Chapter 7 The Psychological Contracts of Older Employees

Tim Vantilborgh, Nicky Dries, Ans de Vos, and P. Matthijs Bal

7.1 Introduction

In recent decades, many developed countries have encountered demographic trends such as lower birth rates and increased life expectancies, which increased the average age of their working populations (Kooij, De Lange, Jansen, & Dikkers, 2008). Consequently, the proportion of older employees in the workforce is steadily rising, and is projected to reach 32 % of the entire workforce in developed countries by 2050 (United Nations, 2007). It is therefore not surprising that governments and organizations are calling upon researchers to investigate how older employees can be motivated to remain productive and to continue working instead of opting for early retirement (Bal, De Lange, Zacher, & Van der Heijden, 2013; Kanfer, Beier, & Ackerman, 2013).

In this chapter, we focus on the psychological contract as a key mechanism to understand what older employees expect from their employment relationships. The psychological contract describes an individual's beliefs regarding reciprocal obligations between her or himself and an organization (Rousseau, 1990). Put differently, it captures what an employee believes to owe the organization and what the employee

T. Vantilborgh (⊠)

Department of Experimental and Applied Psychology, Vrije Universiteit Brussel, Brussels, Belgium

e-mail: tim.vantilborgh@vub.ac.be

N. Dries

Department of Organisation Studies, KU Leuven, Leuven, Belgium

A. de Vos

Antwerp Management School, University of Antwerp, Antwerp, Belgium

P.M. Bal

School of Management, University of Bath, Bath, UK

believes the organization owes him or her in return. Over the course of the last two decades, the psychological contract has become one of the most influential concepts in the organizational behavior literature due to its ability to explain social exchange relationships and predict employees' attitudes and behaviors (Conway & Briner, 2009). Despite the substantial evidence for these relationships, studies conducted thus far mainly focused on the psychological contracts of young and middle-aged employees, and people with little work experience (Ng & Feldman, 2009). At best, they treated age as a control variable (e.g., Raja, Johns, & Ntalianis, 2004). Nonetheless, scholars have recently begun to respond to the call for research into the psychological contract of older workers as a particular subgroup of employees (e.g., Bal, De Lange, Jansen, & Van der Velde, 2008; Bal, De Lange, et al., 2013; Ng & Feldman, 2009; Vantilborgh et al., 2013).

The aim of this chapter is to provide a review of this emergent stream of research in the literature. We briefly discuss psychological contract theory and three theoretical perspectives that have been used in the literature to discuss older employees' psychological contracts. Next, we relate these theoretical perspectives to the content and the process of the psychological contract, and provide an overview of empirical studies. In the case of the content of older employees' psychological contracts, we complement these empirical studies with new meta-analytical findings. Finally, we integrate these theories and empirical findings in the discussion, and offer recommendations for future research and practitioners.

7.2 The Psychological Contract of Older Employees

The psychological contract is rooted in social exchange theory (Blau, 1964) and is considered vital to understand how individuals experience their employment relationship (Shore & Barksdale, 1998). Employees can perceive various mutual obligations within their psychological contract. For example, an employee may believe that his organization is obliged to give him a pay raise in the near future and, in return, feel obliged to work additional hours for his organization. It is important to note that the psychological contract is subjective (Rousseau & Tijoriwala, 1998), meaning that it focuses on the employee's perception of the mutual obligations with her or his organization. Moreover, the psychological contract should be distinguished from expectations, as only those expectations with a promissory nature are part of the psychological contract (Rousseau & Tijoriwala). It is also important that while the psychological contract entails obligations between two parties, the majority of the literature focused on the employer side of the contract. We follow this focus, meaning that we discuss the obligations of the organization towards older employees as perceived by these employees.

Throughout this chapter, we distinguish the content (i.e., what employees believe that their organization is obligated to provide them) from the process (i.e., how employees react when perceived obligations are (not) met by the organization or when they perceive to owe less/more than the organization owes

them in return) of the psychological contract. We draw on three theoretical perspectives—socioemotional selectivity theory, the selection optimization with compensation model, and the contract malleability and replicability model—that have been used in the literature to argue that the content and the process of older¹ employees' psychological contracts differs from that of younger employees. We briefly introduce these theoretical perspectives below.

