When Proactivity Meets Interdependence: Social Context as a Predictor and Boundary

Zijun Cai
Master of Management
Bachelor of Management

DISSERTATION

This thesis is presented for the degree of
Doctor of Philosophy of the University of Western Australia
Business School
Management & Organisations Department
2018
Thesis Declaration

I, Zijun Cai, certify that:

This thesis has been substantially accomplished during enrolment in the degree.

This thesis does not contain material which has been submitted for the award of any other degree or diploma in my name, in any university or other tertiary institution.

No part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of The University of Western Australia and where applicable, any partner institution responsible for the joint-award of this degree.

This thesis does not contain any material previously published or written by another person, except where due reference has been made in the text and, where relevant, in the Declaration that follows.

The work(s) are not in any way a violation or infringement of any copyright, trademark, patent, or other rights whatsoever of any person.

The research involving human data reported in this thesis was assessed and approved by The University of Western Australia Human Research Ethics Committee.

- Research related to paper 1 (review and synthesis: exempt from ethics review)
- Research related to paper 2 (data provided by the 4th author)
- Research related to paper 3: RA/4/1/8617

The work described in this thesis was funded by the Australian Government Research Training Program (RTP) Scholarships, Australian Postgraduate Award and UWA Top-up.

This thesis contains published work and/or work prepared for publication, some of which has been co-authored. Please refer to the forms about “Authorship Declaration”.

Signature: Zijun Cai

Date: 21/08/2018
Table of Contents

Thesis Declaration .............................................................................................................................................. 1
Abstract .............................................................................................................................................................. 2
Acknowledgement ............................................................................................................................................. 6
Authorship Declaration: Co-authored Publications ......................................................................................... 10
Research Output ................................................................................................................................................ 13
Chapter 1: General Introduction ..................................................................................................................... 15
  The Rise of Proactivity .................................................................................................................................. 15
  What is Proactivity? ....................................................................................................................................... 15
  What is Unique in Proactivity? ....................................................................................................................... 16
    Differences from Organizational Citizenship Behaviour .............................................................................. 18
    Differences from Constructive Deviance ....................................................................................................... 18
    Differences from Adaptivity .......................................................................................................................... 20
  Is Proactivity a Trait? ..................................................................................................................................... 20
  Why does Proactivity Happen? ....................................................................................................................... 20
    Divergent Perspectives .................................................................................................................................. 21
    Integrative Efforts .......................................................................................................................................... 21
    Proactive Motivation Model .......................................................................................................................... 22
  What Drives Proactivity? An Individual-focused Perspective ........................................................................ 22
  Taking the Context into Consideration: The Role of Work Characteristics .................................................. 23
  Where Interdependence Comes in: Proactivity Shaped by the Social Context .............................................. 25
  Overview of the Current Thesis ..................................................................................................................... 26
Chapter 2 Foreword .............................................................................................................................................. 32
  Domain and Scope of the Review: Social Context and Proactive Behaviour .................................................. 37
    Clarifying Social Context ............................................................................................................................... 37
    Clarifying Proactive Behaviour .................................................................................................................... 39
    Methodology for the Review .......................................................................................................................... 39
  Social Context Factors as Antecedents of Proactive Behaviour ..................................................................... 41
    Leader-Related Factors as Predictors to Proactive Behaviour ................................................................... 42
    Team-Related Factors as Predictors to Proactive Behaviour ....................................................................... 52
    Organization-Related Factors as Predictors to Proactive Behaviour .......................................................... 58
  Interaction Effects of Social Context Factors ................................................................................................ 63
    Interactions with Individual Attributes ........................................................................................................ 64
    Interaction with Contextual Factors ............................................................................................................ 65
    Summary ......................................................................................................................................................... 67
Discussion and Future Directions ......................................................................................................................... 68
Abstract
Given its positive implications for enhancing individual and organizational effectiveness, a fast-growing body of literature has focused on employee work-based proactivity, i.e., self-initiated behaviour to bring about future-focused changes. Existing studies have mainly focused on why proactivity happens and have identified individual attributes and work characteristics as significant antecedents. However, an interactionist perspective would assume that social context also plays a critical role. The current thesis focuses on the relationship between social context and work-based proactivity. After a general introduction in Chapter 1, Chapter 2 presents a comprehensive review of the existing findings of how social context affects proactivity, showing that that leader-, team- and organization-related factors influence employee proactivity through shaping proactive motivational states, i.e., “reason to”, “can do”, and “energized to” states via multilevel processes. Chapters 3 provides a different perspective by examining how individuals, who constitute the social context, respond to co-worker proactivity. Based on social comparison theory and personal identification theory, this chapter shows that co-worker proactivity was significantly associated with individuals’ helping with and social undermining of the co-worker, with individuals’ envy and personal identification as the mediation mechanisms. Moreover, individuals’ proactive personality was found to moderate the indirect effect through personal identification. Given that individuals change their interpersonal behaviours according to co-workers’ proactivity, social context should condition the effectiveness of proactivity. Chapter 4 examined this idea. Based on the person-environment fit theory, this chapters shows that the person-team misfit in proactive personality was negatively associated with individual task performance, and this association was stronger when individuals are more, rather than less, proactive than the team. Since proactive individuals would actively fix the problems they encounter, their emotional intelligence and leader-member exchange were found to buffer the
misfit effect. In conclusion, with these three chapters, the current thesis shows how social context affects and conditions the proactivity at workplaces, supporting the idea that proactivity is a social process and showing the necessity to further consider the role of the social context in future proactivity-related studies.

Keywords: social context, proactivity, interdependence
Acknowledgment

This research is supported by the Australian Government Research Training Program (RTP) scholarship. This research is also supported by Australian Postgraduate Award and UWA Safety-Net Top-up Scholarship.

I am now sitting in the science library, on the top floor. In my eyes are the green trees, red roof, and the past days in the University of Western Australia. “How time flies!” This is what I heard when I said to other that I was about to submit my thesis. I can still remember that when I first met Francesco nearly three and a half years ago, he said to me “Enjoy your days now. It is the honeymoon of your Ph.D.” Luckily enough, every day of my Ph.D. keeps like a sweet kiss. Thanks to all the great people around me. They gave me the luck and raised me up to more than I could be.

I would like to give my best thanks to Professor Sharon Parker, my dear supervisor. She has such great personalities that could always encourage me, enable me, and empower me. After every meeting with her, I always feel refreshed, full of energy, and confident – I can achieve it! She also has incredible insights in the research which greatly improved my research ability and offered generous help to assist my Ph.D. studies. Every time I heard from my friends complaining how tough they feel about the Ph.D. life and how difficult they feel about doing research, I feel so gratified that Sharon is my supervisor. Thanks to her, my curiosity and excitement about doing research are always burning. Without her, I could not be ready to accept the challenges to be a junior scholar. Thank you, thousands of times.

Professor Zhijun Chen, my dear co-supervisor, also deserves my greatest appreciation. From him, I learned a lot, not only about how to do research but also about what a scholar should be like. When I was new to Perth, he took me around to help me
accommodate. I remembered that evening when we were back from the Pinnacles, after his
driving for a long time along the lonely road, the lights from the city gradually broke the
dark. He is like that light shedding into my Ph.D. life. During each meeting, he always made
excellent, constructive, but challenging comments, encouraging me to think more deeply
about the questions. During each conversation, he always kindly shared his unique
understandings of the literature and insights into the historical events, showing me the mental
life a scholar should live. During my stay in China, he offered as much help as he could,
setting a great example of how supportive a supervisor could be. I will try to be a scholar like
him, from now on to ever.

    I also want to thank many others in Australia. Thanks to Professor Gillian Yeo, who
checked my application materials for the Ph.D. program and became my main supervisor at
UWA in the last several months of my Ph.D. Thanks to the UWA support teams, including
the GRS, IT, and others, who gave me a wonderful study experience in UWA. Thanks to my
lovely friends here, especially Amy Tian, Bin Wang, Di Fan, Fangfang Zhang, Xinli
Huang, and Yukun Liu, who make me feel like a family. Thanks to all these guys, making
me fall in love with UWA and Perth.

    Besides, I want to give my special thanks to two of my master supervisors, Professor
Wei Shi and Professor Yanjun Guan. Professor Wei Shi has helped me a lot during my
master, just like a father. He always made me feel that I am supported, protected, and loved.
Professor Yanjun Guan is who led me into the academia. He provided me with basic
academic training, taught me how to write and make publication, assisted my application for
the Ph.D. in UWA, and offered generous help during my stay in China. Without him, there
would not be an academic me. He always keeps great friendships with his students and helps
them as possible as he could. To me, he is a perfect example. Thanks to these two professors,
I had a really happy master lives, which encouraged me to further pursue my Ph.D. and set
the scholar as my vocational goal. This dissertation, to some extent, started from their supervision.

My parents, of course, deserve my sincere thanks. After my submission, I could finally say to them: “Look! The boy has become a man!” When I was a child, they always played jokes saying that “You know? You’ll be a doctor!” I did not believe, because there was no one doctor in my family. But they bought me lots of books, trained me in math and English, and helped me fall in love with reading and studying. These were only tiny things during the long childhood. But today when I look back, I realize how important they are. Besides, one other thing I appreciate most is the autonomy they gave to me. To do research is to make use of and master the autonomy. Luckily, I have learned how to do these. No matter my choices, they always supported me and let me try, which shaped my personalities that fit academia well. Although they are not able to help me with my studies and research, they have already provided me with something priceless. Thanks, my dad and mom, you have helped me prepare for the dissertation from my childhood, and raised the little boy to be a Ph.D.!

I leave the last paragraphs and my best, most sincere, and greatest thanks to Xinyi Qi, my girl, my lover, and my partner. Life is always unpredictable. Just like I did not know that I would apply for a Ph.D. when I was a bachelor. I did not have high GPA. I did not have much interest in academic research. I set being a manager in the multinational enterprise as my career goal. Until I met her. We wanted to be together, but we also wanted each other to reach the best potential. So, we talked about our future, peacefully, frankly, and with a full heart. She suggested me to pursue academia because she thought this is where my relative talent is.

“So… it’s our decision that I will apply for a Ph.D.”

“Yes. I’ll always be behind you.” She nodded.
My life changed. I put more efforts in my courses. I increased my GPA. I met many academic people. I started to do research. I became to get some publication. I succeeded in getting a Ph.D. offer from UWA. She is right. I enjoy doing research and I believe this is what I am best at. She knew me more than I did.

However, pursuing the Ph.D. in UWA means that we must separate from each other, for at least three and a half years. No one knew what this would mean, but we tried because we believed in our love. She finished her last year in master. She searched for jobs. She started her career. She accommodated in the city. Without me. Alone. But she did not complain to me. We kept our conservations, just like we were not apart. She always encouraged, inspired, and warmed me. Even we were a million miles away, I could always feel that she was around me. Just as she said, she is behind me.

Love can make the life predictable. I know that I need to spare no effort to improve my research ability, to reciprocate her trust. I know that I need to do my best in getting a publication, to demonstrate that she is right. I know that I need to try my best to be a doctor, to let her know that she has found the right boy. I had a full and meaningful Ph.D. life, because I have strived my best. So thanks, Xinqi. Without you, I could not sustain my PhD and make this discretion happen. Please wait a minute, I am about to graduate. I am about to be back, to your side.

At last, thanks again to all the kind and lovely people around me. You make me feel as if I was a lucky dog and help me finish the dissertation! I had a very happy and fruitful Ph.D. life. Thanks!
Authorship Declaration: Co-authored Publications

This thesis contains work that has been prepared for publication.

<table>
<thead>
<tr>
<th>Details of the work: <strong>How Does Social Context Fuel the Proactive Fire: A Multilevel Review</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Location in thesis: Chapter 2</td>
</tr>
<tr>
<td>Student contribution to work:</td>
</tr>
<tr>
<td>The idea of doing a review originates from the discussion among the four authors. Zijun Cai took the lead to conduct literature search, made the analyses, and further develop the idea into a review paper. Zijun Cai also took the major responsibility for the writing and the revision and review process.</td>
</tr>
<tr>
<td>Professor Sharon Parker, Zhijun Chen, and Wing Lam contributed to finalizing the research model. Professor Sharon Parker and Zhijun Chen provided extensive help with the writing, theorizing, and the communication with the editors during the review process. Professor Wing Lam also provided great help with these issues.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Co-author signatures and dates:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Sharon Parker:</td>
</tr>
<tr>
<td>Professor Zhijun Chen:</td>
</tr>
<tr>
<td>Professor Wing Lam: 17 August 2018</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Details of the work: <strong>The Social Paradox of Being Proactive: Individual Helping and Social Undermining as Responses to Co-worker Proactivity</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Location in thesis: Chapter 3</td>
</tr>
<tr>
<td>Student contribution to work:</td>
</tr>
</tbody>
</table>
Zijun Cai developed the research idea, collected the data, made the analyses, and did the majority of the writing.

Professor Sharon Parker and Zhijun Chen provided constructive comments during the research design and the data analyses. They also provided ongoing feedback on and helping with the editing of the manuscript. Professor Sharon Parker provided the funding for the data collection.

Co-author signatures and dates:

Professor Sharon Parker:

Professor Zhijun Chen:

17 August 2018

Details of the work: When Your Bite Off More than Your Team Can Chew: Person-Team Misfit in Proactive Personality and Core Task Performance
Location in thesis: Chapter 4
Student contribution to work:

Zijun Cai did the data analyses, proposed the model, developed the theoretical arguments, and finished majority of the writing.

Professor Sharon Parker and Zhijun Chen helped with the model finalisation, writing, and the theorizing. Professor Zhijun Chen also provided guidance to the data analyses. Dr. Sally Siu Yin Cheung provided the data and helped refine the manuscript.

Data Transparency:
The data was collected by and belongs to Dr. Sally Siu Yin Cheung. The data was used for the publication in Gong, Wang, Huang, and Cheung (2017). In the paper, the authors mainly examined the construct validity of and the predictors to feedback seeking behaviours. There is not data overlap in the used variables, thus the data used in this chapter is distinct from the previous paper.


Co-author signatures and dates:
Dr. Sally Siu Yin Cheun
17 August 2018

Student signature:
Date: 21 August 2018

I, Gillian Yeo, certify that the student statements regarding their contribution to each of the works listed above are correct

Coordinating supervisor signature:
Date: 22 August 2018
Research Output

During my Ph.D., I have made several research outputs which could demonstrate my ability to contribute to the advancement of management research.

1. Publications


2. Under Review and Revision


3. Manuscript in Preparation

Cai, Z., Parker, S. K., Chen, Z., & Cheung, S. Y. When you bite off more than your team can chew: The misfit effect of individual and team proactivity on core task performance.


**4. Academic Presentations**


Chapter 1: General Introduction

The Rise of Proactivity

In recent decades there have been tremendous changes in the work environment and career pattern. Rapid technological development and accelerating globalization have greatly raised the level of competition and the pressure for innovation. To survive and sustain their competitiveness, organizations need to increase their flexibility, act for the future, and adapt to external changes. As a result, organizations have gradually shifted their structures from being centralized, rigid and hierarchical to decentralized, flexible, and flat. At the dawn of new management systems, organizations have begun to share power with employees, to give them more autonomy, and to encourage them to proactively deal with the external environment (Grant & Parker, 2009). One force for greater proactivity, therefore, stems from organizational imperatives for competitiveness and the associated empowered forms of working.

The relevance of proactivity also stems from changes in career trajectories. In the past, most individuals’ vocational paths were predetermined by life-long contracts (Savickas et al., 2009). But now the career has become discontinuous, protean, and “boundaryless” (Guan, Arthur, Khapova, Hall, & Lord, 2018): individuals, voluntarily or involuntarily, frequently change their jobs and jump from one organization to another. As a result, employees become the owner of their careers (Strauss, Griffin, & Parker, 2012). Given the high competitiveness in the job market, individuals need to proactively learn new knowledge, develop skills, manage networks, and so forth to strive for career success (e.g., Cai et al., 2015; Seibert, Kraimer, & Crant, 2001).

Due to these changes, there is an increasing emphasis on proactivity, which is believed to enhance organizational effectiveness (Crant, 2000) and facilitate vocational development (Sonnentag, 2017).
What is Proactivity?

Proactivity refers to the self-starting, future-focused, and change-oriented behaviour that aims to bring about improvements (Parker & Collins, 2010; Parker, Williams, & Turner, 2006). Being self-starting means that proactivity originates not from external requirements, pressure, or instructions, but from individuals’ own will (Frese, Garst, & Fay, 2007). For example, assembly line workers might come up with some new ideas and implement these into their work, even though this is not within their job requirements. Being future-focused means that proactivity does not dwell on past events, but involves acting in advance of future situations (Parker & Collins, 2010). For example, middle managers might anticipate future opportunities and take action on them. Being change-oriented means that proactivity does not involve keeping the status quo but aims to create change (Parker et al., 2006). For example, employees might try to modify a procedure to reduce the time needed to finish the task, or they might change themselves by increasing their personal networks.

Scholars have developed many different proactivity-related concepts. Some focused on detailed behaviours. For example, Scott and Bruce (1994) proposed the concept of innovative behaviour, which refers to individuals’ behaviours to proactively generate and implement new ideas. Van Dyne and LePine (1998) proposed the concept of voice, describing individuals’ suggestion making behaviour to change the status quo even if others disagree. Liang, Farh, and Farh (2012) further classified promotive voice, which refers to “employees’ expression of new ideas or suggestions for improving the overall functioning of their work unit or organization” (p. 74) and prohibitive voice, which refers to “employees’ expressions of concern about work practices, incidents, or employee behaviour that are harmful to their organization” (p. 75). Besides these, Morrison and Phelps (1999) proposed the concept of taking charge, i.e., individuals’ proactive efforts to bring constructive changes to affect how work is executed. Integrating these different concepts, Parker and Collins...
(2010) found that there are three high-order categories of proactivity: firstly, proactive work behaviour that aims to change the internal organizational environments about how work is done, including taking charge (Morrison & Phelps, 1999), voice (Liang et al., 2012; Van Dyne & LePine, 1998), innovative behaviour (Scott & Bruce, 1994), and problem prevention (striving); secondly, proactive strategic behaviour that aims to change the organization’s fit with the external environments, including strategic scanning and issue selling (Dutton & Ashford, 1993); thirdly, proactive person-environment fit behaviours that aim to improve individuals’ own fit with the organization’s environments, including feedback seeking (Ashford & Cummings, 1985) and career initiatives (Seibert, Kraimer, & Crant, 2001).

Some researchers have focused on the broad directions and goals of proactivity. For example, Griffin, Neal, and Parker (2007), based on role theories, proposed three kinds of performance-oriented individual-level proactivity: individual task proactivity that aims to initiate better ways to do core tasks; team member proactivity that aims to help the team perform better; and organization member proactivity that aims to improve the overall organizational efficiency. Similarly, Belschak and Den Hartog (2010) proposed three kinds of proactivity: individual proactivity, which aims to achieve self-focused goals; interpersonal proactivity, which aims to enhance goals related to co-workers; and organizational proactivity, which aims to improve organizational effectiveness. Likewise, Spychala and Sonnentag (2011), based on the promotion-prevention framework, proposed two kinds of proactivity: promotion-oriented proactivity, which aims at “taking control in order to improve the internal organizational environment” (p. 659), and prevention-oriented proactivity, which aims at “preventing the reoccurrence of obstacles and stressors at work” (p. 659).

Despite these various differences in the classification of proactivity, a simple and overarching framework has been offered by Parker et al. (2010) who argued that proactivity consists of proactive goal generation and proactive goal striving. That is, no matter the
detailed behaviours, goals, and so forth, proactivity entails envisioning a different future, planning for it, taking actions to make changes, and reflecting on the experiences. For example, to engage in feedback seeking, individuals envision a change brought by it, plan for and implement the seeking behaviour, and reflect from the process. In this sense, proactivity, in essence, is a goal-driven self-regulation process.

**What is Unique in Proactivity?**

Scholars have proposed some similar concepts as proactivity, but proactivity has some unique characteristics.

**Differences from Organizational Citizenship Behaviour**

Organ (1990) argued that organizational citizenship behaviour (OCB) captures one’s discretionary effort, which is a key characteristic of proactivity. However, proactivity has more than this.

First, OCB emphasizes “keeping the boat steady” (so acting like “good soldiers”), but proactivity emphasizes “rocking the boat”. Examples of OCB are altruism, courtesy, helping, and interpersonal support (Chiaburu, Oh, Berry, Li, & Gardner, 2011), all of which imply making improvements while retaining the status quo. But proactive actions, such as voicing, taking charge, and innovative behaviour, aim to introduce changes to achieve a different future. Second, OCB emphasizes that proactivity is not formally required and rewarded by organizations, thus drawing a line between it and in-role responsibilities. Nevertheless as Parker et al. (2006, p. 637) proposed, “there is no need to confine proactivity to the contextual domain only”. For example, individuals could try to better finish in-role work by improving the standard procedures (taking charge). Third, OCB originates from job satisfaction (Organ, 2018), but proactivity can be stimulated by dissatisfaction and negative affect (Bindl, 2018). Organ (1988) argued that based on equity theory, individuals would
perform OCB when they are satisfied with their jobs while dissatisfaction could stimulate
individuals to introduce changes to the status quo.

Recently, some scholars have developed the concept of change-oriented OCB, which
refers to the discretionary effort to enhance organizational effectiveness by bringing about
changes (Chiaburu, Lorinkova, & Van Dyne, 2013). Conceptually, it has many overlaps with
proactivity. Yet apparently there is no consensus about what exactly change-oriented OCB is
and how to measure it. Researchers have usually measured change-oriented OCBs with
proactivity-related variables, such as taking charge and voice (Chiaburu et al., 2011), but
sometimes included adaptivity and creativity (Chiaburu et al., 2013), which are not, strictly
speaking, features of proactivity. Thus, we consider proactivity to be a clearer and more
focused concept than change-oriented OCB, although they share some similarities in the
definition (Carpini, Parker, & Griffin, 2017).

**Differences from Constructive Deviance**

Constructive deviance was defined as the behaviour that is deviant from norms and
principles but benefits reference groups (Warren, 2003). Constructive deviance and
proactivity both confront with established routines and aim to make improvements. For
example, in their review, Vadera, Pratt, and Mishra (2013) argued that taking charge and
voice are examples of constructive deviance. But proactivity is different from constructive
deviance in at least three ways.

First, proactivity does not necessarily violate the norms. For example, scholars have
argued that there could be climates of proactivity in the workplaces (e.g., Raub & Liao,
2012). Second, constructive deviance favors *hyper norms*, which are “globally held beliefs
and values” that reflect basic human principles and needs (Warren, 2003, p. 628). However,
proactivity does not encompass such an ethical criterion. Third, proactivity emphasizes
bringing about changes yet constructive deviance does not necessarily lead to changes. For
example, Dahling and Gutworth (2017) measured constructive deviance with items such as “violate company procedures in order to solve a problem” and “depart from organizational procedures to solve a customer’s problem”, which are more similar to OCB.

**Differences from Adaptivity**

Adaptivity also describes individuals’ change-related behaviours (Griffin et al., 2007), but is quite distinct from proactivity. On one hand, adaptivity describes individuals’ reactions during or after changes, but proactivity aims to create changes. On the other hand, adaptivity captures the secondary control to accommodate to the uncertainties of externally initiated changes, but proactivity captures the primary control to affect and alter the external environment to fit individuals’ needs (Griffin, Parker, & Mason, 2010).

In short, although sharing some similarities, proactivity differs from OCB, constructive deviance, and adaptivity in its emphasis on taking control of and implementing changes in the environment (Carpini et al., 2017).

**Is Proactivity a Trait?**

Besides conceptualizing proactivity as a behaviour, some scholars treat proactivity as describing individual differences. Bateman and Crant (1993), based on the interactionist perspective, argued that individuals differ in their dispositions to influence and manipulate the environments, which is captured by the concept of the proactive personality. Individuals with a high level of proactive personality are forward thinking, transform the environment, and take primary control. In workplaces, they actively “scan for opportunities, show initiative, take action, and persevere until they reach closure by bringing about change” (p. 105). Opposite to this, those with a low level of proactive personality are reactive, transcend the environment, and take secondary control. In workplaces, they fail to identify or seize opportunities, show little initiative, and rely on others to bring about desirable changes. While Bateman and Crant mainly developed this concept based on a U.S. sample, Frese, Fay,
Hilburger, Leng, and Tag (1997) developed a similar concept called personal initiative (PI) using a sample of Germans. They defined PI as individuals’ taking an active and self-starting approach to work and going beyond the formal requirements, and found that individuals are distinguished from others by their PI trait, which correlates with the proactive personality at a rate of .96 (Fay & Frese, 2001). Thus, in the most recent review, Crant, Hu, and Jiang (2017) concluded that these two concepts are functionally equivalent.

At first glance, it seems that proactivity is like light, which is both waves (personality) and particles (behaviour). By using a meta-analysis technique, Tornau and Frese (2013) have managed to differentiate personality (proactive personality) and behaviour constructs (proactivity), finding that personality is significantly related to behaviour. In the current thesis, we treat the proactive personality as the dispositional tendency to behave proactively.

**Why does Proactivity Happen?**

*Divergent Perspectives*

To understand why proactivity happens, scholars have adopted different theories and perspectives. Some articulated the rationale calculation process, arguing that individuals make deliberate decisions about whether to engage in proactivity based on their perceived cost and benefits. For example, Yuan and Woodman (2010) found that a perceived image gain and risk and a perceived positive implication for performance have significant influences on individuals’ innovative behaviour. Some scholars focused on the internal psychological states that drive the desire for proactive behaviour. For example, Raub and Robert (2010) found that psychological empowerment significantly influenced proactivity, arguably because it keeps individuals autonomously motivated despite the possible violation of social norms and risks. Some researchers emphasized the effects of emotional states that energized individuals’ proactive actions. For example, Den Hartog and Belschak (2007) argued that according to the broaden-and-build model (Fredrickson, 2001), positive affect should
increase one’s personal initiative through broadening his/her thought-action repertoire and encouraging new behaviours.

**Integrative Efforts**

Some scholars have tried to adopt more integrated perspectives. For example, Liang et al. (2012) adopted the theory of planned behaviour to argue that individuals would engage in voicing when they believe that the outcome is positive (psychological safety), feel that there is normative pressure (felt obligation for constructive change), and perceive that they have control over the process (organization-based self-esteem). Parker et al. (2006) proposed a cognitive-motivational system model, arguing that there are two processes that influence individuals’ proactivity. First, individuals would assess the likely outcomes of being proactive. Second, individuals might see initiating changes as their responsibilities, goals, or aspirations. Accordingly, they found that role-breadth self-efficacy (the first process) and flexible role orientation (the second process) significantly influence individual proactivity. Grant and Ashford (2008) defined proactivity as a change process consisting of anticipation, planning, and action directed towards future impact. They proposed that the psychological mechanisms of perceived image cost and benefit, experienced efficacy, and uncertainty reduction motivation, mediate the effects of personality-situation interactions on proactivity processes.

**Proactive Motivation Model**

Based on the previous studies and theorizing, Parker et al. (2010) proposed the proactive motivation model, which has become a key influential model that explains why proactivity happen. In this model, they first developed Grant and Ashford’s idea to define proactivity as a goal-driven process consisting of proactive goal setting and proactive goal striving. Then, they argued that three kinds of proactive motivational states influence the self-regulation process, including “can do”, “reason to”, and “energized to” states.
The “can do” state describes individuals’ efficacious beliefs, control appraisals, and positive utility calculations, and reflect a rational process in pursuing proactive goals. Example states are role-breadth self-efficacy and perceived image gain and risks. The “reason to” state describes why individuals select and persist with proactive goals and reflects the psychological state that individuals are rationally motivated to create changes. Parker et al. (2010) specifically emphasized the role of self-determination motivations, because proactivity, by definition, is “autonomous (self-initiated) rather than externally regulated by contingencies outside the person” (p. 837). Strauss and Parker (2014) further proposed that proactivity motivated by controlled motivations would be less sustainable and effective in the long run. The “energized to” state describes the “hot” affective states that impact proactivity and mainly refers to the core activated affect, such as activated positive affect (Bindl, Parker, Totterdell, & Hagger-Johnson, 2012). These three kinds of states motivate individuals to set proactive goals and strive to make them happen.

What Drives Proactivity? An Individual-Focused Perspective

Since proactivity entails self-starting efforts, some scholars have emphasized the role of individual attributes in influencing proactivity, potentially through the motivational states referred to above. The most important one might be the proactive personality, which describes the dispositional tendency to make changes (Bateman & Crant, 1993). For example, Parker and Collins (2010) found that the proactive personality has positive correlations with all kinds of proactive behaviour, except for strategic scanning. Hong, Liao, Raub, and Han (2016) argued that the influence of the proactive personality would persist across contexts and over time. In a meta-analysis, Fuller and Marler (2009) found that it is positively related to voice (corrected $r = .26$), taking charge (corrected $r = .28$), networking behaviour (corrected $r = .31$), and career initiative (corrected $r = .35$). As to the mechanisms, Bakker, Tims, and Derks (2012) found that job engagement mediates the effects of the proactive
personality on job performance. Parker et al. (2006) found that the proactive personality influences proactivity through role-breadth self-efficacy and flexible role orientation. Thus, the proactive motivation model was generally supported.

