General Discussion
Careers have gone through a considerable amount of change over the last decades. Whereas first career progression was easily recognizable as moving up a (hierarchical) ladder, now careers seem to have become less straightforward with an abundance of routes to take. Instead of staying within one company, employees move between different organizations where they may hold a variety of different jobs (Bravo, Seibert, Kraimer, Wayne, & Liden, 2017). Consequently, the career landscape has become less predictable (Savickas et al., 2009), leaving room for individual differences such as values, personality characteristics and preferences to give shape to individual careers. This dissertation aimed at enhancing our understanding of how employees can become and continue to be attractive for the labor market in a time where careers are less predictable and in need of an individualized approach.

Below, I will first summarize the main findings of the empirical chapters. Then, highlighting potential directions for future research I will elaborate on the implications of our findings concerning (1) the measurement of career role preferences, (2) individual difference variables as antecedents of career role enactment and (3) career role enactment as predictor of perceived employability and (4) the role of the supervisor. Subsequently, strength and limitations of the conducted research will be discussed. Last, practical implications of our findings for individual employees, HR professionals and organizations as a whole are discussed.

### Summary of the Main Findings and Theoretical Implications

#### Self-presentation Tactics and Career Role Identification

In the first empirical chapter (Chapter 2), we presented a new measure for career role identification, the Career Role Identification Questionnaire (CRIQ). In constructing the CRIQ, we used the Comparison Awareness Inducing Technique (CAIT), a new and innovative method to reduce the effects of self-presentation tactics in survey responses. The assumptions and psychometric properties of the developed questionnaire were tested in both a simulation study and a field study among workers in the Netherlands. The results showed that the CRIQ measures identification with the six career roles conceptualized by Hoekstra (2011): the Maker-, Expert, Guide, Presenter, Director, and Inspirer-role. The findings also showed that The CAIT provides a new way for measuring identification through comparison awareness.

While prior research has mainly focused on career role enactment, we have introduced the concept of career role preference (or identification) as an important factor that can further explain the career role acquisition process. Different from career role enactment that focuses on the observed behavior within one’s job, role identification is a personal non-observable personal preference. Interestingly, the fact that preferences are highly personal and often part of one’s self-concept makes them difficult to measure. Moreover,
as career role preferences are discussed in a work context, measurement may be hampered by the fact that individuals may be susceptible to providing biased responses. For example, it has been shown that people will use self-presentation tactics, such as socially desirable responding, in order to defend themselves against negative self-views (Alicke & Sedikides, 2009). Using a comparison awareness identification technique (CAIT) provides a new way of administering survey questions which can decrease the problems that arise with self-serving tendencies in most self-report methods. The CAIT is inspired by three of the main assumptions of the item response process, (1) Likert scales can be influenced by acquiescence (e.g., agreeing or disagreeing with items independent of content, Dittrich, Francis, Hatzinger, & Katzenbeisser, 2007; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), (2) when forced to compare equal options (either desirable or undesirable), respondents will diversify, and (3) even without active comparison, the presence of other options will raise awareness to existing relative differences. Using the CAIT, respondents are still free to answer questions on a Likert scale, therefore staying clear of forced choice method options which cause scale dependency issues (Meade, 2004). At the same time, introducing comparison awareness lowers overall ratings and increases differences between answers. Contributing to new methodological techniques within psychological research, the results of our studies suggest that the CAIT is a suitable technique that can be implemented in different fields of research when responses may be at risk to self-serving bias tendencies. While in this dissertation we used the developed technique to measure career role identification we believe this technique can make a significant contribution to future research across domains.

**Personality, Preferences, and Career Role Enactment**

At work, employees are considered to be largely responsible for their own career development. Moreover, fixed role boundaries have become scarce, which further increases the room for peoples’ individual differences and associated personal preferences to influence their career role development (Hall, 2004; Savickas, 2013; Wille, Beyers, & De Fruyt, 2012). In Chapter 3, we hypothesized that the relationship between personality traits and career role enactment would be mediated by career role preferences. The results of a survey study among students, a field study among Dutch workers and an online study among US workers provided support for this general hypothesis. Results showed that specific personality traits are indeed predictive of the enactment of certain career roles (Wille et al., 2012). Moreover, our findings showed that role preferences have a mediating role in the relationship between personality characteristics and career role enactment. As such, personality traits and career role preferences are important determinants that increase our understanding of the career role acquisition processes.

