the type of your contract?

- Permanent contract
- Fixed-term contract
- Other, namely: _____

For how long have you been working in this team? (in years and months)

Years _____

Months _____

For how long have you been working for this organization? (in years and months)

Years _____

Months _____

For how long have you been working in this function/role? (in years and months)

Years _____

Months _____

How many members does your team have?

Number of members _____

Are you formally identified by your organization as belonging to a talent pool?

Yes

No

Thank you for your cooperation!

Please add your comments/remarks below.

8.1.2. English questionnaire. Team members

Dear participant,

Thank you for agreeing to participate in the Socialization of Talents research project. This questionnaire is about the socialization of newcomers and about the effects of an organization's talent management approach.

Anonymity

By participating in this research, you contribute to a large database that will be analyzed by the two principal investigators and their master students mentioned below. Strict anonymity of your answers is guaranteed, and all personal information will be deleted from the dataset. Furthermore, only the research team of Tilburg University will have access to your answers and will be used for education and research purposes only. For future research, a completely anonymous data file will be stored for ten years on the secure servers of our university. Due to anonymity of the respondents, we will therefore ask you to fill in the unique identifying code the researcher provided you with, in order to indicate your team membership. Note that we never report back answers of individual team members to their team manager. In addition, the Ethical Review Board of Tilburg University has approved this research.

Please read the following instructions before completing the questionnaire:

1. We kindly ask you to answer the questions yourself, without consultation with others.
2. For the questions that regard teams: please select the answer option that in your opinion most closely matches the situation in your team.
3. The questionnaire consists of a part where we ask you to rate a newcomer in your team. A newcomer is a person who has entered the team no longer than 6 months ago.
4. The questionnaire asks for your opinion, so you can never give a wrong answer!
5. Do not think about single questions for too long, but select the answer category that comes to mind first.
6. The same questions are sometimes asked in different ways to increase the reliability of the questionnaire.
7. Completing this questionnaire will take about 25-30 minutes.

Permission statement

I have read and understood this form. I understand the purpose of the research and understand what is asked of me. I understand that I can stop my participation in this research at any time and that I can decide not to answer questions. I understand that participation is confidential and that no conclusions are drawn on the basis of my individual contribution. I understand that the anonymized data from this research will be kept for 10 years on a secure server, as per protocol. I voluntarily participate in this research. I understand that I can ask questions about the research to the following people: Christina Meyers: m.c.meyers@uvt.nl and Sasa Baticic: s.baticic@uvt.nl.

By clicking 'YES', you agree with the conditions mentioned above.

Thank you in advance for your cooperation in the research!

On behalf of the research team:

Kelsey Bovens (k.s.r.bovens@uvt.nl), Vasilina Chuvashева (v.chuvashева@uvt.nl), Geert Compen (g.j.t.compen@uvt.nl), Mandy de Krieger (m.a.m.m.dekrieger@uvt.nl), Laurien Sturms (l.m.j.sturms@uvt.nl), Dave Vissers (d.p.a.vissers@uvt.nl), Chantal de Vries (c.m.devries@uvt.nl), Dr. Christina Meyers (m.c.meyers@uvt.nl), Dr. Sasa Batistic (s.batistic@uvt.nl).

For any comments or complaints about this research, you can also contact the Ethics Review Board of Tilburg School of Social and Behavioral Sciences via ERB@tilburguniversity.edu.

Do you agree with the above conditions? By clicking YES, you agree to fill in this questionnaire.

- Yes
- No

Please give the name of YOUR ORGANIZATION. This information is used for matching purpose only.

Please fill in the code the researcher provided you with. We need this information to be able to compare and link the aggregate data. No one, including your supervisor, will get to see your answers (except the Tilburg University research team).

The following statements relate to how you experience your team. Please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------------------|----------------|-------------------------------------|-------------|----------------------|
| 1. Strongly disagree | 2. Disagree | 3. Neither agree nor disagree | 4. Agree | 5. Strongly agree |
|-------------------------|----------------|-------------------------------------|-------------|----------------------|

We have a "we are in it together" attitude.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

People keep each other informed about work-related issues in the team.

1. 2. 3. 4. 5.

People feel understood and accepted by each other.

1. 2. 3. 4. 5.

There are real attempts to share information throughout the team.

1. 2. 3. 4. 5.

We share information generally in the team rather than keeping it to ourselves.

1. 2. 3. 4. 5.

We all influence each other.

1. 2. 3. 4. 5.

Everyone's view is listened to, even if it is in a minority.

1. 2. 3. 4. 5.

There is a lot of give and take.

1. 2. 3. 4. 5.

The following statements relate to your general experience, attitudes and feelings at work. Please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------------------|----------------|----------------------------------|-------------|----------------------|
| 1. Strongly disagree | 2. Disagree | 3. Neither agree nor disagree | 4. Agree | 5. Strongly agree |
|-------------------------|----------------|----------------------------------|-------------|----------------------|

When facing difficult tasks, I am certain that I will accomplish them.

1. 2. 3. 4. 5.

I will be able to successfully overcome many challenges.

1. 2. 3. 4. 5.

I am confident that I can perform effectively on many different tasks.

1. 2. 3. 4. 5.

Even when things are tough, I can perform quite well.

1. 2. 3. 4. 5.

The following statements relate to your general experience, attitudes and feelings at work. Please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------|--------------|-----------------|------------------|--------------|
| 1. Never | 2. Rarely | 3. Sometimes | 4. Very often | 5. Always |
|-------------|--------------|-----------------|------------------|--------------|

How often (in the past month) did you...

...complete your core tasks well using, the standard procedures?

1. 2. 3. 4. 5.

...ensure yourself that your tasks were completed properly?

1. 2. 3. 4. 5.

...adapt well to changes in core tasks?

1. 2. 3. 4. 5.

...cope with changes to the way you have to do your core tasks?

1. 2. 3. 4. 5.

...learn new skills to help you adapt to changes in your core tasks? 1. 2. 3. 4. 5.

...initiate better ways of doing your core tasks? 1. 2. 3. 4. 5.

...come up with ideas to improve the way in which your core tasks are done? 1. 2. 3. 4. 5.

...make changes to the way your core tasks are done? 1. 2. 3. 4. 5.

...carry out the core parts of your job well? 1. 2. 3. 4. 5.

The following statements relate to how you experience your organization. Please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------------------|----------------|----------------------------------|-------------|----------------------|
| 1. Strongly disagree | 2. Disagree | 3. Neither agree nor disagree | 4. Agree | 5. Strongly agree |
|-------------------------|----------------|----------------------------------|-------------|----------------------|

Within this organization only a select group of employees are considered as talents. 1. 2. 3. 4. 5.

Within this organization all employees get the opportunity to develop their talent. 1. 2. 3. 4. 5.

Within this organization everyone has the chance to advance to a higher function. 1. 2. 3. 4. 5.

Within this organization one invests only into a select group of employees. 1. 2. 3. 4. 5.

Within this organization some employees get more opportunities than others. 1. 2. 3. 4. 5.

Within this organization differentiation is made between employees with much and little growth potential. 1. 2. 3. 4. 5.

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

Your team has one (or more) newcomer(s), that is, a person who has entered the function no longer than 6 months ago. The following questions will ask you about your experiences with the newcomer(s). Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | | | |
|-------------------------|----------------|-------------------------|---------------------------------|----------------------|-------------|----------------------|
| 1. Strongly disagree | 2. Disagree | 3. Somewhat disagree | 4. Neither agree or disagree | 5. Somewhat agree | 6. Agree | 7. Strongly agree |
|-------------------------|----------------|-------------------------|---------------------------------|----------------------|-------------|----------------------|

In the last six months, the newcomer in my team have been extensively involved with other new recruits in common, job related training activities. 1. 2. 3. 4. 5. 6. 7.

Newcomers in my team have been instrumental in helping each other to understand their job requirements. 1. 2. 3. 4. 5. 6. 7.

My team puts all newcomers through the same set of learning experiences. 1. 2. 3. 4. 5. 6. 7.

Most of the newcomer his/her training has been carried out apart from other newcomers in my team. 1. 2. 3. 4. 5. 6. 7.

There is a sense of "being in the same boat" amongst newcomers in this team. 1. 2. 3. 4. 5. 6. 7.

The newcomer in my team has been through a set of training experiences, which are specifically designed, to give them a thorough knowledge of job related skills. 1. 2. 3. 4. 5. 6. 7.

During the newcomer his/her training for this job, he/she was normally physically apart from regular team members. 1. 2. 3. 4. 5. 6. 7.

The newcomer in my team did not perform any of their normal job responsibilities until they were thoroughly familiar with departmental procedures and work methods. 1. 2. 3. 4. 5. 6. 7.

Much of the newcomer his/her job knowledge in my team has been acquired informally on a trial and error basis. 1. 2. 3. 4. 5. 6. 7.

The newcomer has been very aware that he/she are seen as "learning the ropes" in my team 1. 2. 3. 4. 5. 6. 7.

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | | | |
|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| Strongly disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Strongly agree |

The newcomer has been made to feel that their skills and abilities are very important in this team. 1. 2. 3. 4. 5. 6. 7.

Almost all colleagues have been supportive of the newcomer personally. 1. 2. 3. 4. 5. 6. 7.

The newcomer has had to change their attitudes and values to be accepted in this organization. 1. 2. 3. 4. 5. 6. 7.

My colleagues have gone out of their way to help the newcomer adjust to this team.

1. 2. 3. 4. 5. 6. 7.

The newcomer feels that experienced team members have held the newcomer at a distance until he/she conforms to their expectations.

1. 2. 3. 4. 5. 6. 7.

There is a clear pattern in the way one role leads to another or one job assignment leads to another in my team.

1. 2. 3. 4. 5. 6. 7.

Each stage of the training process for newcomers in my team has, and will, expand and build upon the job knowledge gained during the proceeding stages of the process.

1. 2. 3. 4. 5. 6. 7.

The movement from role to role and function to function to build up experience and a track record is very apparent newcomers in my team.

1. 2. 3. 4. 5. 6. 7.

My team does not put newcomers through an identifiable sequence of learning experiences.

1. 2. 3. 4. 5. 6. 7.

The steps in the career ladder are clearly specified in my team.

1. 2. 3. 4. 5. 6. 7.

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | | | |
|----------------------------|----------------|----------------------------|--|-------------------------|-------------|-------------------------|
| 1. Strongly disagree | 2. Disagree | 3. Somewhat disagree | 4. Neither agree nor disagree | 5. Somewhat agree | 6. Agree | 7. Strongly agree |
|----------------------------|----------------|----------------------------|--|-------------------------|-------------|-------------------------|

Experienced team members see advising or training newcomers as one of their main job responsibilities in this organization.

1. 2. 3. 4. 5. 6. 7.

The newcomer is gaining a clear understanding of his/her role in this organization from observing my senior colleagues.

1. 2. 3. 4. 5. 6. 7.