The concept of the Big Five personalities has also received a considerable amount of attention (for a comprehensive review, please see Wu & Li, 2017). Ones, Viswesvaran, and Dilchert (2005) classified these five personalities into getting ahead, including extraversion and openness to experiences, and getting along, including conscientiousness, agreeableness and emotional stability. Getting ahead describes individual differences in making advancements in one’s job and career, thus this should be positively related with proactivity. For example, LePine and Van Dyne (2001) found that extraversion is positively related to voice. Wang, Ang, Jiang, and Wu (2018) found that extraversion influences proactivity through a highly-activated positive affect. Besides, a meta-analysis by Tornau and Frese (2013), found that openness has a positive correlation with taking charge and voice.

Getting along describes individual differences in keeping high-quality interpersonal relationships. It has contrasting effects on proactivity. Conscientiousness was found to be positively related with proactivity (e.g, Tornau & Frese, 2013). For example, Tangirala, Kamdar, Venkataramani, and Parke (2013) found that duty and achievement orientations, two facets of conscientiousness, positively influence voice through voice role perceptions. However, neuroticism, the opposite of emotional stability, has a negative relationship with voice and taking charge (Chamberlin, Newton, & Lepine, 2017; Tornau & Frese, 2013). Agreeableness was found to have insignificant effects (Chamberlin et al., 2017; Tornau & Frese, 2013). This might be because on one hand, to behave proactively means to break the status quo, which contradicts agreeableness; on the other hand, agreeableness could help build positive social relationships, which could facilitate proactivity. Thus, the effect might be dependent on other factors.
Besides, individual values have been found to impact proactivity. For example, Grant and Rothbard (2013) argued that under high ambiguity, individuals with a high level of security value would feel high anxiety and a fear of being proactive, because it is not safe; but individuals with a high level of prosocial value would feel it is worthwhile to take advantage of the opportunity to be proactive, to benefit others. Related moderation analyses in their studies supported these ideas. Individual cognitive differences have also been found to be related to proactivity. For example, Wu, Parker, and de Jong (2014) found that the need for cognition has a strong positive effect on innovation behaviour, especially when there are low autonomy and high time pressure. Strobel, Tumasjan, Spörrle, and Welpe (2017) found that a future focus has a positive effect on proactive strategic scanning behaviour. Last, demographic variables were identified as significant factors. Ng and Feldman (2013) found a three-way interaction between age, proactive personality, and supervisor undermining on innovation behaviour. They argue that older people could choose to fight against unfavorable treatments, or simply escape from the situation. Proactive personality motivates them to fight. Moreover, Zacher and Kooij (2017) proposed that individuals at different life stages would engage in different proactive behaviours, because of the changes in their motivations.

**Taking the Context into Consideration: The Role of Work Characteristics**

Since proactivity aims to influence the environment, the work context also has important influences on individual proactivity (Grant & Ashford, 2008; Parker et al., 2010). Work design scholars have reasoned that to deal with the contemporary increasing uncertainty and dynamism, work characteristics should be designed in a way that facilitates individual proactivity (Grant & Parker, 2009; Parker, 2014; Parker et al., 2010).

Many studies support the notion that work characteristics have significant influences on individual proactivity (for a thorough review, please see Only & Schmitt, 2017). For example, Parker et al. (2006) found that job autonomy could impact individual proactivity
through role-breadth self-efficacy (RBSE) and flexible role orientation. Fuller, Marler, and Hester (2006) found that felt responsibility for constructive change mediates the relationship between the access to resources and individual proactivity. In a recent meta-analysis, Marinova, Peng, Lorinkova, Van Dyne, and Chiaburu (2015) found that enriched work design factors, including job autonomy, job complexity, and task significance, have a positive effect on proactivity, through work engagement. In contrast, non-enriched work characteristics, including routinization and formalization, have a negative indirect effect on proactivity. The meta-analysis results are largely consistent with the work characteristics model (Hackman & Oldham, 1976), which proposes that work design could improve individuals’ intrinsic motivation which then impacts work behaviours.

Interestingly, the non-enriched work characteristics do not always have negative effects. For example, Ohly, Sonnentag, and Pluntke (2006) argued that routinization could conserve individuals’ resources for engaging in proactivity and found a positive relationship between routinization and innovation behaviour as well as personal initiative. Recently, Vough, Bindl, and Parker (2017) identified that there could be routines for proactivity in organizations, where the formal and standardized procedures support the instigation of proactivity. Thus, it is likely that there are potential moderators and curvilinear relationships. For example, Leung, Huang, Su, and Lu (2011) found that role ambiguity and role conflict had an inverted u-shape relationship with innovative behaviour because a moderate level of role stress would trigger active coping responses while a high level of role stress would exhaust individuals’ resources.

**Where Interdependence Comes in: Proactivity Shaped by the Social Context**

Notably, work design scholars have taken the stance that interdependence has become one key characteristic of the current workplace (Grant & Parker, 2009). That is, employees’ roles are connected with each other so that they work in a broad social system consisting of
continuously unfolding interpersonal interactions. In this sense, proactivity might be especially sensitive to social cues, given that it aims to create changes in the shared environment. Moreover, to create changes, the power of a single individual is usually not strong enough. To make changes happen, individuals need to seek support from others, build alliances with others, and wisely match their needs with the broad workplace goals (e.g., Detert & Edmondson, 2011; Dutton, Ashford, O’Neill, & Lawrence, 2001). Therefore, theoretically, proactivity should include a social process.

Not surprisingly, an increasing number of studies demonstrated the significant effect of the social context, which refers to the “multi-level interpersonal stimuli that surround, and are external to, the individual(s)”¹. For example, Niessen, Mäder, Stride, and Jimmieson (2017) found that perceived transformational leadership influences proactivity through employees’ thriving. Tucker, Chmiel, Turner, Hershcovis, and Stride (2008) found that perceived organizational support for safety would influence the individuals’ voicing of safety issues through perceived co-worker support for safety. Aiming to examine an integrated model, Hong et al. (2016) concluded that an initiative-enhancing human resource management system, an empowering leadership, and a team initiative climate have significant effects on individual proactivity.

Nevertheless, unlike individual attributes and work design factors, currently, there is not a comprehensive review of the how the social context affects proactivity. Some reviews (e.g., Farrell & Strauss, 2013; Ng & Feldman, 2012; Parker & Wu, 2014) have covered this topic, but they did not specifically focus on the social context and have suffered from limitations, such as only focusing on restricted social factors or proactive behaviours. As a result, until now, we do not have a clear sense of what, how, and when social context factors affect proactivity.

¹ We will talk more about this definition in Chapter 2.
Moreover, since proactivity aims to create changes, it is easily observable and might affect others’ well-being within an interdependent system. Thus, during the unfolding of interpersonal interactions, others in the workplace might actively respond to the proactivity. Existing studies have provided indirect support for this idea by focusing on performance evaluation as the outcome. For example, proactive individuals’ prosocial value and affect and leaders’ felt responsibility for constructive changes were found to moderate the relationship between proactivity and performance evaluation (Fuller, Marler, Hester, & Otondo, 2015; Grant, Parker, & Collins, 2009). Research about proactive personality found that the social competences to match and introduce proactivity in line with the collective needs could enhance the performance evaluation received by proactive individuals (e.g., Chan, 2006; Erdogan & Bauer, 2005). Besides performance evaluation, co-workers’ interpersonal behaviours have significant influences on individual proactivity (Chiaburu et al., 2013). Thus, it is essential to examine how individuals behaviourally respond to proactivity in the workplaces.

If proactivity influences others’ interpersonal behaviours, which are important components of the social context, the social context itself should serve as a boundary that affects the outcome of being proactive, given that the effectiveness of proactivity is dependent on how much it is supported or resisted by others (Parker, Wang, & Liao, 2018). Unfortunately, seldom have studies examined this idea. As exceptions, Whiting, Maynes, Podsakoff, and Podsakoff (2012) found that when there is favorable norm regarding speaking up, individuals develop a higher level of liking towards the ones who voice and make more prosocial attribution of these voicing events. Zhang, Wang, and Shi (2012) identified that when individuals and their leaders differ in the level of proactive personality, they have a low level of LMX, which reduces their work-related outcomes. To have a more complete understanding of how the interdependence affects proactivity, it is necessary to examine the
moderation effects of the social context factors – how the social context serves as the boundary on proactivity.

**Overview of the Current Thesis**

The current thesis aims to enrich our understandings of proactivity in the interdependent context. As Figure 1 shows, there are three chapters in this thesis. Chapter 2 presents a review study. Based on the proactive motivation model (Parker et al., 2010) and the multilevel model of team motivation (Chen & Kanfer, 2006), this chapter summarizes the existing findings into an integrated model that social context influences proactivity mainly through proactive motivations via individual-level, team-level, and cross-level processes and makes corresponding suggestions about future studies.

Then, Chapter 3 examines how proactivity influences the others’ interpersonal behaviours. The results show what might refer to a “social paradox” in that co-worker proactivity was significantly associated with both individuals’ helping and social undermining behaviours towards the co-worker, with personal identification and envy as the mediation mechanisms. Besides, individuals’ proactive personality was found to enhance the indirect effect through personal identification.

Since individuals actively respond to others’ proactivity and the effectiveness of proactivity is dependent on others’ reactions (Parker et al., 2018), the social context should condition the effectiveness of behaving proactively. This idea was examined in Chapter 4, which showed that misfit in proactive personality between individuals and their teams negatively affects their core task performance, and this effect became stronger when individuals are more proactive than the team. Moreover, individuals’ emotional intelligence was found to buffer this misfit effect, because it helps individuals to improve their relationships with co-workers by expressing their proactivity in a favorable way. Individuals’ leader-member exchange was also found to buffer this misfit effect, because it provides
additional resources to the proactive individuals, reducing the salience of the relationships with the co-workers.

Through three chapters, this thesis could make several contributions to the existing literature. First, it integrates the existing studies about how social context influences proactivity with a new theoretical model (Chapter 2), which contributes to synthesizing the disparate literature and guiding future studies. Second, it provides preliminary evidence for the proposition that being proactive is a bidirectional social process – not only the actor is influenced by the social stimuli (showed in Chapter 1), but also the teammates would actively react to the proactivity (Chapter 2). In other words, it depicts the other side of the social interactions during proactivity from the previous studies. Third, it reveals that, besides the direct effects, the social context could condition the proactivity process. More importantly, the conditioning effect is dependent on individuals’ both personal and social resources (Chapter 3). In short, this thesis contributes to extending our understanding of the role social context plays in the proactivity process and showing a dynamic model about the complex interplay between social context and proactivity (Figure 1): social context predicts and conditions proactivity.
Chapter 1 Figure 1. Research Model of the Thesis

Social Context → Proactivity

Constitute

Chapter 2 → Chapter 3

Chapter 3

Others’ Interpersonal Behaviours

Self Core Task Performance

Chapter 4
Chapter 2 Foreword

This thesis aims to examine the relationship between social context and proactivity. As the first step, chapter 2 presents a comprehensive review of existing research findings of how social context affects proactivity in the workplace. This review is timely and necessary because the research has covered divergent topics, such as different kinds of leadership and team climate, but currently there lack integrative understandings of what, how, and when social context factors influence proactivity.

In this chapter, I, together with the coauthors, reviewed the findings based on a framework that integrated the proactive motivation model (Parker et al., 2010) and the multilevel model of team motivations (Chen & Kanfer, 2006). We reviewed how leader-, team-, and organization-related factors serve as the antecedents to proactivity and how these factors interact with others to affect proactivity. The findings were summarized into Figure 2, which showed that the social context influences proactivity through the proactive motivation states, including “reason to”, “can do”, and “energized to” states, via multiple pathways.

Based on the findings and the model (Figure 5), we made several recommendations for future research and encouraged researchers to more take a multilevel perspective to unpack how proactivity unfolds in organizations.
How Does the Social Context Fuel the Proactive Fire?  
A Multi-level Review and Theoretical Synthesis

Zijun Cai¹*, Sharon K. Parker², Zhijun Chen³, and Wing Lam⁴

¹Business School, University of Western Australia, Australia  
²Center for Transformative Work Design, Future of Work Institute, Business School, Curtin University, Australia  
³School of International Business Administration, Shanghai University of Finance and Economics, China  
⁴Department of Management & Marketing, Hong Kong Polytechnic University, Hong Kong  
*Corresponding author

Note: Chapter 2 is a direct copy of our submission to the Journal of Organizational Behaviour, which is now under the 2nd round review and revision. Thus, I use “we” in this chapter. For my individual contribution, please see “Authorship Declaration”.

33
Abstract

The role of the social context in shaping employee proactive behaviour has received considerable attention, with social context factors covering topics such as leadership, team climate and organization support. This research has also been conducted across multiple forms of proactive behaviour. The field is therefore in need of syntheses that help to structure and integrate the disparate research. Our review adopts a multi-level integrated approach to collate what is known about how social context factors influence employees’ proactive behaviour, as well as by what mechanisms underpin these effects. Our analyses show that leader-, team- and organization-related social context factors mainly influence employee proactivity through shaping “reason to”, “can do”, and “energized to” states (i.e., proactive motivational states) via individual-, team-, as well as cross-level processes. The most frequently investigated is the effect of the discretionary social context, particularly leadership. Moreover, the interaction between social context factors and individual attributes as well as contextual factors is inconsistent with the motivational fit perspective. We draw up a research agenda to advance theoretical insights into this important topic.

Keywords: social context, proactive behaviour, multilevel, proactive motivation model
Given its positive implications for enhancing individual and organizational effectiveness, a fast-growing body of literature has focused on employee work-based proactive behaviour, or employees’ self-initiated efforts to bring about future-focused changes (Parker & Collins, 2010). The majority of this research has identified a variety of individual attributes and job features as antecedents of proactive employee behaviour, such as the proactive personality and job autonomy (Marinova et al., 2015).

Proactive behaviour aims to change and improve the situation or oneself (Bindl & Parker, 2017; Parker et al., 2006). Thus, a fundamental component of proactive behaviour is the idea that people need not passively accept environmental exigencies. Instead, they can intentionally take action to change the work environment they encounter (Parker & Collins, 2010). Such actions are highly likely to be affected by social cues. Indeed, an interactionist perspective on proactivity would assume that the context shapes individual decisions to be proactive. Simply stated, “interactionism notes that the person, environment, and behaviour continuously influence one another” (Crant, Hu, Jiang, 2017, p.194). Consistent with such a perspective, in recent years, there has an increase in numbers of studies focusing on social factors as antecedents to work-based proactive behaviour (e.g., Parker et al., 2006; Hong, Liao, Raub, and Han, 2016).

Despite growth in research focusing on the role of social processes, there is a lack of clarity about the full set of social context factors that might shape multiple forms of proactive behaviour. First, scholars have focused on only a single social context variable. For example, Parker and Wu (2014) examined how leadership affects proactive behaviour, but did not consider other social processes. Thus, we need to develop a clearer picture as to the full range of social context factors that affect proactive behaviour. Second, when research has considered multiple social factors, it has tended to do so for just one form of proactivity. For instance, Ng and Feldman's (2012) meta-analyses identified a set of social factors that shape
employee voice behaviour. Supporting a resource conservation argument (Hobfoll, 1986), the authors concluded that social stressors decrease voice behaviour. However, although this study reviewed multiple social antecedents, it focused only on voice behaviour, so we do not know if different sorts of social context are needed depending on the form of proactive behaviour. Third, the level of the social context variable has had little attention. For example, Farrell and Strauss (2013) proposed a model of how work-based social relationships affect proactive behaviour but they did not consider the possibility that these relationships could vary across different levels, such as leader-member exchange (LMX) at a leader-subordinate level and team support at a team level. Accordingly, the multi-level nature of social context factors was obscured. Altogether, there is a need to synthesize research on the multi-level set of social context factors that shape different types of proactive behaviours (Chen, Farh, Campbell-Bush, Wu, & Wu, 2013; Chen & Kanfer, 2006).

Once we identify the social context antecedents for employee proactive behaviour, this also paves the way for recognizing the mechanisms that underlie the social cues for proactive behaviour. For example, Detert and Burris (2007) found that transformational leadership influences individual voice behaviour through psychological safety, whereas Liu, Zhu, and Yang (2010) found social and relational identifications to be the mechanisms. The forces that spurred the growth of a social perspective for proactive behaviour concepts look set to continue. Further investigation is needed to synthesize the mediating mechanisms that influence proactive employee behaviour (Chiaburu et al., 2013).

Our review has three major purposes. First, we identify different social context factors across multiple proactive behaviour domains to clarify the association between the social context and proactive behaviour. Second, we adopt an integrated approach to summarize the mediating mechanisms for the impact of social context predictors on proactive behaviour, spelling out multi-level pathways to understand why and under which circumstances
employees engage in the proactive behaviour. Finally, we offer a research agenda to build on what is known as well as to further advance theoretical insights into this topic.

**Domain and Scope of the Review: Social Context and Proactive Behaviour**

In what follows, we define what we mean by social context and proactive behaviour, and then describe how we identified papers linking these concepts for the review.

**Clarifying Social Context**

The notion of “context” was originally conceptualized as the stimuli and phenomena surrounding individuals that “illuminate” their behaviours (Cappelli & Sherer, 1991), implying a moderating role of context for shaping behaviour. Later, scholars developed an extended meaning of context, identifying it as a predictor of behaviour. Mowday and Sutton (1993), for example, argued that the context serves as opportunities and constraints for behaviours in organizational settings. Bamberger (2008, p. 841) recognized that context is both a moderator and a predictor of behaviour, defining it as “surrounding phenomena or temporal conditions (that) directly influence lower-level phenomena, condition relations between one or more variables at different levels of analysis …”. Building on this perspective, Johns (2018, p.22) pointed out that context “provides constraints and opportunities that affect the occurrence of organizational behaviour and shape its meaning” and defined context as “situational or environmental stimuli that impinge upon focal actors and are often located at a different level of analysis from those actors”.

Guided by this literature, we recognize social context as both a predictor of proactive employee behaviour, and a moderator of the relationship between other factors and proactive behaviour. We follow Johns (2018) to define the social context as the “**multi-level interpersonal stimuli that surround, and are external to, the individual(s)**”. This definition encompasses a broad scope of interpersonal stimuli. Thus, besides direct interpersonal interactions and relationships, such as co-worker support and leader-member exchange, the
social context also includes leadership, team climate, organizational values, industry norms, and national values. Collective values and norms are social factors relevant to employee work-based proactive behaviour because they emerge from the interactions among individuals who are involved in the particular context. These interactions frequently provide diagnostic cues and criteria against which individuals interpret and evaluate their own behaviours and that of others. This definition also differentiates social context from task and physical contexts (Johns, 2006). While task context is more about how the jobs are designed (e.g., autonomy) and physical context is more about the objective environmental factors (e.g., temperature), social context more focuses on the interpersonal interactions in the workplaces.

By focusing on social context as “multi-level”, we recognize that social factors can differ in levels of theorization, levels of measurement, and levels of analysis. Leadership, for example, has been measured and analyzed at both individual and team levels, with the former reflecting individuals’ perceptions of his/her leader, and the latter reflects the teams’ shared perception of the leader (Chen & Bliese, 2002). In their multi-level model of team motivation, Chen and Kanfer (2006) differentiated discretionary inputs, or person-oriented stimuli that are directed towards a specific individual (an individual-level process), from ambient inputs, or team-oriented stimuli that pervade the team as a whole (a team-level process). Similarly, we adopt a multi-level perspective and classify the social context into discretionary social context factors and ambient social context factors. Discretionary social context factors are usually theorized, measured, and analyzed at the individual level, reflecting individual social experiences or perceptions of the social context, such as the perceived leadership and LMX. Ambient social context factors function at higher levels, reflecting social experiences or shared properties common to collectives, such as team leadership, team climate, and LMX diversity.
Clarifying Proactive Behaviour

Proactive behaviour refers to self-initiated behaviour to bring about changes to achieve a different future (Parker et al., 2006). There are many forms of individual-level proactive behaviour that have received attention in the literature. We include all of these forms of proactivity in the current review. We draw on Parker and Collins (2010), who synthesized the many forms into three overarching categories: proactive work behaviour, including taking charge, innovative behaviour, voice, and problem prevention, proactive strategic behaviour, including issue selling and strategic scanning, and proactive person-environment fit behaviour, including feedback seeking and job change negotiation (idiosyncratic deals).

Recently scholars have proposed that we should focus on team-level proactive behaviour because “to overcome and thrive in such uncertainty … teams must be proactive” (Harris & Kirkman, 2017). Williams, Parker, and Turner (2010) argued that team proactive behaviour is a team-level concept that is theoretically similar to individual proactive behaviour and defined it as “the extent to which a team engages in self-starting, future-focused action that aims to change the external situation or the team itself” (p.302). To capture these multi-level phenomena, we include studies with team proactive behaviour in this review2.

Methodology for the Review

We searched for empirical papers within the field of business, management, and applied psychology using keywords related to proactive behaviour including: (1) generic terms relevant to proactive behaviour such as proactivity, proactive behaviour, personal initiative, and change-oriented citizenship and (2) specific types of proactive behaviour,

---

2 Note that, although the terms are similar, team member proactive behaviour (Griffin et al., 2007; see also interpersonal proactive behaviours, Belschak and Den Hartog, 2010) are distinct from “team proactive behaviour”, because they are kinds of individual-level proactivity that are directed to team goals, such as individually introducing new methods to enhance the team’s processes.
including *taking charge, innovative behaviour, voice, problem prevention, issue selling, strategic scanning, feedback seeking, and job change negotiation (idiosyncratic deals).* We only focused on top-tier journals in our review to ensure the quality of the studies. We made the selection mainly based on the journal impact factors (> 2). The final list of journals (see Appendix 1) is similar to the list of core top management journals identified by Podsakoff, MacKenzie, Podsakoff, and Bachrach (2008), so we think this list is reasonable.

Using the keywords, we first searched for literature mainly from the Web of Science, complemented by EBSCO and PsycINFO. We also manually checked the reference list in previous book chapters, qualitative reviews, and meta-analyses about proactive behaviour. This procedure resulted in around 400 papers. Those papers published in the listed journals were retained for the next steps. We then checked whether social context factors were considered in these papers. Those which included social factors, either as predictors or moderators, were retained. This procedure led us to identify 141 related papers.

To organize the findings, we coded the studies in the following way. The social context factors were first coded according to the subjects, i.e., who the factors describe. Those about leaders were coded as “leader-related” (e.g., leadership). Those about team members were coded as “team-related” (e.g., team climate). Those about organizations were coded as “organization-related” (e.g., organizational climate). Note that the factors about the general interactions among colleagues besides teammates and leaders were also coded as “organization-related” (e.g., workplace ostracism). These factors were then coded based on their functions, specifically, whether they shape and affect proactive behaviour (an antecedent) or whether they condition the relationship between other factors and proactive behaviour (a moderator). We found some studies in which social context factors interacted to influence proactive behaviour. In this case, we coded it as both a “moderator” and “predictor” according to the authors’ propositions. Third, we classified the social factors according to
their themes. For example, ethical leadership and empowering leadership were coded as describing leadership styles. Team initiative climate and team voice climate were coded as describing team climates. Last, we coded the factors as either ambient or discretionary, according to the criteria described above.

Finally, for each study including a mediating process between social context and proactive behaviour, we coded the mediators according to the process they describe. Having created a list of all mediating processes, we then sought to categorize them in a meaningful way. Because our focus was on proactive behaviour, and most of the processes were motivational (e.g., intrinsic motivation, self-efficacy), we applied the proactive motivation model proposed by Parker, Bindl, and Strauss (2010). Around 80% of the identified mediators fitted this model, which identifies three kinds of proactive motivational states that lead to proactive behaviour: “can do”, including “self-efficacy perceptions (can I do it?), control appraisals and attributions (e.g., how feasible is it?), and the perceived costs of action (e.g., how risky is it?)” (p. 834); “reason to”, which is about goal selection and persistence, especially self-determination motivation; and “energized to”, the “‘hot’ affect-related motivational states (p. 838). Around 20% of the mediators could not readily be classified into a single proactive motivation state (e.g., work engagement, psychological empowerment), so these were coded as “other”.

In what follows we discuss the results of the review, focusing first on the studies in which social context is an antecedent of proactive behaviour, then on the studies in which social context interacts with others to affect proactive behaviour.

Social Context Factors as Antecedents of Proactive Behaviour

The key findings from studies investigating social context factors as predictors of proactive behaviour are summarized in Figure 1. As can be seen, most studies (N = 88) are about leader-related factors, N=28 include team-related factors, and N=22 include
organization-related factors. We found no studies that considered industry-related or country-related factors. We discuss each set of factors in turn.

**Leader-Related Factors as Predictors to Proactive Behaviour**

Existing research shows that leadership styles, specific leadership behaviours, and the quality of the relationship with the leaders have significant influences on proactive behaviour.

**Leadership Styles**

**Transformational leadership** emphasizes the leader’s role in introducing and implementing changes through creating a challenging vision, stimulating subordinates’ intellect, and inspiring them to go beyond expectations (Den Hartog & Belschak, 2012). Since proactive behaviour aims to bring about changes, it is not surprising that transformational leadership has been found to be a powerful driver of this behaviour (Den Hartog & Belschak, 2017). Its correlation with individual proactive behaviour ranges from .06 (Niessen et al., 2017) to .51 (Kuonath, Specht, Kühnel, Pachler, & Frey, 2017), although most studies show a correlation as between .20 and .40 (e.g., Den Hartog & Belschak, 2012; Schmitt, Den Hartog, & Belschak, 2016).

“Can do” and “reason to” motivational states were found to mediate discretionary transformational leadership’s effect on individual proactivity. With respect to “can do” motivation, it seems that, through displaying development-oriented behaviours, such as coaching, and by indicating personal interest in and openness to changes, transformational leaders increase subordinates’ self-efficacy for carrying out a broader set of work tasks (RBSE) and lower their perceptions of personal loss from speaking up (psychological safety) (Detert & Burris, 2007; López-Domínguez, Enache, Sallan, & Simo, 2013). With respect to “reason to” motivation, through serving as role models and emphasizing collective identity, vision, and values, these leaders increase subordinates’ affective commitment (Strauss, Griffin, & Rafferty, 2009) and identification (Liu et al. 2010). Similarly, Duan, Li, Xu, and
Wu (2017) found a Pygmalion effect in which transformational leaders motivate subordinates to internalize voice into their work roles. These “can do” and “reason to” motivational states, in turn, increase individual proactive behaviour. Interestingly, Walumbwa and Hartnell (2011) found that ambient transformational leadership increases subordinates’ relational identification, which then affects individual proactive behaviour through RBSE, suggesting “reason to” motivation sometimes drives “can do” motivation.

There is also some evidence that “energized to” motivational states are mediators. By satisfying psychological needs and providing meaning, importance, and support, transformational leaders, as discretionary stimuli, foster subordinates’ thriving and work engagement (“other”) (Niessen et al., 2017; Schmitt et al., 2016), which arguably provide positive and activated states that stimulate proactive behaviour.

**Empowering leadership** differs from transformational leadership in that it explicitly encourages autonomy, control, and independence (Lee, Willis, & Tian, 2018). Empowering leadership has been found to shape proactivity, which is not surprising given that proactive behaviour is self-initiated. The correlations with individual proactive behaviour range from .16 (Chen et al., 2011) to .53 (Martin, Liao, & Campbell, 2013), with most studies reporting it to be around .20 (e.g., Li, Chiaburu, Kirkman, & Xie, 2013; Raub & Robert, 2010).

As to why empowering leadership is important, both affective commitment (“reason to”) and RBSE (“can do”) have been shown to mediate the top-down effect of ambient empowering leadership on individual proactive behaviour. Thus, Chen, Sharma, Edinger, Shapiro, and Farh (2011) found that empowering leaders make subordinates feel personally accountable for and emotionally engaged in their work, thus increasing their affective commitment; and Li, He, Yam, and Long (2015) found that empowering leaders share power and express confidence in subordinates, enhancing their belief in their competence to take on
extra responsibilities (RBSE). Affective commitment and RBSE, in turn, motivate proactive behaviour. Interestingly, Hong et al. (2016) found that, when simultaneously examining the mediation effects of RBSE (“can do”), intrinsic motivation (“reason to”) and positive affect (“energized to”), only RBSE was significant. They suggest that the non-significance of “reason to” and “energized to” motivational states might be because they did not use the best measures and because there might be unexamined moderators. However, this finding concerning the significance of RBSE suggests that it is a more important mediator than the other two, at least for this top-down effect.