Whereas prior research has highlighted the importance of personality characteristics in career development processes our findings extend this line of research by providing
a reason how this is the case. Specifically, in line with the functionalist approach (Wood, Gardner, & Harms, 2015), we argued that personality traits can shape expectations and preferences. Thus, dependent on one's personality some career roles will be perceived as more attractive than others, which in turn influences employees' career role enactment at work. These results highlight the importance of underlying motivational processes that influence employee work behaviors (see Barrick et al., 2002). Furthermore, we have shown that not all personality traits are equally important for career role enactment. In fact, characteristics such as Extraversion, Conscientiousness and Openness to experience are more likely to influence specific career role enactment than others (i.e., Neuroticism and Agreeableness). This is similar to previous research which has suggested that some personality characteristics are more important for career outcomes such as career success, satisfaction or stability (Sundstrom, Lounsbury, Gibson, & Huang, 2015).

**Career Role Enactment, Leadership Behavior and Employability**

Within this fast-changing world, employees need to be flexible in order to secure employment throughout their career (Sullivan & Arthur, 2006). In Chapter 4 we investigated which career roles contribute to perceived employability of employees. We argued that especially the engagement in exploration career role enactment would positively influence employability. Furthermore, we also investigated to what extent supervisors can influence the relationship between employee career role enactment and their employability. More specifically, we investigated how supervisors’ opening and closing leader behaviors (fostering explorative and exploitative behaviors in followers respectively; Rosing, Frese, & Bausch, 2011) would moderate the relationship between employee career role enactment and employability. Testing two competing hypotheses we argued that in work environments where supervisors and employees either complement or supplement each other, the relationship between role enactment and perceived employee employability would be strengthened. The results of a field study among supervisor-follower dyads provided support for the complementary fit hypothesis, whereas no fit results were found in an online experimental study among US workers (see limitations). Results of the field study indicated, as expected, that exploration career roles enactment do enhance perceived employability. That is, the more exploration career roles workers indicated to enact, the more employable their supervisors perceived them to be. As such, exploratory roles seem important to maintain employment and stay attractive and employable in current, as well as in future jobs (Gupta, Smith, & Salley, 2006; Rosing et al., 2011). Moreover, our results highlight the important role that supervisors have in employee employability. When supervisors are able to complement employee behaviors by displaying opening and closing leadership behaviors respectively, this even further enhances work outcomes, strengthening the positive impact that exploration career role enactment has on perceived employability.

While previous research has stressed the importance of employability, with respect to its measurement, there is still lack of clarity about the nature and operationalization of the
construct (Clarke, 2008; Fugate et al., 2004; Fugate & Kinicki, 2008; Van der Heijde, 2014; Van der Heijde & Van der Heijden, 2006). For example, while some authors use a dispositional definition (Fugate & Kinicki, 2008), others rely on a competency-based approach (Van der Heijde & Van der Heijden, 2006), or advocate a broader view incorporating context factors relevant for employability (Clarke, 2008). However, most of these models remain very broad as they do not address the resulting nature of employability in relation to a specific work environment. Taking a different content-based approach, our work has shown the importance of specific work-related behaviors (career role enactment) that influence one’s career development and employability. In addition, in our field study, we demonstrated the importance of taking a complementary fit approach to supervisor-employee interactions at work. It seems that when supervisors and subordinates complement each other at work with respect to a focus on exploration activities supervisors have the most positive perception of employee employability. Unfortunately, these findings could not be replicated in an experimental set-up. Nonetheless, these findings could bring us a step closer to understanding Person-Job fit processes and potential consequences for career development and success. This is especially important in today’s modern career landscape where personal agency is highly valued (Savickas, 2013). Moreover, gaining insight in what kind of behaviors are important for long-term employability can help us provide meaning beyond a generic notion of potential.

The research in this dissertation aimed to enhance our knowledge and understanding of career development processes. In doing so, our main focus was to explore how we can measure career roles and broaden our understanding of determinants and consequences of career role enactment at work. In our work we relied on different theories in the career development literature and methodology domain (such as item response theory, self-enhancement theory, the functionalistic personality approach, the interactionist perspective and Person-Environment fit theory). As such, our work may contribute to advancements in several fields, and may potentially also provide ideas for future research which will be highlighted in the following section.