The newcomer has received little guidance from experienced team members as to how he/she should perform his/her job.

1. 2. 3. 4. 5. 6. 7.

The newcomer has little or no access to people who have previously performed his/her role in this team.

1. 2. 3. 4. 5. 6. 7.

The newcomer has been generally left alone to discover what his/her role should be in this team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer in my team can predict his/her future career path by observing other people's experiences.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer has a good knowledge of the time it will take him/her to go through the various stages of the training process in my team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The way in which the newcomer progress through in my team will follow a fixed timetable of events that has been clearly communicated.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer has little idea when to expect a new job assignment or training exercise in my team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

Most of the newcomer his/her knowledge of what may happen to him/her in the future comes informally, through the grapevine, rather than through regular organizational channels.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

The following statements relate to the newcomer's general experience, attitudes and feelings at work. Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | | | |
|-------------|--------------|--------------------|-----------------|------------------|-------------|--------------|
| 1. Never | 2. Rarely | 3. Occasionally | 4. Sometimes | 5. Frequently | 6. Usual | 7. Always |
|-------------|--------------|--------------------|-----------------|------------------|-------------|--------------|

The newcomer is comfortable with fully contributing to his/her work team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer's individual talents are valued in his/her work team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer's unique perspective is appreciated in his/her work team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer feels that his/her work team respects his/her belief systems.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer's colleagues in his/her work team are interested in learning about his/her unique perspectives.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer feels very much part of his/her work team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer's work team makes him/her believe that he/she

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

is included in it.

The newcomer feels he/she is an 'insider' in his/her work team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer's work team never makes him/her feel 'left-out'.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

The following statements relate to the newcomer's general experience, attitudes and feelings at work. Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | | | |
|----------------------------|----------------|----------------------------|--|-------------------------|-------------|-------------------------|
| 1. Strongly disagree | 2. Disagree | 3. Somewhat disagree | 4. Neither agree nor disagree | 5. Somewhat agree | 6. Agree | 7. Strongly agree |
|----------------------------|----------------|----------------------------|--|-------------------------|-------------|-------------------------|

If the newcomer sees something he/she doesn't like, the newcomer fixes it.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

No matter what the odds, if the newcomer believes in something he/she will make it happen.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer loves being a champion for own ideas, even against others' opposition.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer excels at identifying opportunities.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The newcomer is always looking for better ways to do things.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

If the newcomer believes in an idea, no obstacle will prevent him/her from making it happen.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

The following statements relate to the newcomer's general experience, attitudes and feelings at work. Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------------------|--------------------|--------------------|------------------|-----------------------|
| 1. Very infrequently | 2. Infrequently | 3. Occasionally | 4. Frequently | 5. Very frequently |
|-------------------------|--------------------|--------------------|------------------|-----------------------|

How frequently does the newcomer...

...try to bring about improved procedures in his/her workplace?

1. 2. 3. 4. 5.

...try to institute new work methods that are more effective?

1. 2. 3. 4. 5.

...try to implement solutions to pressing organization problems?

1. 2. 3. 4. 5.

...communicate his/her views about work issues to others in the workplace, even if newcomer's views differ and others disagree with him/her?

1. 2. 3. 4. 5.

...speak up and encourage others in the workplace to get involved with issues that affect him/her?

1. 2. 3. 4. 5.

...keep well informed about issues where his/her opinion might be useful to his/her workplace?

1. 2. 3. 4. 5.

...speak up with new ideas or changes in procedures?

1. 2. 3. 4. 5.

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

The following statements relate to the newcomer's general experience, attitudes and feelings at work. Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------------------|--------------------|--------------------|------------------|-----------------------|
| 1. Very infrequently | 2. Infrequently | 3. Occasionally | 4. Frequently | 5. Very frequently |
|-------------------------|--------------------|--------------------|------------------|-----------------------|

How frequently does the newcomer...

1. 2. 3. 4. 5.

...generate creative ideas?

1. 2. 3. 4. 5.

...search out new techniques, technologies and/or product ideas?

...promote and champion ideas to others?

1. 2. 3. 4. 5.

...try to develop procedures and systems that are effective in the long term, even if they slow things down to begin with?

1. 2. 3. 4. 5.

...try to find the root cause of things that go wrong?

1. 2. 3. 4. 5.

...spend time planning how to prevent reoccurring problems?

1. 2. 3. 4. 5.

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

The following statements relate to the newcomer's general experience, attitudes and feelings at work. Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | | | |
|----------------------------|----------------|----------------------------|--|-------------------------|-------------|-------------------------|
| 1. Strongly disagree | 2. Disagree | 3. Somewhat disagree | 4. Neither agree nor disagree | 5. Somewhat agree | 6. Agree | 7. Strongly agree |
|----------------------------|----------------|----------------------------|--|-------------------------|-------------|-------------------------|

The newcomer really feels as if this organization's problems are his/her own. 1. 2. 3. 4. 5. 6. 7.

The newcomer feels a 'strong' sense of belonging to this organization. 1. 2. 3. 4. 5. 6. 7.

The newcomer feels 'emotionally attached' to this organization. 1. 2. 3. 4. 5. 6. 7.

The newcomer feels like 'part of the family' at this organization. 1. 2. 3. 4. 5. 6. 7.

This organization has a great deal of personal meaning for the newcomer. 1. 2. 3. 4. 5. 6. 7.

The newcomer would be very happy to spend the rest of his/her career with this organization. 1. 2. 3. 4. 5. 6. 7.

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

The following statements relate to the newcomer's general experience, attitudes and feelings at work. Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | | | |
|----------------------------|----------------|----------------------------|--|-------------------------|-------------|-------------------------|
| 1. Strongly disagree | 2. Disagree | 3. Somewhat disagree | 4. Neither agree nor disagree | 5. Somewhat agree | 6. Agree | 7. Strongly agree |
|----------------------------|----------------|----------------------------|--|-------------------------|-------------|-------------------------|

All-in all, the newcomer is satisfied with his/her job. 1. 2. 3. 4. 5. 6. 7.

In general, the newcomer likes working here. 1. 2. 3. 4. 5. 6. 7.

All things considered, the newcomer is satisfied with his/her current job. 1. 2. 3. 4. 5. 6. 7.

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

The following statements relate to the newcomer's general experience, attitudes and feelings at work. Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------------------|----------------|----------------------------------|-------------|----------------------|
| 1. Strongly disagree | 2. Disagree | 3. Neither agree nor disagree | 4. Agree | 5. Strongly agree |
|-------------------------|----------------|----------------------------------|-------------|----------------------|

The newcomer intends to switch jobs in the next year.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

The newcomer intends to keep his/her current job for at least two years.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

The newcomer is thinking about switching to another job.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

This part consists of a number of words that describe different feelings and emotions. Indicate to what extent you think the newcomer has felt this way since he/she has entered your current team.

| | | | | |
|--------------------------------|----------------|------------------|-------------------|-----------------|
| 1. Very slightly not at all | 2. A little | 3. Moderately | 4. Quite a bit | 5. Extremely |
|--------------------------------|----------------|------------------|-------------------|-----------------|

Mixed.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Uneasy.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Torn.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Bothered.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Preoccupied.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Confused.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Unsure of self or goals.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Contradictory.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

This part consists of a number of words that describe different feelings and emotions. Indicate to what extent you think the newcomer has felt this way since he/she has entered your current team.

| | | | | |
|-----------------------------------|----------------|------------------|-------------------|-----------------|
| 1. Very slightly not at all | 2. A little | 3. Moderately | 4. Quite a bit | 5. Extremely |
|-----------------------------------|----------------|------------------|-------------------|-----------------|

Distractible. 1. 2. 3. 4. 5.

Unclear. 1. 2. 3. 4. 5.

Restless. 1. 2. 3. 4. 5.

Confused about identity. 1. 2. 3. 4. 5.

Uncomfortable. 1. 2. 3. 4. 5.

Conflicted. 1. 2. 3. 4. 5.

In-decisive. 1. 2. 3. 4. 5.

Chaotic. 1. 2. 3. 4. 5.

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

The following statements relate to the newcomer's general experience, attitudes and feelings at work. Based on your own experience with the newcomer, please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------------------|----------------|-------------------------------------|-------------|----------------------|
| 1. Strongly disagree | 2. Disagree | 3. Neither agree nor disagree | 4. Agree | 5. Strongly agree |
|-------------------------|----------------|-------------------------------------|-------------|----------------------|

The newcomer knows what his/her responsibilities are. 1. 2. 3. 4. 5.

The newcomer knows exactly what is expected of him/her. 1. 2. 3. 4. 5.

The newcomer knows how to divide his/her time properly. 1. 2. 3. 4. 5.

The newcomer has clear, planned goals and objectives for his/her job. 1. 2. 3. 4. 5.

The newcomer feels certain about how much authority he/she has. 1. 2. 3. 4. 5.

The newcomer knows what has to be done. 1. 2. 3. 4. 5.

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

Based on your own experience with the newcomer, please indicate the extent to which the newcomer purposefully tried to obtain information by observing the situation around him/her.

| | | | | |
|------------|-------------|----------|------------------|-------------------|
| 1. | 2. | 3. | 4. | 5. |
| Not at all | Very little | Somewhat | To a good extent | To a great extent |

The newcomer obtained information on...

...how to perform specific aspects of one's job.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...how to perform one's efficiently and effectively.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...how to balance the demands of one's job.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...definitions and technical terms related to one's job.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...where to obtain needed supplies and information.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...how to get along with people in the organization.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...the behaviors and personalities of persons with whom one work.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...how to deal with politics at work.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...who to trust and who not to trust.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...how well one is fitting in.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...the appropriateness of one's social behaviors.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

IMPORTANT: In the following section, we will ask you to answer questions about the person who entered your team last (i.e., hereafter the newcomer).

Based on your own experience with the newcomer, please indicate the extent to which the newcomer purposefully tried to obtain information by observing the situation around him/her.

| | | | | |
|------------|-------------|----------|------------------|-------------------|
| 1. | 2. | 3. | 4. | 5. |
| Not at all | Very little | Somewhat | To a good extent | To a great extent |

The newcomer obtained information on...

...how well one is getting along with co-workers.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...organizational policies and procedures.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...the structure of the organization.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...the financial position and/or performance of the organization.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...information on services or products provided by the organization.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...where individuals and departments are located.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...benefits provided by the organization.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...who makes the important decisions in the organization.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...who controls critical resources in the organization.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...who has authority over whom in the organization.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

What is your gender?

- Male
- Female
- Other, namely: _____

What is your age? (in years)

What is your highest level of education?

- Junior secondary (vocational) education
- Senior secondary (vocational) education
- Professional education
- Higher vocational education (e.g., university of applied sciences)
- University
- Other, namely: _____

What is the type of your contract?

- Permanent contract
- Fixed-term contract
- Other, namely: _____

For how long have you been working in this team? (in years and months)

- Years _____
- Months _____

For how long have you been working for this organization? (in years and months)

- Years _____
- Months _____

For how long have you been working in this function/role? (in years and months)

- Years _____
- Months _____

How many members does your team have?