As might be expected, a further mediator linking empowering leadership and proactive behaviour is psychological empowerment (“other”), or a high sense of impact, meaningful, and self-determination. Thus Chen et al. (2011) and Raub and Robert (2010) found that ambient and discretionary empowering leadership positively affect individuals’ psychological empowerment. At the team level, Kirkman and Rosen (1999) found that ambient empowering leadership influences team proactive behaviour through team psychological empowerment.

**Ethical leadership** is different from transformational leadership and empowering leadership in that it does not specifically emphasize motivating employees but focuses on doing things in the “right way” (Brown, Treviño, & Harrison, 2005). Its correlation with individual proactive behaviour is at a similar level to these other leadership styles, ranging from .19 (Kalshoven, Den Hartog, & de Hoogh, 2013) to .48 (Chen & Hou, 2016).

As to why ethical leadership fosters proactivity, most evidence suggests that this way of leading builds “reason to” motivational states, including intrinsic motivation (Tu & Lu, 2013), identification (Zhu, He, Treviño, Chao, & Wang, 2015), and a motivation for reciprocity (Kalshoven et al., 2013). For example, Tu and Lu (2013) argued that discretionary ethical leadership gives a sense of meaning to work, sets a high moral standard, and conveys
a sense of impact to individuals. Ambient ethical leadership increases the team members’ understanding of the social impact of their jobs and helps build trust relationships among team members. As a result, individuals find their work meaningful and intrinsically motivating, and hence are more likely to engage in innovative behaviour (Tu & Lu, 2013).

One study, Walumbwa and Schaubroeck (2009), found that ambient ethical leadership increases team psychological safety (“can do”), because ethical leaders show openness and truthfulness to subordinates, which lowers individuals’ perceived risk of speaking up. Regarding the “energized to” pathway, Den Hartog and Belschak (2012) found that the ethical leaders increase individuals’ work engagement, which indicates a positive emotional state that inspires proactive behaviour.

Although these three kinds of leadership are the most extensively studied ones with respect to proactive behaviour, scholars have examined the effects of other leadership styles (e.g., servant leadership, Panaccio, Henderson, Liden, Wayne, & Cao, 2015; authentic leadership: Liang, 2017; paternalistic leadership: Zhang, Huai, & Xie, 2015). These studies consistently show, with correlations ranging from .18 to .40, that leaders displaying positive forms of leadership can facilitate individual proactive behaviour. Interestingly, scholars have also shown that leadership can also be deleterious to proactive behaviour. Abusive supervision, which refers to individuals’ perception that their leaders continuously engage in hostile verbal or nonverbal behaviours (Tepper, Simon, & Park, 2017), negatively predicts individual proactive behaviour, with correlations ranging from -.22 (Farh & Chen, 2014) to -.12 (Ouyang, Lam, & Wang, 2015). Abusive supervision psychologically detaches individuals from their organizations (Burris, Detert, & Chiaburu, 2008), which essentially impairs “reason to” motivation, and also lowers individuals’ judgment of their own self-worth (perceived insider status, Ouyang et al., 2015; organization-based self-esteem, Farh & Chen, 2014), which means lower can do motivation. Furthermore, Farh and Chen (2014)
found that, due to a social comparison process, when ambient abusive supervision is low, discretionary abusive supervision has an even more negative influence on individuals’ organization-based self-esteem (OBSE), because individuals perceive that the abuse is highly individualized.

**Specific Leader Behaviours**

Besides the general leadership styles, scholars have also focused on leaders’ specific behaviours to understand their impacts on employee proactive behaviour.

Leaders can increase employee proactive behaviour by directly encouraging change, including providing a clear vision (Griffin et al., 2010), signaling that they welcome and are interested in employees’ ideas (Bienefeld & Grote, 2014), asking employees for suggestions (Tangirala & Ramanujam, 2012), and actively responding to employees’ innovative inputs (Janssen & Gao, 2015). These correlations with individual proactivity range from .11 to .46. These behaviours promote their psychological safety (“can do”, Bienefeld & Grote, 2014), perceived status (“other”, Janssen & Gao, 2015) and perceived influence (“other”, Tangirala & Ramanujam, 2012). Perceived status and influence were argued to prompt individual proactive behaviour because they make individuals feel they have the capacity and responsibility to do so.

Leaders can also facilitate employee proactive behaviour by treating them in a considerate and respectful manner. **Perceived leader support** refers to individuals’ perception that their leaders show support for their efforts and care, and are concerned for them, as well as valuing them (Chen, Li, & Leung, 2016; Wu & Parker, 2017). Its correlation with individual proactive behaviour ranges from .13 (Parker et al., 2006) to .58 (Wu & Parker, 2017), although most studies report the correlation to be between .20 and .40. High

---

3 The only exception is that in sample 3 Bienefeld and Grote (2014) reported the correlation between leader inclusiveness and employee speaking up behaviour to be -.11, which is not significant.
perceived support from leaders could make individuals feel that they have the competence to deal with obstacles when bringing about changes, thus increasing their RBSE (Wu & Parker, 2017), and that their work is meaningful and joyful, thus increasing their intrinsic motivation (Chen et al., 2016). RBSE and intrinsic motivation, in turn, serve as “can do” and “reason to” motivational states, respectively, that improve individual proactive behaviour.

Delegating important tasks and decision responsibilities to subordinates (delegation, \(r = .18\), Chen & Aryee, 2007) and treating them fairly (perceived leader justice, \(r = .55\), McAllister, Kamdar, Morrison, & Turban, 2007) were also found to be beneficial to individual proactive behaviour. Interestingly, Liao and Chun (2016) found that observational monitoring behaviour (gathering subordinates’ work-related information without direct input from them) is negatively related to individual feedback seeking and innovative behaviour, perhaps because the lack of interaction during the information collection process makes subordinates feel less empowered, fearful and skeptical, which results in distrust in leaders and thus low proactive behaviour. In contrast, interactional monitoring behaviour (gathering information directly from subordinates) creates opportunities for open discussion that lead to trust and proactive behaviour.

Not all leaders’ behaviours are positive. Leaders showing arrogance to subordinates were found to have a negative impact on employees’ feedback seeking behaviour, likely because seeking feedback from such belittling leaders is risky and unreliable (\(r = -.15\), Borden, Levy, & Silverman, 2018). Leaders showing verbal aggression (e.g., making derogatory remarks and using harsh language) to subordinates were also found to decrease their feedback seeking behaviour because they appraise experiences with rude leaders as negative affective events (\(r = -.04\), Nifadkar, Tsui, & Ashforth, 2012).

\(^4\) In this paper, \(r\) refers to the correlation between the social context factor and the outcome proactive behaviour.
While all the above studies treat leaders’ behaviours as discretionary inputs, Schraub, Michel, Shemla, and Sonntag (2014) conceptualized leaders’ emotional management as an ambient input. Based on affective event theory, they found that when leaders actively regulate team members’ emotions in positive ways, members are likely to make a positive appraisal of work events and have high job-related affective well-being (e.g., being happy, inspired; “energized to”), which functions as a positive affect that increases their proactive behaviour \((r = .21)\). On the contrary, Frazier and Bowler (2015) found that ambient supervisor undermining decreases the team voice climate and hence team voice itself because it highlights the risk of making challenging suggestions (“can do”, \(r = -.27\)).

**Relationship with the Leader**

Leadership scholars have argued that, apart from focusing on what leaders do, it is important to adopt a relational perspective to concentrate on the relationships between individuals and their leaders (e.g., Lord, Gatti, & Chui, 2016). In proactive behaviour research, scholars have mainly examined the effect of leader-member exchange (LMX), which describes the relationships between leaders and followers as characterized by mutual trust and respect. Its correlation with individual proactive behaviour ranges from -.03 (Ward, Ravlin, Klaas, Ployhart, & Buchan, 2016) to .50 (Van Dyne, Kamdar, & Joireman, 2008).

As with leadership styles and specific behaviour, proactive motivation variables appear to mediate between LMX and individual proactive behaviour. For example, Burris et al. (2008) found that low LMX makes employees psychologically detach from their organizations (“reason to”), thus performing less voice behaviour. Based on the broaden-and-build theory (Fredrickson, 2001), Lin, Kao, Chen, and Lu, (2016) found that LMX influences taking charge through positive affect (“energized to”). Yuan and Woodman (2010) theorized that LMX influences individual innovative behaviour through “can do” motivational states, including expected image and performance gain because individuals can obtain work and
political resources from their high-quality relationships with their leaders. Surprisingly, however, the researchers found that perceived image gain had a negative effect on innovative behaviour. In other words, LMX decreased innovative behaviour because it increased perceived image gain. The authors explained in terms of these individuals being more focused on showing off or pleasing others to create positive images, which makes them less innovative. This finding echoes Strauss and Parker’s (2014) proposition that proactive behaviour elicited by extrinsic motivations is less effective.

Scholars have expanded the focus on LMX in three ways. First, they compared LMX with a similar concept, guanxi, which can be translated as rapport or connection. Zhang, Li, and Harris (2015) argued that guanxi describes the relationships developed after working hours/outside the work domain and is relevant in the workplace context subordinates are very dependent on their leaders. Although theoretically both LMX and guanxi facilitate taking charge through the motivation to reciprocate, these researchers proposed that guanxi is more important than LMX because LMX is rooted in work-related exchanges that emphasize helping each other within the status quo, whereas guanxi more affords long-term psychological safety and thus reduces the short-term risk to challenge this status quo. This proposition was supported with a sample of Chinese employees ($\beta_{\text{LMX}} = .06, \beta_{\text{Guanxi}} = .24$) (Zhang et al., 2015).

Second, scholars have focused on LMX differentiation in teams, which describes the extent to which team members each have a different level of LMX with their leaders. Chen, He, and Weng, (2018) found that LMX differentiation has a negative impact on team proactive behaviour because it suggests that leaders distribute their relational resources unfairly. This feeling of unfairness is theorized to increase team members’ perceived risk to perform the proactive behaviour. Nevertheless, this effect becomes weaker when the
differentiation is more based on individuals’ task performance and organizational citizenship behaviour, which makes the distribution more reasonable.

Third, the effect of exchange relationships with higher-level leaders has been examined. Liu, Tangirala, and Ramanujam (2013) found that employees’ exchange relationship with skip-level leaders improves employees’ making voice to the skip-level leader. Moreover, they found that this effect is stronger when employees’ direct leaders do not have the resources to solve individuals’ concerns, as depicted by a low exchange relationship between the direct leaders and skip-level leaders.

**Other Leader-Related Factors**

From our review, we identify several other leader-related factors for employee proactive behaviour, including leaders’ personal attributes (openness to change, $r = .45$, Tröster & Van Knippenberg, 2012; self-efficacy, $r = .17$ & .20, Fast, Burris, & Bartel, 2014; authentic personality, $r = .17$, Liang, 2017; narcissism, $r = .01$, Liu, Ting-Ju Chiang, Fehr, Xu, & Wang, 2017), positive affect ($r = .19$, Liu, Song, Li, & Liao, 2017), and job embeddedness ($r = .33$ to .47, Ng & Feldman, 2013). Proactive motivations were found or implied to be mediators in most of these studies. For example, Liu et al. (2017) found that high perceived unfairness would activate leaders with high narcissism to engage into self-interested behaviours, which break team’s reciprocity motivation to make voice (“reason to”). In addition, based on the affect-as-social-information model (Van Kleef, De Dreu, & Manstead, 2010), Liu et al. (2017) found that during an interaction episode, when leaders display positive affect, individuals’ positive affect (“energized to”) increases. This positive affect, in turn, informs individuals that the environment is safe so that they feel high psychological safety (“can do”), which motivates them to voice to their leaders.
Summary of leader-related factors

Much attention has been given to leadership as a social context factor that shapes individual proactivity (see Figure 2 for a summary). Positive styles (e.g., transformational leadership), specific behaviours (e.g., vision), and a high-quality relationship between employees and leaders (LMX) have been found to be positively related to proactive behaviour. From simple correlation statistics, we found that positive leadership styles and leader behaviours have similar effect sizes on individual proactive behaviour, mostly around .20 to .40. However, there are sometimes associations greater than .50 (e.g., Kuonath et al., 2017), suggesting quite powerful effects. In the case of LMX, there is a large range of associations, suggesting potential moderators of the relationship between this social context factor and individual proactive behaviour. Of course, leaders can behave negatively too, and studies show that leaders’ abusive supervision, arrogance, verbal aggression, undermining, observational monitoring, narcissism, and LMX differentiation discourage individual proactive behaviour, revealing a “dark” side to some leaders.

In terms of why leadership matters, there is a body of clear evidence that “reason to” and “can do” motivational states serve as the primary mediators between leader-related factors and individual proactive behaviour. In comparison, the mediating role of “energized to” motivational states has not been examined much. Individuals’ judgments of self-worth, such as their OBSE and perceived influence, were also mediators (“other”). It is important to note that scholars have theorized the relationship between these judgments and proactive behaviour by arguing for their influence on proactive motivation. For example, Tangirala and Ramanujam (2012) argued that perceived influence brings individuals a sense of responsibility to make constructive suggestions, which can be seen as a “reason to” motivational state.
One insight from the review is that most studies have treated leader-related factors as discretionary factors in their models. However, this discretionary focus is perhaps misplaced because it reflects individuals’ perception, so it is not known whether leaders’ behaviours, or the way individuals construct these behaviours, is what influences individuals’ proactive behaviour. Indeed, the studies that treated leader-related factors as team-level inputs (ambient factors) found similar mediators to those which treated them as discretionary inputs, suggesting that ambient and discretionary factors influence individual proactive behaviour through similar mechanisms. Overall, only a few studies have focused on how ambient leader-related factors influence team proactive behaviour, so our understanding of the team-level paths linking leadership to proactivity are still very preliminary.

**Team-Related Factors as Predictors to Proactive Behaviour**

Compared with leaders (N=88 studies), teams have not received as much attention in the proactive behaviour literature (N= 28). From our review, we found that scholars mainly focused on the effects of team climate and interpersonal interactions with co-workers.

**Team Climate**

Team climate describes the shared perception of the way things are going, and how things are done, in teams (Reichers & Schneider, 1990). In theory, it should be an ambient factor that pervades the team as a whole, although some scholars have argued that perceived team climate, as a discretionary factor that only affects individuals, could reflect individuals’ cognitive interpretation of the team environment (e.g., Scott & Bruce, 1994). Consequently, we include team climate as both an ambient and discretionary factor in this review.

**Proactive behaviour-related climates** - including initiative climate (Baer & Frese, 2002; Raub & Liao, 2012), voice climate (Morrison, Wheeler-Smith, & Kamdar, 2011), and innovation climate (Morrison & Phelps, 1999) - describe the perception of whether proactive
behaviour is encouraged, safe, and supported in the team\(^5\). Correlations of these climates with individual proactive behaviour ranges from \(-.01^6\) (Chen & Hou, 2016) to \(.34\) (Montani, Odoardi, & Battistelli, 2014). In the two studies with team-level proactive behaviour as the outcome, the correlations were \(.30\) (Frazier & Bowler, 2015) and \(.37\) (Raub & Liao, 2012).

“Can do” and “reason to” motivational states were the main mediators of the effects of proactive behaviour-related climates. For instance, Hong et al. (2016)\(^7\) argued that an initiative climate would increase RBSE, intrinsic motivation, and positive affect, because it provides employees with the support to be proactive, encourages and signals the importance of their discretionary behaviour, and shows that management trusts their decision-making skills. But, as we mentioned above, only RBSE was a significant mediator. Choi (2007) found that discretionary innovation climate influences individual proactive behaviour through both felt responsibility for change (“reason to”) and psychological empowerment, because it reflects employees’ perception that changes are supported and encouraged. Similarly, ambient innovation climate has a top-down effect on individual proactive behaviour through both team felt responsibility for change (“reason to”) and psychological empowerment of the team, because it reflects the collective perception that employees are protected and supported by the organization to make changes (Choi, 2007).

Some scholars have focused on climates that are not directly related to proactive behaviour yet have found that these climates have a positive effect. Axtell et al. (2000) found that perceived psychological safety climate increases innovative behaviour, because it signals that there is a low risk in taking the initiative. Wallace, Butts, Johnson, Stevens, and Smith (2016) found that an ambient involvement climate (described as a climate in which the team encourages employee commitment by sharing information and power, encouraging self-}

\(^5\) Voice climate also includes the shared belief that the team could voice effectively (Morrison et al., 2011).
\(^6\) This is a correlation between perceived innovation climate and voice, and is not significant.
\(^7\) Hong and colleagues examined the effect of department-level climate. But since they treated the department level as being only one level above the individual level, we include this study here about team-level climates.
development, and rewarding contributions), through satisfying individuals’ basic psychological needs, improves their thriving and hence their innovative behaviour. These two studies, respectively, suggest that “can do” and “energized to” motivational states serve as mediators. Finally, Lin and Leung (2014) found that an ambient procedural justice climate increase team identification, because it signals that the team is respected and valued, and team identification (“reason to”), in turn, motivates employees to engage into innovative behaviour. These correlations with individual proactivity range from .05 to .19.

**Interpersonal Interactions with Co-workers**

As well as how employees perceive their team environment, as captured by team climate, how members interact with each other in the team also has a great influence on their individual behaviours (Chen & Kanfer, 2006; Chiaburu & Harrison, 2008). During these interactions, members collect information, exchange resources, and alter their behaviours according to the feedback they receive.

There is a body of strong evidence proposing that favorable interaction with co-workers prompts both individual and team proactive behaviour. The correlation of this factor with individual proactivity ranges from .01 to .44; the correlation with team proactivity ranges from .44 to .80. For example, as a discretionary input, the perceived trust gained from co-workers motivates individuals to take the risk to set and strive for broader goals than their prescribed job requirements, as described by a flexible role orientation (“reason to”), which in turn improves their proactive behaviour (Parker et al., 2006). In a similar vein, the perception of co-worker support for safety motivates individuals to reciprocate with a more frequent voice concerning safety (Tucker et al., 2008). At the team level, when team members treat each other with respect and trust, as depicted by favorable interpersonal norms, the team is likely to engage in the collective proactive behaviour, arguably because of the low perceived risk and high perceived favorability of initiating changes (Williams et al.,
Brav, Andersson, and Lantz (2009) found that team cooperation increases team proactive behaviour because it encourages team members to take on minor dissent to initiate changes. Team support also increases team proactive behaviour because it encourages risk-taking behaviours. These authors examined the possibility that team reflexivity, a cognitive factor describing team members collectively reflecting upon and adapting their objectives, strategies, processes, and wider objects (West, Hirst, Richter, & Shipton, 2004), could increase team proactive behaviour because it helps team members to engage in constructive criticism, through which they could take specific initiatives to work on. However, for reflectivity, they did not find any significant effect, admitting that their measure of reflectivity might be problematic, and encouraging more studies on this factor.

By way of contrast, team conflict, an important team variable in team-level research (Mathieu, Maynard, Rapp, & Gilson, 2008), was found to be negatively related to proactive behaviour. The correlation with individual proactivity ranges from -.14 to -.05. Chen et al. (2011) treated relationship conflict as a demotivating force for the team and argued that it has a negative effect on individual innovative behaviour through affective commitment (“reason to”) and psychological empowerment (“other”). In Chen’s (2011) first study, this proposition was supported. However, in the second, neither mediation path was significant. This might be because the effects are dependent on empowering leadership (Chen et al., 2011). Interestingly, and contrary to Chen et al., Schraub et al. (2014) found that team task conflict, rather than team relationship conflict, had a negative top-down effect on individual personal initiative through affective job-related well-being (“energized to”). They argued that this is because of the high correlation between these two types of conflicts. More studies are needed to fully understand the role of conflict.

It is also worth noting that Scott and Bruce (1994) did not find a significant correlation between individual innovative behaviour and team-member exchange (TMX), a
similar concept to leader-member exchange that describes high-quality relationships with co-workers. The authors suggested that task interdependence might be a moderator.

Unfortunately, this idea has not been examined further.

**Other Team-Related Factors**

From our review, we identified three studies pointing to other team-related factors. Liu et al. (2015) focused on co-workers’ mood ($r = .38 & .15$). Using the affect-as-social-information model (Van Kleef et al., 2010), they found that a co-worker’s positive mood could increase an individual’s voice towards the co-worker, because it signals that this co-worker is likely to accept and welcome suggestions, as reflected in the individual’s high psychological safety (“can do”). Choi (2007) focused on the team’s vision, or a general transcendent ideal that represents shared values (Kirkpatrick & Locke, 1996). Perceived team vision affects individual proactive behaviour through the individuals’ felt responsibility for change (“reason to”) and psychological empowerment (“other”) because individuals link their own goals and values to the shared ones ($r = .29$). Similarly, shared team vision was found to affect the team’s felt responsibility for change (“reason to”) and psychological empowerment (“other”). These two studies again demonstrate that proactive motivation explains why team factors shape individual proactivity.

Hoch (2013) focused on team members’ dispositional trustworthiness and reliability, captured by team member integrity ($r = .37$). The author found that high team member integrity, as an ambient input, increased the team’s shared leadership, including collaborative decision-making, mutual support and information sharing, and the shared responsibility for outcomes. Shared leadership leads team members to share their ideas, building on each other, identifying a common vision, and supporting each other to realize the vision. As a result, members were found to be highly engaged in the innovative behaviour.
Last, social network researchers found that employees’ network attributes could influence their proactivity. Venkataramani and Tangirala (2010) found that employees with high **workflow centrality** are likely to perform voice behaviour, because of high perceived influence ($r = .28$). Donati, Zappalà, and González-Romá (2016) found that teams with high **friendship network density** are more likely to actively communicate feeling, meanings, and ideas with each other, as described by high **communication network density**. Such high-quality communication is helpful for employee innovative behaviour.

**Summary**

Figure 3 provides a summary of these findings. Scholars have mainly focused on the effects of team climate and interactions with co-workers in teams, showing that individuals engage in proactive behaviours when there is a positive climate and when interpersonal interactions are favorable. Our review shows mostly positive effects of these social factors, with just a couple of exceptions, including an insignificant correlation between TMX and individual innovative behaviour, and somewhat inconsistent evidence about the effects of team conflict. There are also reasonably large ranges in correlations, such as the link between proactive behaviour-related climates and individual proactive behaviour (ranging from $r = -.01$ to $r = .34$), which suggests that there are likely to be moderators of some relationships. Overall though, because most team-related factors (e.g., involvement climate, perceived co-worker support) have received attention only in a few studies, it’s not possible to make any firm conclusions about the size of these factors’ correlation with proactive behaviour.

There is clear evidence that proactive motivation variables mediate the effects of team-related factors on proactive behaviour, especially “can do” and “reason to” motivational states, with one study finding that “energized to” states also serve as mediators (Schraub et al., 2014). Work engagement, psychological empowerment, thriving and perceived influence
were also found to explain the effects of team-related factors, which further suggests the mediating role of proactive motivation.

Finally, several studies have focused on the role of ambient team-related factors, indicating ambient social inputs affect both team and individual proactive behaviour. Interestingly, Choi (2007) showed that the team-level path to individual proactive behaviour is similar to the individual-level one, which is consistent with Chen and Kanfer’s (2006) idea that, across the team and individual levels, motivational states have similar functions.

**Organization-Related Factors as Predictors to Proactive Behaviour**

22 studies about organization-related factors were found. Scholars have mainly focused on top management openness, perceived organization support (POS), organization climate, and workplace relational experiences as organization-related predictors for proactive behaviour.

**Top Management Openness and Perceived Organization Support**

*Top management openness* describes how much individuals perceive that top management encourages and welcomes the suggestions and comments below (Morrison & Phelps, 1999). Its correlation with individual proactive behaviour is quite varied, ranging from -.04 (Premeaux & Bedeian, 2003) to .29 (Morrison & Phelps, 1999). Ashford, Rothbard, Piderit, and Dutton, (1998) found that this factor is positively related to individuals’ willingness to promote gender-related issues, because it increases individuals’ confidence in making the change happen, as depicted by the perceived probability of success (“can do”). Adopting a similar logic, Morrison and Phelps (1999) found top management openness to be positively related to taking charge because it indicates a low risk of and high support for initiating changes (“can do”).

*Perceived organization support (POS)* describes the individual perception that the organization values employees’ contributions and cares about their well-being (Eisenberger,
Armeli, Rexwinkel, Lynch, & Rhoades, 2001). Its correlation with individual proactive behaviour ranges from .03 (Farh, Hackett, & Liang, 2007) to .15 (Caesens, Marique, Hanin, & Stinglhamber, 2016). As to how POS might affect proactive behaviour, there is some evidence that it shapes “can do” motivation. First, Ashford et al. (1998) found that POS increases individuals’ willingness to sell issues by enhancing the perceived probability of achieving success in such an activity and lowering related image risk. Second, Yuan and Woodman (2010) found that POS affects individuals’ innovative behaviour through expected image risk and image gain (note that as we mentioned above, expected image gain had a negative effect on individual innovative behaviour). “Reason to” motivational states are also potential mediators. For instance, Caesens et al. (2016) found receiving support from the organization would make individuals feel that they have the obligation to reciprocate by performing the proactive behaviour. They also found that POS could affect individuals’ work engagement, which, as Parker and Griffin (2011) argued, could provide the “energized to” motivation to perform proactivity.

Two other studies deserve specific attention. First, Burnett, Chiaburu, Shapiro, and Li (2015) argued that the relationship between POS and taking charge is not linear. Based on social exchange theory (Blau, 1964), POS increases individuals’ taking charge through generating a sense of reciprocity and positive affect. On the other hand, according to the threat-to-self-esteem model (Fisher, Nadler, & Whitcher-Alagna, 1982), when support is overly abundant, individuals are likely to feel that they are not trusted to fulfill their tasks without help. Integrating these two perspectives, Burnett et al. (2015) proposed that, at a low level of POS, individuals are not motivated to be proactive and at a high level, they would be inept when taking charge. At a moderate level of support, individuals should thus perform most proactively. These results support “too-much-of-a-good-thing” reasoning, showing an inverted U-shape relationship between POS and taking charge.
Second, in a study of junior doctors, Parker, Johnson, Collins, and Nguyen (2013) focused on the actual support individuals received, namely structural support (in the form of an advanced practice nurse on shift), rather than perceptions of support. They argued that the traditional focus on perceived support makes the causal effects of support less clear because individuals who need support might be more likely to seek out, or make use, of support. Using a within-person quasi-experiment, they found that, compared with a condition without structural support, in the intervention condition with structural support, junior doctors reported significantly more proactive work behaviour. Moreover, they found that only those doctors with a low negative affect had a boost in their proactivity as a result of the intervention. The authors reasoned that this occurred because these individuals have sufficient resources to make use of the structural support to enhance their proactive behaviour. On the other hand, doctors with a high negative affect benefited from structural support in terms of a reduced workload, consistent with the idea that these more stressed doctors are likely to use the support provided to protect future loss rather than being proactive.

**Organization Climate**

Organization climate describes whether a behaviour is encouraged and supported in the organization. It is different from team climate in that it describes the perception of the broader organizational context. Scholars have mainly focused on individual perceptions of the climate, which reflect individuals’ cognitive representations of the organization environment (Scott & Bruce, 1994). Its correlation with individual proactive behaviour ranges from .00 (Kang, Matusik, Kim, & Phillipps, 2016) to .20 (Eldor & Harpaz, 2016).

---

8Caesens et al. (2016) examined whether there is a reciprocal prelateship between POS and proactive behaviour. They found that only Time 1 POS predicts Time 2 proactivity, but Time 2 proactivity could not predict Time 1 POS.
Various proactive behaviour-oriented organizational climates have been shown to facilitate proactive behaviour, with proactive motivations appearing to be the key mechanisms. For example, Ashford et al. (1998) found that an organization norm that favors issue selling behaviour has a positive effect on individuals’ willingness to sell a gender-equality issue, because it reduces the perceived risk that how he or she is seen by others would be negatively affected (“can do”). The mediation effects of hot “energized to” motivational states were also examined. Madrid, Patterson, Birdi, Leiva, and Kausel (2014) investigated within-individual differences across weeks and proposed—but did not find—that a weekly positive mood (“energized to”) is a mediator of the link between the perceived innovation climate and weekly innovative behaviour (we discuss this study further in the section on interaction effects). Kang et al. (2016) collected a matched sample of managers and their CEOs. They found that managers in high organization innovation climate (manager reports of the innovation climate aggregated to the organizational level) develop a high passion for innovation through identifying with and internalizing the innovation vision. This passion (“energized to”) then predicted innovative behaviour rated by CEOs.