Socioemotional selectivity theory states that as people grow older they start to experience time as running out (Carstensen & Löckenhoff, 2004). In the context of paid employment, this narrowing time horizon can refer both to time left until retirement or time left in life in general (Zacher & Frese, 2009). Socioemotional selectivity theory therefore introduces the concept of future time perspective, which captures individuals' subjective beliefs of the amount of time and opportunities they have left in their future (Bal, De Lange, et al., 2013). As long as the future is perceived to be open-ended (i.e., high future time perspective), people prioritize goals that optimize the future. However, when people view their future as close-ended (i.e., low future time perspective), they focus on present-oriented goals that maximize emotional meaning. For example, they try to avoid negative states and intensify positive emotions. Put differently, a diminishing future time perspective causes people to focus on deriving socioemotional meaning from life as opposed to long-term benefits and problem solving.

The selection optimization with compensation (SOC) model states that people encounter opportunities and limitations throughout life, to which they can react with three strategies; selection, optimization, and compensation (Freund & Baltes, 1998). Selection refers to setting goals, meaning that people restrict their activities to a few important domains in life (Bajor & Baltes, 2003). On the one hand, people engage in elective selection, meaning that they identify a set of goals on which they focus their resources (e.g., focus on relationships with family members instead of on a career). On the other hand, people engage in loss-based selection, meaning that they restructure goals due to having experienced a loss that threatens one's current level of functioning (e.g., focus on a less stressful life and foregoing a job promotion after suffering a heart attack). Whereas selection refers to focusing on certain goals in life, optimization and compensation refer to the means to reach these goals. Optimization indicates that people try to enhance or maintain their means or strategies to achieve certain goals (e.g., dedicating time and effort to learn new media). Compensation means that people use alternative means to maintain a certain level of functioning when previous means or strategies are no longer viable or useful (e.g., delegating certain tasks that require knowledge of new technology to colleagues). While the SOC model assumes that everyone uses the three aforementioned strategies, the loss of resources—e.g., a diminished fluid memory—and the new opportunities—e.g., an improved crystalized memory—associated with aging increases the relevance of the model for older employees (Freund & Baltes, 1998; Kanfer & Ackerman, 2004).

¹We follow the majority of the literature and consider employees who are older than 50 as "older employees" (Bal et al., 2008; Kanfer et al., 2013; Kooij et al., 2008).

The contract malleability and replicability model is used to explain why older employees react differently to psychological contract breach than younger employees (Ng & Feldman, 2009). Contract malleability indicates the extent to which employees can tolerate deviations from what the other party is obligated in the psychological contract, without perceiving that their contract is violated. Contract replicability is defined as an employee's beliefs regarding the extent to which aspects of the psychological contract can also be obtained in other organizations (Ng & Feldman). Employees are believed to react less strongly to breach when contract malleability is high and contract replicability is low. Moreover, Ng and Feldman proposed that psychological contracts become more malleable and less replicable as employees grow older. They argue that this is due to older employees' improved ability to regulate their emotions and their more forgiving stance towards misconduct in social relationships.

7.3 The Content of Older Employees' Psychological Contracts

The content of the psychological contract refers to an employee's perception of what the specific inducements and contributions are that both parties owe each other (Conway & Briner, 2009). Typologies are commonly used to describe the content of the psychological contract, of which one of the most widely used is the transactionalrelational psychological contract typology (Rousseau, 1990). Transactional contracts concern the exchange of highly specific economic inducements and contributions within a well-defined time frame (e.g., a certain amount of pay in exchange for a specified level of performance). Relational contracts entail the exchange of broader, subjectively understood socio-emotional inducements and contributions within an open-ended time frame (e.g., employee commitment in return for job security). Mutual trust and a desire to establish a long-term exchange relationship characterize these relational contracts. Both contract types were originally considered to represent opposite ends of a single dimension (e.g. Millward & Hopkins, 1998). However, scholars nowadays agree that they form independent dimensions, meaning that employees can perceive both transactional and relational obligations (e.g., Isaksson, De Cuyper, Oettel, & De Witte, 2010).

Socioemotional selectivity theory has been used to propose that age-related differences in the content of the psychological contract exist (e.g., Bal et al., 2008). The central argument being that as employees grow older, they focus on other goals in life and, hence, start to emphasize mutual obligations related to these goals. This argument is substantiated by a recent meta-analysis which showed a positive relationship between age and intrinsic motives, and a negative relationship between age and growth and extrinsic motives (Kooij, De Lange, Jansen, Kanfer, & Dikkers, 2011).