- Number of members _____

Are you formally identified by your organization as belonging to a talent pool?

- Yes
- No

Thank you for your cooperation!

Please add your comments/remarks below.

8.1.2. English questionnaire. Newcomers

Dear participant,

Thank you for agreeing to participate in the Socialization of Talents research project. This questionnaire is about the socialization of newcomers and about the effects of an organization's talent management approach.

Anonymity

By participating in this research, you contribute to a large database that will be analyzed by the two principal investigators and their master students mentioned below. Strict anonymity of your answers is guaranteed, and all personal information will be deleted from the dataset. Furthermore, only the research team of Tilburg University will have access to your answers and will be used for education and research purposes only. For future research, a completely anonymous data file will be stored for ten years on the secure servers of our university. Due to anonymity of the respondents, we will therefore ask you to fill in the unique identifying code the researcher provided you with, in order to indicate your team membership. Note that we will never report back answers of individual team members to their team manager. In addition, the Ethical Review Board of Tilburg University has approved this research.

Please read the following instructions before completing the questionnaire:

1. We kindly ask you to answer the questions yourself, without consultation with others.
2. For the questions that regard teams: please select the answer option that in your opinion most closely matches the situation in your team.
3. The questionnaire asks for your opinion, so you can never give a wrong answer!
4. Do not think about single questions for too long, but select the answer category that comes to mind first.
5. The same questions are sometimes asked in different ways to increase the reliability of the questionnaire.
6. Completing this questionnaire will take about 25-30 minutes.

Permission statement

I have read and understood this form. I understand the purpose of the research and understand what is asked of me. I understand that I can stop my participation in this research at any time and that I can decide not to answer questions. I understand that participation is confidential and that no conclusions are drawn on the basis of my individual contribution. I understand that the anonymized data from this research will be kept for 10 years on a secure server, as per protocol. I voluntarily participate in this research. I understand that I can ask questions about the research to the following people: Christina Meyers: m.c.meyers@uvt.nl and Sasa Batistic: s.batistic@uvt.nl.

By clicking 'YES', you agree with the conditions mentioned above.

Thank you in advance for your cooperation in the research!

On behalf of the research team:

Kelsey Bovens (k.s.r.bovens@uvt.nl), Vasilina Chuvashva (v.chuvashva@uvt.nl), Geert Compen (g.j.t.compen@uvt.nl), Mandy de Krieger (m.a.m.m.dekrieger@uvt.nl), Laurien Sturms (l.m.j.sturms@uvt.nl), Dave Vissers (d.p.a.vissers@uvt.nl), Chantal de Vries (c.m.devries@uvt.nl), Dr. Christina Meyers (m.c.meyers@uvt.nl), Dr. Sasa Batistic (s.batistic@uvt.nl).

For any comments or complaints about this research, you can also contact the Ethics Review Board of Tilburg School of Social and Behavioral Sciences via ERB@tilburguniversity.edu.

Do you agree with the above conditions? By clicking YES, you agree to fill in this questionnaire.

- Yes
- No

Please give the name of YOUR ORGANIZATION. This information is used for matching purpose only.

Please fill in the code the researcher provided you with. We need this information to be able to compare and link the aggregate data. No one, including your supervisor, will get to see your answers (except the Tilburg University research team).

The following question is about the extent to which you use electronic communication in your daily work. Please indicate your overall usage on the following forms of electronic communication:

| 1. | 2. | 3. | 4. | 5. |
|------------|-------------|----------|------------------|---|
| Not at all | Very little | Somewhat | To a good extent | To a great extent |
| | | | | <input type="text"/> 1. <input type="text"/> 2. <input type="text"/> 3. <input type="text"/> 4. <input type="text"/> 5. |

Email.

Teleconferencing.

 1. 2. 3. 4. 5.

Collaborative software.

 1. 2. 3. 4. 5.

Electronic communication in general.

 1. 2. 3. 4. 5.

The following statements relate to how you experience your organization. Please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------------|----------|----------------------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. |
| Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |

Within this organization only a select group of employees are considered as talents. 1. 2. 3. 4. 5.

Within this organization all employees get the opportunity to develop their talent. 1. 2. 3. 4. 5.

Within this organization everyone has the chance to advance to a higher function. 1. 2. 3. 4. 5.

Within this organization one invests only into a select group of employees. 1. 2. 3. 4. 5.

Within this organization some employees get more opportunities than others. 1. 2. 3. 4. 5.

Within this organization differentiation is made between employees with much and little growth potential. 1. 2. 3. 4. 5.

The following statements relate to how you experience your organization. Looking overall at how far the organization has or has not kept its promises and commitments, to what extent do you agree with the following statements?

| | | | | |
|------------|----------|------------|------|---------|
| 1. | 2. | 3. | 4. | 5. |
| Not at all | Slightly | Moderately | Very | Totally |

Overall, do you feel you are rewarded fairly for the amount of effort you put into your job? 1. 2. 3. 4. 5.

To what extent do you trust senior management to look after your best interests? 1. 2. 3. 4. 5.

Do you feel that organizational changes are implemented fairly in your organization? 1. 2. 3. 4. 5.

In general, how much do you trust your organization to keep promises or commitments to you and other employees? 1. 2. 3. 4. 5.

Do you feel you are fairly paid for the work you do? 1. 2. 3. 4. 5.

To what extent do you trust your immediate line manager to look after your best interests? 1. 2. 3. 4. 5.

Do you feel fairly treated by managers and supervisors? 1. 2. 3. 4. 5.

The following statements relate to the relationship you have with your manager. Please indicate the extent you agree with each of the statements below.

| | | | | |
|-------------------|----------|---------------------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. |
| Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |

My relationship with my manager is based on mutual trust. 1. 2. 3. 4. 5.

My manager has made a significant investment in me. 1. 2. 3. 4. 5.

I try to look out for the best interest of my manager because I can rely on my manager to take care of me. 1. 2. 3. 4. 5.

The things I do for the job today will benefit my standing with my manager in the long run. 1. 2. 3. 4. 5.

The most accurate way to describe my relationship with my manager is that I do what I am told to. 1. 2. 3. 4. 5.

I do what my manager demands from me, mainly because he or she is my formal boss. 1. 2. 3. 4. 5.

My relationship with my manager is mainly based on authority, he or she has the right to make decisions on my behalf and I do what I am told to do. 1. 2. 3. 4. 5.

All I really expect from my manager is that he or she fulfills his or her formal role as supervisor or boss. 1. 2. 3. 4. 5.

The following statements relate to how you experience your team. Please indicate the extent to which you agree with each of the statements below.

| | | | | | | |
|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| Strongly disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Strongly agree |

In the last six months, I have been extensively involved with other new recruits in common, job related training activities. 1. 2. 3. 4. 5. 6. 7.

Other newcomers have been instrumental in helping me to 1. 2. 3. 4. 5. 6. 7.

understand my job requirements.

This team puts all newcomers through the same set of learning experiences.

1. 2. 3. 4. 5. 6. 7.

Most of my training has been carried out apart from other newcomers.

1. 2. 3. 4. 5. 6. 7.

There is a sense of "being in the same boat" among newcomers in this team.

1. 2. 3. 4. 5. 6. 7.

I have been through a set of training experiences which are specifically designed to give newcomers a thorough knowledge of job related skills.

1. 2. 3. 4. 5. 6. 7.

During my training for this job I was normally physically apart from regular team members.

1. 2. 3. 4. 5. 6. 7.

I did not perform any of my normal job responsibilities until I was thoroughly familiar with departmental procedures and work methods.

1. 2. 3. 4. 5. 6. 7.

Much of my job knowledge has been acquired informally on a trial and error basis.

1. 2. 3. 4. 5. 6. 7.

I have been very aware that I am seen as "learning the ropes" in this team.

1. 2. 3. 4. 5. 6. 7.

The following statements relate to how you experience your team. Please indicate the extent to which you agree with each of the statements below.

| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| Strongly disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Strongly agree |

I have been made to feel that my skills and abilities are very important in this team.

1. 2. 3. 4. 5. 6. 7.

Almost all of my colleagues have been supportive of me personally.

1. 2. 3. 4. 5. 6. 7.

I have had to change my attitudes and values to be accepted in this team.

1. 2. 3. 4. 5. 6. 7.

My colleagues have gone out of their way to help me adjust to this team.

1. 2. 3. 4. 5. 6. 7.

I feel that experienced team members have held me at a distance until I conform to their expectations.

1. 2. 3. 4. 5. 6. 7.

There is a clear pattern in the way one role leads to another or one job assignment leads to another in this team.

1. 2. 3. 4. 5. 6. 7.

Each stage of the training process has, and will, expand and build upon the job knowledge gained during the preceding stages of the process.

1. 2. 3. 4. 5. 6. 7.

The movement from role to role and function to function to build up experience and a track record is very apparent in this team.

1. 2. 3. 4. 5. 6. 7.

This team does not put newcomers through an identifiable sequence of learning experiences.

1. 2. 3. 4. 5. 6. 7.

The steps in the career ladder are clearly specified in this team.

1. 2. 3. 4. 5. 6. 7.

The following statements relate to how you experience your team. Please indicate the extent to which you agree with each of the statements below.

| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| Strongly disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Strongly agree |

Experienced team members see advising or training newcomers as one of their main job responsibilities in this team.

1. 2. 3. 4. 5. 6. 7.

I am gaining a clear understanding of my role in this organization from observing my senior colleagues.

1. 2. 3. 4. 5. 6. 7.

I have received little guidance from experienced team members as to how I should perform my job.

1. 2. 3. 4. 5. 6. 7.

I have little or no access to people who have previously performed my role in this team.

1. 2. 3. 4. 5. 6. 7.

I have been generally left alone to discover what my role should be in this team.

1. 2. 3. 4. 5. 6. 7.

I can predict my future career path in this team by observing other people's experience.

1. 2. 3. 4. 5. 6. 7.

I have a good knowledge of the time it will take me to go through the various stages of the training process in this team.

1. 2. 3. 4. 5. 6. 7.

The way in which my progress through this team will follow a fixed timetable of events has been clearly communicated to me.

1. 2. 3. 4. 5. 6. 7.

I have little idea when to expect a new job assignment or training exercise in this team.

1. 2. 3. 4. 5. 6. 7.

Most of my knowledge of what may happen to me in the future comes informally, through the grapevine, rather than through regular organizational channels.

1. 2. 3. 4. 5. 6. 7.

The following statements relate to how you experience your team. Please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------------|----------|----------------------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. |
| Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |

We have a "we are in it together" attitude.

1. 2. 3. 4. 5.

People keep each other informed about work-related issues in the team.

1. 2. 3. 4. 5.

People feel understood and accepted by each other.

1. 2. 3. 4. 5.

There are real attempts to share information throughout the team.