**Workplace Interpersonal Interactions**

Scholars have also been interested in the interpersonal interactions in the workplace, beyond those with team-mates and leaders. **Favorable workplace interactions** were found to have positive effects on individual proactive behaviour, mainly through “can do” motivational states. Its correlation with individual proactivity ranges from .01 to .57. For example, Ashford et al. (1998) found that a high quality of relationship with the person/s to whom individuals sell an issue (usually top management) could increase their perception of the probability of selling success and lower their expected image risk so that they show a high willingness to sell issues. Ng and Lucianetti (2016) found that individuals’ self-efficacy increases because of their trust in the organization and perceived respect from colleagues.
With high self-efficacy, they are more likely to engage in the innovative behaviour. Vinarski-Peretz, Binyamin, and Carmeli (2011) found individuals are likely to affectively commit to their organizations when they have favorable relationship experiences, characterized by positive regard, mutuality, and relational vitality, with their colleagues. This commitment (“reason to”) encourages them to perform the innovative behaviour.

Wu, Liu, Kwan, and Lee (2016) focused on a negative factor: workplace ostracism \((r = -.37 \text{ to } -.07)\). Based on social identification theory (Ashforth & Mael, 1989), they argued that when individuals perceived that they are ostracized, they feel that they are different from, unaccepted by, and not valued by others, so that they develop a low level of identification with the organization (“reason to”), which in turn decreases their motivation to be proactive. Of note, they found that this mediation exists even after controlling for other possible mechanisms (felt obligation, OBSE, and job engagement). Perceived organization politics (another negative organization-related factor describing the perception that the workplaces are characterized by staff’s self-serving intentions) was negatively related to individual proactive behaviour \((r = -.24, \text{Yang, 2017})\), with “can do” motivation, i.e., psychological safety, as the mediator \((r = -.31, \text{Li, Wu, Liu, Kwan, & Liu, 2014})\): the greater the perceived politics, the more unsafe individuals felt about being proactive.

**Summary**

We summarize the findings in Figure 4. Research to date shows that individuals are likely to engage in proactive behaviours when top management has a positive attitude towards changes, the organization cares about them, the environment encourages proactive behaviour, and colleagues interact with them in a positive way. But too much of a good thing can be a bad thing: POS was found to have a curvilinear effect on taking charge (Burnett et al., 2015). As with leader and team factors, there are also negative organizational factors (ostracism and perceived politics) that reduce proactive behaviours. With respect to
mediation, there is good evidence for “can do”, “reason to” and “energized to” motivational states as explaining the links between organization-related factors and proactive behaviour.

Importantly, though, overall the correlations between organization-related factors and individual proactive behaviour are not very high, perhaps because - compared with leader- and team-related ones – these factors are more distal to individual behaviour. The large range and low correlations also suggest possible moderation effects, especially of the effects of top management openness. Finally, with just one exception (Kang et al., 2016), the studies about organization-related factors focus on individual perceptions, so they examine the individual-level paths. As a result, although these factors describe organizational characteristics, we do not know how proactive behaviour unfolds at the level of the organization as a result of social context factors.

**Interaction Effects of Social Context Factors**

Scholars have examined the interaction effects among social context factors and between social context factors and individual attributes (e.g., personality, motivation) as well as job characteristics. These studies support the idea that the social context conditions the relationships among other factors, and that, as we mentioned above, there are moderators on the relationship between social context factors and proactive behaviour.

We organize the findings based on the motivational fit perspective (Chen & Kanfer, 2006). The core idea of this perspective is that “individuals who are predisposed to being motivated (e.g., have higher levels of achievement motivation) are unlikely to be motivated in situations that do not allow them to express their motivational tendencies” (Chen & Kanfer, 2006, p. 255). That is, motivational inputs from personal and contextual factors should exert stronger influences when they function in a consistent way (Chen et al., 2011). For example, enriched job characteristics have stronger effects on those with a high (vs low) need for growth (Hackman & Oldham, 1976); and LMX has a stronger effect on individual
psychological empowerment when the ambient empowering leadership is high (vs low) (Chen, Kirkman, Kanfer, Allen, & Rosen, 2007). Accordingly, social context factors should have stronger effects on proactive behaviour when there is a “fit” with individual attributes and contextual factors, but weaker effects when there is a “misfit” with these factors.

**Interactions with Individual Attributes**

Taking a person-environment interactionist perspective, Parker et al. (2010) proposed that individual attributes interact with situational factors to affect proactive motivations and the proactive behaviour process. They specifically drew on trait activation theory (Tett & Burnett, 2003), which proposes that individual personalities have a stronger effect when there are similar cues in the context. This theory could be treated as a specific example of the motivational fit perspective and has received much support. For example, Griffin et al. (2010) found that the perceived leader vision positively interacts with RBSE to affect proactive behaviour because only those with high RBSE would take the challenge to create changes. Based on the regulatory fit perspective, Wallace et al. (2013) found that an ambient involvement climate positively interacts with an individual promotion focus to affect thriving and so proactive behaviour, because a high promotion focus could enable individuals to better utilize such an involvement climate. Based on the cognitive appraisal theory, Madrid et al. (2014) argued that because the goal presented by an innovative climate fits the values, beliefs, and commitments underlying an openness to change, individuals with a high openness to experience would appraise this innovative climate more positively. The authors found results consistent with this reasoning.

Consistent with the motivational fit perspective, scholars have also found that when social context factors and individual attributes do not fit each other, they have negative interaction effects. For example, power distance was found to be negatively related to proactive behaviour, because those with a high power distance perceive a low likelihood that
things will change even if they take the initiative (Wei, Zhang, & Chen, 2015). Farh et al. (2007) and Wei et al. (2015) found that power distance negatively interacts with POS and supervisor delegation to affect individual proactive behaviour. Besides, Chen and Aryee (2007) found that in a sample of Chinese employees, traditionality buffers the effect of delegation on individual innovative behaviour through OBSE and perceived insider status, because highly traditional Chinese employees are likely to accept status differences and act as subordinates when this is their allocated role.

However, other studies showed that sometimes either elements in the social context or in individual attributes are so strong that one may overpower the influence of the other. For example, Lam and Mayer (2014) found that when the ambient service climate is high, the effect of customer orientation on voice is insignificant, because the climate provides strong cues to individuals to do the best to serve customers so that all individuals, despite different level of customer orientation, would perform voice behaviour. Li et al. (2013) found that when team identification, proactive personality, and learning goal orientation are high, the effect of transformational leadership on proactive behaviour becomes insignificant. They argued that this is because these variables substitute for the functions provided by transformational leadership. These studies thus challenge the motivational fit perspective.

**Interaction with Contextual Factors**

The motivational fit perspective has received some support from the studies about the interaction among contextual factors: those with inconsistent motivational effects buffer each other, and with consistent effects enhance each other. For example, Chen et al. (2011) found that team conflict negatively interacted with empowering leadership to influence innovative behaviour through psychological empowerment and affective commitment. Leung et al., (2011) found that when perceived support for innovation is high, the U-shape relationship

---

9 This moderated mediation effect was only significant in Chen et al.’s (2011) Study 1.
between role stress and innovative behaviour does not exist, because the support assists individuals to deal with the negative effect of role stress. Gao, Janssen, and Shi (2011) found that empowering leadership enhances the effect of trust in the leader on voice, because empowering leadership invites and encourages individuals to translate their trust into suggestion making behaviours.

At the same time, there are serious challenges to the motivational perspective, suggesting complexity. Thus, some studies have shown that contextual factors that are consistent in their motivational effects buffer each other. For example, Hong et al. (2016) proposed that an initiative-enhanced human resource management system (which describes the organization’s priority towards initiative among employees) would enhance the effect of the ambient empowering leadership on the team’s initiative climate, which, in turn, affects individual proactive behaviour. This is because: (1) such a system attracts, selects, and retains individuals who are ready to be proactive and should be more responsive to an empowering leadership; (2) the consistency between such a system and an empowering leadership could have a synergistic effect on the formation of the initiative climate. However, the results showed a substitution effect. The authors explained that the system has already set strong and clear signals to individuals related to being proactive and thus makes an empowering leadership less necessary, which contrasts with the proposition offered by the motivational fit perspective. In addition, Liu et al. (2015) found that co-worker exchange and the relative status between the individual and the co-worker could buffer the effect of the co-worker’s mood on the individual’s psychological safety, because a high co-worker exchange would reduce the need to monitor the co-worker’s mood and a relatively high status would lower the motivation to pay attention to the social cues. Lam and Myer (2014) found that when the ambient service climate is high, the effect of job autonomy on individual voice becomes insignificant because the climate has provided strong cues for individuals.
Summary

Overall, there is certainly good evidence for the motivational fit perspective on how social context factors interact with individual differences and with context factors. But there are also contrary effects, suggesting that there are moderators on the effect of motivational fit. For example, Den Hartog and Belschak (2012) showed a three-way interaction effect among perceived transformational leadership, RBSE, and job autonomy on individual proactive behaviour. The authors explained that when job autonomy is low, individuals with high RBSE make use of clear mastery cues to show initiative, making leadership less salient. When job autonomy is high, such cues are absent. As a result, only those with high RBSE could thrive on transformational leaders’ high expectations, ambitious vision, and encouragement for extra efforts. In other words, when job autonomy is high, there is a motivational fit effect between transformational leadership and RBSE; but when job autonomy is low, the effect goes in the opposite direction.

Another example is Takeuchi, Chen, and Cheung's (2012) study, which showed a three-way interaction effect among perceived interpersonal justice, perceived procedural justice, and perceived distributive justice on individual voice. They argued that perceived interpersonal justice provides the interpersonal cues to manage the uncertainty to speak up, and perceived procedure justice provides structure-related cues. According to the elaboration likelihood model (Petty & Cacioppo, 1986), when perceived distributive justice is high, individuals do not worry about their material outcomes, and thus tend to use either interpersonal or procedural justice as the heuristic to manage uncertainty; but when perceived distributive justice is low, individuals perceive that their material outcomes are at risk, and thus try to scrutinize all possible information. In other words, when perceived distributive justice is high, there is a strong challenge to the motivational fit effect; when perceived distributive justice low, the challenge becomes weaker.
Discussion and Future Directions

We have provided a comprehensive review of a purposive sample of 152 studies focusing on the relationship between the social context and proactive behaviour. The findings from several different social factors, and multiple forms of proactive behaviour, are synthesized into one model (Figure 5). As this model depicts, scholars have mostly focused on leader-related factors as the social antecedents to proactive behaviour, with some attention to the effects of team-related factors and relatively little attention to organization-related factors. Overall, irrespective of the form of proactive behaviour, there is good evidence that leaders’ positive behaviours, favorable team and organization climates, perceived top management openness and support from the organization, and high-quality interaction experiences with colleagues increase individual and team proactive behaviour. Comparatively fewer studies have examined when the social context becomes an obstacle for proactive behaviour, although there is some evidence of the “dark” side of leader-related factors (leaders’ abusive supervision, undermining, verbal aggression, observational monitoring, and arrogance behaviours and narcissistic personality), team-related factors (LMX differentiation in teams, team conflicts) and organizational factors (workplace ostracism, and perceived organization politics).

Importantly, proactive motivational states, which we have identified as “reason to” (e.g., intrinsic motivation), “can do” (e.g., RBSE), and “energized to” (e.g., positive affect) motivational states, were found to be key mechanisms explaining why the social context affects proactivity. As to “reason to” motivational states, consistent with the propositions by Parker et al. (2010) and Strauss and Parker (2014), the research has mostly focused on more self-determined forms of motivation, such as intrinsic motivation (Tu & Lu, 2013), autonomous motivation (Wu & Parker, 2017), identification (Liu et al., 2010), and affective commitment (Chen et al., 2011). We are somewhat surprised to find that the motivation to
reciprocate (e.g., Caesens et al., 2016), which is a less self-determined motivation, was identified to be a mediator; a point we return to later. As to “can do” motivational states, self-efficacy perceptions, such as RBSE (Wu & Parker, 2017), perceived risk of being proactive, such as expected image gain and risk (Yuan & Woodman, 2010), and perceived probability of success (Ashford et al., 1998) were identified as mediators. Comparably fewer studies have examined “energized to” motivational states as the mediators, so we have a more limited understanding of how individuals’ “hot” affective motivational states could explain the relationship between social context factors and proactivity.

Scholars have identified some mediators that could not be directly classified into any of these three categories, including psychological empowerment, work engagement, thriving, and judgment of self-worth in the workplaces (i.e., OBSE, perceived influence, and perceived status). To explain why these variables operate as mediators, researchers have turned to consider their motivational function. From this perspective, these factors still suggest the mediation roles of proactive motivation. For example, one reason why work engagement influences proactive behaviour is that it is argued to increase positive affect, an “energized to” state (Schmitt et al., 2006). Similarly, perceived influence affects proactive behaviour because it makes individuals feel that they have the responsibility to (“reason to”) and capability to (“can do”) take initiatives (Tangirala & Ramanujam, 2012).

As to the effect sizes of the impact of social context factors on proactive behaviour, due to the narrative nature of the current review and the fact that some factors, such as perceived organization politics and TMX, have not received much attention, we are not able to come to a clear conclusion about which factor is more important than others. Even so, from our observation of the correlations mentioned in the current review, leader- and team-related factors seem to have slightly stronger effects than organization-related factors, although, in their meta-analysis of voice, Chiaburu et al. (2013) concluded that the effects of positive
leader-, team-, and organization-related factors do not differ statistically. Since many studies have emerged after their paper, we encourage an expanded meta-analysis to identify whether there are differences in the sizes of social context factors’ effects on proactive behaviour. Also, because we found that mainly proactive motivations were identified as the mediators and Chiaburu et al. called for more attention to the underlying mechanisms in the relationship between the social context and proactive behaviour, it would be interesting to meta-analytically examine the mediation paths.

Another finding from our observation of the correlations is that the ranges of the effect sizes of social context factors are usually large. For example, the correlation between transformational leadership and individual proactive behaviour ranges from .06 to .51 in the identified papers. We think this suggests that there are significant moderators of the relationship between the social context and proactive behaviour. Scholars have examined the interaction effects between social context factors and individual attributes as well as contextual factors. The results show inconsistent support for the motivational fit perspective that when two stimuli have consistent motivational patterns, they enhance each other’s effect. We elaborate on this topic shortly.

Finally, scholars have mainly focused on the effects of discretionary factors and given comparably less attention to ambient factors, as evidenced by the numbers of Paths A, B, and C in Figure 5. Context exists at multiple levels (Bamberger, 2008; Kozlowski & Klein, 2000; Johns, 2006), so proactivity might develop at different levels of social context in the organizations. Thus, the lack of focus on ambient social context factors is problematic, at least from two aspects. First, most discretionary factors are about individual perceptions of the social context. This leads to some confusion about whether it is the way individuals cognitively perceive their social context or the actual social context itself that affects proactive behaviour. By including ambient factors into the model could help us better clarity
this theoretical issue. Also, as Parker et al. (2013) pointed out, those who need resources to make changes would actively seek them, thus making the causality of the relationship between the perceptions and proactive behaviour unclear. Second, some social aspects of the context are collective, so they cannot be captured by discretionary factors, or at least their meanings change when conceptualized as discretionary factors. For example, team climate, as an ambient factor, reflects the shared perception of the appropriate behaviours in the teams, but perceived climate, as a discretionary factor, only reflects individuals’ cognitive representation of the team environment. Thus, ambient social context factors deserve more attention.

The existing studies about ambient social context factors have shown that they influence individual proactive behaviour through proactive motivation, similar to discretionary social context factors, as depicted by Path B in Figure 5, although this observation needs more examination. Only a few studies have examined Path C, which is about the mediating role of team-level factors. The small number of studies about Path C2 shows that our understanding about the effect of social context factors on proactive team behaviour remains limited. More studies taking a multi-level perspective about the relationship between the social context and proactive behaviour are needed, otherwise, we may get an overly simplistic, and even biased, view about how proactive behaviour unfolds in the social context.

With these findings, this review could contribute to the existing literature in several ways. First, we integrate different social context factors and proactive behaviours into our review. Such a comprehensive approach helps us go beyond previous reviews to summarize that despite different concepts, the existing research got similar findings that social context factors influence proactive behaviours through proactive motivational states. Second, we take the level of the social context factors into consideration. While previous reviews largely
neglect this issue, our review shows that the at different levels the relationships seem to be homologous and future studies should more examine the similarities and differences. Third, we summarize the identified mediation mechanisms. As Chiaburu et al. (2013) proposed, future studies should more focus on why social context influences proactive behaviours. As we reveal, the proactive motivation model has received great support, but some mediators beyond the three typical proactive motivational states were also found. This finding could encourage and guide future mediation examinations.

Our findings also contain important practical implications for practitioners. First, we reveal that there are powerful tools to enhance proactive behaviour, such as to adopt a transformational leadership style (Chen et al., 2013), cultivate an innovation climate (Choi, 2007) and improve interpersonal workplace experiences (Vinarski-Peretz et al., 2016). Second, we demonstrate that practitioners could adopt methods which correspond to specific needs. For example, for employees who lack “can do” motivational states, managers could create an initiative promoting climate (Hong et al., 2016). Third, we emphasize that social interventions are contingent on other factors. Thus, practitioners should take a comprehensive view of the individuals’ attributes, the social context, job characteristics and so on, to design effective methods to enhance proactive behaviour.

**Future Research Directions**

Based on the review, we identify twelve key research directions.

*Focus More on Factors Beyond Leader-Related Factors*

Team- and organization-related factors have not received as much attention as leader-related factors. Yet employees work within an organizational context, and often have more frequent interactions with their team members than with their leaders (Chiaburu & Harrison, 2008). We do not have sufficient understanding of, for example, how organization cultures (e.g., collectivism vs individualism), co-workers’ personalities (e.g., proactive personality),
or co-worker behaviours (e.g., mentoring, incivility) influence proactive behaviour. Further, organizations are embedded in a broader social context, which might impact proactive behaviour. For example, in high-tech industries where the pressure exists for innovation and initiative, and in countries that encourage risk-taking behaviours, employees might engage in a high level of proactive behaviour. A largely ignored social subject is the influence of customers, with whom employees might have intense interactions during their work, especially in service industries. Scholars have emphasized that employees should proactively improve their services to customers (e.g., Raub & Liao, 2012), but it would be interesting to look at the flipside: how do customers influence employees’ proactive behaviour (e.g., Yoo, 2017)? For example, would mistreatment by customers decrease individuals’ proactive behaviour or encourage their voice? In short, we recommend that researchers: consider, in greater depth, how social context factors beyond leader-related variables influence proactive behaviour.

Focus More on When the Social Context is an Obstacle for Proactive Behaviour

Existing studies have mainly honed in how the social context fosters proactive behaviour in the workplace, but have given much less attention to the “dark” side. Due to the negativity bias and the interpersonally risky nature of proactive behaviour, individuals might be especially sensitive to de-motivators in the social context. Despite some studies about how social context stifles proactivity, the ignorance of these negative factors risks undermining the influence of the social context, and misleads practitioners into not paying enough attention to the potential risks that diminish proactive behaviour. Moreover, Chen et al. (2011) argued that in reality individuals are exposed to both positive and negative factors simultaneously, so it is important to examine how they compete and interact to influence outcomes. For example, does a Machiavellian leader influence proactive behaviour positively or negatively? Does it buffer the effects of POS, or make it more salient? In sum, we
recommend further examination of the circumstances in which the social context is an obstacle for proactive behaviour.

Clarify the Distinctiveness of Different Social Context Factors

The large number of similar factors identified puts us at the risk of reinventing the wheel. For example, do transformational leadership and empowering leadership play different roles in shaping proactive behaviour? How about organization innovation climate and team innovation climate? Do trust in the organization and trust in co-workers influence proactive behaviour differently? We need more studies that consider several factors at once to ascertain their unique effects. For example, Parker et al. (2006) showed that perceived supportive supervision does not have a significant effect on proactive behaviour, but perceived co-worker trust does; Ashford et al. (1998) found that POS, issue selling norms, and relationship quality all influence the perceived risk to one’s image risk of selling issues, but these norms do not affect the perceived probability of the successful selling of these issues. In short, we recommend the scholarly comparison of the distinctiveness (e.g., relative effect sizes, unique mechanisms) of different social context factors.

Focus on “Energized to” States and Reconsider the Effect of the Reciprocity Motive

Overall, “energized to” motivational states have received less attention, which means that we have relatively little idea about whether and how the social context factors foster the “hot” affective states that drive proactive behaviour. The types of affective states should also be expanded. For example, can the social context affect one’s anger, frustration, fear, or enthusiasm, which are theoretically related to proactive behaviour (Bindl, Parker, Totterdell, & Hagger-Johnson, 2012; Lebel, 2016, 2017)?

Somewhat surprisingly, the motivation to reciprocate was shown to be a mediating mechanism between the social context and proactive behaviour. We think this idea needs more consideration. As the reactive aspect of reciprocity is inconsistent with the self-starting
nature of proactive behaviour (Spitzmuller & Van Dyne, 2013), proactive behaviour stimulated by social exchange might be unsustainable and of a low quality. It is also unclear why individuals choose interpersonally risky proactive behaviour rather than the safe affiliation behaviour for a reciprocal action. For example, Kalshoven et al. (2013) showed that perceived ethical leadership affected personal initiative through a social exchange process, but it is important to assess the longer-term sustainability of the exchange relationship. In short, we recommend further examination of the mediating role of “energized to” motivational states and social exchange motivations in the relationships between the social context and proactive behaviour.

Examine the Relationship between Proactive Motivation and “Other” Mediators

As discussed, scholars have identified other mediators, such as OBSE, psychological empowerment, and work engagement, beyond proactive motivation. However, they have mainly argued that these variables influence proactive behaviour due to their motivational functions. For example, Chen and Aryee (2007) proposed that individuals with high OBSE are motivated to prove their positive self-views. In other words, these individuals see taking risks as consistent with their values and goals (“reason to”). In addition, individuals with a high perceived status are motivated to take the responsibility to promote mutual future well-being through showing discretionary efforts (“reason to”). Studies are needed to examine whether they influence proactive behaviour through proactive motivation or have additive explanatory effects after controlling for proactive motivation. In short, we recommend investigation of the relationships between proactive motivations and other identified mediators in this review.

Examine the Mediation Effects of Cognition and Capacity Factors

As showed, existing studies mainly focused on psychological mechanisms as the mediators. But proactive behaviour entails cognitively projecting oneself into future events
and assessing possible outcomes (Wu, Parker, & de Jong, 2014). Accordingly, one’s cognition-related factors might also serve as mechanisms linking social factors with proactive behaviour. For example, since proactive behaviour entails envisioning a different future and transformational leadership inspires individuals to strive for a desirable vision, high work-based construal level might be a mediator between these two variables. In addition, individuals not only need to generate proactive goals to bring about changes but also need the relevant capacities to strive for these goals (Parker et al., 2010). In this sense, the various capabilities involved in proactive behaviour might also explain why the social context affects proactive behaviour. For example, Parker and Wu (2014) proposed that the capacities of long-term thinking and integrated understanding could mediate leaders’ effects on individual proactive behaviour. In short, we recommend exploration of the mediation effects of cognition and capacity factors to reveal the non-motivational effects of proactive behaviour.

Examine the Too-Much-of-a-Good (Bad)-Thing Effect

Burnett et al. (2015) found that POS has a curvilinear effect on taking charge because of two competing mechanisms: social exchange and the threat to self-esteem. We encourage scholars to pay more attention to the potentially negative mechanisms operating against the positive mechanism related to social context factors. For example, Den Hartog and Belschak (2017) argued that transformational leadership might stifle proactive behaviour, e.g., through building too much dependence. Similarly, the negative social context factors might not always be detrimental, e.g., perceived abusive supervision might motivate individuals to prove that the leader is wrong (Tepper et al., 2017). Indeed, researchers have argued that to be proactive, a certain level of dissatisfaction with the status quo is needed. In this sense, could there be an “optimal” level of negative social experiences? For example, could perceived abusive supervision have a curvilinear effect on individual proactive behaviour? In
short, we encourage scholars to examine whether social context factors have influences in opposite directions so that there are too-much-of-a-good(bad)-thing effects.

Examine the Distinct Explanatory Effects of Different Mediators

The large number of mediators is helpful to gain new insights into why social context matters. However, currently there lacks of the studies that brought different theoretical perspective together, preventing us from examining the relative explanatory power of each mediator and putting us at the risk of overstating the importance of a specific mechanism (Greer, De Jong, Schouten, & Dannals, 2018). For example, Strauss and Parker (2014) proposed that intrinsic and extrinsic forms of “reason to” states have different effects on proactive behaviour. The relative role of “reason to” and “can do” motivation is also interesting. On the one hand, Parker et al. (2010) argued that, based on construal level theory (Liberman & Trope, 1998), for distant proactive goals, “reason to” should be more important than “can do”. On the other hand, Chen et al. (2013), Hong et al. (2016), and Walumbwa and Hartnell (2011) consistently found that when putting “can do” and “reason to” motivational states together, only “can do” states are the significant mediator. This implies that the social context influences individual proactive behaviour more through the “can do” paradigm, which is consistent with the interpersonally risky nature of the proactive behaviour. We encourage scholars to replicate the findings, with different social context factors at different levels as predictors. In short, we recommend investigation of the distinct explanatory effects of different mediators.

Further Examine the Interaction Effects of Social Context Factors

Existing studies have produced contrasting evidence for the motivational fit perspective that social context factors enhance the effects of other factors that have consistent motivating functions and decrease the effects of other factors that have inconsistent motivating functions. One explanation is that there are other factors that could determine the
need for both or either motivator. In this case, researchers could rely on theories that describe individuals’ need to pay attention to the social context to examine under which circumstances the motivational fit effect would occur. For example, social information processing theory (Salancik & Pfeffer, 1978) proposes that high situational uncertainty increases individuals’ need for social information, resulting in the prediction that, when uncertainty is high, the motivational fit effect would happen.

Another possible explanation is that the motivational fit depends on the functions of the variables. For example, Wu and Li (2017) differentiated proactive behaviour-related personality traits into cognitive (e.g., need for cognition), affective (e.g., trait positive affect), instrumental (e.g., proactive personality), and interpersonal (e.g., attachment styles) ones. A social context providing different functions might enhance these traits’ effect (e.g., initiative climate and need for cognition) and, with schematically related cues, might activate corresponding traits (e.g., leader support and attachment styles, Wu & Parker, 2017). But a social context with similar functions to the traits might buffer the effect of these traits (e.g., transformational leadership and proactive personality, Li et al., 2013).

We acknowledge that these are preliminary explanations of when motivation fit effects happen, and when they do not. Our main aim is to encourage research into further examination of the interaction.

Focus More on Ambient Social Context Factors

Discretionary factors mainly describe individuals’ own experiences and how individuals perceive the social context and ambient factors capture the collective properties in the social context. Given the relatively less understanding of ambient factors, we encourage more relevant studies. Specifically, we encourage scholars to examine whether the relationship between the social context and proactive behaviour is homologous across the levels of the team and, where possible, the organization (Chen & Kanfer, 2006). Such studies
will help us gain insight into how the social context affects proactive team behaviour; a neglected topic. As Harris and Kirkman (2017) proposed, to deal with high uncertainty in workplaces (Griffin et al., 2007), teams need to be effective. Since proactive behaviour reflects person-environment interactions, the social context should have a significant effect on proactive team behaviour. We have little insight as to whether, how, and under which circumstances the social context affects proactive team behaviour.

To elaborate, researchers could examine if Paths C and A in Figure 5 are similar. Chen and Kanfer (2006) proposed that motivational states function similarly at the team and individual levels, thus we could expect that ambient social context factors influence proactive individual and team behaviour through similar mediators to discretionary ones. But at the same time, as Mathieu et al. (2008) have stated, at the team level there are some variables describing the processes and emergent states that do not exist at the individual level, such as the transactive memory system. In this case, ambient social context factors might have unique influences on proactive behaviour through these team processes and states.

To conduct such examinations, researchers should include multiple paths. For example, Tu and Lu (2013) investigated the effects of perceived individual and perceived team ethical leadership on individual innovative behaviour through intrinsic individual and team motivation (Paths A, B, and C1) and showed homologous effects at different levels. In the future, scholars should keep asking, for example, what is the difference between perceived transformational leadership and ambient transformational leadership? Are the effects of perceived climate and team climate similar? What are the unique team-level mediators? In short, we recommend more focus on ambient social context factors.

Examine Bottom-Up Effects of Proactivity on Context

As Bamberger (2008) suggested, it would be interesting to explore and explain the bottom-up processes—such as how discretionary social context factors affect proactive team
and organization behaviour. Specifically, Chen and Kanfer (2006) have proposed Path G through which the motivational states of the team and the individual might influence each other, and Path H wherein proactive individual behaviour might influence proactive team behaviour. For example, individuals confident in their abilities (self-efficacy, “can do”) will perform their roles well and also be confident in their teams’ capability (team efficacy, “can do”). In other words, “can do” related discretionary factors might shape proactive team behaviour via team efficacy (Path G). Also, Chen and Kanfer (2006) have described a social learning process (e.g., behaviour modeling, social contagion) through which individual behaviour contributes to collective actions (Chen et al., 2013), suggesting that discretionary factors could shape proactive team behaviour through proactive individual behaviour (Path H). However, until now, no studies have examined these two paths. We think this might be because of the lack of a relevant theoretical framework, thus we hope that we could encourage future studies. In short, we encourage scholars to examine the bottom-up effect of discretionary social context factors on proactive team behaviour.