Bal and Kooij (2011) drew on this argument to test whether older employees reported a different psychological contract type than younger employees. They proposed that age moderated the relationship between work centrality and reporting a relational psychological contract. Building on the SOC model, they explained that older employees are faced with a loss of resources (e.g., diminishing physical capabilities and fluid memory) and therefore thoroughly consider where to invest remaining resources. As a result, they argued that older employees only develop relational psychological contracts with their organization if work occupies a central role in their life. These arguments were largely supported by their data. They found that age was negatively related to both transactional and relational obligations in the psychological contract. However, older employees who attached a central role to work in life were more likely to report a relational contract.

Bal and Kooij's (2011) findings contrast with an earlier study by Hess & Jepsen (2009) who found that baby-boomers (born between 1946 and 1964 and who currently can be considered as older employees) reported more transactional and relational obligations than employees belonging to generation X (born between 1965 and 1979). They argued that this might be due to generation-X's cynical attitude towards work. No differences could be discerned in the content of the psychological contract between baby-boomers and generation-Y employees (born between 1980 and 1994). Taking a more in-depth look at specific obligations in the psychological contract, Lub, Bijvank, Bal, Blomme, and Schalk (2012) compared generations and found that baby-boomers reported fewer obligations related to a stimulating job, intra-organizational mobility, and work-life balance than other generations.

In sum, the few studies to date that examined the content of older employees' psychological contracts yield mixed results. On the one hand, when relating content to age it appears that older employees perceive fewer transactional and relational obligations than young employees (Bal & Kooij, 2011). On the other hand, studies that relate content to generational differences suggest that older employees (i.e., baby-boomers) perceive more transactional and relational obligations than middle-aged employees belonging to generation-X (Hess & Jepsen, 2009). Moreover, the centrality of work in life (Bal & Kooij) and the specific obligations underlying the transactional-relational contract types (Lub et al., 2012) may need to be considered to fully untangle these differences between older and younger employees.

7.4 Meta-analysis

Given that research on the content of older employees' psychological contracts is scarce and yields mixed findings, we conducted a meta-analysis to test the relationship between age and organizational tenure on the one hand, and transactional and relational psychological contracts on the other. In June and July 2013, we searched a number of databases (Psycinfo, ABI-Inform, and Medline) for

papers published between 1989—the year of Rousseau's (1989) seminal article on the psychological contract—and 2013. We used combinations of the following search terms: age, tenure, relational psychological contract, transactional psychological contract. Studies were included if they contained an effect size for the relationship between age or organizational tenure on the one hand and transactional or relational contracts on the other. We only considered studies that examined transactional and relational obligations of the employer towards the employee, as perceived by the employee. Moreover, we only included studies that used samples of paid employees and that were written in English or Dutch.² Next to the database search, we examined reference lists of previous meta-analyses for additional articles (Bal et al., 2008; Zhao, Wayne, Glibkowski, & Bravo, 2007). The programs of the annual Academy of Management meetings (years 2008–2013) were scanned and authors who had presented papers relevant to our meta-analysis were contacted by e-mail. Finally, we distributed a call for relevant (un)published papers via the Organizational Behavior and Careers mailing lists of the Academy of Management. When two or more studies used the same sample, we included only the most recent study. This search strategy yielded 26 samples ($N_{\text{respondents}} = 7,784$) that could be used to analyze the relationship between age and the transactional and relational contract, and 26 samples ($N_{\text{respondents}} = 8,504$) that could be used to analyze the relationship between organizational tenure and the transactional and relational contract. We analyzed the data in R with the metafor package (Viechtbauer, 2010), using the Hunter-Schmidt estimator. Correlations between age/organizational tenure and transactional or relational contracts were adjusted for sample size and the internal reliability of the transactional and relational contract measures. All correlations were then submitted to a Fisher Z-transformation. We ran random effect models to estimate the true-score correlations.

Table 7.1 provides an overview of the sample characteristics, sample size, average age and organizational tenure, internal reliabilities of the transactional and relational contract, and their correlations with age and organizational tenure of the studies included in the meta-analysis. The mean age, weighted by sample size, was 35.20 years (mean ages ranged from 24.71 to 47.92 years in primary studies). The mean organizational tenure, weighted by sample size, was 8.38 years (mean tenures ranged from .48 to 14.68 years in primary studies). Fifty-two percent of the total sample was female. Correlations between age and transactional and relational psychological contracts ranged from -.35 to .17 and from -.35 to .29 respectively, while correlations between organizational tenure and transactional and relational psychological contracts ranged from -.31 to .19 and from -.35 to .35 respectively. The reliabilities of transactional and relational psychological contracts ranged from .64 to .89 and from .62 to .92 respectively.