**Directions for Future Research**

Although in our research on career role enactment and employability we have focused solely on an employees’ exploration career role activities, it might be the case that in order for individual career role enactment to benefit other work outcomes, both exploration and exploitation roles are important. For example, focusing only on exploitation activities might trade employee flexibility for stability, making it difficult to incorporate changes when needed and vice versa (Sorensen & Stuart, 2000). As such, in order to balance out potential negative effects from either opposing strategy both type of roles and strategies may be needed simultaneously (Gebert, Boerner, & Kearney, 2010).
However, oftentimes we do not work fully independently from one another. Instead, within organizations we are often part of a taskforce or a team and are expected to reach organizational goals working together (Bell, Kozlowski, & Blawath, 2012). More importantly, it has been argued that team effectiveness can vary dependent upon the combination of different roles that the individual team members enact within the team (Prichard & Stanton, 1999). Therefore, instead of focusing on individual ambidexterity team ambidexterity may be equally important. In a similar vein, Belbin (1981) has argued that when team members are able to identify the needs of the task at hand and optimize individual strengths and roles accordingly team performance will be enhanced. Differentiating between task-oriented and interpersonal-oriented role behaviors Belbin posited that both types of behaviors are necessary for effective team functioning. Specifically, the Belbin team role model proposes nine complementary team roles that can be distributed amongst team members for effective teamwork (e.g., Plant, Resource investigator, Coordinator, Shaper, Monitor evaluator, Team worker, Implementer, Completer-finisher and Specialist). Ideally, every team member has two or three fitting roles and once combined all nine roles will be represented within the team.

From an organizational point of view research has shown that ambidextrous organizations are overall, more successful (Andriopoulos & Lewis, 2009; Gibson & Birkinshaw, 2004). However due to specific needs within teams and organizations the extent to which exploitation and/or exploration behaviors are rewarded and promoted is likely to fluctuate from one moment to the other (Lavie, Stettner, & Tushman, 2010). Similarly, dependent upon team composition and the task at hand different team roles (both task- and interpersonal-oriented) may be required in order to work effectively within a team. As such, ideally, individual employees are ambidextrous in their working behaviors, adjusting the roles they enact to the specific situation. However, as research in this dissertation has shown, due to individual differences certain roles could be more fitting to an employee than others (Parker, Bindl, & Strauss, 2010). Consequently, it is likely that the compatibility between employee preferences (e.g., preferred role enactment) and the environment will ultimately influence performance in a specific working context. This means that although, in general, ambidextrous role behavior is expected to be highly favorable for success, the value that is being placed on task behaviors (exploration and exploitation role enactment) and interpersonal behaviors (team roles) may differ between teams and organizations, dependent on the task at hand. To understand the effects of specific career role enactment on individual employee work outcomes, subsequent research could benefit from taking employee work behaviors (e.g., career role enactment), team composition (e.g., task- and interpersonal-oriented role enactment) as well as the organizational context into account.

In this dissertation we have investigated how personality traits and role preferences are related to work behaviors. However, due to the reciprocal relation between work and personality, personality may not only influence work behaviors, but work behaviors
may influence personality as well (Wood & Roberts, 2006). Whereas employees are likely to select fitting work tasks and career roles based on initial preferences and personality traits, work related past experiences and changes within the work environment may also affect personality characteristics. Interestingly, although some researchers may argue that Big Five traits are relatively static and unchangeable (McCrea & Costa, 2008) others have argued that peoples’ traits develop across the life span (Roberts, Walton, & Viechtbauer, 2006). Personality characteristics might therefore change over time depending on what people experience in their work (particularly for those whose work is a major part of their adult lives; Frese, 1982; Wu, 2016; Wu, Griffin, & Parker, 2015). Individuals may not only selectively choose career roles depending on their personality, but employee generated changes in the work environment (i.e., job crafting efforts) may also subsequently strengthen personality traits in employees.

The notion that work experiences can also affect the development of personality characteristics is especially relevant for today’s workforce as peoples’ ability to constantly change and adapt is considered to be important for long-term employability. Up to date, the conducted research on the reciprocal relationship between personality characteristics and the work environment has adopted different research designs, work outcome variables (e.g., job involvement, organizational citizenship behavior, job and occupational characteristics) and different time intervals (between 2.5 to 15 year time intervals; see Wu, 2016). Although these studies are a first step to understanding the bidirectional relationship between personality traits and work, much work still needs to be done. Specifically, how, when and why work experiences can lead to personality changes is still unclear. In order to further enhance our understanding of the reciprocal relations between personality and work (and career development in general) we highly encourage future research in this domain.