Examine Organization-Level Paths

Organizations might have unique influences on proactive behaviour through their systems and structures, but this is largely unknown to us at this stage. As a high leverage for organizational success (Crant, 2000), proactive behaviour at the organization level should contain important meaning for organizations and is worth more attention. Moreover, examining organization-level paths gives us the opportunity to borrow insights from other fields to offer us “new ways of seeing” the effects of the social context. For example, in the industrial relations literature, Arthur and Aiman-Smith (2001) found that introducing a gainsharing plan could increase the number of suggestions that promote organizational learning. This implies that by changing the relationship between employees and the organization–obviously a social context factor – a gainsharing plan could increase
organization voice. In the international business literature, Newman and Nollen (1996) found that the congruence between management practices and the national culture would influence organization performance. In this case, we expect that the national culture, as a country-level social context factor, could have an indirect effect on proactive organization behaviour. In short, we recommend extending the scope of research to the organization-level path.

Treating Social Context Factors as Moderators and Outcomes

While in the current review we mainly focus on how social context shapes proactivity, as the proactive motivation model (Parker et al., 2010) proposed, proactivity could influence the context because it aims to affect and manipulate the environment. For example, it has been long argued that being proactive is risky because others might not welcome the initiated changes (Fay & Frese, 2001), but seldom have studies examined this idea. It would be interesting to see whether and how others react to the workplace proactivity – or say, how proactivity could shape the social context. Besides, proactive motivation model (Parker et al.) proposed that context conditions how proactivity translates into real changes. For example, a supportive environment might be helpful for proactive goal striving, but lack of opportunities might kill the efforts. Thus, it would also be interesting to examine how social context shapes the outcome of being proactive. In short, to extend our model (Figure 5), researchers in the future could more treat social context factors as the outcomes of proactivity and as the moderators on the proactivity process.

Conclusion

From an interactionist perspective, the social context plays a critical role in shaping proactive behaviour in workplaces. Our comprehensive review closes the gaps created by a disparate literature studying multiple social context factors and multiple proactive behaviours. We encourage scholars to further investigate the relationship between the social context and proactive behaviour, using the integrative model depicted in Figure 5. Most
importantly, we hope that, with this review, we encourage researchers to take the initiative to address these opportunities, thus creating a favourable social context for their research-related proactive behaviour!
Chapter 2 Figure 1. Findings of Social Context Factors as Antecedents of Proactive Behaviour
Chapter 2 Figure 2. Leader-related Factors and Proactivity

**Leadership Styles**
- **Ambient** Transformational, Empowering, Ethical etc.
- **Discretionary** Transformational, Empowering, Ethical, Abusive Supervision etc.

**Leader Behavior**
- **Ambient** Emotional management, Undermining
- **Discretionary** Support, verbal aggression etc.

**Relationship with Leader**
- **Ambient** LMX differentiation
- **Discretionary** LMX, Guanxi etc.

**Others**
- **Ambient** Authentic personality, Narcissism, Self-efficacy
- **Discretionary** Openness to change, affect, job embeddedness

**Team Motivation**
- Team Intrinsic Motivation,
- Team Psychological Safety,
- Team Psychological Empowerment

**Individual Motivation**
**Reason to:** Intrinsic Motivation, Identification, Role Perception, Affective commitment, Motive to Reciprocate etc.

**Can do:** RBSE, Psychological Safety, expected image and performance gain

**Energized to:** Positive Affect, Psychological Well-being

**Others:** Work Engagement, Thriving, Perceived Status & Influence, OBSE, Psychological Empowerment

**Team Proactivity**
- Team Voice,
- Team General Proactivity

**Individual Proactivity**
- Taking Charge, Innovative Behavior, Voice, Problem Prevention, Feedback Seeking, I-deals, Personal Initiative, General Proactivity,
Chapter 2 Figure 3. Team-related Factors and Proactivity

**Team Climate**
- **Ambient** Innovative, Initiative, Voice, Involvement, Procedure, Justice
- **Discretionary** Innovative, Participative, Safety

**Interpersonal Interactions**
- **Ambient** Favorable
  - Interpersonal Norm, Cooperation, Support, Conflict
- **Discretionary** TMX, Trust, Support

**Others**
- **Ambient** Team Member
  - Integrity, Vision, Friendship & Communication Network
  - Density
- **Discretionary** Vision, Coworker’s Mood, Work Flow, Centrality

**Team Motivation**
- Team Felt Responsibility for Change, Team Psychological Empowerment

**Individual Motivation**
- **Reason to:** Flexible Role Orientation, Identification, Affective Commitment, Felt Obligation for Change
- **Can do:** RBSE, Psychological Safety
- **Energized to:** Affective Well-being
- **Others:** Work Engagement, Psychological Empowerment, Perceived Influence, Thriving

**Team Proactivity**
- Team Voice, Team Initiative, Team General Proactivity

**Individual Proactivity**
- Taking Charge, Innovative Behavior, Voice, Feedback Seeking, Personal Initiative, General Proactivity
Chapter 2 Figure 4. Organization-related Factors and Proactivity

**Top Management Openness**
- POS

**Organization Climate**
- Ambient Innovation
- Discretionary Innovation, Learning, Issue Selling Norm

**Interpersonal Interactions**
- Discretionary Subjective
  - Relational Experiences, Trust, Perceived Respect, Organization Politics, Ostracism

**Others**
- Discretionary Justice, Sparse Network

**Individual Motivation**
- **Reason to:** Organizational Identification, Affective Commitment, Felt Obligation to Reciprocate
- **Can do:** Self-efficacy, Psychological Safety, Perceived Probability of Success, Expected Image Risk & Gain,
- **Energized to:** Passion, Positive Mood
- **Others:** Work Engagement

**Individual Proactivity**
- Taking Charge, Innovative Behavior, Voice, Issue Selling, Feedback Seeking, General Proactivity
Chapter 2 Figure 5. The Integrative Model Showing the Number of Studies for Each Key Pathway\textsuperscript{10}

<table>
<thead>
<tr>
<th>Social Context</th>
<th>Mediators</th>
<th>Team Proactive Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient Social Context</td>
<td>Individual Proactive Motivation</td>
<td>Team Proactive Behavior</td>
</tr>
<tr>
<td>Organization (e.g., innovative climate)</td>
<td>Can do (e.g., psychological safety)</td>
<td>Team proactivity</td>
</tr>
<tr>
<td>Leader (e.g., transformational leadership, undermining)</td>
<td>Reason to (e.g., intrinsic motivation)</td>
<td>Team voice</td>
</tr>
<tr>
<td>Team (e.g., initiative climate, role conflict)</td>
<td>Others</td>
<td>Team initiative</td>
</tr>
<tr>
<td></td>
<td>Psychological Empowerment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discretionary Social Context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization (e.g., POS)</td>
<td>Individual Proactive Motivation</td>
<td></td>
</tr>
<tr>
<td>Leader (e.g., LMX, perceived transformational leadership)</td>
<td>Can do (e.g., RBSE)</td>
<td></td>
</tr>
<tr>
<td>Team (e.g., perceived innovative climate, perceived coworker trust)</td>
<td>Reason to (e.g., intrinsic motivation)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Energized to (e.g., positive affect)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e.g., Psychological Empowerment</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interact with</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Attributes (e.g., RBSE, proactive personality, power distance)</td>
<td></td>
</tr>
<tr>
<td>Contextual Factors (e.g., job autonomy, initiative-enhanced HRM)</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{10} The numbers in each path sum up more than 141 because some studies examined more than one path.
Chapter 2 Appendix 1. List of Included Journals

1. Administrative Science Quarterly
2. Academy of Management Journal
3. British Journal of Management
4. European Journal of Work and Organizational Psychology
5. Human Relations
6. Human Resource Management
7. Journal of Applied Psychology
8. Journal of Business Ethics
9. Journal of Business and Psychology
10. Journal of Business Research
11. Journal of Business Venturing
12. Journal of International Business Studies
13. Journal of Management
14. Journal of Management Studies
15. Journal of Occupational and Organizational Psychology
16. Journal of Organizational Behaviour
17. Journal of Vocational Behaviour
18. Leadership Quarterly
19. Management and Organization Review
20. Organizational Behaviour and Human Decision Processes
21. Organizational Research Method
22. Organization Science
23. Personnel Psychology
24. Strategic Management Journal
Chapter 3 Foreword

Chapter 2 presented a comprehensive review of existing studies about how social context influences proactivity: social context serves as a direct predictor to proactivity and interacts with other variables, including individual attributes and contextual factors, to affect proactivity. Based on the findings, I, together with my co-authors, encouraged scholars to further unpack how proactivity unfolds in organizations through the multilevel processes (Chapter 2 Figure 5).

However, as Chapter 2 pointed out, it is largely unknown how proactivity shapes the social context, or say how others in the social context “react” to proactivity. Specifically, scholars have argued that being proactive might receive both social punishments and rewards, but this idea has not been examined. To further unpack what happens when proactivity meets interdependence, Chapter 3 aims to examine the relationship between co-worker proactivity and individual interpersonal behaviours.

In detail, based on the social comparison and personal identification theories, Chapter 3 reveals that individuals would respond to co-worker proactivity with social undermining, because of envy of the co-worker, and helping, because of personal identification with the co-worker. Furthermore, individuals’ proactive personality enhances the indirect effect through personal identification. Although their self-esteem is argued to buffer the indirect effect through envy, results do not support this idea.
The Social Paradox of Being Proactive:

Individual Helping and Social Undermining as Responses to Co-worker Proactivity

Zijun Cai\(^1\)*, Sharon K. Parker\(^2\), and Zhijun Chen\(^3\)

\(^1\)Business School, University of Western Australia, Australia

\(^2\)Center for Transformative Work Design, Future of Work Institute, Business School, Curtin University, Australia

\(^3\)School of International Business Administration, Shanghai University of Finance and Economics, China

*Corresponding author

Note: Chapter 3 is a manuscript that is under preparation for future submission to the Journal of Applied Psychology. I use “we” in this chapter, in respect for my coauthors. For my individual contribution, please see “Authorship Declaration”.

Abstract

Proactivity has long been argued to be a social process, but the idea has seldom been examined. Moreover, the existing literature emphasize too much that proactivity is interpersonally risky, but neglect that it might be rewarded by others. This paper thus examines the relationship between co-worker proactivity and individuals’ helping and social undermining behaviours. On one hand, we propose that co-worker proactivity is positively related to social undermining through envy, because of social comparison effect. On the other hand, co-worker proactivity is positively related to helping through personal identification, because of identification effect. Besides, since personalities influence how people react to the environmental cues, we propose that proactive personality enhances the identification effect and self-esteem buffers the social comparison effect. The results of one cross-sectional study and one scenario-based study showed support for all the hypotheses, except the one about self-esteem. This paper thus reveals a social paradox of being proactive: it contains both interpersonal risks and gains.

Keywords: proactivity; social process; helping; social undermining
The business environment has become increasingly uncertain (Crant, 2000; Griffin, Neal, & Parker, 2007), thus employees are expected to actively take the initiative to anticipate challenges and opportunities and act on them to make improvements. As a result, proactivity, the self-initiated behaviour to bring about future-focused changes (Parker & Collins, 2010), has received an increasing amount of attention. Researchers have argued that proactivity is a social process, due to the social risks that individuals might punish the proactive actors. As indirect evidence, scholars found that those proactive actors who take the shared goals into consideration (Parker, Wang, & Liao, 2019), calculate the potential cost (e.g., Yuan & Woodman, 2013), and seek support from as well as cooperate with others (e.g., Sun & van Emmerik, 2015) could achieve better outcomes. However, how and why individuals make punishments are still largely unknown (Weiss & Morrison, 2018).

Moreover, Grant and Ashford (2008) argued that “proactive behaviours that are perceived as mixed in their effects … may be linked to both rewards and punishments [italics added]” (p. 19). In other words, proactivity might not always be socially risky. Individuals are likely to reward the proactive actors, depending on how individuals process and construct the proactivity. There is preliminary evidence for the rewarding idea: McClean, Martin, Emich, and Woodruff (2017) and Weiss and Morrison (2018) both showed that voice is positively associated with ascribed status. However, it is not clear whether proactivity is linked to more direct rewarding behaviours, which are critical for the sustainability of proactivity (see Chapter 2), and when as well as how the rewarding behaviours happen.

The current study aims to examine the relationships between co-worker proactivity and individual helping as well as social undermining behaviours. We choose to focus on the interactions among peers because peers interact most frequently in the workplaces (Chiaburu & Harrison, 2008) and have significant influences on each other (e.g., Banks et al., 2014; Chiaburu et al., 2013; De Jong, Bijlsma-Frankema, & Cardinal, 2014). Social undermining is
chosen as the punishing behaviour because it directly hinders other’s success (Duffy, Ganster, & Pagon, 2002). Helping is chosen as the rewarding behaviour because it is beneficial for individual effectiveness and wellbeing. To note, these two behaviours do not necessarily exclude each other. The absence of undermining does not imply high helping, and similarly, the absence of helping does not imply high undermining. For example, Duffy et al. (2002) showed that both social undermining and social support could originate from the same person.

To examine these relationships has critical implications for researchers. First, modern workplaces are characterized by continuously unfolding interpersonal interactions (Grant & Parker, 2009). Without examining the social consequences, we are at the risk of treating the proactive actors as mere receipts of social influences and neglecting the effects individuals could have on proactive actors. Second, without examining the social risks of being proactive, the social process view of proactivity is largely based on a taken-for-granted assumption. In order to further investigate how proactivity unfolds in a social process, it is necessary to examine what social risks proactivity contain and when and why there are such risks. Third, ignoring the social benefits of being proactive risks biasing our understanding of proactivity – to overestimate the risks and mistakenly treat it as a purely risk-taking behaviour. To examine helping as the outcome of co-worker proactivity could provide a more comprehensive view of what happens when proactivity is initiated in the workplaces. For practitioners, to understand the social consequences of proactivity could prepare them for related system designs to make better use of the proactivity in the workplaces.

Specifically, this study unpacks the different psychological mechanism that leads to social undermining and helping behaviours. On one hand, because of social comparison (Festinger, 1954), individuals are likely to feel envy of the co-worker who performs proactivity (Smith & Kim, 2007), due to that proactivity implies that the co-worker has high
competence, positive vocational potential, and rich resources. This envious feeling would further encourage individuals to socially undermine the co-worker, to relieve the unpleasant and painful feeling (Duffy, Scott, Shaw, Tepper, & Aquino, 2012). On the other hand, co-worker proactivity would increase individuals’ personal identification with the co-worker, because it provides a positive role model about how to take primary control and conveys prosocial cues that could contribute to building a close relationship (Ashforth, Schinoff, & Rogers, 2016). To verify and enhance such a self-concept (Ashforth & Schinoff, 2016), individuals are likely to help the co-worker. In short, social comparison leads to “punishing” reaction, while personal identification leads to “rewarding” reaction.

To take a further step, since personalities determine how individuals process the information in the environment and react accordingly (Mischel & Shoda, 1995), self-esteem and proactive personality are proposed to be moderators. Since individuals with high self-esteem are less motivated to compare themselves with others in the workplaces (Gibbons & Buunk, 1999), they should be less likely to make “punishing” reactions – to socially undermine the proactive co-worker. Besides, since individuals with high proactive personality have more positive attitudes towards changes and are more willing to learn from others (Fuller et al., 2012; Williams, Parker, & Turner, 2010; Zhang et al., 2012), they are more likely to make “rewarding” reactions – to help the proactive co-worker.

In short, this paper depicts what might be referred to as a “social paradox” of being proactive: both punishing (i.e., social undermining) and rewarding (i.e., helping) behaviours are the interpersonal outcomes of being proactive. In the following, we first elaborate the punishing path, then the rewarding path.

**Co-worker Proactivity and Individual Social Undermining**

According to the social comparison theory (Buunk & Gibbons, 2007; Festinger, 1954), individuals are naturally inclined to search for self-related information in the
workplaces and compare themselves with others to estimate and understand their self-worth. Co-workers are usually the targets of such comparisons because they interact frequently with individuals, have similar status with individuals (Chiaburu & Harrison, 2008), and provide easily accessible information (Kulik & Ambrose, 1992). Co-worker proactivity is especially likely to attract individuals’ attention because it is easily observable (Grant & Ashford, 2008), deviates from the routines (Griffin et al., 2007), and, more importantly, contains information about the co-worker’s competence, future vocational status, and resources.

In detail, engaging in proactivity implies that the co-worker has high work-related competence (Weiss & Morrison, 2018). Proactivity deals with uncertainty and unpredictability in the workplace by going beyond formal instructions and prescribed requirements (Griffin et al., 2007). By actively identifying the opportunities and problems, imagining a better future, and striving for improvements (Parker et al., 2010), the co-worker shows that he/she has rich understandings of the job, deep insights into the situation, and a good mastery of necessary skills, which signal that the co-worker has strong work-related capabilities. For example, using meta-analyses, Tornau and Frese (2013) found that personal initiative is positively related with general mental ability and education level, two indicators of “general knowledge and skills (e.g., problem-solving skills)” (p. 55).

Besides, proactivity implies future vocational advancement. Dealing with the uncertainty through making changes, proactivity contributes to improving organizational functioning (Crant, 2000; Griffin et al., 2007; Lam & Mayer, 2014; Raub & Liao, 2012), and thus is likely to be valued and rewarded by the organization (Seibert, Kraimer, & Crant, 2001). Research has shown that being proactive improves individual performance (Crant, 1995), team performance (Frazier & Bowler, 2015; Li, Liao, Tangirala, & Firth, 2017), and organization competitiveness (Baer & Frese, 2002). As reciprocity, the organization is likely
to reward the proactive co-worker with vocational benefits, such as promotion opportunities (Seibert, Kraimer, & Crant, 2001).

Moreover, co-worker proactivity implies that the co-worker has rich work-related resources. On one hand, being proactive is highly resource-demanding (Parker et al., 2010). Since it focuses on improvements in the future, individuals are likely to interpret that this co-worker currently has a rich amount of resources – otherwise it is irrational for the co-worker to make such a resource investment (Hobfoll, Halbesleben, Neveu, & Westman, 2018). On the other hand, proactivity is likely to enrich future resources. For example, Cangiano, Parker, and Yeo (in press), who conducted a daily study, showed that proactivity increases vitality at the end of the day. Weiss and Morrison (2018) found that proactivity leads to a higher status. Ellis, Nifadkar, Bauer, and Erdogan (2017) showed that newcomer proactivity increases the amount of information provided by the leaders. Van den Heuvel, Demerouti, and Peeters (2015) showed that engaging in job crafting increases the leader-member exchange.

The sense of competence is a basic human need (Gagné & Deci, 2005). Vocational development plays critical roles in determining one’s life quality (Duffy, Blustein, Diemer, & Autin, 2016). Resources are critical in the workplace (Hobfoll et al., 2018). Thus, high co-worker proactivity shows to individuals that the co-worker has prized and desirable attributes and assets at work. Since social comparisons are usually inevitable (Dineen, Duffy, Henle, & Lee, 2017; Duffy, Shaw, & Schaubroeck, 2008) and people have the strong tendency to make upward social comparisons (Gerber, Wheeler, & Suls, 2018), high co-worker proactivity would make individuals feel that they are inferior to the co-worker, which causes envy, i.e., the unpleasant and often painful feeling arising because of an unfavourable comparison of the self with others (Smith & Kim, 2007).
Envy would motivate individuals to engage in destructive behaviours (Gino & Pierce, 2009; Kim & Glomb, 2014; Reh, Tröster, & Van Quaquebeke, 2018), to “reduce or, better yet, fully remove the envied person’s advantage” (Smith & Kim, 2007, p. 53). To comfort this undesirable and unwanted feeling, individuals are likely to engage in social undermining behaviours (Duffy et al., 2012; Reh et al., 2018), that is, to intentionally damage the proactive co-worker’s interpersonal relationships, reputation, and success (Duffy, Ganster, & Pagon, 2002), because such behaviours are powerful ways to boost oneself and raise one’s relative standing at the expense of others (Duffy et al., 2012). For example, by belittling, giving silent treatment, and withholding information, individuals effectively lower the probability that the co-worker successfully implements changes. Here, we focus on social undermining but not ostracism or incivility, which have been found to negatively influence proactivity (Schilpzand & Huang, 2018; Wu et al., 2016), because social undermining captures the clear intention to mistreat the co-worker (Hershcovis, 2011), which is more consistent with the motivational basis of envy. Thus, we propose:

*Hypothesis 1.* Envy mediates the positive relationship between co-worker proactivity and social undermining.

It is noteworthy that people differ in their tendency to make social comparisons (Wheeler, 2000), depending on how uncertain they feel about themselves (Festinger, 1954; Gibbons & Buunk, 1999; Taylor, Buunk, & Aspinwall, 1990). People make more social comparisons when they are unclear about their self-worth, but less when they are confident in and sure about their self-evaluations. Thus, self-esteem, which reflects an overall evaluation of the self-worth (Rosenberg, 1965), influences the tendency and effort to compare the self with others.

With high self-esteem, individuals hold the strong belief that they are competent, significant, and worthy. They are fairly clear about their self-worth. As a result, they are less
motivated to compare themselves with others to search for information about their capabilities and standings (Brown et al., 2007; Gibbons & Buunk, 1999; Wayment & Taylor, 1995). In contrast, with low self-esteem, individuals doubt and are suspicious about their self-worth. They are especially inclined to compare themselves with others to further understand themselves. Interestingly, scholars have found that these individuals usually engage in upward social comparisons (Wheeler, 2000), arguably because of the motive to confirm their closeness with those they perceive as better than themselves and the false belief that they are not so worse than such people (Gerber et al., 2018).

Accordingly, individuals’ self-esteem would mitigate the negative relationship between co-worker proactivity and individuals’ envious feeling. Individuals with high self-esteem are less interested in the surrounding information and thus are less motivated to process the implications of co-worker proactivity. As a result, the co-worker engaging in proactive behaviour has a weaker influence on these individuals’ self-judgment. However, individuals with low self-esteem pay more attention to co-worker proactivity and try harder to understand what the proactivity means for them. As a result, they would be more aware, and thus more hurt, by the co-worker’s strong competence, positive vocational potential, and rich resources implied by proactivity. Because of the resulting feeling of a lack of ability, significance, and worth, they feel particularly unpleasant and painful. Rentzsch, Schröder-Abé, and Schütz (2015) found that low self-esteem leads to high envy. Therefore, we propose:

**Hypothesis 2.** Self-esteem buffers the positive relationship between co-worker proactivity and individual envy, such that when self-esteem is higher, the relationship becomes weaker.

Because envy motivates individuals to engage in social undermining behaviour (Duffy et al., 2012; Reh et al., 2018), we further propose:
Hypothesis 3. Self-esteem buffers the positive indirect relationship between co-worker proactivity and individual social undermining through envy, such that when self-esteem is higher, the indirect relationship becomes weaker.

Co-worker Proactivity and Individual Helping

Besides comparing themselves with co-workers to understand “where I stand”, individuals are likely to expand their identities to include co-workers to make “who I am” clear. While previous studies have mainly focused on collectives (e.g., a team, an organization) (Ashforth & Mael, 1989) and relationships (e.g., relationship with a co-worker) (Sluss & Ashforth, 2007) as the identification targets, recently Ashforth et al. (2016) proposed that individuals also include a specific other into their sense of oneness, when doing so satisfies their needs for uncertainty reduction, self-enhancement, and/or belongingness. For example, sports fans identify with a sports star because of his/her excellent skills. Employees identify with their leaders to learn what to do when facing challenges. Co-worker proactivity is likely to increase individuals’ personal identification with the co-worker because proactivity serves as a role model to reduce uncertainty and conveys prosocial cues.

On one hand, by displaying proactivity, the co-worker shows that he/she is a good role model to follow. Individuals often observe and learn from their co-workers (Salancik & Pfeffer, 1978). Behaving proactively, the co-worker plays flexible roles, shows high self-efficacy, and manipulates, rather than bends to, the environment (Parker et al., 2006), which all show individuals how to take primary control in their work (Bateman & Crant, 1993; Griffin et al., 2010). When individuals feel threatened by the uncertainty in their environment and work, the assertiveness and dominance conveyed by proactivity (Grant, Gino, & Hofmann, 2011) show that the co-worker “embodies an identity worth internalizing in order to secure validation for oneself” (Ashforth et al., 2016, p. 15). When individuals already have an efficacious self, they could learn from the co-worker about how to translate such self-
efficacy into effective work behaviours and improve their own positive sense of self (e.g., Cangiano et al, 2018; Wu, Deng, & Li, 2018). Therefore, co-worker proactivity shows that the co-worker serves as a good role model that could help individuals reduce their uncertainty and improve self-feelings.

On the other hand, proactivity often stems from a prosocial motivation, because it involves personal risks (e.g., fail to reach goals), is self-starting, goes beyond the prescribed requirements, and sometimes could benefit others (Klotz & Bolino, 2013). For example, by searching out new techniques (innovative behaviour), communicating his/her views to others (voice), and instituting improved procedures into the team (taking charge), the co-worker invests his/her resources, such as time and energy, to performing behaviours that might benefit the team. There is consistent evidence showing that prosocial motivation is a powerful predictor of proactivity (Grant & Rothbard, 2013; Lebel, 2016; Lebel & Patil, 2018) and Whiting, Maynes, Podsakoff, and Podsakoff (2012) showed that individuals often associate an effective voice with prosocial motivation. Besides, Belschak and Den Hartog (2010) and Wu, Parker, Wu, and Lee (2018) found that proactivity, except for career-oriented proactivity, reflects that the actor cares about collective benefits. Prosocial cues in the proactivity make individuals ascribe warm and communally-oriented attributes to the co-worker (Cuddy, Glick, & Beninger, 2011; Weiss & Morrison, 2018) and trust the co-worker (Colquitt, Scott, & LePine, 2007), which together make them highly appreciate their relationships with that co-worker.

In short, co-worker proactivity might increase individuals’ personal identification with him/her by providing individuals with a positive role model and increasing the closeness in the relationship. Findings that individuals judge those who perform a high level of proactivity as being transformational leaders (Bateman & Crant, 1993) and charismatic leaders (Crant & Bateman, 2000) and identify with them (e.g., Liu, Zhu, & Yang, 2010)
provide indirect support. Such an identification would make individuals more receptive to the co-worker’s influence (Ashforth, Harrison, & Corley, 2008), so that they are likely to support proactive the co-worker. Moreover, Flynn (2005) argued that identification influences how individuals interact with others. Personal identification would encourage individuals to focus on the common benefits between them and the co-worker, so that they are likely to help the co-worker. Besides, people are motivated to behave in a way to enhance their self-concept (Ashforth & Schinoff, 2016). Personal identification binds individuals with their co-workers, so that individuals are likely to help the co-worker to make this self-concept more positive. Thus, we propose:

*Hypothesis 4.* Personal identification mediates the relationship between co-worker proactivity and helping.

However, individuals differ in their appraisal of the events that shape their personal identification (Ashforth et al., 2016). Proactive personality makes differences. Proactive personality describes one’s dispositional tendency to behave proactively (Bateman & Crant, 1993) and is characterized by a change orientation (Bateman, 2017) and a learning orientation (Major, Turner, & Fletcher, 2006). With a high level of proactive personality, individuals better identify co-worker’s proactivity as containing opportunities to learn how to exert primary control. Thus, they more view co-worker proactivity as being helpful to reduce uncertainty and/or to improve the self (Fuller et al., 2012). Moreover, co-worker proactivity shows that the co-worker has similar goals, values, and preferences as the proactive individuals, making individuals feel more positive towards the co-worker (Kristof-Brown & Stevens, 2001).

On the other hand, individuals with a low level of proactive personality are characterized by the disposition of endurance of the environment and adhering to its requirements (Bateman & Crant, 1993). They are unlikely to learn the way proactive co-
workers behave and would see the co-worker as conflicting with their patterns of thought, feeling, and behaviour (Funder, 2001). As a result, they should be less strongly identified with the co-worker who performs proactively. In short, we propose:

*Hypothesis 5.* Proactive personality strengthens the positive relationship between co-worker proactivity and personal identification, such that when proactive personality is higher, the relationship becomes stronger.

Since personal identification could be translated into helping behaviours, we further propose:

*Hypothesis 6.* Proactive personality strengthens the positive indirect relationship between co-worker proactivity and helping through personal identification, such that when proactive personality is higher, the indirect relationship becomes stronger.