Table 7.2 shows the number of studies (k) used in the meta-analyses, the total sample size (N), the average correlation, the true-score correlation (ρ) and its standard error, the 80 % credibility interval, the 95 % confidence interval, and the test

²The mother tongue of the authors.

Table 7.1 Sample characteristics, sample size, average age and tenure, Pearson correlations and internal reliabilities of transactional and relational contracts with age and tenure

17.7.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.						Transact	Transactional contract	ract	Relation	Relational contract	
33 Dutch employees 465 42.64 14.26 01 .12 .71 31 22 33 Dutch employees 1,058 43.33 14.68 .10 .15 .71 20 18 Ann Belgian and Dutch 334 47.92 na 02 na 87 13 na NO9) Portuguese customer 220 29.36 na na na 09 na Portuguese call-center 363 27.25 3.38 01 na .84 11 na workers workers 27.25 3.38 04 na .84 11 na Nortuguese call-center 191 26.89 2.75 14 07 .81 .14 .07 Norkers Saccious 191 26.89 2.75 14 07 .81 .14 .07 Israeli bank staff 313 39.90 na 14 07	Authors	Sample	N	M_{age}	Mtenure	rage	Frenure	r _{yy}	rage	r tenure	7
3) Dutch employees 1,058 43.33 14.68 .10 .15 .71 -20 18 Aan Belgian and Dutch 334 47.92 na -0.02 na .87 13 na Portuguese customer 220 29.36 na na na 09 na Portuguese call-center 363 27.25 3.38 01 na .84 11 na workers Portuguese call-center 363 27.25 3.38 01 na .84 11 na Workers Portuguese call-center 191 26.89 2.75 14 07 .81 .11 na Workers Workers 313 39.90 na 04 na .64 .09 na 1 Straeli bank staff 313 39.90 na 04 na .64 .09 .13 .04 1 Straeli bank staff 313 39.90 na .0	Bal and Kooij (2011)	Dutch employees	465	42.64	14.26	01	.12	.71	31	22	.82
fam Belgian and Dutch employees 334 47.92 na 02 na 13 na 909) Portuguese customer 220 29.36 na na na 09 na Portuguese call-center 363 27.25 3.38 01 na .84 11 na workers Portuguese factory 339 29.83 3.00 13 08 .80 .13 .08 workers Portuguese call-center 191 26.89 2.75 14 07 .81 .14 .07 workers Workers 191 26.89 2.75 14 07 .81 .14 .07 workers 18.raeli bank staff 313 39.90 na 04 .81 .14 .07 workers 18.raeli bank staff 313 39.90 na .01 .82 na .04 workers Latin-American faculty 96 45.63 11.26	Bal, Kooij, and De Jong (2013)	Dutch employees	1,058	43.33	14.68	.10	.15	.71	20	18	.82
009) Portuguese customer service workers 220 29.36 na na na 09 na Portuguese call-center workers 363 27.25 3.38 01 na .84 11 na Portuguese call-center workers Portuguese factory 339 29.83 3.00 13 08 .80 .13 .08 Portuguese call-center 191 26.89 2.75 14 07 .81 .14 .07 workers Israeli bank staff 313 39.90 na 04 na .64 .09 na 2000) UK employees and workers 639 na 7.70 na .01 .82 na .04 .09 managers Latin-American faculty 96 45.63 11.26 na .02 .85 na .04 NS Belgian employees 97 41.8 8.7 06 04 .80 12 .19 Chinese employees </td <td>Bal, De Lange, Zacher, and Van der Heijden (2013)</td> <td>Belgian and Dutch employees</td> <td>334</td> <td>47.92</td> <td>na</td> <td>02</td> <td>na</td> <td>.87</td> <td>13</td> <td>na</td> <td>.81</td>	Bal, De Lange, Zacher, and Van der Heijden (2013)	Belgian and Dutch employees	334	47.92	na	02	na	.87	13	na	.81
Portuguese call-center 363 27.25 3.38 01 na .84 11 na workers workers 339 29.83 3.00 13 08 .80 .13 .08 workers workers 191 26.89 2.75 14 07 .81 .14 .07 Israeli bank staff 313 39.90 na 04 na .64 .09 na 1000) UK employees and managers 639 na 7.70 na .64 .09 na 2001 UK employees and managers 447 34.00 10.00 na 04 .09 .85 na .04 107 Belgian employees 447 34.00 10.00 na 28 .81 na .04 107 Belgian employees 491 na 06 04 .80 12 19 108 Chinese employees 491 na 06	Castanheira and Chambel (2009)	Portuguese customer service workers	220	29.36	na	na	na	na	60	na	.78