1. 2. 3. 4. 5.

We share information generally in the team rather than keeping it to ourselves.

1. 2. 3. 4. 5.

We all influence each other.

1. 2. 3. 4. 5.

Everyone's view is listened to, even if it is in a minority.

1. 2. 3. 4. 5.

There is a lot of give and take.

1. 2. 3. 4. 5.

The following statements relate to how you experience your team. Please indicate the extent to which you agree with each of the statements below.

| | | | | | | |
|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| Strongly disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Strongly agree |

I am comfortable with fully contributing to this team.

1. 2. 3. 4. 5. 6. 7.

My individual talents are valued in this team.

1. 2. 3. 4. 5. 6. 7.

My unique perspective is appreciated in this team.

1. 2. 3. 4. 5. 6. 7.

I feel this team respects my belief systems.

1. 2. 3. 4. 5. 6. 7.

My colleagues on this team are interested in learning about

1. 2. 3. 4. 5. 6. 7.

my unique perspectives.

I feel very much part of this team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

This team makes me believe that I am included in it.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

I feel I am an 'insider' in this team.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

This team never makes me feel 'left-out.'

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The following statements relate to your general experience, attitudes and feelings at work. Please indicate the extent you agree with each of the statements below.

| | | | | | | |
|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| Strongly disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Strongly agree |

If I see something I don't like, I fix it.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

No matter what the odds, if I believe in something I will make it happen.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

I love being a champion for my ideas, even against others' opposition.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

I excel at identifying opportunities.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

I am always looking for better ways to do things.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

If I believe in an idea, no obstacle will prevent me from making it happen.

| | | | | | | |
|----|----|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----|----|----|----|----|----|----|

The following statements relate to your general experience, attitudes and feelings at work.

| | | | | |
|------------------|--------------|--------------|------------|-----------------|
| 1. | 2. | 3. | 4. | 5. |
| Vey infrequently | Infrequently | Occasionally | Frequently | Very frequently |

How frequently do you...

...try to bring about improved procedures in your workplace?

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...try to institute new work methods that are more effective?

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...try to implement solutions to pressing organization problems?

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

...communicate your views about work issues to others in the workplace,

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

even if your views differ and others disagree with you?

...speak up and encourage others in the workplace to get involved with issues that affect you?

1. 2. 3. 4. 5.

...keep well informed about issues where your opinion might be useful to your workplace?

1. 2. 3. 4. 5.

...speak up with new ideas or changes in procedures?

1. 2. 3. 4. 5.

The following statements relate to your general experience, attitudes and feelings at work.

| | | | | |
|---------------------|--------------|--------------|------------|--------------------|
| 1. | 2. | 3. | 4. | 5. |
| Vey infrequently | Infrequently | Occasionally | Frequently | Very frequently |

How frequently do you...

...generate creative ideas?

1. 2. 3. 4. 5.

...search out new techniques, technologies and/or product ideas?

1. 2. 3. 4. 5.

...promote and champion ideas to others?

1. 2. 3. 4. 5.

...try to develop procedures and systems that are effective in the long term, even if they slow things down to begin with?

1. 2. 3. 4. 5.

...try to find the root cause of things that go wrong?

1. 2. 3. 4. 5.

...spend time planning how to prevent reoccurring problems?

1. 2. 3. 4. 5.

The following statements relate to your general experience, attitudes and feelings at work.

| | | | | |
|-------|--------|-----------|------------|--------|
| 1. | 2. | 3. | 4. | 5. |
| Never | Rarely | Sometimes | Very often | Always |

How often (in the past month) did you...

...complete your core tasks well using, the standard procedures?

1. 2. 3. 4. 5.

...ensure yourself that your tasks were completed properly?

1. 2. 3. 4. 5.

1. 2. 3. 4. 5.

...adapt well to changes in core tasks?

1. 2. 3. 4. 5.

...cope with changes to the way you have to do your core tasks?

1. 2. 3. 4. 5.

...learn new skills to help you adapt to changes in your core tasks?

1. 2. 3. 4. 5.

...initiate better ways of doing your core tasks?

1. 2. 3. 4. 5.

...come up with ideas to improve the way in which your core tasks are done?

1. 2. 3. 4. 5.

...make changes to the way your core tasks are done?

1. 2. 3. 4. 5.

...carry out the core parts of your job well?

The following statements relate to your general experience, attitudes and feelings at work. Please indicate the extent to which you agree with each of the statements below.

| | | | | |
|-------------------|----------|----------------------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. |
| Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |

When facing difficult tasks, I am certain that I will accomplish them.

1. 2. 3. 4. 5.

I will be able to successfully overcome many challenges.

1. 2. 3. 4. 5.

I am confident that I can perform effectively on many different tasks.

1. 2. 3. 4. 5.

Even when things are tough, I can perform quite well.

1. 2. 3. 4. 5.

The following statements relate to your general experience, attitudes and feelings at work. Please indicate the extent you agree with each of the statements below.

| | | | | | | |
|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| Strongly disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Strongly agree |

I really feel as if this organization's problems are my own.

1. 2. 3. 4. 5. 6. 7.

I feel a strong sense of belonging to my organization.

1. 2. 3. 4. 5. 6. 7.

I feel 'emotionally attached' to this organization.

1. 2. 3. 4. 5. 6. 7.

I feel like part of the family at my organization.

1. 2. 3. 4. 5. 6. 7.

This organization has a great deal of personal meaning for me.

1. 2. 3. 4. 5. 6. 7.

I would be very happy to spend the rest of my career with this organization.

1. 2. 3. 4. 5. 6. 7.

The following statements relate to your general experience, attitudes and feelings at work. Please indicate the extent you agree with each of the statements below.

| | | | | |
|-------------------|----------|----------------------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. |
| Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |

- I know what my responsibilities are. 1. 2. 3. 4. 5.
- I know exactly what is expected of me. 1. 2. 3. 4. 5.
- I know how to divide my time properly. 1. 2. 3. 4. 5.
- I have clear, planned goals and objectives for my job. 1. 2. 3. 4. 5.
- I feel certain about how much authority I have. 1. 2. 3. 4. 5.
- I know what has to be done. 1. 2. 3. 4. 5.

Since you have entered your current team, please indicate the extent to which you have purposefully tried to obtain the information by observing the situation around you.

| | | | | |
|------------|-------------|----------|------------------|-------------------|
| 1. | 2. | 3. | 4. | 5. |
| Not at all | Very little | Somewhat | To a good extent | To a great extent |

- I have obtained information on...
- ...how to perform specific aspects of one's job. 1. 2. 3. 4. 5.
- ...how to perform one's efficiently and effectively. 1. 2. 3. 4. 5.
- ...how to balance the demands of one's job. 1. 2. 3. 4. 5.
- ...definitions and technical terms related to one's job. 1. 2. 3. 4. 5.
- ...where to obtain needed supplies and information. 1. 2. 3. 4. 5.
- ...how to get along with people in the organization. 1. 2. 3. 4. 5.
- ...the behaviors and personalities of persons with whom one work. 1. 2. 3. 4. 5.
- ...how to deal with politics at work. 1. 2. 3. 4. 5.
- ...who to trust and who not to trust. 1. 2. 3. 4. 5.
- ...how well one is fitting in. 1. 2. 3. 4. 5.
- ...the appropriateness of one's social behaviors. 1. 2. 3. 4. 5.

Since you have entered your current team, please indicate the extent to which you have purposefully tried to obtain the information by observing the situation around you.

| | | | | |
|------------|-------------|----------|------------------|-------------------|
| 1. | 2. | 3. | 4. | 5. |
| Not at all | Very little | Somewhat | To a good extent | To a great extent |

I have obtained information on...

...how well one is getting along with co-workers.

 1. 2. 3. 4. 5.

...organizational policies and procedures.

 1. 2. 3. 4. 5.

...the structure of the organization.

 1. 2. 3. 4. 5.

...the financial position and/or performance of the organization.

 1. 2. 3. 4. 5.

...information on services or products provided by the organization.

 1. 2. 3. 4. 5.

...where individuals and departments are located.

 1. 2. 3. 4. 5.

...benefits provided by the organization.

 1. 2. 3. 4. 5.

...who makes the important decisions in the organization.

 1. 2. 3. 4. 5.

...who controls critical resources in the organization.

 1. 2. 3. 4. 5.

...who has authority over whom in the organization.

 1. 2. 3. 4. 5.

...who's who in the organization.

 1. 2. 3. 4. 5.

The following statements relate to your general experience, attitudes and feelings at work. Please indicate the extent you agree with each of the statements below.

| | | | | | | |
|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| Strongly disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Strongly agree |

All-in all, I am satisfied with my job.

 1. 2. 3. 4. 5. 6. 7.

In general, I like working here.

 1. 2. 3. 4. 5. 6. 7.

All things considered, I am satisfied with my current job.

 1. 2. 3. 4. 5. 6. 7.

Please indicate the extent to which you agree with each of the statements below. Please indicate the extent you agree with each of the statements below.

| | | | | |
|-------------------------|----------------|----------------------------------|-------------|----------------------|
| 1. Strongly disagree | 2. Disagree | 3. Neither agree nor disagree | 4. Agree | 5. Strongly agree |
|-------------------------|----------------|----------------------------------|-------------|----------------------|

I intend to switch jobs in the next year.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

I intend to keep my current job for at least two years.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

I'm thinking about switching to another job.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

This part consists of a number of words that describe different feelings and emotions. Indicate to what extent you have felt this way since you have entered your current team.

| | | | | |
|-----------------------------------|----------------|------------------|-------------------|-----------------|
| 1. Very slightly or not at all | 2. A little | 3. Moderately | 4. Quite a bit | 5. Extremely |
|-----------------------------------|----------------|------------------|-------------------|-----------------|

Mixed.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Uneasy.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Torn.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Bothered.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Preoccupied.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Confused.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Unsure of self or goals.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Contradictory.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

This part consists of a number of words that describe different feelings and emotions. Indicate to what extent you have felt this way since you have entered your current team.

| | | | | |
|-----------------------------------|----------------|------------------|-------------------|-----------------|
| 1. Very slightly or not at all | 2. A little | 3. Moderately | 4. Quite a bit | 5. Extremely |
|-----------------------------------|----------------|------------------|-------------------|-----------------|

Distractible.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Unclear.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Restless.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Confused about identity.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Uncomfortable.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Conflicted.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

In-decisive.

| | | | | |
|----|----|----|----|----|
| 1. | 2. | 3. | 4. | 5. |
|----|----|----|----|----|

Chaotic.

What is your gender?

- Male
- Female
- Other, namely: _____

What is your age? (in years)

What is your highest level of education?

- Junior secondary (vocational) education
- Senior secondary (vocational) education
- Professional education
- Higher vocational education (e.g., university of applied sciences)
- University
- Other, namely: _____

What is the type of your contract?