Last, despite the rapid movement and globalization of organizations studies on career development are often conducted in the United States. Therefore, conclusions and claims are often biased in favor of the US (Mayrhofer, Meyer, Iellatchitch, & Schiffinger, 2004). Consequently, generalizability could potentially be difficult, as comparative research is still lacking (Thomas & Inkson, 2007). The current dissertation took some steps to overcome these challenges by including samples from both the United States as well as the Netherlands. However, cultural differences are often subtle and can go unnoticed. Although different samples were included in our studies, culture was neither explicitly mentioned, nor included. Moreover, we only included samples from more individualized (Western) cultures. Future research may consider including and explicitly comparing different cultures, as cultural background has been shown to affect individual motives, goals and consequently expectations for career development (Thomas & Inkson, 2007). For example, compared to collectivistic cultures (mostly non-Western and Asian), individualistic cultures value individual goals and motives more highly (Markus & Kitayama, 1991). These cultural differences may in turn influence what
individual employees, supervisors and organizations value at work (Sparrow & Hiltrop, 1997). For instance, because in most Western cultures individual goal attainment is seen as more important compared to pursuing collectivistic needs, career roles that emphasize autonomy and personal agency (e.g., the Maker and the Expert role) may be more preferable than career roles that focus on connectedness and cooperation (e.g., the Presenter and Guide role). In contrast, the opposite may be true for career role preferences in collectivistic cultures. Consequently, different behaviors in terms of career role enactment may be seen as important for employability and career development in general. Unfortunately, up to date, these cultural differences have not received much attention in career development research. Thus, future research could include differences between and within cultures in order to gain more insight in career development theory in relation to employability and other work outcomes.

Strengths and Limitations

The aim of this dissertation was to enhance our understanding of career role measurement, career role development processes and employability. A number of different methodologies were included in this dissertation. We included: a simulation study, an online experiment, (single and multi-source) cross-sectional field studies, and two wave field studies, varying between student samples and worker samples. Replicating (most of) our findings across samples (i.e., Dutch students, Dutch workers, Dutch leader and subordinate dyads and workers from the United States) has bolstered the confidence in our conclusions. As such, we believe our work has benefitted from using various samples, methods and research designs. However, each method comes with its own drawbacks, which need to be acknowledged. Below both strengths and weaknesses of the research methods, and measurements that we used in our studies will be discussed.

First, we included various cross-sectional (Chapter 2) as well as two-wave studies (Chapter 3) in this dissertation. Cross-sectional studies can be very useful as they are often cost effective, high on external validity and can be used in order to rule out potential confounding variables (Spector, 2019). However, cross-sectional studies also have disadvantages such as limited internal validity and the inability to draw causal conclusions. Moreover, these studies are often at risk for common method bias due to, for example, measurement context effects, similarities in questionnaire format, or social desirability responding tendencies (Podsakoff et al., 2003). Taking this into consideration we also employed two-wave studies, thereby reducing common method bias. However, due to time constraints (of our participants) we were unable to measure all variables at both waves. Therefore, we were not able to control for previous levels of the measured variables. Furthermore, Chapter 4 included an experimental design as well. An advantage of using experimental designs is the high internal validity, which makes it possible to demonstrate
causality. At the same time however, generalizing our findings to the organizational setting becomes difficult in an experimental set up, as internal validity comes at the cost of external validity (Shadish, Cook, & Campbell, 2002; Mutz, 2011). Moreover, our manipulation was not successful. Perhaps the intended differences between the conditions were too subtle and difficult to operationalize. Moreover, the experimental design may have oversimplified the complex dynamic between subordinates and supervisors and ambidextrous leadership behaviors at work (Zacher & Rosing, 2015).

Second, we used different measures to operationalize the different concepts in this research (i.e., career roles, personality, employability and ambidextrous leadership behavior). Whenever possible we used established questionnaires. For example, in order to measure career role enactment, personality characteristics, employability and ambidextrous leadership behavior we relied on validated questionnaires (e.g., Hiemstra, Op de Beek, & Serlie, 2011; Hoekstra, 2011; John & Srivastava, 1999; Rothwell & Arnold, 2007; Zacher & Rosing, 2015). Alternatively, whenever existing measures were unavailable, we constructed new scales or used adaptations of widely accepted scales were used in our research. As a point in case, we developed a 40-item questionnaire in order to measure career role preferences. Notably, across studies we sometimes varied the operationalization of the variables (for instance using different questionnaires to measure personality or career role preferences). In doing so, we aimed to reduce the possibility that our findings were dependent upon a specific conceptualization of the concepts, thus enhancing the generalizability of our findings.

In our research we mainly used self-report measures. Because oftentimes the person knowing inner feelings, motives and preferences best is the person him- or herself, it makes sense to ask such questions (such as personality characteristics or work behaviors) directly (Paulhus & Vazire, 2007). However, as previously mentioned, self-reports also leave room for bias, as people can adopt self-serving tactics, especially when they feel evaluated (Alicke & Sedikides, 2011). In this dissertation we therefore not only relied on the use of techniques such as the comparison awareness identification technique, but we also included a multi-source study including subordinate-supervisor pairs. Future research could even go a step further including not only supervisor ratings (as we did), but also peer reports or even behavioral measures in order to further our knowledge in career development research.