**Research Overview**

We conducted two studies. Study 1 was cross-sectional. With the assistance of an online survey platform, we collected all the variables of interest, i.e., co-worker proactivity, envy, personal identification, helping, social undermining, and control variables including social desirability and organizational justice. However, this research design could not provide any causal evidence for the hypotheses. Given that previous studies have shown that interpersonal behaviours could influence proactivity (see Chapter 2), we conducted a scenario experiment in Study 2. Specifically, we provided two scenarios, one when a “co-worker” performs with a high level of proactivity and one with a low level, and asked participants to report their envy of and identification with the “co-worker” and how likely that they would help and socially undermine the “co-worker”. In these two studies, we examined the same models, with the aim to replicate the findings.
Study 1

Method

Sample, design, and procedure. We collected data with the assistance of a Chinese online survey platform, Wenjuanxing. We set two requirements for participants: firstly, they should have formal jobs (i.e., work for more than 35 hours a week) and secondly, they should work in teams. The platform then distributed the surveys to the eligible registered members. The surveys were anonymous to keep the confidentiality and encourage participants to report their true feeling. To each participant that finished the survey and passed the checks for their attention, we gave 14 Chinese Yuan (around 2 American dollars).

The survey consists of three parts. First, participants were told to write down the name of the co-worker with whom they interact most frequently at work and the reasons why they nominated this co-worker. Then, they were asked to fill out the survey about their own demographics, personality characteristics (i.e., proactive personality and self-esteem), and the control variables, including social desirability and organizational justice. Last, they were asked to write down the co-worker’s name again and complete survey questions about the co-worker’s proactivity, their identification with and envy of the co-worker, and their helping as well as social undermining of this co-worker.

To ensure the quality of the responses, we set three attention checks. First, the two names which participants wrote down should be identical. Second, at the very beginning, we asked the participants to rate how much they agree that genetically modified food is safe with a 5-point Likert scale (“1” – extremely disagree, “5” – extremely agree). This question was displayed again in the latter part of the survey. These two responses should be identical. Third, we added the item “I believe that the earth is flat” into the survey and asked how much participants agree with it. Those who chose “3” (neither agree or disagree), “4” (agree), and “5” (strongly agree) were regarded as failing to pass the check. Besides, we manually
checked the reasons why the participants nominated the co-worker. We found some participants nominated their supervisors, subordinates, secretaries, and mentors/mentees instead of their co-workers. We dropped these participants.

Finally, we had 206 valid participants, i.e., those who passed all the checks. They were from different locations in China (e.g., 37 were from the Guangdong province, 13 were from Beijing). The average age of the participants was 31.58 (s.d. = 5.65). 52% were males (N = 107) and 47% females (N = 99). They had on average worked for 96.30 months (s.d. = 63.45). All were working in teams.

Measures. We followed the procedure recommended by Brislin (1980) to translate the items from English to Chinese when there were not published Chinese version of the scales.

Proactive Personality. We measured individual proactivity by using Seibert, Crant, and Kraimer’s (1999) 10-item scale, which is a short version of Bateman and Crant’s (1993) original scale. A sample item is “I am constantly on the lookout for new ways to improve my life”. Participants were asked to rate their agreement on the items from “1” (totally disagree) to “5” (totally agree). This short scale has consistently shown good validity in previous studies (e.g., Bergeron, Schroeder, & Martinez, 2014). We dropped one item (“If I believe in an idea, no obstacle will prevent me from making it happen”) because of its low loading, according to the CFA analysis. Cronbach’s alpha value for the remaining 9 items was .68. We think this value is acceptable because the scale is well established and some studies have reported that occasionally the Cronbach’s alpha was slightly below .70 (Bertolino, Truxillo, & Fraccaroli, 2011; Guenter, Schreurs, van Emmerik, & Sun, 2017).

Self-esteem. We measured individual self-esteem by using the 10-item scale developed by Rosenberg (1965). A sample item is “On the whole, I am satisfied with myself”. Participants were asked to rate their agreement on the items from “1” (totally
disagree) to “5” (totally agree). The Cronbach’s alpha value for the scale in the current study was .79.

Co-worker Proactivity. We asked participants to report their co-worker’s proactivity using the proactive work behaviour scale developed by Parker and Collins (2010). The co-worker report has been used in previous studies and showed good validity (e.g., Den Hartog & Belschak, 2012; Van Dyne & LePine, 1998). The scale includes voice (4 items), innovative behaviour (3 items), and taking charge (3 items). Participants were asked to rate how often the co-worker performed the following behaviours from “1” (very infrequently) to “5” (very frequently). Sample items are “speaks up and encourages others in the workplace to get involved with issues that affect him/her (the co-worker)” (voice), “generates creative ideas” (innovative behaviour), and “tries to bring about improved procedures in the workplace” (taking charge). The Cronbach’s alpha for the 10-item scale was .82.

Personal identification. The 7-item scale developed by Shamir, Zakay, Breinin, and Popper (1998) was used. A sample item is “I have complete faith in him/her (the co-worker)”. Participants were asked to rate their agreement on the items from “1” (totally disagree) to “5” (totally agree). The Cronbach’s alpha value for the scale in the current study was .72.

Envy. We measured envy with the 5-item scale developed by Vecchio (2000). A sample item is “my supervisor values his/her (the co-worker’s) efforts more than my efforts”. Participants were asked to rate their agreement on the items from “1” (totally disagree) to “5” (totally agree). We dropped one item “He/she (the co-worker) has it better than me” because of a low loading. The Cronbach’s alpha value for the remaining 4 items in the current study was .72.

Helping. We used the OCB-I scale developed by Lee and Allen (2002) which has 8 items. We asked the participants to rate the frequency of the behaviours described in the
items from “1” (very infrequently) to “5” (very frequently). A sample item is “(I) willingly give my time to help him/her (the co-worker) when he/she (the co-worker) has work-related problems”. The Cronbach’s alpha value for the scale in the current study was .79.

**Social Undermining.** The scale developed by Duffy et al. (2002) was adopted. A sample item is “(I) spread rumors about him/her (the co-worker)”. Participants were asked to rate how frequently they performed these behaviours from “1” (very infrequently) to “5” (very frequently). The Cronbach’s alpha value for the scale in the current study was .89.

**Control Variables.** Social desirability was included to control the common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The 10-item scale developed by Crowne and Marlowe (1960) was used. A sample item is “I never hesitate to go out of my way to help someone in trouble”. Participants were asked to rate their agreement on the items from “1” (totally disagree) to “5” (totally agree). In the current study, the Cronbach’s alpha was .71.

Besides, the participant’s perception of organizational justice was controlled for due to its possible confounding effects. On one hand, the perception of high justice would motivate an employee to perform proactively (Moon, Kamdar, Mayer, & Takeuchi, 2008). On the other hand, due to the social exchange motive (Cropanzano & Mitchell, 2005), receiving fair treatment from the organization is likely to increase employees’ positive feeling and behaviours towards each other. We measured this variable using the 6-item scale developed by Ambrose and Schminke (2009). A sample item is “In general, the treatment I received around here is fair”. Participants were asked to rate their agreement on the items from “1” (totally disagree) to “5” (totally agree). The Cronbach’s alpha was .79 in the current study.

**Confirmatory factor analyses.** To examine the measurement validity, we conducted confirmatory factor analyses. Because there were 77 items but only 206 participants, we
created parcels before running the analyses. Specifically, we created 3 parcels for proactive personality, 3 parcels for self-esteem, 3 parcels for co-worker proactive work behaviour, 2 parcels for personal identification, 2 parcels for envy, 2 parcels for helping, and 3 parcels for social undermining. Besides, we created 3 parcels for social desirability and 2 parcels for perceived organizational justice. The results showed good measurement validity ($\chi^2 = 322.79$, df = 216, RMSEA = .05, CFI = .95, SRMR = .05). An alternative 1-factor model showed significantly worse validity: $\Delta \chi^2 = 988.02$, $\Delta$df = 36, RMSEA = .14, CFI = .49, SRMR = .13.

**Analysis strategy.** We used structural equation modeling (SEM) to examine the hypotheses. The advantage of using SEM is that we could test all the hypotheses at once, which produces more accurate estimations. All continuous independent variables were mean centered before analyses. Mplus was used for the analyses.

**Results**

**Descriptive statistics and correlations.** For descriptive statistics and simple correlations, please see Table 1.

**Path Analyses.** We used path analyses to examine the hypotheses. Interaction terms were created with the code “xwith”. The results are displayed in Figure 1. Note that we added a path from personal identification to social undermining, because this resulted in a better model fit ($\Delta \chi^2 = 8.12$, $\Delta$df = 1, $p < .001$). The reason might be that to undermine a co-worker you personally identified with is inconsistent with the self-concept. The final model shows a good fit ($\chi^2 = 13.85$, df = 13, RMSEA = .02, CFI = 1.00, SRMR = .02). Co-worker proactiveness had significant positive association with both envy ($\beta = .34$, $p < .001$) and personal identification ($\beta = .37$, $p < .001$). Envy ($\beta = .26$, $p < .001$) and personal identification ($\beta = -.19$, $p < .01$) were significantly related with social undermining, positively and negatively, respectively. As expected, personal identification was significantly associated with helping ($\beta = .23$, $p < .001$). The indirect effect on social undermining through envy
was .09, with the 95%CI being [.04, .13], which supported Hypothesis 1. The indirect effect on helping through personal identification was .08, with the 95%CI being [.02, .15], which supported Hypothesis 4. Although not hypothesized, the indirect effect on social undermining through personal identification was -.07, with the 95%CI being [-.12, -.02]. Notably, co-worker proactivity still had significant association with individual helping ($\beta = .23, p < .01$) and social undermining ($\beta = .12, p < .05$), even after two mediators were included.

Proactive personality significantly moderated the effect of co-worker proactivity on personal identification ($\beta = .22, p < .05$), as theorized in Hypothesis 5. When it was higher, the indirect effect on helping ($B = .11, p < .05$) was stronger; when it was lower, the indirect effect was weaker ($B = .06, p < .05$). The difference was significant ($\text{difference} = .05, 95\%\text{CI} = [.002, .08]$). Thus, Hypothesis 6 was supported. However, self-esteem did not moderate the effect of co-worker proactivity on envy ($\beta = -.03, \text{ns}$). Thus, Hypotheses 2 and 3 were not supported.

**Brief Discussion of Study 1**

The results in Study 1 have shown that, as we hypothesized, co-worker proactivity is positively related to individual social undermining and helping. When individuals are more proactive, they are more personally identified with the co-worker and engage more in helping behaviours.

However, the hypothesized moderation effect of self-esteem was not supported: the results have indicated that the extent to which individuals feel envious of and socially undermine the co-worker who performs proactively was not dependent on their self-esteem. Although not hypothesized, we also found that when individuals personally identified with the co-worker, they were less likely to socially undermine him/her. This might be because undermining a person with whom one identifies contradicts one’s self-definition (Ashforth & Schinoff, 2016).
The cross-sectional design is weak for the examination of causality. This is an important problem since interpersonal behaviours have been found to have significant effects on proactivity (see Chapter 2). Besides, the insignificant moderation effect of self-esteem and the significant relationship between personal identification and social undermining need further examination. Since Aguinis and Bradley (2014) argued that scenario study is helpful to examine causality, we conducted a scenario experiment to resolve the issues.

**Study 2**

**Method**

**Sample, design, and procedure.** We recruited participants with the assistance of a Chinese online survey platform Wenjuanxing. We set the same requirements and paid the same amount of money to the participants as Study 1. The survey was anonymous to ensure confidentiality.

In the study, we created two scenarios: one was the condition that the co-worker performed with high proactivity, and the other was the condition that the co-worker performed with low proactivity. During the survey, participants were first asked to finish the questions about their demographics and personality traits (i.e., proactive personality and self-esteem). Then, a scenario was randomly displayed to them. After reading the scenario, they were asked to report how they felt about this co-worker and how likely they would help and socially undermine the co-worker. We adopted the same set of attention checks as in Study 1, except that we did not ask the participants to nominate a co-worker but to choose one correct description according to the scenario.

We obtained 107 participants for this study. They were from various locations in China (e.g., 14 were from Guangdong province, 6 were from Beijing). The average age of the participants was 30.93 (s.d. = 5.67). 58% were males (N = 62) and 42% females (N = 45). They have on average worked for 92.17 months (s.d. = 68.18). All were working in teams.
**Manipulation.** We first showed participants the background information, which emphasized that there was some level of interdependence and competition to mimic a real team situation:

“You work in a company that organizes employees into project teams. In each team, team members’ jobs are connected, which means that at work team members rely on others, for example, on their information, task completion, and outcomes, to finish their job.

In your team, apart from your normal salary, there is an annual bonus that is based on both your own performance and your team’s performance. Thus, members of high performing teams receive higher salaries than members of low performing teams, and the highest performing employees across the company receive higher salaries than others.”

Then we presented the participants with either the high or the low co-worker proactivity situation randomly:

“Alex is one of your teammates. Having been working together for a while, you find that Alex always takes the initiative to create changes in your team. That is, Alex always tries to bring about improved procedures, institute new work methods, and implement solutions to pressing problems.” (*high* co-worker proactivity)

“Alex is one of your teammates. Having been working together for a while, you find that Alex seldom takes the initiative to create changes in your team. That is, Alex seldom tries to bring about improved procedures, institute new work methods, or implement solutions to pressing problems.” (*low* co-worker proactivity)

Participants needed to finish the attention check after they read the scenario. For the high co-worker proactivity situation, the correct answer was “Alex always take the initiative to create changes in your team”. For the low co-worker proactivity situation, the correct answer was “Alex seldom takes the initiative to create changes in your team”. We dropped the surveys in which participants failed to choose the correct response.

**Measures.** We used the same scales as in Study 1. The Cronbach’s alpha value for the proactive personality and self-esteem scales in the current study were .77, for personal identification it was .93, for envy it was .71 (after dropping the item “my supervisor would value Alex’s efforts more than she/he values my efforts”), for helping it was .91, and for
social undermining it was .82. We changed the instruction to “how much do you agree with
the following items” in the helping and social undermining scales and reformulated the items
so that they referred to Alex. An example item of helping was “I would willingly give my
time to help Alex when Alex has work-related problems”. An example item of social
undermining was “I would spread rumors about Alex”.

**Confirmatory factor analyses.** Due to the low ratio of the number of participants \(N = 107\) versus the number of items \(N = 51\), WE created parcels for the CFA similarly to Study
1. The same parceling methods as Study 1 were adopted. The results showed good
measurement validity \(\chi^2 = 103.69, \text{df} = 89, \text{RMSEA} = .04, \text{CFI} = .98, \text{SRMR} = .06\). An
alternative 1-factor model created by setting the correlations among the variables as 1.0
showed significantly worse validity: \(\Delta \chi^2 = 476.06, \Delta \text{df} = 15, \text{RMSEA} = .21, \text{CFI} = .44,
\text{SRMR} = .19\).

**Analysis strategy.** The same as Study 1, we ran SEM with Mplus to examine the
hypotheses.

**Results**

**Independent-Samples T Test.** We ran t tests to examine the differences in the
variables of interest between the high and the low co-worker proactivity situations. The
results showed that there were significant differences in personal identification \(\text{difference} = 1.85, t = 16.60, p < .001\), envy \(\text{difference} = 1.02, t = 9.66, p < .001\), and helping \(\text{difference} = .76, t = 5.13, p < .001\). However, the difference in social undermining \(\text{difference} = -.15, t
= 1.66, ns\) was not significant.

**Descriptive statistics and correlations.** The descriptive statistics and correlations are
presented in Table 2.

**Path Analyses.** The results were shown in Figure 2. Like Study 1, we added a path
from personal identification to social undermining, because this resulted in a better model fit
(Δχ² = 24.18, Δdf = 1, p < .001). The final model showed a reasonable fit (χ² = 24.39, df = 13, RMSEA = .09, CFI = .96, SRMR = .05). RMSEA was slightly above the popular cutoff point .08. However, its value is determined by the degree of freedom (df) and the sample size. Since WE had a relatively low df and sample size and other fit indicators showed good results, WE consider the value of RMSEA to be acceptable. As can be seen, co-worker proactivity (manipulation) had a significant association with envy (β = 1.02, p < .001) and personal identification (β = 1.85, p < .001). Similar as Study 1, both envy (β = .23, p < .01) and personal identification (β = -.35, p < .001) were significantly related with social undermining. Personal identification was also significantly related with helping (β = .68, p < .001). The indirect effect on social undermining through envy was .23, with the 95%CI being [.10, .35]. Thus, Hypothesis 1 was again supported. The indirect effect on helping through personal identification was 1.24, with the 95%CI being [.89, 1.60]. Thus Hypothesis 4 was again supported. Although not hypothesized, the indirect effect on social undermining through personal identification was significant (B = -.65, 95%CI = [-.86, -.43]), similar to Study 1.

Participants’ proactive personality significantly moderated the effect of co-worker proactivity (manipulation) on personal identification (β = .49, p < .05). When the proactive personality was higher, the indirect effect on helping (B = 1.41, p < .001) was stronger; when it was lower, the indirect effect was weaker (B = 1.08, p < .001). The difference of the effects was also significant (difference = .33, 95%CI = [.07, .59]). Thus, Hypotheses 5 and 6 were supported. Besides, although not hypothesized, the difference of the indirect effect on social undermining through personal identification at the high and low levels of participants’ proactive personality was also significant (difference = -17, 95%CI = [-.31, -.03]). The same as Study 1, the moderation effect of self-esteem was not significant (β = -.13, ns).
In summary, Study 2 replicated the findings of Study 1: both mediation hypotheses (1 & 4) were supported; the moderation effect of participants’ proactive personality was significant (Hypotheses 5 & 6); the moderation effect of self-esteem was not significant (Hypotheses 2 & 3); personal identification had a significant effect on social undermining (not hypothesized).

Discussion

Is proactivity socially risky? Why? Could it bring social benefits? How? These questions have seldom been answered in the literature about proactivity. The current study serves as the pioneer by showing a “social paradox” phenomena. Through two studies, we found that co-worker proactivity is positively related to individual social undermining behaviour via individuals’ envious feeling – a social comparison effect. Besides, co-worker proactivity is positively related to individual helping behaviour via individuals’ personal identification – an identification effect. In other words, individuals are likely to punish and reward those who behave proactively, due to different reasons. Besides, individuals’ personalities influence the behaviours they take. Proactive personality enhances the identification effect. Self-esteem was proposed to buffer the social comparison effect, but this proposition was not supported – a point we will discuss later.

Theoretical implications

The findings related to social undermining gives strong support to the largely unexamined assumption in the social process view of proactivity that behaving proactively is interpersonally risky. Facing the potential to be socially undermined, proactive actors need to be wise (Parker et al., 2019). Future studies could expand the social view based on this finding. Note that the underlying logic in the current study is slightly different from the previous papers: they argue that the risk originates from individuals’ resistance towards unfavorable changes (Chan, 2006; Sun & van Emmerik, 2015), but here we propose that the
risk originates from the information implied by the initiative. This is an interesting because proactivity is characterized by “initiating changes”. In the future researchers could examine whether “initiative” and “change” have different effects on the interpersonal outcomes, and whether proactive actors need different kinds of wisdom to deal with the risks.

On the other hand, the findings related to revealed a largely neglected part of the social process view of proactivity: proactivity has social benefits. Previous studies found that proactivity is positively related to career success and work evaluation (Grant, Parker, & Collins, 2009; Seibert, Kraimer, & Crant, 2001), we expand the findings by focusing on social relationships. Different from McClean et al. (2017) and Weiss and Morrison (2018), we focus on the exact behaviours, i.e., helping, as the outcome, making the benefits more direct and salient. Challenging the overly simplistic argument that proactivity is interpersonal risky, we show a complex story that individuals might also help the proactive actors.

Together, these findings reveal a “social paradox” that individuals are likely to help and socially undermine the proactive actors. This paradox urges researchers to reframe the social view of proactivity and develop more complex arguments by simultaneously taking the social risks and benefits into consideration. Moreover, the flow from proactivity to social context factors, i.e., helping and social undermining, challenges previous findings that social context influences proactivity (see Chapter 2). Seldom has longitudinal design been adopted in proactivity-related literature. Thus, in the future researchers need to examine whether there is reciprocal causality between social context and proactivity.

The findings of proactive personality expand the understanding of how proactive individuals behave in the workplaces. Some findings have shown that more proactive individuals favor the changes initiated by others more than less proactive individuals (Fuller et al. 2012; Zhang et al., 2012), but the mechanism has not been examined. We contribute by showing that personal identification serves as a mechanism. Future studies could continue to
examine other mechanisms, based on our findings. For example, besides change and learning orientations, proactive personality is also associated with need for dominance (Bateman & Crant, 1993). According to dominance conflict theory (Graham, Dust, & Ziegert, 2018), proactive individuals might unlike others’ proactivity (Grant et al., 2011) due to interpersonal conflicts.

The unexpected insignificant effect of self-esteem encourages scholars to think more deeply about this personality in the future. On one hand, as we proposed, individuals with a high level of self-esteem are less likely to engage in social comparison (Brown et al., 2007; Gibbons & Buunk, 1999). On the other hand, scholars have found that when making social comparison, these individuals are more likely to feel threatened, due to the cues that challenge their beliefs about self-worth (Baumeister, Smart, & Boden, 1996). Thus, there might be contextual factors that influence these individuals’ behaviours. For example, unfair treatment might challenge the self-perception of those with high self-esteem (Heuer, Blumenthal, Douglas, & Weinblatt, 1999), motivating them to compare with, and thus more hurt by, co-worker proactivity.

Although not the main focuses, the current paper could also contribute to the literature about personal identification and interpersonal harming behaviour. It has been showed that individuals tend to personally identify with transformational leaders (Liu et al., 2010). The current study extends this line of investigation by showing that individuals would identify with co-workers who perform proactivity. Would individuals personally identify with their co-workers because of other reasons? This entails further investigation. Besides, scholars have found that employees tend to harm others when they feel that they are mistreated (e.g., Duffy et al., 2002; Hershcovis et al., 2007), when others perform outstandingly (Kim & Glomb, 2014; Lam, Van der Vegt, Walter, & Huang, 2011) and when others break the performance norm (Jensen, Patel, & Raver, 2014). We show that proactivity could also
include harming behaviour because of upward social comparison. Future studies could empirically compare the relative importance of each source variable to harming behaviours.

To note, previous studies have shown that those with high performance could be the admired and envied by their co-workers (e.g., Kim & Glomb, 2014). Proactivity shares the common mechanism to influence envy as performance does: through the upward comparison. But proactivity has something unique. First, proactivity entails different competencies from performance, such as the ability to anticipate future opportunities and challenges (Bateman & Crant, 1993) and deal with uncertainty (Griffin et al., 2007). Second, proactivity requires more resources than performance. For example, a combination of self-efficacy and LMX is necessary for voice (Van Dyne, Kamdar, & Joireman, 2008), but task performance does not require such. Thus, proactivity might influence envy thorough some unique comparison aspects than performance and have stronger influence on envy than performance through the shared aspects. Second, performance does not show to others how to deal with uncertainty, nor conveys communal meanings. Although it might influence personal identification through serving the role model to finish in-role responsibilities, proactivity influences personal identification in different ways. In the future, scholars should empirically compare the effects of performance and proactivity on envy and identification.

There are some other unexpected findings. In study 1 the simple correlation between co-worker proactivity and social undermining was not significant (see Table 1). In study 2, the t-test did not find significant differences in social undermining between high and low co-worker proactivity situations (see Table 2). Thus, it seems that co-worker proactivity does not have a significant main effect on social undermining behaviour. There are three possible reasons. First, there might be some confounding variables. In study 1, when controlling for social desirability and organizational justice the partial correlation became to be .16, p < .05. Second, there might be contrasting mechanisms. For example, envy and personal identification had contrasting
associations with social undermining. Third, there are unexamined moderation effects. For example, strong team identification might buffer the comparison effect (Hu & Liden, 2013; Kim & Glomb, 2014). Researchers could further examine these potentials in the future.

Besides, in Study 1, the correlation between envy and personal identification is -.17, but in Study 2 it is unexpectedly .62. The difference might be because that there are two kinds of envy: malicious one and benign one (Van de Ven, Zeelenberg, & Pieters, 2009). While personal identification might be positively related to benign envy, it might be negatively related to malicious envy. So, the size of the correlation is dependent on the relative strength of these two relationships. Notably, theoretically malicious and benign envy lead to different behavioural outcomes. Because we include personal identification as a parallel mediator to envy, the significant relationship between envy and social undermining as two studies revealed might largely due to the malicious part. In the future, researchers could examine whether malicious and benign envy have different mediation effects in the relationship between co-worker proactivity and reactive behaviours.

Moreover, although not hypothesized, post hoc analyses showed that in study 2 self-esteem positively moderated the effect of co-worker proactivity (manipulation) on personal identification while in study 1 it did not. Because of self-verification motive, individuals with high self-esteem are likely to perform proactivity in the workplaces. In this way, they might identify with the proactive co-worker because of the similarity in behaviours. But, because of behavioural plasticity, those with low self-esteem are more likely to be influenced by the environment, i.e., co-worker proactivity in the current study. The inconsistent findings support the contradicting predictions. In the future, researchers could further examine how and when self-esteem moderates the effect of co-worker proactivity on identification.
Limitations and Future Directions

There are several limitations to the research designs. First, we used an online platform to collect the data. Although such a sampling method has been widely used in previous studies (e.g., Chen et al., 2011; Wu & Parker, 2017), there is still a hot debate about the validity of the method (e.g., Buhrmester, Kwang, & Gosling, 2011; Peer, Brandimarte, Samat, & Acquisti, 2017; Smith, Roster, Golden, & Albaum, 2016). To ensure the data quality, we have used quite strict attention checks. But to improve the validity of the findings, we recommend replication with real field-based data.

Second, we asked participants to report how they treated the co-worker, rather than asked the co-worker to report the received treatment. Since some undermining behaviours are covert and not easily observable (e.g., “talk bad about the co-worker behind his/her back”), the self-report method might more accurately capture these behaviours. Besides, with a meta-analytic comparison, Berry, Carpenter, and Barratt (2012) found that other-reported counterproductive work behaviour (CWB), a similar concept to social undermining, has little additional contributions than and shares similar patterns with self-reported CWB in correlation analyses. Thus, it is acceptable to use the self-report method to measure social undermining in the current studies (Duffy et al., 2012; Reh et al., 2018). Similarly, meta-analyses have indicated that other-reported and self-reported organizational citizenship behaviour have few differences at the mean levels and in terms of the correlations with other variables (see e.g., Carpenter, Berry, & Houston, 2014). Since the current paper is mainly interested in how individuals respond to co-worker proactivity, the self-reported method to assess helping behaviour is also acceptable.

Third, we only focused on the dyadic relationships between the individual and his/her co-worker. But since employees work in teams, team attributes might influence the outcomes. For example, in teams with a high initiative climate, individuals might be more likely to
identify with the co-worker who behaves proactively, because the co-worker is similar to the group prototype (Hogg & Terry, 2000). Thus, in future studies, we encourage researchers to use the round-robin method to collect data and control for the effects of related team-level variables.