- Permanent contract
- Fixed-term contract
- Other, namely: _____

For how long have you been working in this team? (in years and months)

Years _____

Months _____

For how long have you been working for this organization? (in years and months)

Years _____

Months _____

For how long have you been working in this function/role? (in years and months)

Years _____

Months _____

How many members does your team have?

Number of members _____

Are you formally identified by your organization as belonging to a talent pool?

Yes

No

Thank you for your cooperation!

Please add your comments/remarks below.

8.2. Team descriptives: Locations, nationalities, sectors, team specialities.

Table 6

Locations of companies in the sample

| <i>Locations</i> | <i>% of the sample</i> |
|-------------------------|-------------------------------|
| the Netherlands | 90% |
| Ireland | 5% |
| Australia | 2% |
| Belgium | 2% |
| Vietnam | 2% |

Table 7

Nationalities of the teams in the sample

| <i>Nationalities</i> | <i>% of the sample</i> |
|-------------------------------------|-------------------------------|
| <i>Nationally homogeneous teams</i> | 84% |
| Dutch | 79% |
| Irish | 3% |
| Belgium | 2% |
| <i>International teams</i> | 16% |

Table 8

Sectors in the sample

| <i>Sectors</i> | <i>% of the sample</i> |
|-----------------------|-------------------------------|
| Retail | 22% |
| Consulting | 19% |
| Manufacturing | 17% |
| Healthcare | 14% |
| IT | 9% |
| Education | 3% |
| Staffing | 3% |
| Hospitality | 3% |
| Insurance | 3% |
| Government | 2% |
| Bank | 2% |
| Construction | 2% |

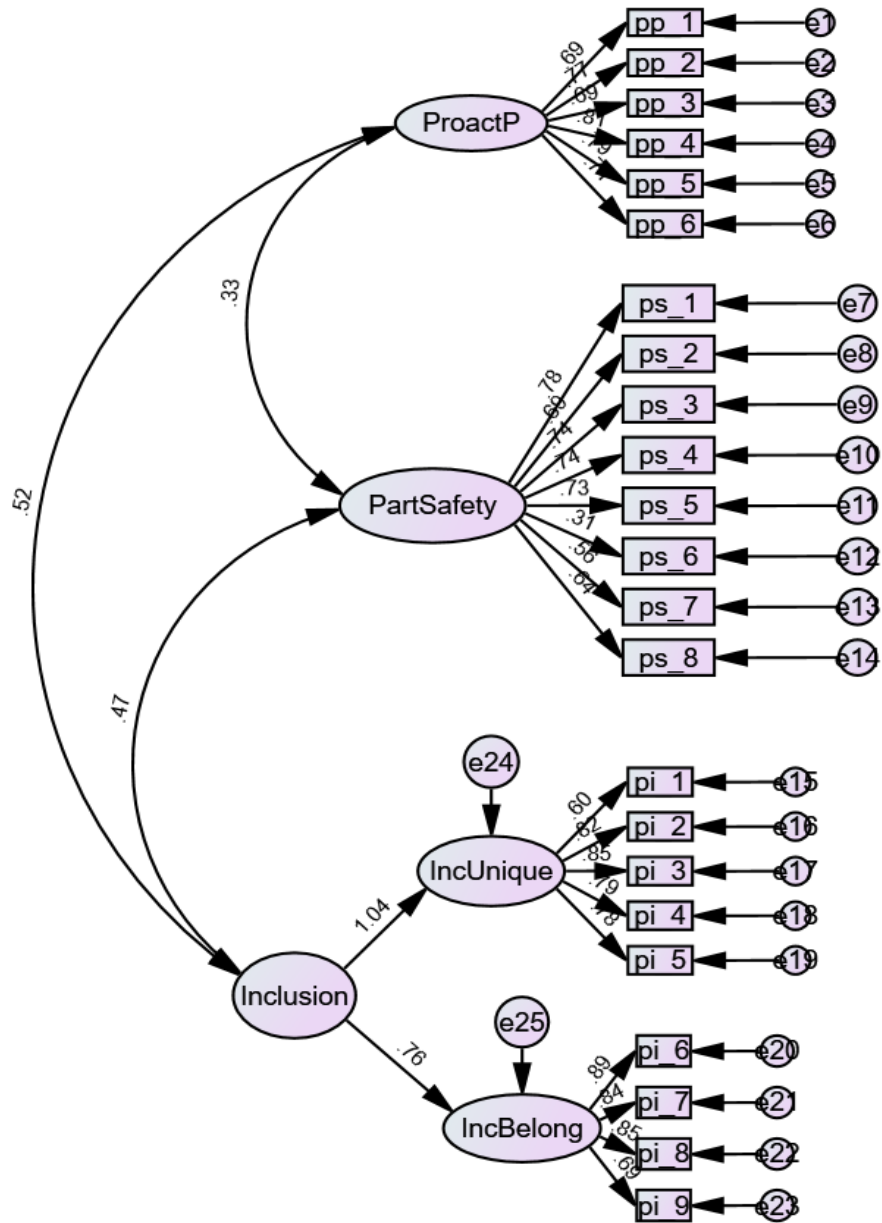
Table 9

Team specialities in the sample

| <i>Team specialities</i> | <i>% of the sample</i> |
|--|------------------------|
| Finance and Accountancy | 16% |
| Marketing team | 12% |
| Healthcare professionals / Social workers | 10% |
| Internal HR team | 10% |
| Project Management | 7% |
| Software development / Application engineering | 7% |
| Process operators | 5% |
| Sales | 5% |
| External recruiters | 3% |
| Operational Management | 3% |
| Planner | 3% |
| Teachers | 3% |
| Waiters | 3% |
| Design | 2% |
| Front-desk | 2% |
| Logistics | 2% |
| Merchandising | 2% |
| NA | 3% |

8.3. Confirmatory factor analysis

8.3.1 Conceptual model without modification



Model Fit Summary

CMIN

| Model | NPAR | CMIN | DF | P | CMIN/DF |
|--------------------|------|----------|-----|---|---------|
| Default model | 50 | 443,232 | 226 | 0 | 1,961 |
| Saturated model | 276 | 0 | 0 | | |
| Independence model | 23 | 2942,759 | 253 | 0 | 11,631 |

RMR, GFI

| Model | RMR | GFI | AGFI | PGFI |
|--------------------|-------|-------|-------|-------|
| Default model | 0,081 | 0,849 | 0,815 | 0,695 |
| Saturated model | 0 | 1 | | |
| Independence model | 0,449 | 0,263 | 0,196 | 0,241 |

Baseline Comparisons

| Model | NFI Delta1 | RFI rho1 | IFI Delta2 | TLI rho2 | CFI |
|--------------------|---------------|-------------|---------------|-------------|-------|
| Default model | 0,849 | 0,831 | 0,92 | 0,91 | 0,919 |
| Saturated model | 1 | | 1 | | 1 |
| Independence model | 0 | 0 | 0 | 0 | 0 |

Parsimony-Adjusted Measures

| Model | PRATIO | PNFI | PCFI |
|--------------------|--------|-------|-------|
| Default model | 0,893 | 0,759 | 0,821 |
| Saturated model | 0 | 0 | 0 |
| Independence model | 1 | 0 | 0 |

NCP

| Model | NCP | LO 90 | HI 90 |
|--------------------|----------|----------|----------|
| Default model | 217,232 | 161,308 | 280,949 |
| Saturated model | 0 | 0 | 0 |
| Independence model | 2689,759 | 2518,797 | 2868,078 |

FMIN

| Model | FMIN | F0 | LO 90 | HI 90 |
|--------------------|--------|--------|-------|--------|
| Default model | 2,071 | 1,015 | 0,754 | 1,313 |
| Saturated model | 0 | 0 | 0 | 0 |
| Independence model | 13,751 | 12,569 | 11,77 | 13,402 |

RMSEA

| Model | RMSEA | LO 90 | HI 90 | PCLOSE |
|--------------------|-------|-------|-------|--------|
| Default model | 0,067 | 0,058 | 0,076 | 0,002 |
| Independence model | 0,223 | 0,216 | 0,23 | 0 |

AIC

| Model | AIC | BCC | BIC | CAIC |
|--------------------|----------|----------|----------|----------|
| Default model | 543,232 | 555,864 | 711,764 | 761,764 |
| Saturated model | 552 | 621,726 | 1482,296 | 1758,296 |
| Independence model | 2988,759 | 2994,569 | 3066,284 | 3089,284 |

ECVI

| Model | ECVI | LO 90 | HI 90 | MECVI |
|--------------------|--------|--------|--------|--------|
| Default model | 2,538 | 2,277 | 2,836 | 2,597 |
| Saturated model | 2,579 | 2,579 | 2,579 | 2,905 |
| Independence model | 13,966 | 13,167 | 14,799 | 13,993 |

HOELTER

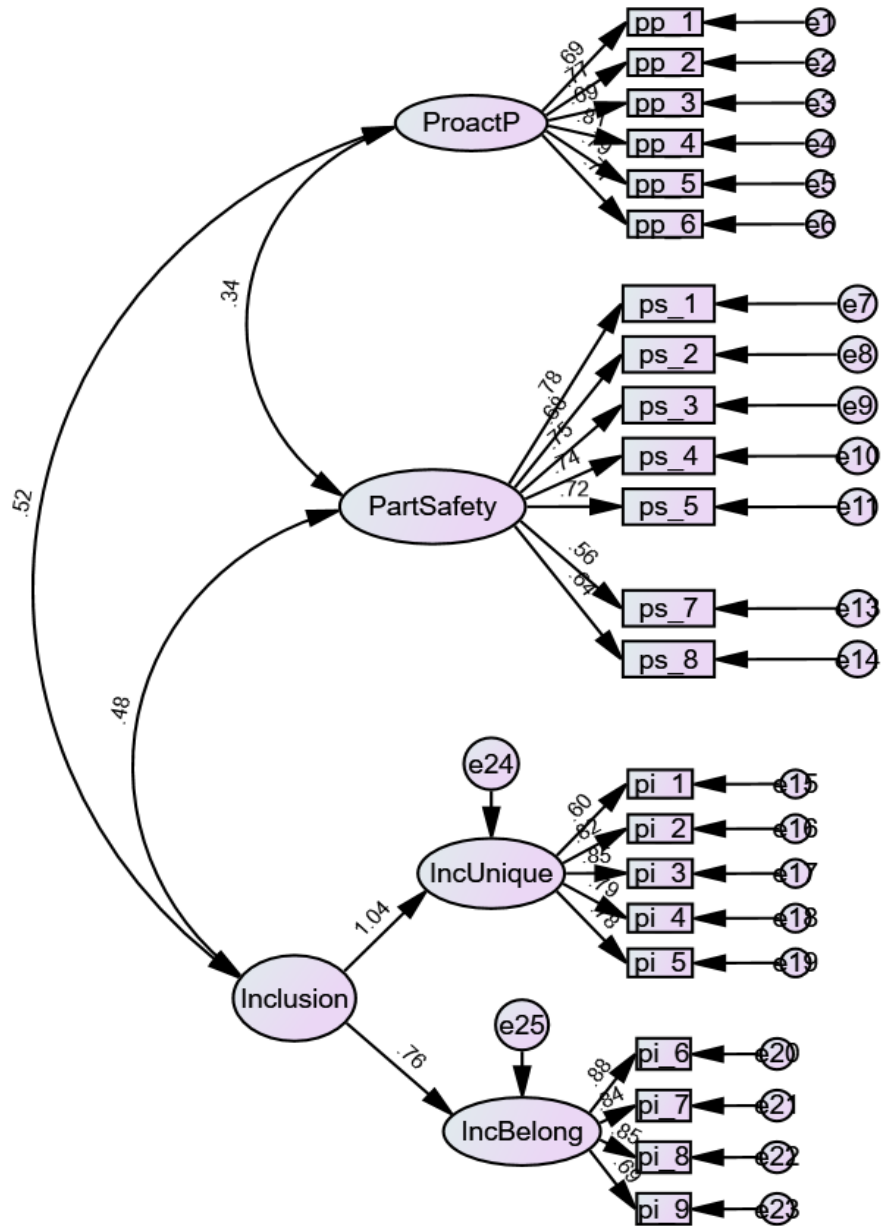
| Model | HOELTER | HOELTER |
|--------------------|---------|---------|
| | 0,05 | 0,01 |
| Default model | 127 | 135 |
| Independence model | 22 | 23 |