Moreover, future research could certainly benefit from employing longitudinal designs or diary studies. Longitudinal designs could provide more insight into potential causal relationships either by assessing all focal variables at all time points or, alternatively, by assessing the different variables at different time points (longitudinal prospective designs, Podsakoff, MacKenzie, & Podsakoff, 2012). Notably, longitudinal methods are particularly useful when studying development and lifespan issues. Researchers could, for instance, investigate how career roles and preferences may change at different points in life and explore some of the reasons why these developmental shifts take place.
Furthermore, complementing long-term development studies, diary studies could be useful to investigate micro-changes that happen on a day to day basis (Savickas, 2013; Zacher, 2016) and that may eventually affect career role preferences and enactment. Last, although in this dissertation the experiment had some major drawbacks, we believe that future research could work towards (different) more sophisticated ways of measuring the complex nature of ambidextrous leadership using this method. Ultimately, the strength of research lies in replicating studies using complementing methods, samples and measurements in order to advance our knowledge in the field.

**Practical Implications**

In our lives, a lot of time and energy is devoted to our careers. Therefore, hopefully, our work provides us with a sense of purpose and meaning. As jobs and careers have become highly diverse with ample directions to pursue, it may take some time to find fitting jobs, work roles and ultimately a fulfilling career. From an individual perspective, we explored how individuals can become flexible, attractive and employable in today’s labor market. Although the current career culture highlights the importance of personal agency (Savickas, 2013), our work holds potentially valuable implications for individual workers as well as organizations and HR professionals.

First, Chapter 1 and 2 discuss that individual differences, such as role preferences and personality traits (Wille et al., 2012), are likely to influence how people carry out their jobs and select career roles. Indeed, although job descriptions may be similar, it is very likely that two employees will make personal adjustments in their work based on their former experiences, preferences and expectations. For this to happen, employees need to first realize that they themselves can influence how they fulfill their job and that they can often make personal adjustments when necessary. Aiding to this process organizations could provide career support in the form of coaching, counseling or job rotations, in order to make use of the full potential of their workforce and to provide employees with the opportunity for personal development (Haan, 2014; Wrzesniewski & Dutton, 2001). Considering that over time, if provided with the opportunity, employees continue to develop and commit towards the roles of their choosing, individual differences may become more prominent. Therefore, it would be advisable to have HR practices in place that not only enhance ongoing development, but that acknowledge that employees may perform well in their jobs in a variety of ways and match recruitment and selection appropriately. As such, even before the hiring process starts companies need to a) carefully think about the selection criteria for the positions that need to be filled, and b) have fitting recruitment methods for candidate selection (e.g., interviews/ competency-based interviews and/or practical assessments) in place. Once hired, supporting environments that stimulate the employees’ way of working may prevent potential
risks such as burn-out complaints, high turnover rates or lack of commitment amongst employees (Kristof-Brown, Zimmerman, & Johnson, 2005). Furthermore, although one difficulty could be to attract the ‘right’ employees for specific jobs and roles, for organizations another challenge lies in keeping highly skilled workers. An added bonus of long-term (personal) development programs could be that highly skilled and motivated workers are willing to stay within the company if they have invested in and are supported in their own development journey.

Second, for employees to become (and stay) employable in current and future jobs, the results in Chapter 4 suggest that especially exploration career role enactment is important. Providing employees with the opportunity to explore different areas of their work and different ways of working can help employees to become more flexible in terms of their career role enactment. For example, work redesign programs that focus on (problem) exploration and innovation could positively influence employees’ flexibility and work strategies. This in turn would enable employees to successfully move through occupational transitions within and between organizations throughout one’s career, thus enhancing one’s employability. At the same time, for organizations it is important to employ a flexible workforce capable of innovation, problem solving and implementing changes that are needed in order to stay ahead of the competition. As such, both employees as well as organizations may benefit in the long run from ongoing HR career development practices focused especially on continuous development and growth (De Cuyper & De Witte, 2011).

Concluding Remarks

Although organizations can support individual career development, it is mainly up to employees to take ownership of their career development process and select, optimize and construe their careers (Roberts & DelVecchio, 2000). This dissertation used and advanced the concept of career roles to further our understanding of individual career development. In due course, we developed a measure to assess career role preferences, showed how these preferences mediate the personality – career role enactment relationship, and investigated how career role enactment can affect perceptions of employability. We hope that introducing the career role framework to discuss perceptions of career development and employability in the organizational context may help conceptualize and provide meaning to career positions and trajectories for today’s modern workforce.