Last, we collected cross-sectional data in Study 1. Although we have controlled social desirability to decrease common method variance (Antonakis, Bendahan, Jacquart, & Lalive, 2010), such a design is weak in causality identification. In the second study, we used a scenario study with an aim to improve this identification (Aguinis & Bradley, 2014). Thus, the results at least provide preliminary evidence about causality. But without the real interaction experiences, participants might feel difficult to imagine the co-worker’s proactivity and make evaluations. Also in the scenario study no manipulation check was conducted. One reason is that the scenarios were written directly based on the measurement items, which reduce the necessity of the check. Given these limitations, we encourage truly longitudinal designs to increase the validity of the findings (Ployhart & Vandenberg, 2010).
Chapter 3 Table 1. Means, Standard Deviations, and Correlations among Variables for Study 1

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-worker Proactivity</td>
<td>3.56</td>
<td>.62</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive Personality</td>
<td>3.75</td>
<td>.45</td>
<td>.36**</td>
<td>.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td>3.93</td>
<td>.46</td>
<td>.26**</td>
<td>.53**</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Desirability</td>
<td>2.80</td>
<td>.23</td>
<td>-.13</td>
<td>-.36**</td>
<td>-.28**</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Justice</td>
<td>4.02</td>
<td>.60</td>
<td>.33**</td>
<td>.41**</td>
<td>.53**</td>
<td>-.31**</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal identification</td>
<td>4.02</td>
<td>.53</td>
<td>.58**</td>
<td>.41**</td>
<td>.37**</td>
<td>-.26**</td>
<td>.43**</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Envy</td>
<td>2.20</td>
<td>.72</td>
<td>.12</td>
<td>-.21*</td>
<td>-.38**</td>
<td>.26**</td>
<td>-.31**</td>
<td>-.17*</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helping</td>
<td>3.69</td>
<td>.60</td>
<td>.42**</td>
<td>.42**</td>
<td>.25**</td>
<td>-.32**</td>
<td>.37**</td>
<td>.45**</td>
<td>-.12</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>Social Undermining</td>
<td>1.47</td>
<td>.47</td>
<td>.03</td>
<td>-.22*</td>
<td>-.31**</td>
<td>.30**</td>
<td>-.30**</td>
<td>-.27**</td>
<td>.52**</td>
<td>-.16*</td>
<td>.89</td>
</tr>
</tbody>
</table>

*Note. N = 206. Cronbach alpha was showed alone the diagonal. *p < .05, **p < .01.
Chapter 3 Table 2. Means, Standard Deviations, and Correlations among Variables for Study 2

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manipulation*</td>
<td>0.50</td>
<td>0.50</td>
<td>/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive Personality</td>
<td>3.74</td>
<td>0.50</td>
<td>.11</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td>3.92</td>
<td>0.47</td>
<td>.01</td>
<td>.28**</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal identification</td>
<td>3.19</td>
<td>1.09</td>
<td>.85**</td>
<td>.13</td>
<td>.03</td>
<td>.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Envy</td>
<td>2.36</td>
<td>0.74</td>
<td>.69**</td>
<td>-.05</td>
<td>-.16</td>
<td>.62**</td>
<td>.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helping</td>
<td>3.55</td>
<td>0.85</td>
<td>.45**</td>
<td>.12</td>
<td>-.02</td>
<td>.62**</td>
<td>.30**</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>Social Undermining</td>
<td>1.84</td>
<td>0.46</td>
<td>-.16</td>
<td>-.27**</td>
<td>-.15</td>
<td>-.35**</td>
<td>.05</td>
<td>-.49**</td>
<td>.82</td>
</tr>
</tbody>
</table>

Note. N = 107. Cronbach alpha was showed alone the diagonal. ** p < .01. * 0 = Low co-worker proactivity situation, 1 = High co-worker proactivity situation.
Chapter 3 Figure 1. Path Analyses Results for Study 1

Diagram:

- Self-esteem
  - Coworker Proactivity
    - Proactive Personality
  - Envy
    - .34***
    - .37***
    - .22*
  - Social Undermining
    - .26***
    - -.19**
    - .23***
    - .12*
  - Helping
    - .23**
Chapter 3 Figure 2. Path Analyses Results for Study 2

- Self-esteem
  - Coworker Proactivity
  - Proactive Personality
- Envy
  - Relational Identification
- Social Undermining
  - Helping

Path coefficients:
- Self-esteem to Envy: -.13
- Coworker Proactivity to Envy: 1.02***
- Proactive Personality to Envy: .49*
- Envy to Social Undermining: .23**
- Relational Identification to Social Undermining: -.35***
- Relational Identification to Helping: .68***
Chapter 4 Foreword

Chapter 3 reveals that proactivity influences individuals’ interpersonal responses, including helping and social undermining. Since support and resistance influence the success of proactivity, the social context might condition the effectiveness of behaving proactively. As pointed out in Chapter 2, it would be interesting to examine how social context influences the relationship between proactivity and outcomes.

Chapter 4 examines how team proactive personality, as a social context factors, influences the relationship between individual proactive personality and task performance. Consistent with the person-environment fit theory, the results showed that person-team misfit in proactive personality was negatively associated with core task performance, especially when individuals are more proactive than the team. Moreover, the results showed that that individuals’ emotional intelligence and leader-member exchange could buffer this misfit effect – proactive individuals would actively use their resources to cope with the problems and challenges they encounter.

Chapter 4 builds upon Chapter 3 to show how social context serves as a boundary of the relationship between proactivity and outcomes. It enriches the findings of Chapter 2 and 3 by showing that social context is not only an antecedent-to but also a boundary of proactivity.
When You Bite Off More than Your Team Can Chew:

Person-Team Misfit in Proactive Personality and Core Task Performance

Zijun Cai¹*, Sharon K. Parker², Zhijun Chen³, and Sally Siu-Yin Cheung⁴

¹Business School, University of Western Australia, Australia
²Center for Transformative Work Design, Future of Work Institute, Business School, Curtin University, Australia
³School of International Business Administration, Shanghai University of Finance and Economics, China
⁴Department of Management, Hong Kong Baptist University, Hong Kong, Hong Kong
*Corresponding author

Note: Chapter 4 is a manuscript that is under preparation for future submission to the Journal of Organizational Behaviour. I use “we” in this chapter, in respect for my coauthors. For my individual contribution, please see “Authorship Declaration”.

125
Acknowledgment

Thanks for the comments and suggestions from the participants in the European Association of Work and Organization Psychology Annual Meeting symposium “The Consequences of Proactive Behaviours for Individual and Team Performance” in 2017. Also thanks for the constructive comments I got during my presentations in Tongji University, Beijing Normal University, Central University of Finance and Economics, and University of International Business and Economics in China.
Abstract

Research on the relationship between proactive personality and core task performance has got inconsistent findings, inspiring scholars to examine the boundary effects. One essential but largely ignored factor is the role played by the team. Adopting the person-environment fit theory, we propose that a misfit in the proactive personality of individuals relative to their team impairs core task performance and the negative effect is stronger when individuals are more proactive than their team. Furthermore, based on conservation of resource theory, we propose that emotional intelligence and leader-member exchange, as personal and social resources, would buffer the negative effect of misfit: emotional intelligence could help wisely manage interpersonal problems in proactivity process and leader-member exchange could make individuals less vulnerable to the problems with teammates. Data were collected from five large organizations in China. The multilevel moderated polynomial regression analyses support the propositions. This study highlights the need to consider the influence of social context on the relationship between proactive personality and outcomes and the importance of both personal, i.e., emotional intelligence, and social, i.e., leader-member exchange, resources in dealing with interpersonal problems during the proactivity processes.

Keywords: proactive personality; task performance; emotional intelligence; leader-member exchange
Proactive personality, the dispositional tendency to behave proactively (Bateman & Crant, 1993), has been found to be positively related to some desirable work-related outcomes (Crant et al., 2017), such as creativity (Gong, Cheung, Wang, & Huang, 2012), self-efficacy (Brown, Cober, Kane, Levy, & Shalhoop, 2006), and job satisfaction (Greguras & Diefendorff, 2009). But, when it comes to task performance, scholars got complex findings. Some found positive associations (e.g, Bakker et al., 2012; Crant, 1995). But, in their meta-analyses, Fuller and Marler (2009) reported the 95% credibility interval of the correlation between proactive personality and task performance to be [-.05, .60] and Spitzmuller et al. (2015) reported the 80% credibility interval of the correlation to be [.11, .55], suggesting that there are significant moderators (Koslowsky & Sagie, 1993).

Reviewing existing findings, Crant et al. (2017) concluded that proactive personality does not always lead to positive task performance, and encouraged more studies to examine when (i.e., the circumstances in which) proactive individuals perform their tasks more effectively.

Some scholars have examined the boundary effects, focusing on proactive individuals’ abilities to shape their changes in an interpersonally favorable way (Chan, 2006; Erdogan & Bauer, 2005; Sun & Van Emmerik, 2015). Zhang, Wang, and Shi (2012) took the role of leaders into consideration. But at work, individuals spend most of their time living and working in teams, so that team contexts cast great influences on individual behaviours and outcomes (Chiaburu & Harrison, 2008). Since to initiate and implement changes require the support from those closely related to the proactive individuals (Detert & Edmondson, 2011; Dutton, Ashford, O’ Neill, Hayes, & Wierba, 1997; Sun & Van Emmerik, 2015), it is likely that – when individuals take initiative within a team structure – attributes of the whole team have a significant influence on the outcomes of the initiative. However, the role of team contexts has been largely ignored.
In the current paper, based on person-environment fit theory (van Vianen, 2018), we examine a condition that influences proactive individuals’ core task performance: the person-team misfit in proactive personality. A misfit occurs when an individual’s proactive personality deviates from his/her team’s proactive personality. We propose that when individuals do not fit their teams in proactive personality, they have troubles in the interactions with their co-workers, which then impair their core task performance. Moreover, task performance decreases more sharply when individuals are more, compared with less, proactive than the team, because in this situation teammates are motivated to avoid undesirable changes introduced by the proactive individuals. In contrast, when individuals are less proactive than the team, teammates are at the risk of not getting the full potential of their changes because of the individuals’ low commitment. Since potential lost has a stronger effect than “not gain” (Kahneman & Tversky, 1979), teammates react more strongly when individuals are more proactive than the team, so that individuals’ task performance decreases more sharply.

Furthermore, according to conservation of resource theory (COR; Hobfoll, Halbesleben, Neveu, & Westman, 2018), individuals actively use their resources in the context of potential loss. Since misfit in proactive personality with teammates could cause potential loss, individuals are motivated to utilize their resources to cope with the situation. We focus on two kinds of resources: emotional intelligence and leader-member exchange (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014), reflecting personal and social resources respectively. In detail, emotional intelligence could help individuals alter the expression of their personality to close the gap between them and their co-workers (Hogan, Jones, & Cheek, 1985), and leader-member exchange could provide additional support to finish their in-role tasks (Croppanzano & Mitchell, 2005). Thus, both variables could buffer the negative effect of misfit on task performance.
In short, this paper contributes to existing literature on proactive personality in two main ways. First, team proactive personality was introduced as a key social context factor to explain when proactive personality leads to better task performance: when there is a low level of misfit, which corresponds to Crant et al.’s (2017) call to examine boundary effects. Second, we show that the misfit effect does not always hold up by itself but is dependent on proactive individuals’ EI and LMX, which supports the conservation of resource theory (Hobfoll et al., 2018). The moderation effects of EI and LMX also contribute to the person-environment fit literature since researchers have long called for more examination of when fit matters (Kristof-Brown, Zimmerman, & Johnson, 2005; Su, Murdock, & Rounds, 2015; van Vianen, 2018).

**Proactive Personality (Mis)Fit and Task Performance**

Person-environment fit theory (Edwards, 2008; Kristof-Brown et al., 2005; Su et al., 2015) proposes that individuals and their environments jointly influence work-related outcomes, and optimal outcomes are achieved when individual attributes are compatible with environmental attributes (e.g., Cable & Edwards, 2004; Greguras & Diefendorff, 2009; Kristof-Brown & Stevens, 2001). Specific to the fit between individuals and their teams, scholars have argued that similarity leads to positive outcomes because it facilitates social acceptance and interpersonal cooperation (van Vianen, 2018). Since successful interpersonal interactions (e.g., cooperation) are critical to finishing core tasks in workplaces (e.g., in teams; Grant & Parker, 2009), dissimilarity with the team decreases task performance.

In particular, proactive personality is characterized by a focus on the future, a change orientation, and a desire to manipulate the environment (Bateman, 2017; Bateman & Crant, 1993). In contrast, non-proactive personality is characterized by a desire to maintain the status quo, a tendency to adhere to the requirements, and a preference for stability (Bateman, 2017; Bateman & Crant, 1993). Thus, when individuals do not fit with their teams in terms of
proactive personality, they would find it difficult to understand, communicate with, and predict their teammates, which might result in conflicts during role exchanges (Katz & Kahn, 1978), failures to take the perspective of each other (Williams, Parker, & Turner, 2007) and low trust in each other (Cable & Edwards, 2004). Besides, since individuals are naturally inclined to categorize each other based on similarities, the differences in proactive personality would cause a low level of identification and a low degree of satisfaction with each other (Hogg & Terry, 2000; Kristof-Brown & Stevens, 2001). Thus, the person-team misfit in terms of proactive personality would cause problems in interpersonal interactions, which prevent individuals from getting the necessary opportunities to use their skills, obtaining information about how work should be done, and gaining support to finish collaborative tasks from teammates (Banks et al., 2014). As a result, individuals would find it difficult to finish their in-role tasks. Therefore, we propose:

**Hypothesis 1**: Person-team misfit in proactive personality is negatively associated with employees’ core task performance.

Individuals’ task performance decreases more sharply when they are more proactive than their team than when they are less proactive because teammates have different regulatory goals in these two situations (van Vianen, 2018). When individuals are more proactive than the team, teammates have a comparatively greater desire to keep the status quo and adhere to the requirements, but proactive individuals serve as threats to this desire: they want to alter the status quo and introduce changes. For example, teammates vote to keep the work procedures they have mastered, but the individuals want to introduce some new methods. Under this situation, teammates are motivated to avoid the deviance from the status. Things are different when individuals are less proactive than the team. Teammates are comparably more motivated to create changes and make improvements, but individuals largely lag behind. For example, teammates want to introduce new procedures, but
individuals just do not follow up. Under this situation, teammates face the challenge that they cannot get the full benefits from their initiatives.

In short, when individuals are more proactive, teammates need to avoid potentially negative events (“potential loss”); but when individuals are less proactive, teammates are at the risk of failing to reach full benefits of the changes they initiate (“not gain”). Because people react more strongly to a potential loss (Kahneman & Tversky, 1979; van Vianen, 2018), teammates react more negatively to individuals when individuals are more proactive. For example, teammates might actively kill the opportunities for initiative. Thus, interpersonal problems are more severe when individuals are more proactive than the team. More severe interpersonal problems lead to lower-quality cooperation and more difficulties to get the necessary resources to finish the core task. Thus, we propose:

*Hypothesis 2.* Employees’ core task performance decreases more sharply when they are more proactive than their team compared to when they are less proactive than the team.

**Managing Misfit with Emotional Intelligence and Leader-Member Exchange**

One typical characteristic of the proactive personality is to actively fix encountered problems (Bateman & Crant, 1993). In particular, COR (Hobfoll, 1989; Hobfoll et al., 2018) proposes that individuals are motivated to protect themselves from losing resources. Thus, proactive individuals are likely to actively utilize their available resources to cope with the misfit with their teammates. Though resources refer to anything that is perceived by individuals to be beneficial for their goal attainment and achievement, Halbesleben et al. (2014) identified some typical resources, such as emotional intelligence and social support that are especially helpful for interpersonal problems.

On one hand, emotional intelligence (EI) is the social competence to wisely manage interpersonal relationships through understanding, regulating, and making use of the self’s
and others’ emotions (Law, Wong, & Song, 2004). With high EI, individuals could better identify others’ (potential) reactions and change the way they express their personalities accordingly. In this way, EI helps proactive individuals deal with such a misfit with the team.

Specifically, lack of fit is accompanied by emotional cues (Weiss & Cropanzano, 1996; Yu, 2009). Proactive individuals with high EI are able to recognize these cues and regulate their behaviours to facilitate consensus, such as showing consideration, empathy, and perspective taking (Côté & Miners, 2006; Wolff, Pescosolido, & Druskat, 2002). For example, when they are more proactive than the team, EI helps them recognize others’ fear of the deviance from the status quo. As responses, they could regulate themselves to show more confidence and positive affect to make others open to the changes (Fredrickson, 2001; Grant, 2013). When they are less proactive than the team, EI helps them recognize others’ frustration and pity towards them because of their relatively low commitment towards the collective change-oriented behaviours (Williams et al., 2010). As responses, they could energize themselves to follow teammates’ initiatives to show more commitment (Bindl, Parker, Totterdell, & Hagger-Johnson, 2012; Parker, Williams, & Turner, 2010). In short, high EI helps individuals express their personalities in a more interpersonally favorable way, both when they are more and when they are less proactive than their teams. These improved interpersonal interactions helps them obtain the resources and support from their teams to finish the prescribed task requirements.

By contrast, proactive individuals with low EI are not able to recognize the emotional cues and regulate themselves to facilitate consensus. As a result, they experience even more interpersonal dysfunctions, which cause more harm to their role fulfillment. Previous studies have found that EI improves the quality of interpersonal relationships (Lopes, Salovey, & Straus, 2003) and helps achieve better job performance (Joseph, Jin, Newman, & O’Boyle,
Besides, Grant (2013) found that EI enhances the effect of voice on performance evaluation. Thus, we propose that:

**Hypothesis 3:** EI buffers the negative relationship between person-team misfit in proactive personality and task performance: when employees’ EI is high, the relationship becomes weaker; when employees’ EI is low, the relationship becomes stronger.

On the other hand, LMX indicates that leaders and individuals mutually trust and respect each other, so that individuals could rely on their leaders for necessary support and help (Banks et al., 2014). With high LMX, individuals feel less risky, more capable, and more energetic to bring about changes (Lin, Kao, Chen, & Lu, 2016; Van Dyne, Kamdar, & Joireman, 2008; Wang, Fang, Qureshi, & Janssen, 2015; Zhang, Huai, & Xie, 2015). As a result, with a high LMX, proactive individuals rely less on their teammates to mobilize their proactivity into high task performance. Although a lack of fit would lead to low-quality interpersonal interactions with teammates, proactive individuals could perform their prescribed roles and engage in change-oriented behaviours based on their leaders’ trust and support, which could counterbalance the dysfunctional interactions with their peers.

However, when the LMX is low, individuals heavily rely on their teammates to perform their own roles, increasing the salience of negative interactions with teammates. As a result, the misfit with their teams becomes more detrimental to task performance. Previous studies have shown that high-quality relationships with one group could compensate for the poor relationships with other groups (Anand, Vidyarthi, Liden, & Rousseau, 2010; Ng, Feldman, & Butts, 2014). Thus, we propose:

**Hypothesis 4:** LMX buffers the negative relationship between person-team misfit in proactive personality and task performance: when employees’ LMX is high, the
relationship becomes weaker; when employees’ LMX is low, the relationship becomes stronger.

Methodology

Data and sample

428 employees working in 69 teams in five large organizations in China were invited to participate in this study. Three of the organizations were chemical companies and two were researching organizations. These organizations all adopt a team-based structure and members in the same teams share some interdependence. For example, in productive teams, members have to cooperate with each other on production works. In research teams, members rely on each other’s work to move the project forward. The team setting is suitable to test the hypotheses regarding the misfit in proactivity between individuals and their teams.

A temporally-lagged research design was used to collect data from multiple sources to reduce common method variance (Podsakoff et al., 2003). Two waves of the survey were administrated with a time lag of one month between them. Such a lag was chosen to allow time for changes in core task performance while avoiding the unintended potential dropouts of participants likely in a longer time lag (McArdle & Woodcock, 1997). In the first survey (Time 1), employees were asked to report their demographics (i.e., age, gender, team tenure and job type), proactive personality, EI, and job mastery which is a control variable. In the second survey (Time 2), employees were asked to report on their LMX and leaders were asked to rate the core task performance of each employee in their team.

Nine participants were dropped who did not fill in the Time 2 survey and two participants who had missing values on proactive personality items. The final sample was N = 417 participants from 67 teams in five organizations. Among the participants, 67% of them (N = 278) were males and 33% (N = 139) were females. 64.3% (N = 268) were working in production jobs, 18.5% (N = 77) were in marketing jobs, 7.2% (N = 30) were in research
jobs, 5.0% (N = 21) were in management jobs, and the remaining 5.0% (N = 21) were in other jobs (e.g., oil geology, legal consultancy). Their average age was 31.99 years (s.d. = 7.52) and average team tenure was 50.22 months (s.d. = 50.72). The average team size was 6.93 people (s.d. = 2.21). There were at least four members and at most 12 members in one team.

Measures

The procedure recommended by Brislin (1980) was adopted to translate the items from English to Chinese. Participants were asked to rate on their agreement using a five-point Likert scale (1 = “totally disagree” to 5 = “totally agree”).

**Proactive personality.** Proactive personality was measured with Seibert et al. (1999) 10-item scale, which is a short version of Bateman and Crant’s (1993) original scale. A sample item is “I am constantly on the lookout for new ways to improve my life”. This short scale has consistently shown good validity in previous studies. The Cronbach’s alpha value for the scale in the current study was .86. Team proactive personality was assessed by the average score of the team members, as have other personality studies (Gonzalez-mulé et al., 2014; Kristof-Brown, Barrick, & Stevens, 2005; Wang et al., 2017) and previous studies about the proactive personality of a team (Wang et al., 2017; Williams et al., 2010).

**Emotional intelligence (EI).** Wong and Law's (2002) 16-item scale (WLEIS) was used to measure emotional intelligence. This scale has been subjected to rigorous validation for use in Chinese contexts (e.g., Law et al., 2004; Li, Saklofske, Bowden, Yan, & Fung, 2012). It covers four dimensions of EI: self-emotion appraisal (SEA), others’ emotion appraisal (OEA), use of emotion (UOE), and regulation of emotion (ROE). Sample items are “I really understand what I feel” (SEA), “I am sensitive to the feelings and emotions of others” (OEA), “I am a self-motivated person” (UOE), and “I am quite capable of controlling my own emotions” (ROE). The current paper focused on the broad concept rather than
specific dimensions and so treated emotional intelligence as a latent multidimensional construct. Therefore, an average score using the sixteen items to was calculated to obtain an overall score for EI. The Cronbach’s alpha value for the scale was .93.

**Leader-member exchange.** LMX was measured with the 7-item scale adopted by Graen and Uhl-Bien (1995). A sample item is “my working relationship with my manager is effective”. The Cronbach’s alpha value for the scale was .84.

**Core task performance.** Core task performance was measured using Van Dyne and LePine's (1998) four-item scale. A sample item was “this employee fulfills the responsibilities specified in his/her job description”. The Cronbach’s alpha value for the scale was .89. We ran a one-way ANOVA analysis and an ICC test to examine whether there were any significant differences among teams and organizations for core task performance. The results showed significant between-team variances ($F = 3.24, p < .001$, ICC1 = .26, design factor = $2.38 > 2$), but no significant between-organization variances ($F = .44, ns$).

**Control variables.** We controlled for job types to rule out the possible bias on performance ratings due to different requirements for different jobs. Job mastery (Chao, O’Leary-Kelly, Wolf, Klein, & Gardner, 1994; 5 items, sample item: “I have not yet learned ‘the ropes’ of my job”; $\alpha = .84$) was controlled to rule out the influence of individual job-related skill on task performance, so that we could focus more on the misfit effect. Team size was controlled because in large teams the responsibility are diffused and members interact less frequently (e.g., LePine & Van Dyne, 1998), which might influence the phenomena of interest. Team tenure was controlled, because of its potential influence on interpersonal interaction and task performance. In sum, at the individual level, the control variables were job types (as a dummy variable, with other jobs as the reference group), job mastery, and team tenure. At the team level, team size was the control variable.
Analytic strategies

Adopting the suggestions from Edwards and Parry (1993), we utilized the polynomial regression method to test the hypotheses. Due to the nested nature of the data, we adopted the multilevel analysis procedure developed by Jansen and Kristof-Brown (2005). Because the outcome variable, i.e., task performance, does not have any significant between-organization variances, we conducted a two-level (team and individual levels) analysis.

For this analysis, the dependent variable core task performance was regressed on the control variables and five polynomial terms: individual proactive personality (I), team proactive personality (T), individual proactive personality times team proactive personality (I×T), individual proactive personality squared (I²) and team proactive personality squared (T²):

\[
task \text{ performance} = \beta_0 + \beta_1 I + \beta_2 T + \beta_3 I^2 + \beta_4 I \times T + \beta_5 T^2
\]

Please note that in the equation T and T² are team-level variables, and I×T is a cross-level interaction. The misfit effect was tested through calculating the slope and curvature along the misfit line (I = -T). That is, to substitute I = -T into the model and calculate the slope (\(\beta_1 - \beta_2\)) and the curvature (\(\beta_3 - \beta_4 + \beta_5\)). If there is significant misfit effect, the curvature should be significantly different from 0. If there is significant asymmetry as hypothesised, the slope should be significantly less than 0 (Matta, Scott, Koopman, & Conlon, 2015) – which will be discussed in more details below. To reduce multicollinearity and better interpret the results, we centred individual proactive personality and team proactive personality around the pooled grand mean before calculating the second-order terms (Zhang et al., 2012).

Based on these results, we drew three-dimensional response surface plots to illustrate the joint influence of individual and team proactive personality (Edwards & Parry, 1993). In the plot, the axis named “I” reflects the individual proactive personality, the axis named “T”
reflects team proactive personality, and the vertical axis reflects individual core task performance. The misfit was represented by a downward curve along the misfit line (I = - T).

Finally, we tested the moderation effect by adding moderation variables and the interaction terms between them and each of the five polynomial terms in the initial polynomial regression model (Edwards & Rothbard, 1999):

\[
\text{task performance} = \beta_0 + \beta_1 I + \beta_2 T + \beta_3 I^2 + \beta_4 I \times T + \beta_5 T^2 + \beta_6 W + \beta_7 W \times I + \beta_8 W \times T + \beta_9 W \times I^2 + \beta_{10} W \times I \times T + \beta_{11} W \times T^2
\]

In the equation, W refers to the moderator, i.e., EI or LMX. Since we merely focused on the moderation effect on the curve along the misfit line, we only analyzed whether the moderated misfit effect (\(\beta_9 - \beta_{10} + \beta_{11}\)) was significant. EI and LMX were grand-centred before interaction terms were created. The SAS code “Proc Mixed”, which was introduced by Jansen and Kristof-Brown (2005), was used to run all the analyses mentioned above.

**Results**

Table 1 shows the mean, standard deviation, inter-correlations and reliability of the variables. Note that proactive personality was not significantly related to task performance. This might be because the effect is dependent on other variables, as will be shown later. Confirmative factor analyses, with the parcelling method, showed that the measurement model has good validity (\(\chi^2 = 117.77, \text{df} = 55, \text{RMSEA} = .09, \text{CFI} = .92, \text{SRMR} = .06\)).

We ran multilevel polynomial regressions to examine the hypotheses (Jansen & Kristof-Brown, 2005). The results are shown in Table 2. From Model 2, the p-value of the joint effect of the polynomial terms (I, T, I^2, I\times T, T^2) was .08 (\(F = 1.98\)). This is acceptable because of the existing moderators and the significant curvature that runs along the misfit line (I^2– I\times T– T^2) (\(B = -1.05, p < .05\)). Figure 1 illustrates the surface according to the coefficients in the polynomial regression (Model 2). In the figure, “I” refers to individual proactive personality, and “T” refers to team proactive personality. As shown there was a convex
surface running along the incongruence line (I = - T). This means that individuals’ core task performance decreased as the person-team misfit in proactive personality increased. Thus, Hypothesis 1 regarding the effect of the misfit on task performance was partially supported.

To illustrate how we examined Hypothesis 2, let’s suppose that we randomly selected two points (I - n, T - m) and (I + n, T + m) at the misfit line that have the same amount of deviance from the congruence point (where I = T). We generated two equations:

\[
\text{Task performance} = b_0 + b_1(I - n) + b_2(T - m) + b_3(I - n)^2 + b_4(I - n) * (T - m) + b_5(T - m)^2 \quad (1)
\]

\[
\text{Task performance} = b_0 + b_1(I + n) + b_2(T + m) + b_3(I + n)^2 + b_4(I + n) * (T + m) + b_5(T + m)^2 \quad (2)
\]

Because these points are at the misfit line, we got:

\[I = T = 0 ; \quad n = - m\]

Subtracting Equation 2 from Equation 1, we get:

\[\Delta \text{Task performance} = 2(b_1 - b_2)n or 2(b_2 - b_1)m\]

Thus, the significance of the \( \Delta \text{task performance} \) was equal to that of the slope of the incongruence line. Based on Model 2, we found that the slope of the incongruence line was significantly negative \( (B = -.40, p < .05) \). The lateral shift effect was significantly negative \( (B = -.19, p < .05) \), indicating that the surface shifted towards the region where \( T > I \) (Carter & Mossholder, 2015; Matta et al., 2015). In other words, the task performance at the point where individual’s level of proactive personality was higher than team’s level of proactive personality was always lower than the point where the individual’s level of proactive personality was lower than the team’s level of proactive personality (when the differences between individual and team proactive personality are the same). In short, the hypothesis that the decrease along the misfit line was sharper in the \( I > T \) area than the \( I < T \) area was supported.
Next, we examined the moderation effect of EI. The results of the moderated polynomial regression are shown in Table 2 (Model 3). We hypothesized that EI buffers the misfit effect. Consistent with this, the moderation on the curvature effect was significant \( (F = 3.75, p < .05) \). It can be noted that the overall effect of the moderation terms was not significant \( (F = 1.10, ns) \). However, this overall effect included all aspects of the surface (e.g., the fit line along \( I = T \)), and we did not expect the moderation to apply to these elements. Further support could be got from the simple slope test. Following the advice by Aiken and West (1991), we chose the high (1 s.d.) and low (-1 s.d.) values of EI to calculate the corresponding misfit effect (see Table 3) and draw the response surface plots (Figure 2). As can be seen, when EI was high, the effect along the misfit line became insignificant \( (Curvature = -.23, ns) \), which means that individuals’ task performance was not influenced by the misfit; but when EI was low, the curvature effect became stronger and significant \( (Curvature = -1.81, p < .01) \), which means that task performance decreased more sharply due to the misfit. The difference was significant \( (difference = 1.58, p < .05) \).

Last, we tested the moderation effect of LMX. We hypothesized that LMX buffers the misfit effect. The polynomial regression results were shown in Table 2 (Model 4). Consistent with this, the moderation on the curvature effect was also significant \( (F = 6.90, p < .01) \). The joint effect of the moderation terms was significant \( (F = 2.89, p < .05) \). As Table 3 and Figure 3 show, when the LMX was high, the effect along the misfit line became insignificant \( (Curvature = -.13, ns) \); but when the LMX was low, the curvature became sharper and significant \( (Curvature = -2.11, p < .01) \). The difference was significant \( (difference = -1.98, p < .01) \). Therefore, the moderation Hypotheses 3 and 4 were supported.