Execution time summary

| | |
|----------------|-------|
| Minimization: | 0,025 |
| Miscellaneous: | 0,891 |
| Bootstrap: | 0 |
| Total: | 0,916 |

| | CR | AVE | MSV | MaxR(H) | PartSafety | ProactP | Inclusion |
|------------|------|------|------|---------|------------|---------|-----------|
| PartSafety | 0,86 | 0,44 | 0,22 | 0,88 | 0,66 | | |
| ProactP | 0,88 | 0,56 | 0,27 | 0,89 | 0,33 | 0,75 | |
| Inclusion | 0,90 | 0,83 | 0,27 | 1,10 | 0,47 | 0,52 | 0,91 |

8.3.1 Conceptual model with modification



Model Fit Summary

CMIN

| Model | NPAR | CMIN | DF | P | CMIN/DF |
|--------------------|------|----------|-----|---|---------|
| Default model | 48 | 407,274 | 205 | 0 | 1,987 |
| Saturated model | 253 | 0 | 0 | | |
| Independence model | 22 | 2887,826 | 231 | 0 | 12,501 |

RMR, GFI

| Model | RMR | GFI | AGFI | PGFI |
|--------------------|-------|-------|-------|-------|
| Default model | 0,079 | 0,854 | 0,82 | 0,692 |
| Saturated model | 0 | 1 | | |
| Independence model | 0,468 | 0,257 | 0,187 | 0,235 |

Baseline Comparisons

| Model | NFI Delta1 | RFI rho1 | IFI Delta2 | TLI rho2 | CFI |
|--------------------|---------------|-------------|---------------|-------------|-------|
| Default model | 0,859 | 0,841 | 0,925 | 0,914 | 0,924 |
| Saturated model | 1 | | 1 | | 1 |
| Independence model | 0 | 0 | 0 | 0 | 0 |

Parsimony-Adjusted Measures

| Model | PRATIO | PNFI | PCFI |
|--------------------|--------|-------|------|
| Default model | 0,887 | 0,762 | 0,82 |
| Saturated model | 0 | 0 | 0 |
| Independence model | 1 | 0 | 0 |

NCP

| Model | NCP | LO 90 | HI 90 |
|--------------------|----------|----------|----------|
| Default model | 202,274 | 148,696 | 263,638 |
| Saturated model | 0 | 0 | 0 |
| Independence model | 2656,826 | 2487,235 | 2833,776 |

FMIN

| Model | FMIN | F0 | LO 90 | HI 90 |
|--------------------|--------|--------|--------|--------|
| Default model | 1,903 | 0,945 | 0,695 | 1,232 |
| Saturated model | 0 | 0 | 0 | 0 |
| Independence model | 13,495 | 12,415 | 11,623 | 13,242 |

RMSEA

| Model | RMSEA | LO 90 | HI 90 | PCLOSE |
|--------------------|-------|-------|-------|--------|
| Default model | 0,068 | 0,058 | 0,078 | 0,002 |
| Independence model | 0,232 | 0,224 | 0,239 | 0 |

AIC

| Model | AIC | BCC | BIC | CAIC |
|--------------------|----------|----------|----------|----------|
| Default model | 503,274 | 514,834 | 665,064 | 713,064 |
| Saturated model | 506 | 566,932 | 1358,771 | 1611,771 |
| Independence model | 2931,826 | 2937,125 | 3005,98 | 3027,98 |

ECVI

| Model | ECVI | LO 90 | HI 90 | MECVI |
|--------------------|-------|--------|--------|--------|
| Default model | 2,352 | 2,101 | 2,638 | 2,406 |
| Saturated model | 2,364 | 2,364 | 2,364 | 2,649 |
| Independence model | 13,7 | 12,908 | 14,527 | 13,725 |

HOELTER

| Model | HOELTE R 0,05 | HOELTE R 0,01 |
|--------------------|---------------------|---------------------|
| Default model | 126 | 135 |
| Independence model | 20 | 22 |

Execution time summary

| | |
|----------------|-------|
| Minimization: | 0,022 |
| Miscellaneous: | 1,293 |
| Bootstrap: | 0 |
| Total: | 1,315 |

| | CR | AVE | MSV | MaxR(H) | PartSafety | ProactP | Inclusion |
|------------|------|------|------|---------|-------------|-------------|-------------|
| PartSafety | 0,87 | 0,49 | 0,23 | 0,88 | 0,70 | | |
| ProactP | 0,88 | 0,56 | 0,27 | 0,89 | 0,34 | 0,75 | |
| Inclusion | 0,90 | 0,83 | 0,27 | 1,09 | 0,48 | 0,52 | 0,91 |

8.4 HLM output

8.4.1 Model 1

Program: HLM 6 Hierarchical Linear and Nonlinear Modeling
Authors: Stephen Raudenbush, Tony Bryk, & Richard Congdon
Publisher: Scientific Software International, Inc. (c) 2000
techsupport@ssicentral.com
www.ssicentral.com

Module: HLM2S.EXE (6.08.29257.1)
Date: 05 August 2020, Wednesday
Time: 12:47:34

Specifications for this hlm2 run

The maximum number of level-1 units = 190
The maximum number of level-2 units = 43
The maximum number of iterations = 100
Method of estimation: restricted maximum likelihood
The outcome variable PI_TM_M

Summary of the model specified (in equation format)

Level-1 Model

$$Y = B0 + R$$

Level-2 Model

$$B0 = G00 + U0$$

Iterations stopped due to small change in likelihood function – Iteration 6

Sigma_squared = 0.64072

Tau

INTRCPT1, B0 0.20304

Tau (as correlations)

INTRCPT1, B0 1.000

| <i>Random level-1 coefficient</i> | <i>Reliability estimate</i> |
|-----------------------------------|-----------------------------|
| INTRCPT1, B0 | 0.577 |

The value of the likelihood function at iteration 6 = -2.460142E+002

The outcome variable is PI_TM_M

Final estimation of fixed effects:

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|-----------------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 INTRCPT2, G00 | 5.472626 | 0.090485 | 60.481 | 42 | 0.000 |

The outcome variable is PI_TM_M

**Final estimation of fixed effects
(with robust standard errors)**

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|-----------------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 INTRCPT2, G00 | 5.472626 | 0.089423 | 61.199 | 42 | 0.000 |

Final estimation of variance components:

| <i>Random Effect</i> | <i>Standard Deviation</i> | <i>Variance Component</i> | <i>df</i> | <i>Chi-square</i> | <i>P-value</i> |
|----------------------------|---------------------------|---------------------------|-----------|-------------------|----------------|
| INTRCPT1, U0 level-1, R | 0.45060 0.80045 | 0.20304 0.64072 | 42 | 99.88190 | 0.000 |

Statistics for current covariance components model

Deviance = 492.028403
Number of estimated parameters = 2

8.4.2 Model 2

Program: HLM 6 Hierarchical Linear and Nonlinear Modeling
Authors: Stephen Raudenbush, Tony Bryk, & Richard Congdon
Publisher: Scientific Software International, Inc. (c) 2000
techsupport@ssicentral.com
www.ssicentral.com

Module: HLM2S.EXE (6.08.29257.1)
Date: 05 August 2020, Wednesday
Time: 12:51:14

Specifications for this hlm2 run

The maximum number of level-1 units = 190
The maximum number of level-2 units = 43
The maximum number of iterations = 100
Method of estimation: restricted maximum likelihood
The outcome variable is PI_TM_M

Summary of the model specified (in equation format)

Bold - predictor has been centered around its group mean.

Bold Italic - predictor has been centered around its grand mean.

Level-1 Model

$$Y = B0 + B1*(GENDER_M) + B2*(PP_TM_M) + R$$

Level-2 Model

$$B0 = G00 + U0$$

$$B1 = G10$$

$$B2 = G20$$

Iterations stopped due to small change in likelihood function - Iteration 6

Sigma_squared = 0.53608

Tau

INTRCPT1, B0 0.23034

Tau (as correlations)

INTRCPT1, B0 1.000

| <i>Random level-1 coefficient</i> | <i>Reliability estimate</i> |
|-----------------------------------|-----------------------------|
| INTRCPT1, B0 | 0.648 |

The value of the likelihood function at iteration 4 = -2.349890E+002

The outcome variable is PI_TM_M

Final estimation of fixed effects:

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 5.467124 | 0.127911 | 42.742 | 42 | 0.000 |
| For GENDER_M slope, B1 | | | | | |
| INTRCPT2, G10 | 0.007311 | 0.133922 | 0.055 | 187 | 0.957 |
| For PP_1L_M slope, B2 | | | | | |
| INTRCPT2, G20 | 0.356767 | 0.065880 | 5.415 | 187 | 0.000 |

The outcome variable is PI_TM_M

**Final estimation of fixed effects
(with robust standard errors)**

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|---------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 5.467124 | 0.134178 | 40.745 | 42 | 0.000 |

| | | | | | | |
|---------------------------|----------|----------|-------|-----|-------|--|
| For GENDER_M slope, B1 | | | | | | |
| INTRCPT2, G10 | 0.007311 | 0.133050 | 0.055 | 187 | 0.957 | |
| For PP_1L_M slope, B2 | | | | | | |
| INTRCPT2, G20 | 0.356767 | 0.066623 | 5.355 | 187 | 0.000 | |

Final estimation of variance components:

| <i>Random Effect</i> | <i>Standard Deviation</i> | <i>Variance Component</i> | <i>df</i> | <i>Chi-square</i> | <i>P-value</i> |
|----------------------|---------------------------|---------------------------|-----------|-------------------|----------------|
| INTRCPT1, U0 | 0.47994 | 0.23034 | 42 | 119.51376 | 0.000 |
| level-1, R | 0.73217 | 0.53608 | | | |

Statistics for current covariance components model

Deviance = 469.978095

Number of estimated parameters = 2

8.4.3 Model 3

Program: HLM 6 Hierarchical Linear and Nonlinear Modeling
 Authors: Stephen Raudenbush, Tony Bryk, & Richard Congdon
 Publisher: Scientific Software International, Inc. (c) 2000
 techsupport@ssicentral.com
 www.ssicentral.com

Module: HLM2S.EXE (6.08.29257.1)
 Date: 05 August 2020, Wednesday
 Time: 12:53:11

Specifications for this hlm2 run

The maximum number of level-1 units = 190
 The maximum number of level-2 units = 43
 The maximum number of iterations = 100
 Method of estimation: restricted maximum likelihood
 The outcome variable is PI_TM_M

Summary of the model specified (in equation format)

Bold - predictor has been centered around its group mean.
Bold Italic - predictor has been centered around its grand mean.