Portuguese factory 339 29.83 3.00 13 08 .80 .13 .08 workers Portuguese call-center 191 26.89 2.75 14 07 .81 .14 .07 workers Israeli bank staff 313 39.90 na 04 na .64 .09 na 2000) UK employees and managers 639 na 7.70 na .01 .82 na .04 Latin-American faculty 96 45.63 11.26 na .02 .85 na 24 07) Belgian employees 447 34.00 10.00 na 28 .81 na .04 US employees 97 41.8 8.7 06 04 .80 12 19 Pakistani employees 46 39 .48 na .15 .77 na .05 Pakistani employees 46 39 .48 na .15 </td <td>Chambel and Alcover (2011)</td> <td>Portuguese call-center workers</td> <td>363</td> <td>27.25</td> <td>3.38</td> <td>01</td> <td>na</td> <td>.84</td> <td>11</td> <td>na</td> <td>6.</td>	Chambel and Alcover (2011)	Portuguese call-center workers	363	27.25	3.38	01	na	.84	11	na	6.
Portuguese call-center 191 26.89 2.75 14 07 .81 .14 .07 workers Israeli bank staff 31.3 39.90 na 04 na .64 .09 na 2000) UK employees and managers 63.9 na 7.70 na .01 .82 na .04 Latin-American faculty 96 45.63 11.26 na .02 .85 na 24 07) Belgian employees 447 34.00 10.00 na 28 .81 na 24 07) Belgian employees 471 34.00 10.00 na 28 .81 na 04 Chinese employees 491 na 06 04 80 12 19 Pakistani employees 46 39 .48 na 15 na 05 na Dakistani employees 361 33.68 7.68 17 14	Chambel and Castanheira (2006)—sample A	Portuguese factory workers	339	29.83	3.00	13	08	08.	.13	80.	08.
Straeli bank staff 313 39.90 na 04 na .64 .09 na 2000) UK employees and managers 639 na 7.70 na .01 .82 na .04 Latin-American faculty 96 45.63 11.26 na .02 .85 na 24 07) Belgian employees 447 34.00 10.00 na 28 .81 na .04 O US employees 97 41.8 8.7 06 04 .80 12 19 Pakistani employees 491 na 05 14 .77 .12 .12 US employees 46 39 .48 na .15 na .05 na US employees 46 39 .48 na .15 na .05 na Pakistani employees 361 33.68 7.68 17 14 .77 01 .07	Chambel and Castanheira (2006)—sample B	Portuguese call-center workers	191	26.89	2.75	14	07	.81	41.	.07	.81
2000) UK employees and managers managers 639 na 7.70 na .01 .82 na .04 Latin-American faculty members 45.63 11.26 na .02 .85 na 24 07) Belgian employees 447 34.00 10.00 na 28 .81 na 04 VS employees 97 41.8 8.7 06 04 .80 12 19 Chinese employees 491 na na 09 14 .77 .12 15 Pakistani employees 46 39 .48 na .15 na .05 na Pakistani employees 46 39 .48 na .15 na .05 na Pakistani employees 46 39 .48 na .15 na .05 na	Cohen (2011)	Israeli bank staff	313	39.90	na	04	na	49.	60.	na	62.
Latin-American faculty 96 45.63 11.26 na .02 .85 na 24 07) Belgian employees 447 34.00 10.00 na 28 .81 na .04 VS employees 97 41.8 8.7 06 04 .80 12 19 Chinese employees 491 na na 09 14 .77 .12 .12 Pakistani employees 302 31.71 na 15 na .89 .05 na US employees 46 39 .48 na .15 .72 na .05 Pakistani employees 361 33.68 7.68 17 14 .77 01 .07	Coyle-Shapiro and Kessler (2000)	UK employees and managers	639	na	7.70	na	.01	.82	na	90.	.62
OT) Belgian employees 447 34.00 10.00 na 28 .81 na .04 Chinese employees 97 41.8 8.7 06 04 .80 12 19 Chinese employees 491 na na 09 14 .77 .12 .12 Pakistani employees 302 31.71 na 15 na .89 .05 na US employees 46 39 .48 na .15 .72 na .05 Pakistani employees 361 33.68 7.68 17 14 .77 01 .07	Dabos and Rousseau (2004)	Latin-American faculty members	96	45.63	11.26	na	.02	.85	na	24	.92
US employees 97 41.8 8.7 06 04 .80 12 19 Chinese employees 491 na na 09 14 .77 .12 .12 Pakistani employees 302 31.71 na 15 na .89 .05 na US employees 46 39 .48 na .15 .72 na .05 Pakistani employees 361 33.68 7.68 17 14 .77 01 .07		Belgian employees	447	34.00	10.00	na	28	.81	na	9.	.81
Chinese employees 491 na na 09 14 .77 .12 .12 Pakistani employees 302 31.71 na 15 na .89 .05 na US employees 46 39 .48 na .15 .72 na .05 Pakistani employees 361 33.68 7.68 17 14 .77 01 .07	Eatough (2013)	US employees	67	41.8	8.7	90	40	08.	12	19	88.
Pakistani employees 302 31.71 na 15 na .89 .05 na US employees 46 39 .48 na .15 .72 na .05 Pakistani employees 361 33.68 7.68 17 14 .77 01 .07	Gardner, Huang, Pierce, Niu, and Lee (2010)	Chinese employees	491	na	na	60	14	TT.	.12	.12	.87
US employees 46 39 .48 na .15 .72 na .05 Pakistani employees 361 33.68 7.681714 .7701 .07	Haq, Jam, Azeem, Ali, and Fatima (2011)	Pakistani employees	302	31.71	na	15	na	68:	.05	na	68.
Pakistani employees 361 33.68 7.681714 .7701 .07	Ho, Rousseau, and Levesque (2006)	US employees	46	39	.48	na	.15	.72	na	.05	06:
	Jamil, Raja, and Darr (2013)	Pakistani employees	361	33.68	7.68	17	14	<i>TT.</i>	01	.07	.82