**Discussion**

What influences the relationship between proactive personality and task performance? This question has not been well examined in the existing literature, making Crant et al.
call for more studies to examine when proactive personality leads to favourable outcomes. In the current paper, we respond to the call by examining the effects of team proactive personality, EI and LMX. Specifically, we found that the misfit between individual and team proactive personality is negatively related to task performance, and the misfit effect is stronger when individuals are more proactive rather than less proactive than the team. EI and LMX, serving as personal and social resources respectively, buffer the misfit effect, so that the effect becomes weaker when individuals have high EI or LMX.

Theoretical implications

The misfit effect between individual and team proactive personality contributes to understanding how team, as a social context, influences the outcome of proactive personality. Previous studies have found that the fit with organizations, jobs, and leaders (Erdogan & Bauer, 2005; Zhang et al., 2012) influence proactive individuals’ effectiveness. Yet teams are different from these three in that in workplaces individuals spend most of their time with their teammates and the interactions with teammates are based less on authority and hierarchical differences but more on reciprocity taking. Wang, Zhang, Thomas, Yu, and Spitzmueller (2017) also focused on team proactive personality, but they developed arguments based on trait activating theory (Tett & Burnett, 2003). In other words, they were mainly interested in whether proactive personality could be expressed. In this paper, we make a further step by focusing on the expression process: misfit leads to conflicts with the teammates, thus hampering task performance. Moreover, we show team proactive personality has commensurate effect on individual task performance with individual proactive personality, rather than merely serving as background information that activates individual proactive personality. Thus, we be beyond previous studies to contribute to understanding when proactive personality leads to high task performance: when the misfit is low.
The asymmetric misfit effect is interesting, especially when comparing with Zhang et al.’s (2012) finding. They found that when individuals are more proactive than their leaders, they have higher LMX than when they are less proactive. The reason for the difference between their results and ours might be because the interaction among teammates more characterized by reciprocation and turn-taking (Chiaburu & Harrison, 2008) so that teammates reciprocate the “boat-rocking” behaviours with strong resistance. However, the interactions between subordinates and leaders are more based on responsibility fulfillment, so that sometimes proactivity serves as a valuable resource to leaders (Wilson, Sin, & Conlon, 2010). Thus, one contribution of the current study is to reveal a main difference in the misfit in proactive personality with teams and leaders. Further studies should directly compare the differences and examine the mechanisms, to provide more evidence for the difference.

To further examine the boundaries around the misfit effect, we turn for conservation of resource theory (Hobfoll et al., 2018) and examine the moderation effects of EI, a kind of personal resources, and LMX, a kind of social resources. The significant moderation effect of EI provides support to the idea that the ability to regulate proactivity in an interpersonally favourable way improves its effectiveness (Chan, 2006; Erdogan & Bauer, 2005; Sun & Van Emmerik, 2015), but goes beyond these studies by focusing on emotion-related abilities (Grant, 2013) and showing why these abilities matter: through mitigating the misfit effect. The significant moderation effect of LMX provides support for the largely unexamined idea that individuals seek for additional social support to deal with the potential risks of making changes (Detert & Edmondson, 2011; Dutton et al., 2001). Moreover, previous studies have found that the LMX serves as a mechanism that explains why a proactive personality is beneficial (Li et al., 2010; Zhang et al., 2012). The current study provides a different perspective by showing that LMX enhances the effectiveness of proactive personality and revealing the mechanism: through saving proactive individuals from the misfit with their
teammates. The moderation examinations help us make further contributions than previous studies focusing on how fit influences the outcome of proactive personality (Erdogan & Bauer, 2005; Wang et al., 2017; Zhang et al., 2012): we show when the (mis)fit matters and the possible solution to the misfit.

Overall, the findings contribute to the literature about proactive personality in two main ways. First, we provide empirical support for the interactionism underlying the concept of proactive personality that individuals, environments, and behaviours influence each other (Bateman & Crant, 1993): misfit with the team decreases task performance. Second, we enrich understandings of the relational perspective in proactive personality research (Li et al., 2010; Zhang et al., 2012): EI and LMX buffer the misfit effect through improving the relationship quality.

Besides, although not the main focus, we contribute to the person-environment fit literature. The meta-analyses about person-environment fit showed a high heterogeneity in the relationship between fit and performance (e.g., Kristof-Brown et al., 2005), but seldom have scholars examined the boundary effects (Su et al., 2015) (i.e., in what circumstances). By incorporating conservation of resource theory, we show that resources, including EI and LMX, could be the moderators. Future studies could examine the effects of other resources, such as job mobility, resilience, and self-esteem (Halbesleben et al. 2014).

**Practical implications**

The findings show that to make full use of employee proactivity, managers should pay attention to three aspects: team design, employee training, and leader support. First, managers should allocate employees with similar levels of proactive personality into the same teams, otherwise task performance would be negatively affected. Second, managers should train their employees’ emotional intelligence, especially when team redesign is not available. As we showed, a high level of EI helps mitigate the effect of a misfit in the proactive personality.
Third, leaders play important roles. Leaders should show support for their proactive subordinates, especially when they are experiencing misfit with the team. High LMX could help them deal with the challenges.

**Limitations and Future Directions**

Despite these interesting findings, the study has some limitations. First, the joint effect of the polynomial terms is only close to being significant at $\alpha = .05$. We argue that this is acceptable because the misfit effect of interest was significant ($B = -1.05, p < .05$). To increase the statistical validity of the current study, we encourage future researchers to use other samples to replicate the findings.

Second, although we proposed that the quality of interpersonal interactions as the explanatory mechanism, we did not make a direct examination. Nevertheless, the moderation effect of EI and LMX could provide indirect support, because theoretically, they buffer the misfit effect due to their impact on interpersonal interactions (Vancouver & Carlson, 2015). In the future, scholars should directly examine the mechanism.

Third, although we collected data from two time points, this design could not provide strong evidence for the causality. For example, individuals perform their in-role tasks well might be more proactive gradually, because they are confident to make improvements through creating changes (Detert & Burris, 2007). This change in proactive personality would contribute to the (mis)fit in proactive personality between individuals and their teams. In the future, researchers could use experiments to provide a more solid examination of the causality.

Forth, there may be some bias in leader-rated performance (e.g. MacKenzie, Podsakoff, & Fetter, 1991). For example, leaders might not be able to observe subordinates’ working behaviours well. Despite this, since core task performance has some formal
standards, the bias should not be a particularly significant problem. We encourage scholars in future studies to use object indicators of core task performance to replicate the findings.
Chapter 4 Table 1. Means, Standard Deviations, and Correlations among Variables

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1 (Productive jobs)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E2 (Marketing jobs)</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td>-64**</td>
<td></td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E3 (Research jobs)</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td>-37**</td>
<td>-13**</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E4 (Management jobs)</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td>-31**</td>
<td>-11*</td>
<td>-06</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team tenure</td>
<td>50.22</td>
<td>50.71</td>
<td>.19**</td>
<td>-17**</td>
<td>-07</td>
<td>-12*</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job mastery</td>
<td>4.10</td>
<td>.57</td>
<td>.11*</td>
<td>-13**</td>
<td>-02</td>
<td>-03</td>
<td>.27**</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive personality</td>
<td>3.72</td>
<td>.56</td>
<td>.19**</td>
<td>-11*</td>
<td>-17**</td>
<td>.00</td>
<td>.06</td>
<td>.37**</td>
<td>.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional intelligence</td>
<td>3.86</td>
<td>.59</td>
<td>.18**</td>
<td>-09</td>
<td>-18**</td>
<td>-02</td>
<td>.07</td>
<td>.47**</td>
<td>.59**</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader-member exchange</td>
<td>3.54</td>
<td>.62</td>
<td>.10*</td>
<td>-06</td>
<td>-12*</td>
<td>-01</td>
<td>.05</td>
<td>.21**</td>
<td>.23**</td>
<td>.25**</td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>Task performance</td>
<td>4.14</td>
<td>.60</td>
<td>.02</td>
<td>-02</td>
<td>.04</td>
<td>-10*</td>
<td>.14**</td>
<td>.16**</td>
<td>.06</td>
<td>.08</td>
<td>.10*</td>
<td>.89</td>
</tr>
<tr>
<td>Team size</td>
<td>6.22</td>
<td>2.11</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team proactive personality</td>
<td>3.69</td>
<td>.39</td>
<td>.25*</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Above the dotted line are correlations at the individual level, \( N = 417 \); below the dotted line are correlations at the team level, \( N = 67 \). * \( p < .05 \), ** \( p < .01 \).
### Chapter 4 Table 2. Polynomial regression results.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.11***</td>
<td>4.16***</td>
<td>4.17***</td>
<td>4.19***</td>
</tr>
<tr>
<td>E1 (Productive jobs)</td>
<td>.04</td>
<td>.05</td>
<td>.04</td>
<td>.04</td>
</tr>
<tr>
<td>E2 (Marketing jobs)</td>
<td>.08</td>
<td>.19</td>
<td>.17</td>
<td>.15</td>
</tr>
<tr>
<td>E3 (Research jobs)</td>
<td>.09</td>
<td>.11</td>
<td>.09</td>
<td>.06</td>
</tr>
<tr>
<td>E4 (Management jobs)</td>
<td>-.19</td>
<td>-.18</td>
<td>-.20</td>
<td>-.19</td>
</tr>
<tr>
<td>Team tenure</td>
<td>.001*</td>
<td>.001*</td>
<td>.001*</td>
<td>.001*</td>
</tr>
<tr>
<td>Job mastery</td>
<td>.13**</td>
<td>.14**</td>
<td>.16**</td>
<td>.15**</td>
</tr>
<tr>
<td>Team size</td>
<td>-.02</td>
<td>-.04</td>
<td>-.04</td>
<td>-.05</td>
</tr>
</tbody>
</table>

#### Polynomial terms

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>-.09</td>
<td>-.13*</td>
<td>-.12*</td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>.31*</td>
<td>.39*</td>
<td>.25*</td>
<td></td>
</tr>
<tr>
<td>I^2</td>
<td>-.07</td>
<td>-.07</td>
<td>-.03</td>
<td></td>
</tr>
<tr>
<td>I×T</td>
<td>.30</td>
<td>.28</td>
<td>.37</td>
<td></td>
</tr>
<tr>
<td>T^2</td>
<td>-.68*</td>
<td>-.67*</td>
<td>-.72*</td>
<td></td>
</tr>
</tbody>
</table>

#### Moderation terms

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>-.10</td>
<td>-.11*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I×M</td>
<td>-.06</td>
<td>-.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T×M</td>
<td>.10</td>
<td>-.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I^2×M</td>
<td>.26</td>
<td>.32**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I×T×M</td>
<td>-.62*</td>
<td>-.61*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T^2×M</td>
<td>.46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| R^2         | .02      | .03      | .03      | .10      |
| Δ R^2       | .01      | .001     | .07      |          |
| F value     | 1.98*    | 1.10     | 2.89*    |          |

*Note. N = 417. * p < .05, + p < .10. I = individual proactive personality, T = team proactive personality. M in Model 3 = emotional intelligence. M in Model 4 = leader-member exchange. R^2 was calculated with the method proposed by Snijders and Bosker (1999: 102). F value reflects the joint significance of the added terms.
Chapter 4 Table 3. The Effect Misfit between Individual and Team Proactive Personality at High and Low Levels of Moderators

<table>
<thead>
<tr>
<th>Moderator Value</th>
<th>Polynomial Terms</th>
<th>Misfit Line (I = -T)</th>
<th>F value</th>
<th>Curvature (I²-I×T+T²)</th>
<th>F value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>T</td>
<td>I²</td>
<td>I×T</td>
<td>T²</td>
</tr>
<tr>
<td>High emotional intelligence</td>
<td>-17</td>
<td>.45</td>
<td>.08</td>
<td>-.09</td>
<td>-.40</td>
</tr>
<tr>
<td>Low emotional intelligence</td>
<td>-.09</td>
<td>.33</td>
<td>-.22</td>
<td>.65</td>
<td>-.94</td>
</tr>
<tr>
<td>High leader-member exchange</td>
<td>-.19</td>
<td>.16</td>
<td>-.04</td>
<td>-.01</td>
<td>-.09</td>
</tr>
<tr>
<td>Low leader-member exchange</td>
<td>-.05</td>
<td>.34</td>
<td>-.02</td>
<td>.75</td>
<td>-1.35</td>
</tr>
</tbody>
</table>

Note. ** p < .01. I = individual proactive personality, T = team proactive personality.
Chapter 4 Figure 1. Asymmetric Misfit Effect of Individual and Team Proactive Personality on Core task performance

Note: I = individual proactive personality, T = team proactive personality
Chapter 4 Figure 2. Misfit Effect of Individual and Team Proactive Personality on Core task performance at Different Values of EI

When EI is high:

![Graph showing misfit effect when EI is high.]

When EI is low:

![Graph showing misfit effect when EI is low.]

Note: I = individual proactive personality, T = team proactive personality
Chapter 4  Figure 3. Misfit Effect of Individual and Team Proactive Personality on Core task performance at Different Values of LMX

When LMX is high:

When LMX is low:

Note: I = individual proactive personality, T = team proactive personality
General Discussion

Proactivity has received a considerable amount of attention in the past decade. Many studies have examined why it happens in the workplace and found that individual attributes and work characteristics have significant influences (e.g., Only & Schmitt, 2017; Wu & Li, 2017). There is also an increasing focus on social context factors, due to the fact that the contemporary workplace is characterized by high interdependence: the daily organizational function is built on continuously unfolding interpersonal interactions. In the current thesis, I extend this line of research by reviewing and integrating previous findings (Chapter 2), showing how proactivity influences the interpersonal behaviours in the social context (Chapter 3), and examining how the social context, i.e., team proactive personality, conditions the effectiveness of being proactive.

In detail, Chapter 2 presents a comprehensive review of existing studies about how the social context affects proactivity in the workplace. As the review shows, social context factors, including organization-, leader- and team-related factors, influence proactivity through proactive motivations, including “reason to”, “can do”, and “energized to” motivational states, via individual-level, team-level, and cross-level processes. Chapter 3 extends the review by providing a different perspective: how individuals respond to proactivity in the workplace. The findings reveal a social paradox: behaving proactively could induce both helping and social undermining. Besides, individuals’ own proactive personality influences their response decisions: the more proactive they are, the more likely they show help rather than socially undermine the co-worker who behaves proactively. Given that individuals actively respond to proactivity and their proactive personality influences the responses, Chapter 4 examines how the team proactive personality, as a social context factor, influences the effectiveness of being proactive. As the results show, the person-team misfit in terms of a proactive personality decreases task performance, especially when individuals are
more proactive than the team. Chapter 4 extends Chapter 3 by showing that proactive individuals would actively use their personal (i.e., emotional intelligence) and relational (i.e., leader-member exchange) resources to cope with problems: both variables were found to buffer the misfit effect.

Together, these three chapters contribute to more thorough understandings of what happens when proactivity meets interdependence (see Chapter 1 Figure 1): the social context could serve as both a predictor to and a boundary of proactivity in the workplace. These separate findings have important implications for future research. In Chapter 2, it is suggested that researchers should have a broader focus on different social context factors (e.g., to focus more on the effects of co-workers and customers), more examine non-motivational mechanisms (e.g., examine the cognitive mechanisms), and more investigate the multilevel processes (e.g., focus more on ambient social context factors). At the same time, as proposed in Chapter 3, researchers should further examine how, why, and why individuals choose certain interpersonal behaviours as responses to proactivity in the workplace. Furthermore, as discussed in Chapter 4, researchers should examine the moderation effects of other social context factors, such as the team initiative climate, on the relationship between proactivity and outcomes. In general, from Chapters 2 to 4, it is consistently suggested that researchers should pay more attention to the roles which social context plays in the proactivity process. Besides these points, the findings from the three chapters together show some interesting future directions.

1. A Broader Scope of Social Context Factors

In the three chapters, I mainly focused on the team as a social context. In Chapter 1, I integrated the proactive motivation model (Parker & Collins, 2010) and the multilevel model of team motivation (Chen & Kanfer, 2006). In Chapter 2, I examined the dyadic interaction between individuals and their teammates. In Chapter 3, I used team proactive personality as a
moderator. However, as I mentioned in Chapter 1, the social context should be broader than the team. For example, in their review of the relationship between social context and performance appraisal, Levy and Williams (2004) included organizational climate, society’s sociopolitical system, and the competition within the industry as the social context factors. Social context was defined as the “multi-level interpersonal stimuli that surround, and are external to, the individual(s)” in Chapter 2, where I emphasized that this definition encompasses a broad scope of interpersonal stimuli, such as organizational values, industry norms, and national values. Since individuals not only live in their workplaces but are also embedded in different life roles (Savickas, 2005), these broader social context factors might also have important influences on proactivity. For example, individualism culture might encourage proactivity, while the emphasis on harmony might reduce proactivity. In the IT industry, initiative-enhancement human resource management practices might be especially useful to encourage proactivity, because of the high pressure for innovation in the industry. In short, in the future, researchers should focus on a broader scope of social context factors to examine how they affect proactivity.

2. The Dynamic Relationship between the Social Context and Proactivity

The three chapters together imply a dynamic relationship between the social context and proactivity. While Chapter 2 shows that the social context had significant influences on proactivity, Chapter 3 shows that proactivity could influence others’ interpersonal behaviours. Taking together, it is likely that the social context and proactivity influence each other reciprocally. Moreover, as shown in Chapter 3, the induced interpersonal behaviours could be positive and negative. Thus, there could be a negative feedback loop where proactivity is gradually diminished as a result of the received social undermining from peers, and also a positive feedback loop where proactivity is gradually enhanced as a result of the received help from peers. In Chapter 3 it is clarified that a highly proactive personality could
strengthen the positive loop because it encourages individuals to help the proactive co-worker. In Chapter 4 it is revealed that a misfit with the team in terms of a proactive personality might strengthen the negative loop because it decreases proactive individuals’ performance by causing interpersonal problems. In this sense, others’ proactive personality might be an important moderator on the reciprocal relationships.

While in this thesis I have mainly focused on the proactive personality, other variables might also influence the dynamic relationships. For example, leaders’ positive feedback might make co-workers feel that proactivity is encouraged, thus showing more favor to the proactive actor (Salancik & Pfeffer, 1978), which further encourages future proactivity. In short, in the future researchers could use a longitudinal design and dairy studies to unpack the dynamics between the social context and proactivity.


In Chapter 3 it is shown that individuals actively respond to the proactivity in the workplace, either in positive or negative ways. This idea gives support for the arguments in Chapter 4 that a person-team misfit in terms of proactive personality negatively influences individual task performance because the differences in proactive personality would make co-workers respond negatively to the proactive individuals. Together, these two chapters suggest that individual responses (e.g., interpersonal behaviours) serve as the mechanisms why the social context affects the outcomes of being proactive.

I suggest further examination of how different social contexts affect different interpersonal behaviours that influence the relationship between proactivity and outcomes. For example, would team-oriented transformational leadership increase a team’s openness to changes so that it enhances the relationship between proactivity and team commitment as well as satisfaction? At the same time, I encourage researchers to examine other mechanisms that might explain how the social context shapes the effectiveness of proactivity. For
example, would directive supervision enhance the effect of proactivity on performance because it helps individuals match their proactivity with organizational goals?

4. The Dark Side of Proactivity within a Social Context

As Chapter 2 shows, social context is not always beneficial to proactivity but sometimes could serve as obstacles. While I call for more studies about the negative effect of social context on proactivity, Chapter 3 and 4 imply a different story: proactivity might have unfavorable effects, within a specific social context. Chapter 3 shows that due to social comparison, co-workers might socially undermine the proactive actor. Chapter 4 shows that when the team is not consistent with the individuals at the level of proactivity, individuals’ task performance suffers. These two chapters challenge the argument that proactivity is always beneficial and call into question when proactivity is favorable. The recent paper by Parker et al. (2019) could help answer the question. They suggest that proactivity needs to be “wise”: to balance the task and strategic considerations, social and relational considerations, and self-regulation considerations.

Future studies could extend this thesis through in two ways. First, to further identify in what social contexts proactivity is harmful. For example, would abusive supervision make proactivity more draining? Would high centralization in decision-making procedures make proactivity more interpersonally risky? Second, to examine how the different considerations buffer the negative effect of proactivity. Chapter 4 shows that EI and LMX could buffer the misfit. These two resources could be seen as related to the social and relational considerations. The effect of other considerations could be examined in the future.

5. The Emergence of Team Proactivity Due to the Social Context

Chapters 3 and 4 focus on individual proactivity. In Chapter 2 we reveal that most of the existing studies have mainly focused on individual proactivity, but argue that to focus more on the team, and even higher-level, proactivity is necessary, because to deal with the
environmental uncertainties the team must be proactive (Harris & Kirkman, 2017). We propose that the discretionary social context could influence individual proactivity, which might contribute to the emergence of team proactivity. This proposition receives indirect support from Chapter 3: proactivity could induce interpersonal helping. Thus, if the members of the team are motivated, enabled, and/or energized to engage in proactivity, they might get help from others.

This interpersonal helping among team members would encourage future proactivity. As the process continues to unfold, members’ individual proactivity might emerge into team proactivity. In this sense, we just need a “light” from the social context to fuel the team proactivity. Thus, unlike the social learning process proposed by Chen and Kanfer (2006), the results in this thesis suggest a different social process that contributes to the emergence of collective proactivity: through increasing the helping among team members. Note that individual proactivity might also induce social undermining, and a misfit with the team would lower the effectiveness. Thus, ambient factors would have important influences on the social process of emergence. I encourage in future researchers to use suitable methods, such as interviews, to examine this process.

6. The Two Sides of Low Level of Proactive Personality

In Chapter 3 and 4, I focus on dispositional proactivity: the proactive personality. In Chapter 3, I show that highly proactive individuals would appreciate co-workers’ proactivity. This is consistent with the findings in Chapter 4 that a low misfit in proactive personality was not harmful to individual task performance. However, the findings of the low level of proactive personality are different in both chapters.

In Chapter 3, I found that for those low in proactive personality, the relationship between co-worker proactivity and personal identification as well as interpersonal helping is still positive. In Chapter 4, however, I showed that when individuals are more proactive than
the team, their task performance decreases more sharply, arguably because teammates low in proactive personality would show stronger resistance. These seemingly inconsistent findings show that those have a low level of proactive personality might have different behavioural patterns.

On one hand, they might rely on others for making changes and then adapt to the environment (Bateman & Crant, 1993). This is similar to the tendency to engage in adaptivity (Griffin et al., 2007). This pattern receives support from the results presented in Chapter 3. On the other hand, they might resist changes, because they prefer adhering to established routines and principles (Bateman, 2017). This pattern is supported by the results in Chapter 4.

The question is, why are there two different behaviour patterns and when would individuals with low level of proactive personality show either one? One possibility is that it depends on the contextual cues. For example, according to the literature about change readiness (Rafferty, Jimmieson, & Armenakis, 2013) and change-supporting behaviour (e.g., Kim, Hornung, & Rousseau, 2011), a supportive context would increase one’s openness and support for changes. According to the trait activation theory (Tett & Burnett, 2003), in this context, those low in proactive personality might show adaption to changes. Another possibility is that these are two different kinds of people. In other words, those with a low level of proactive personality could be further classified as either “adaptive” or “reactive” people. Apart from the studies of highly proactive individuals (Crant et al., 2017), it seems that we need more studies to understand what a “low level of proactive personality” means.

7. Use More Rigorous Methods

Above, I suggested researchers to use some more advanced designs to examine the relationship between social context and proactivity. When we were reviewing existing studies about the relationship between social context and proactivity (Chapter 2), we found that nearly 65% of existing studies adopted cross-sectional designs and 33% of the studies
adopted time-lag designs that do not measure variables at repeated time points. Besides, until now, no laboratory experiments were conducted. Instead, only 2 studies conducted quasi-experiments (Martin et al., 2013; Parker et al., 2013). Thus, the majority of the existing studies are vulnerable to common method bias (Podsakoff et al., 2003) and only have weak causal validity.

I strongly encourage researchers to more use truly longitudinal design, which refers to the design “containing at minimum three repeated observations ... on at least one of the substantive constructs of interest” (Ployhart & Vandemberg, 2010, p. 97), to overcome these problems. More importantly, longitudinal designs could study the dynamics between social context factors and proactivity.

Besides, since it is difficult to manipulate proactivity with pure lab experiments, I suggest researchers to more adopt quasi-experiment designs, which Grant and Wall (2009) argued to be powerful tools to examine causality and keep external validity. These two methods could provide stronger evidence about the causality between the social context and proactivity. Some studies adopted scenario-based experiment designs, as I did in Chapter 3. Although the vignette design has received serious criticism before, Aguinis and Bradley (2014) argued that it can be a useful approach to help make causal inferences. When longitudinal and quasi-experiment designs are not available, this design should be considered as a choice.

Moreover, I suggest to more consider the person-centric designs. Existing studies mostly adopted the variable-centric designs which assume that all individuals in the sample group share the same set of parameters, but individuals “may come from different subpopulations in which the observed relations between variables may differ, quantitatively and qualitatively” (Morin, Morizot, Boudrias, & Madore, 2011, p. 2). Latent profile analysis, which examines how relevant factors constitute different profiles to influence outcomes, is a
good choice. This method adopts person-centric analyses and is powerful to examine interactions among more than three variables. For example, Ashford et al. (1998) argued that POS, top management openness, positive social norms, and relationship quality constitute a favorable social context for issue selling. A more suitable method to test this argument is to examine how different profiles of these four variables, and so different levels of context favorability, influence individuals’ issue selling. Besides, as some scholars have done (Kuonath et al., 2017; Liu, Song, Li, & Liao, 2017; Schilpzand, Houston, & Cho, 2017), researchers could use dairy studies to examine how social context influences the within-individual differences in proactivity.

Last, all the existing studies used survey-based designs. The survey-based method has limitations: it is based on an assumption that the expectancy value of the error term equals to zero and the error term is independent of the true value of the measured variable. However, this is not always the case. For example, individuals might intentionally report higher or lower level of their proactivity, for impression management purposes. Leaders’ familiarity with the follower would also influence their reports of the follower’s proactivity. As a result, there would be systematic errors, which bias study findings. One solution is to use some observation-based reports. For example, researchers could ask the participants to write diary reports of their behaviours or simply stay together with the participants and count the frequency of their proactive behaviours. But this method might be influenced by the differences in researchers’ own understanding of what proactive behaviour is. On other solution is to combine the situation judgment test and item response theory to develop a new measure of proactivity, although this method seems more appropriate to measure traits. That is, participants will be asked to choose their behaviours given different situations. The more they choose proactive behaviours, the more challenging situations (e.g., highly risky situations for suggesting changes) will be displayed. The more they choose non-proactive
behaviours, the less challenging situations (e.g., highly friendly situations for suggesting changes) will be displayed. In short, I encourage researchers to develop some new methods to more accurately measure proactivity in the workplace.
References


https://doi.org/10.1037/0021-9010.80.4.532

https://doi.org/10.1002/(SICI)1099-1379(200002)21:1<63::AID-JOB8>3.3.CO;2-A


https://doi.org/10.1177/0149206305279602

https://doi:10.1037/h0047358


https://doi.org/10.1002/job.2194


Duan, J., Li, C., Xu, Y., & Wu, C. (2017). Transformational leadership and employee voice


of perceived organizational support-employee outcomes relationships: Comparing the
effects of power distance and traditionality. *Academy of Management Journal, 50*, 715–
729. https://doi.org/10.5465/amj.2007.25530866

Farrell, J. B., & Strauss, K. (2013). The People Make the Place, and They Make Things
Happen: Proactive Behavior and Relationships at Work. Cooper-Thomas, H. &
Morrison, R. (Eds.), *Relationships in organisations: A work psychology perspective.*
Palgrave Macmillan.

self-efficacy, ego defensiveness, and the aversion to employee voice. *Academy of

https://doi.org/10.1207/S15327043HUP1401_06

140. https://doi.org/10.1177/001872675400700202


https://doi.org/10.1177/0149206311434533

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The
https://doi.org/10.1037/0003-066X.56.3.218

*Research in Organizational Behavior, 23*, 133 – 188. https://doi.org/10.1016/s0191-


https://doi.org/10.5465/amr.2011.0109


Lam, C. K., Van der Vegt, G. S., Walter, F., & Huang, X. (2011). Harming high performers: A social comparison perspective on interpersonal harming in work teams. *Journal of


187


https://doi.org/10.1177/0149206310363732


Van Dyne, L., Kamdar, D., & Joireman, J. (2008). In-Role Perceptions Buffer the Negative


San Diego, CA: Academic Press


https://doi.org/10.5465/AMJ.2010.49388995