Level-1 Model

$$Y = B0 + B1*(GENDER_M) + B2*(PP_TM_M) + R$$

Level-2 Model

$$B0 = G00 + G01*(INF_T_M) + U0$$

$$B1 = G10$$

$$B2 = G20$$

Iterations stopped due to small change in likelihood function – Iteration 5

Sigma_squared = 0.53587

Tau

INTRCPT1,B0 0.23424

Tau (as correlations)

INTRCPT1,B0 1.000

| <i>Random level-1 coefficient</i> | <i>Reliability estimate</i> |
|-----------------------------------|-----------------------------|
| INTRCPT1, B0 | 0.652 |

The value of the likelihood function at iteration 5 = -2.369475E+002

The outcome variable is PI_TM_M

Final estimation of fixed effects:

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 5.468196 | 0.128333 | 42.609 | 41 | 0.000 |
| INF_T_M, G01 | 0.081301 | 0.104150 | 0.781 | 41 | 0.440 |
| For GENDER_M slope, B1 | | | | | |
| INTRCPT2, G10 | 0.004879 | 0.134095 | 0.036 | 186 | 0.971 |
| For PP_TM_M slope, B2 | | | | | |
| INTRCPT2, G20 | 0.356973 | 0.065870 | 5.419 | 186 | 0.000 |

The outcome variable is PI_TM_M

**Final estimation of fixed effects
(with robust standard errors)**

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 5.468196 | 0.134569 | 40.635 | 41 | 0.000 |
| INF_T_M, G01 | 0.081301 | 0.064464 | 1.261 | 41 | 0.215 |
| For GENDER_M slope, B1 | | | | | |
| INTRCPT2, G10 | 0.004879 | 0.133358 | 0.037 | 186 | 0.971 |
| For PP_TM_M slope, B2 | | | | | |
| INTRCPT2, G20 | 0.356973 | 0.066809 | 5.343 | 186 | 0.000 |

Final estimation of variance components:

| <i>Random Effect</i> | <i>Standard Deviation</i> | <i>Variance Component</i> | <i>df</i> | <i>Chi-square</i> | <i>P-value</i> |
|----------------------|---------------------------|---------------------------|-----------|-------------------|----------------|
| INTRCPT1, U0 | 0.48398 | 0.23424 | 41 | 118.03965 | 0.000 |
| level-1, R | 0.73203 | 0.53587 | | | |

Statistics for current covariance components model

Deviance = 473.895024

Number of estimated parameters = 2

8.4.4 Model 4

Program: HLM 6 Hierarchical Linear and Nonlinear Modeling
 Authors: Stephen Raudenbush, Tony Bryk, & Richard Congdon
 Publisher: Scientific Software International, Inc. (c) 2000
 techsupport@ssicentral.com
 www.ssicentral.com

Module: HLM2S.EXE (6.08.29257.1)
 Date: 05 August 2020, Wednesday
 Time: 15:26:59

Specifications for this hlm2 run

The maximum number of level-1 units = 190
 The maximum number of level-2 units = 43
 The maximum number of iterations = 100
 Method of estimation: restricted maximum likelihood
 The outcome variable is PI_TM_M

Summary of the model specified (in equation format)

Bold - predictor has been centered around its group mean.
Bold Italic - predictor has been centered around its grand mean.

Level-1 Model

$$Y = B0 + B1*(GENDER_M) + B2*(PP_TM_M) + R$$

Level-2 Model

$$B0 = G00 + G01*(PS_TM_M) + U0$$

$$B1 = G10$$

$$B2 = G20$$

Iterations stopped due to small change in likelihood function – Iteration 11

Sigma_squared = 0.53701

Tau
INTRCPT1,B0 0.10274

Tau (as correlations)
INTRCPT1,B0 1.000

Random level-1 coefficient *Reliability estimate*
-2.270108E+002.468862E+002
The outcome variable is PI_TM_M

Final estimation of fixed effects:

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 5.470452 | 0.112035 | 48.828 | 41 | 0.000 |
| PS_TM_M, G01 | 0.914838 | 0.186666 | 4.901 | 41 | 0.000 |
| For GENDER_M slope, B1 | | | | | |
| INTRCPT2, G10 | 0.014690 | 0.127452 | 0.115 | 186 | 0.909 |
| For PP_1L_M slope, B2 | | | | | |
| INTRCPT2, G20 | 0.356139 | 0.065843 | 5.409 | 186 | 0.000 |

The outcome variable is PI_TM_M

**Final estimation of fixed effects
(with robust standard errors)**

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 5.470452 | 0.106437 | 51.396 | 41 | 0.000 |
| PS_TM_M, G01 | 0.914838 | 0.219943 | 4.159 | 41 | 0.000 |
| For GENDER_M slope, B1 | | | | | |
| INTRCPT2, G10 | 0.014690 | 0.123169 | 0.119 | 186 | 0.906 |
| For PP_1L_M slope, B2 | | | | | |
| INTRCPT2, G20 | 0.356139 | 0.066483 | 5.357 | 186 | 0.000 |

Final estimation of variance components:

| <i>Random Effect</i> | <i>Standard Deviation</i> | <i>Variance Component</i> | <i>df</i> | <i>Chi-square</i> | <i>P-value</i> |
|----------------------|---------------------------|---------------------------|-----------|-------------------|----------------|
| INTRCPT1, U0 | 0.32053 | 0.10274 | 41 | 75.26243 | 0.001 |
| level-1, R | 0.73281 | 0.53701 | | | |

Statistics for current covariance components model

Deviance = 454.021638

Number of estimated parameters = 2

8.4.5 Model 5

Program: HLM 6 Hierarchical Linear and Nonlinear Modeling
Authors: Stephen Raudenbush, Tony Bryk, & Richard Congdon
Publisher: Scientific Software International, Inc. (c) 2000
techsupport@ssicentral.com
www.ssicentral.com

Module: HLM2S.EXE (6.08.29257.1)
Date: 05 August 2020, Wednesday
Time: 15:21:12

Specifications for this hlm2 run

The maximum number of level-1 units = 190
The maximum number of level-2 units = 43
The maximum number of iterations = 100
Method of estimation: restricted maximum likelihood
The outcome variable is PI_TM_M

Summary of the model specified (in equation format)

Bold - predictor has been centered around its group mean.
Bold Italic - predictor has been centered around its grand mean.

Level-1 Model

$$Y = B0 + B1*(GENDER_M) + B2*(PP_TM_M) + R$$

Level-2 Model

$$B0 = G00 + G01*(INF_T_M) + U0$$
$$B1 = G10$$
$$B2 = G20 + G21*(INF_T_M)$$

Iterations stopped due to small change in likelihood function – Iteration 6

Sigma_squared = 0.52478

Tau
INTRCPT1,B0 0.23729

Tau (as correlations)
INTRCPT1,B0 1.000

| <i>Random level-1 coefficient</i> | <i>Reliability estimate</i> |
|-----------------------------------|-----------------------------|
| INTRCPT1, B0 | 0.660 |

The value of the likelihood function at iteration 6 = -2.357083E+002
The outcome variable is PI_TM_M

Final estimation of fixed effects:

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 5.463656 | 0.127874 | 42.727 | 41 | 0.000 |
| INF_T_M, G01 | 0.081247 | 0.104235 | 0.779 | 41 | 0.440 |
| For GENDER_M slope, B1 | | | | | |
| INTRCPT2, G10 | 0.011562 | 0.133004 | 0.087 | 185 | 0.931 |
| For PP_TM_M slope, B2 | | | | | |
| INTRCPT2, G20 | 0.345238 | 0.065447 | 5.275 | 185 | 0.000 |
| INF_T_M, G21 | -0.150212 | 0.074953 | -2.004 | 185 | 0.046 |

The outcome variable is PI_TM_M

**Final estimation of fixed effects
(with robust standard errors)**

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 5.463656 | 0.132125 | 41.352 | 41 | 0.000 |
| INF_T_M, G01 | 0.081247 | 0.064566 | 1.258 | 41 | 0.216 |
| For GENDER_M slope, B1 | | | | | |
| INTRCPT2, G10 | 0.011562 | 0.129894 | 0.089 | 185 | 0.930 |
| For PP_TM_M slope, B2 | | | | | |
| INTRCPT2, G20 | 0.345238 | 0.058806 | 5.871 | 185 | 0.000 |
| INF_T_M, G21 | -0.150212 | 0.072261 | -2.079 | 185 | 0.039 |

Final estimation of variance components:

| <i>Random Effect</i> | <i>Standard Deviation</i> | <i>Variance Component</i> | <i>df</i> | <i>Chi-square</i> | <i>P-value</i> |
|----------------------|---------------------------|---------------------------|-----------|-------------------|----------------|
| INTRCPT1, U0 | 0.48712 | 0.23729 | 41 | 120.66454 | 0.000 |
| level-1, R | 0.72442 | 0.52478 | | | |

Statistics for current covariance components model

Deviance = 471.416531

Number of estimated parameters = 2

8.4.6. Model 6

Program: HLM 6 Hierarchical Linear and Nonlinear Modeling
Authors: Stephen Raudenbush, Tony Bryk, & Richard Congdon
Publisher: Scientific Software International, Inc. (c) 2000
techsupport@ssicentral.com
www.ssicentral.com

Module: HLM2S.EXE (6.08.29257.1)
Date: 05 August 2020, Wednesday
Time: 15:30:39

Specifications for this hlm2 run

The maximum number of level-1 units = 190
The maximum number of level-2 units = 43
The maximum number of iterations = 100
Method of estimation: restricted maximum likelihood
The outcome variable is PI_TM_M

Summary of the model specified (in equation format)

Bold - predictor has been centered around its group mean.
Bold Italic - predictor has been centered around its grand mean.