(continued)

Table 7.1 (continued)

					Transacti	Transactional contract	act.	Relations	Relational contract	
Authors	Sample	N	M_{age}	$M_{ m tenure}$	rage	rtenure	r _{yy}	rage	rtenure	r yy
Lub, Blomme, and Bal (2011)	International hotel employees	102	29.80	2.68	00.	03	89.	29	26	.87
Luksyte, Spitzmueller, and Maynard (2011)	US employees	215	24.71	2.76	na	15	62.	na	90.	88.
Purvis and Cropley (2003)	UK nurses	223	32.30	4.60	.17	.19	.81	03	13	.87
Raja, Johns, and Bilgrami (2011)	Pakistani employees	331	30.81	4.21	60	07	.85	60:	.07	.85
Raja, Johns, and Ntalianis (2004)	Pakistani employees	197	38.81	12.25	80.	.12	.72	.29	.35	62.
Ravlin, Liao, Morell, Au, and Thomas (2012)	International employees	352	na	na	23	13	.82	35	35	.78
Richard, McMillan-Capehart, Bhuian, and Taylor (2009)	US employees	200	na	14.00	29	29	.75	07	01	.78
Schieven (2009)	Dutch employees	75	32.11	na	16	na	.74	.16	na	.74
Shih and Chen (2011)	Taiwanese employees	485	36.60	9.74	na	.07	.74		.12	.90
Syed (2010)	•	406	27.9	4.23	11	18	.75	05	04	.71
Uen and Chien (2010)	Taiwanese knowledge workers	127	33.11	na	27	na	.72	.22		68.
Zagenczyk, Restubog, Kiewitz, Kiazad, and Tang (2011) —sample A	Philippine employees	199	na	na	12	.13	62.	na	na	na
Zagenczyk et al. (2011) —sample B	Philippine employees	156	29.8	5.5	14	10	.80	.12	.01	.90
Zagenczyk et al. (2011) —sample C	Philippine employees	152	32.72	na	35	31	62.	.07	05	.82
Zagenczyk et al. (2011) —sample D	Philippine employees	259	30.71	na	18	12	.74	.15	90.	88.
Zhao and Chen (2008)—sample A	US employees	165	38.70	6.82	17	20	88.	05	00:	6.
Zhao and Chen (2008)—sample B	Chinese employees	505	33.10	6.75	17	12	.78	60	18	.85
*na-no data renorted in etudy										

*na=no data reported in study

					SE	80 % credibil interval	5	95 % confide interva		
Relationship	K	N	Mean r	ρ	of ρ	Lower	Upper	Lower	Upper	Q
Age with transactional contract	26	7,763	11	12***	.03	37	.13	17	06	143.53***
Age with relational contract	26	7,784	01	02	.04	36	.33	09	.05	251.58***
Tenure with transactional contract	26	8,504	06	07*	.03	38	.24	13	002	218.64***
Tenure with relational contract	25	8,305	03	03	.03	35	.29	10	.04	222.65***