Level-1 Model

$$Y = B0 + B1*(GENDER_M) + B2*(PP_TM_M) + R$$

Level-2 Model

$$B0 = G00 + G01*(PS_TM_M) + U0$$
$$B1 = G10$$
$$B2 = G20 + G21*(PS_TM_M)$$

Iterations stopped due to small change in likelihood function – Iteration 11

Sigma_squared = 0.53939

Tau

INTRCPT1,B0 0.10179

Tau (as correlations)

INTRCPT1,B0 1.000

| <i>Random level-1 coefficient</i> | <i>Reliability estimate</i> |
|-----------------------------------|-----------------------------|
| INTRCPT1, B0 | 0.449 |

The value of the likelihood function at iteration 11 = -2.268775E+002

The outcome variable is PI_TM_M

Final estimation of fixed effects:

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 5.477441 | 0.112538 | 48.672 | 41 | 0.000 |
| PS_TM_M, G01 | 0.913951 | 0.186506 | 4.900 | 41 | 0.000 |
| For GENDER_M slope, B1 | | | | | |
| INTRCPT2, G10 | 0.004348 | 0.128530 | 0.034 | 185 | 0.973 |
| For PP_TM_M slope, B2 | | | | | |
| INTRCPT2, G20 | 0.365555 | 0.067524 | 5.414 | 185 | 0.000 |
| PS_TM_M, G21 | 0.096205 | 0.146817 | 0.655 | 185 | 0.513 |

The outcome variable is PI_TM_M

**Final estimation of fixed effects
(with robust standard errors)**

| <i>Fixed Effect</i> | <i>Coefficient</i> | <i>Standard Error</i> | <i>T-ratio</i> | <i>Approx. d.f.</i> | <i>P-value</i> |
|------------------------|--------------------|-----------------------|----------------|---------------------|----------------|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 5.477441 | 0.104704 | 52.314 | 41 | 0.000 |
| PS_TM_M, G01 | 0.913951 | 0.220345 | 4.148 | 41 | 0.000 |
| For GENDER_M slope, B1 | | | | | |
| INTRCPT2, G10 | 0.004348 | 0.123195 | 0.035 | 185 | 0.972 |
| For PP_TM_M slope, B2 | | | | | |
| INTRCPT2, G20 | 0.365555 | 0.067448 | 5.420 | 185 | 0.000 |
| PS_TM_M, G21 | 0.096205 | 0.104650 | 0.919 | 185 | 0.359 |

Final estimation of variance components:

| <i>Random Effect</i> | <i>Standard Deviation</i> | <i>Variance Component</i> | <i>df</i> | <i>Chi-square</i> | <i>P-value</i> |
|----------------------|---------------------------|---------------------------|-----------|-------------------|----------------|
| INTRCPT1, U0 | 0.31905 | 0.10179 | 41 | 74.80040 | 0.001 |
| level-1, R | 0.73443 | 0.53939 | | | |

Statistics for current covariance components model

Deviance = 453.755100

Number of estimated parameters = 2

8.5. Process Output

8.5.1 Analysis 1

PROCESS Procedure for SPSS Release 2.16.1

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 1
Y = pi_n_m
X = pp_n_m
M = inf_t_m

Statistical Controls:
CONTROL= ttl_team gender g_match
Sample size 56
Outcome: pi_n_m

Model Summary

| <i>R</i> | <i>R-sq</i> | <i>MSE</i> | <i>F</i> | <i>df1</i> | <i>df2</i> | <i>p</i> |
|----------|-------------|------------|----------|------------|------------|----------|
| ,4689 | ,2199 | ,7967 | 2,9082 | 6,0000 | 49,0000 | ,0166 |

Model

| | <i>coeff</i> | <i>se</i> | <i>t</i> | <i>P</i> | <i>LLCI</i> | <i>ULCI</i> |
|----------|--------------|-----------|----------|----------|-------------|-------------|
| constant | 6,0112 | ,3194 | 18,8220 | ,0000 | 5,3694 | 6,6530 |
| inf_m_m | ,1311 | ,1394 | ,9406 | ,3515 | -,1490 | ,4111 |
| pp_m | ,3095 | ,1612 | 1,9205 | ,0606 | ,0144 | ,6334 |
| int_1 | -,5625 | ,1797 | -3,1299 | ,0029 | -,9236 | -,2013 |
| ten_t_t | -,1037 | ,0681 | -1,5224 | ,1343 | -,2406 | ,0332 |
| gender | ,1417 | ,2702 | -,5244 | ,6023 | -,4012 | ,6846 |
| gender_c | -,1346 | ,2796 | -,4815 | ,6323 | -,6964 | ,4272 |

Note. Product terms key: int_1 pp_n_m X inf_t_m

R-square increase due to interaction(s):

| | <i>R2-chng</i> | <i>F</i> | <i>df1</i> | <i>df2</i> | <i>p</i> |
|-------|----------------|----------|------------|------------|----------|
| int_1 | ,1169 | 9,7963 | 1,0000 | 49,0000 | ,0029 |

Conditional effect of X on Y at values of the moderator(s):

| <i>inf_m_m</i> | <i>Effect</i> | <i>se</i> | <i>t</i> | <i>P</i> | <i>LLCI</i> | <i>ULCI</i> |
|----------------|---------------|-----------|----------|----------|-------------|-------------|
| -,9563 | ,8474 | ,2319 | 3,6382 | ,0007 | ,3793 | 1,3155 |
| ,0000 | ,3095 | ,1612 | 1,9205 | ,0606 | -,0144 | ,6334 |
| ,9563 | -,2284 | ,2383 | -,9586 | ,3425 | -,7072 | ,2504 |

Notes. Values for quantitative moderators are the mean and plus/minus one SD from mean.
Values for dichotomous moderators are the two values of the moderator.

Data for visualizing conditional effect of X on Y

Paste text below into a SPSS syntax window and execute to produce plot.

```
DATA LIST FREE/ pp_n_m inf_t_m pi_n_m.  
BEGIN DATA.
```

| | | |
|--------|--------|--------|
| -,8066 | -,9563 | 4,7840 |
| ,0000 | -,9563 | 5,4675 |
| ,8066 | -,9563 | 6,1510 |
| -,8066 | ,0000 | 5,3432 |
| ,0000 | ,0000 | 5,5929 |
| ,8066 | ,0000 | 5,8425 |
| -,8066 | ,9563 | 5,9025 |
| ,0000 | ,9563 | 5,7182 |
| ,8066 | ,9563 | 5,5340 |

```
END DATA.
```

```
GRAPH/SCATTERPLOT=pp_n_m WITH pi_n_m BY inf_t_m.
```

* Estimates are based on setting covariates to their sample means.

Analysis notes and warnings

Level of confidence for all confidence intervals in output: 95,00

NOTE: The following variables were mean centered prior to analysis: pp_n_m inf_t_m

NOTE: Some cases were deleted due to missing data. The number of such cases was: 1

NOTE: All standard errors for continuous outcome models are based on the HC3 estimator

8.5.2 Analysis 2

PROCESS Procedure for SPSS Release 2.16.1

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

Model = 1

Y = pi_n_m

X = pp_m

M = ps7_n_m

Statistical Controls:

CONTROL= ttl_team gender g_match

Sample size 56

Outcome: pi_n_m

Model Summary

| <i>R</i> | <i>R-sq</i> | <i>MSE</i> | <i>F</i> | <i>df1</i> | <i>df2</i> | <i>p</i> |
|----------|-------------|------------|----------|------------|------------|----------|
| ,6577 | ,4325 | ,5796 | 6,6820 | 6,0000 | 49,0000 | ,0000 |

Model

| | <i>coeff</i> | <i>se</i> | <i>t</i> | <i>P</i> | <i>LLCI</i> | <i>ULCI</i> |
|----------|--------------|-----------|----------|----------|-------------|-------------|
| constant | 5,9062 | ,2858 | 20,6664 | ,0000 | 5,3318 | 6,4805 |
| ps7_m | ,9354 | ,2406 | 3,8884 | ,0003 | ,4520 | 1,4188 |
| pp_m | ,2361 | ,1410 | 1,6743 | ,1005 | -,0473 | ,5196 |
| int_1 | -,2909 | ,3431 | -,8480 | ,4006 | -,9804 | ,3985 |
| ten_t_t | -,0196 | ,0507 | -,3863 | ,7010 | -,1214 | ,0823 |
| gender | -,0475 | ,2365 | -,2008 | ,8417 | -,5228 | ,4278 |
| gender_c | -,3259 | ,2580 | -1,2634 | ,2124 | -,8444 | ,1925 |

Note. Product terms key: int_1 pp_n_m X ps7_n_m

R-square increase due to interaction(s):

| | <i>R2-chng</i> | <i>F</i> | <i>df1</i> | <i>df2</i> | <i>p</i> |
|-------|----------------|----------|------------|------------|----------|
| int_1 | ,0125 | ,7191 | 1,0000 | 49,0000 | ,4006 |

Conditional effect of X on Y at values of the moderator(s):

| <i>ps7_m</i> | <i>Effect</i> | <i>se</i> | <i>t</i> | <i>P</i> | <i>LLCI</i> | <i>ULCI</i> |
|--------------|---------------|-----------|----------|----------|-------------|-------------|
| -,5522 | ,3968 | ,2401 | 1,6525 | ,1048 | -,0858 | ,8793 |
| ,0000 | ,2361 | ,1410 | 1,6743 | ,1005 | -,0473 | ,5196 |
| ,5522 | ,0755 | ,2322 | ,3251 | ,7465 | -,3911 | ,5421 |

Notes. Values for quantitative moderators are the mean and plus/minus one SD from mean.

Values for dichotomous moderators are the two values of the moderator.

Data for visualizing conditional effect of X on Y

Paste text below into a SPSS syntax window and execute to produce plot.

```
DATA LIST FREE/ pp_n_m ps7_n_m pi_n_m.
BEGIN DATA.
```

| | | |
|--------|--------|--------|
| -,8066 | -,5522 | 4,7495 |
| ,0000 | -,5522 | 5,0696 |
| ,8066 | -,5522 | 5,3897 |
| -,8066 | ,0000 | 5,3956 |
| ,0000 | ,0000 | 5,5861 |
| ,8066 | ,0000 | 5,7766 |
| -,8066 | ,5522 | 6,0417 |
| ,0000 | ,5522 | 6,1026 |
| ,8066 | ,5522 | 6,1635 |

END DATA.

GRAPH/SCATTERPLOT=pp_n_m WITH pi_n_m BY ps7_n_m.

* Estimates are based on setting covariates to their sample means.

Analysis notes and warnings

Level of confidence for all confidence intervals in output: 95,00

NOTE: The following variables were mean centered prior to analysis: pp_n_m ps7_n_m

NOTE: Some cases were deleted due to missing data. The number of such cases was: 1

NOTE: All standard errors for continuous outcome models are based on the HC3 estimator