Table 7.2 Meta-analytic results of relationships between age and tenure on the one hand and transactional and relational contracts on the other

for heterogeneity of the true effects (Q). As can be seen in this table, the true-score correlations of the relationship between age and transactional contracts ($\rho = -.12$, p < .001) and organizational tenure and transactional contracts ($\rho = -.07$, p < .05) were statistically significant. With increasing age and tenure, employees tend to report less transactional contracts. As age and tenure were often correlated in the primary studies (average r = .54), we performed an additional analysis in which we treated the correlation between age and tenure as a covariate. The results indicated that the true-score correlations between age and transactional contracts and between tenure and transactional contracts were contingent upon the correlation between age and tenure (see Fig. 7.1). In particular, the true-score correlation between age and transactional contracts became statistically significant when the correlation between age and tenure exceeded .25 in the primary studies. Likewise, the true-score correlation between tenure and transactional contracts became statistically significant when the correlation between age and tenure exceeded .47 in the primary studies. True-score correlations between age/tenure and relational contracts did not significantly differ from zero for varying values of the age-tenure correlation. This implies that both age and tenure are related to transactional contracts, and that these effects are to a certain extent intertwined. Finally, the regression tests for funnel plot asymmetry were not statistically significant when estimating the true-score correlations between age and transactional contracts (t(17) = -1.05, ns.), age and relational contracts (t(16) = .96, ns.), tenure and transactional contracts (t(17) = -.61, ns.), and tenure and relational contracts (t(16) = .55, ns.). This suggests a low likelihood of publication bias influencing our findings. In sum, we can conclude from this metaanalysis that as employees grow older and gain more work-related experience, they tend to perceive fewer transactional obligations, while the perception of relational obligations remains stable.

^{*}p<.05; ***p<.001

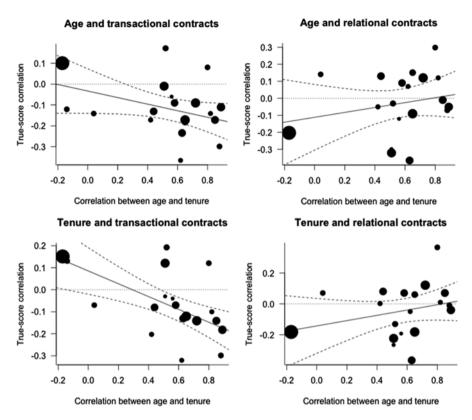


Fig. 7.1 Plots of the true-score correlations found in the meta-analysis while controlling for the correlation between age and tenure (*Notes. Dashed lines* represent confidence bands. *Dots* represent correlations in primary studies)

7.5 The Process of Older Employees' Psychological Contracts

7.5.1 Breach and Fulfillment

Morrison and Robinson (1997) explain that employees perceive a breach when they become cognitively aware that their organization failed to meet one or more obligations in the psychological contract. Put differently, employees compare the inducements that the organization is obliged to provide them to the inducements they actually receive (Vantilborgh et al., 2012). Psychological contract breach generally results in negative outcomes for the employee and the employer, such as feelings of violation, reduced trust, commitment, and performance, and increased turnover intentions and deviant behaviors (Bal et al., 2008; Zhao et al., 2007). These relationships between psychological contract breach and outcomes are commonly explained

by social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960). When employees perceive that their organization is not living up to its end of the deal, they reciprocate with negative behaviors and alter their behavior in order to redress the balance in their psychological contract.

Socioemotional selectivity theory has mostly been used to argue that older employees react differently to breach compared to younger and middle-aged employees. In 2008, Bal and colleagues conducted a large-scale meta-analysis on reactions to psychological contract breach and the moderating role of age. They hypothesized that older employees would react less intensely—in terms of organizational commitment, trust, and job satisfaction—to breaches in their psychological contract than younger employees. This hypothesis was largely supported: older employees reported a smaller decrease in organizational commitment and trust following a perceived breach than younger employees. However, they also found that older employees reported a stronger decline in job satisfaction than younger employees. A possible explanation for this latter finding is that the moderating variable in their analysis—i.e., age—is an umbrella variable that subsumes several underlying processes. Recent studies have therefore started to explore these underlying processes, which may help to further unravel differences between younger and older employees.

A number of studies examined the role of future time perspective in this regard. First, Bal and colleagues (2010) demonstrated that older employees with an open future time perspective react more strongly to psychological contract fulfillment than those with a limited future time perspective. In particular, the former employees perceive more in-role, citizenship, and high performance obligations of their own when their organization fulfills transactional and relational obligations. Second, De Lange and colleagues (2011) showed that employees with an open future time perspective reported a stronger decline in work motivation when their organization broke relational obligations than employees with a limited future time perspective. In line with socioemotional selectivity theory and Bal and colleagues' (2008) metaanalysis, this finding suggests that older employees, who are more likely to experience a limited future time perspective, react less strongly to relational contract breaches than younger employees. Third, Bal and colleagues (2013) showed that future time perspective moderates relationships between psychological contract fulfillment and organizational commitment. In particular, employees with a limited future time perspective who experience relational fulfillment report increased continuance commitment. In other words, they feel that leaving the organization would require them to sacrifice the socio-emotional inducements included in their relational contract. In contrast, employees with an open future time perspective report increased normative commitment, meaning that receiving socio-emotional inducements inspires them to stay in the organization out of a sense of reciprocity. Reverse relationships could be discerned for transactional contract fulfillment. Following transactional contract fulfillment, employees with a limited future time perspective developed normative commitment, as the short-term nature of economic inducements triggered an immediate sense of reciprocity. Employees with an open future time perspective reported an increased continuance commitment in case of

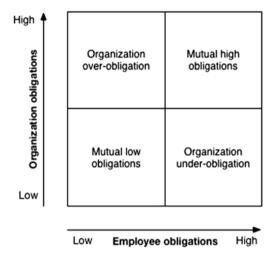
transactional fulfillment, meaning that they believed that leaving the organization required considerable (economic) sacrifices.

In contrast to socioemotional selectivity theory, the SOC model and the concept of contract replicability have scarcely been drawn upon when studying older employees' reactions to breach and fulfillment. Nonetheless, both offer useful perspectives to better understand these relationships. First, one might argue based on the SOC model that older employees who optimize their means to achieve certain goals may respond differently to breach and fulfillment of obligations related to these goals. For example, an older employee who focuses his resources on achieving a healthy work-life balance in favor of career opportunities may respond less negatively when the organization fails to provide chances for promotion. In contrast, this employee may respond more negatively when the organization does not live up to obligations related to work-life balance. Second, perceptions of contract replicability may explain why older employees react differently to breach (Ng & Feldman, 2009). Ng and Feldman (2008) showed that employees who perceive that their contract is unreplicable in other organizations experienced higher levels of affective, normative and continuance commitment. These relationships were moderated by age, as older employees were especially likely to develop an emotional bond (i.e., affective commitment) and a sense of reciprocity (i.e., normative commitment) when they perceived that their contract was unreplicable.

7.5.2 The Degree of Balance

The degree of balance forms the second process—next to breach and fulfillment by which the psychological contract influences outcomes. It received far less attention in the literature, which is striking as balance captures an essential feature of the psychological contract, namely exchange (De Cuyper, Rigotti, De Witte, & Mohr, 2008). The degree of balance refers to employees' comparisons between the level of inducements obliged by the organization to the level of contributions they are obliged to the organization in return (De Cuyper et al., 2008; Vantilborgh et al., 2013). Four types (see Fig. 7.2) are commonly used to describe the degree of balance: mutual low obligations (i.e., both the employer and the employee have few obligations); mutual high obligations (i.e., both the employer and the employee have many obligations); organization over-obligation (i.e., the employer has many obligations while the employee has few obligations); and organization under-obligation (i.e., the employer has few obligations while the employee has many obligations) (Shore & Barksdale, 1998). Links can be drawn between the degree of balance and the content of the psychological contract, as mutual high obligations contracts resemble the relational contract type, whereas mutual low obligations resemble the transactional contract type (De Cuyper et al.). Moreover, unbalanced contracts (i.e., organization over- and under-obligation) have been related to psychological contract breach (De Cuyper et al.). Research suggests that employees who perceive high mutual obligations tend to be more committed to their

Fig. 7.2 Four types that can be discerned in the degree of psychological contract balance



organization, more satisfied with their job and life in general, and experience less negative emotions (De Cuyper et al.).

To date and to our knowledge, only one study examined the relationship between age and psychological contract balance. Vantilborgh and colleagues (2013) demonstrated, in a sample of volunteers, that older volunteers were more likely to report organization under-obligation, while younger volunteers were more likely to report organization over-obligation. They explained these differences based on socioemotional selectivity theory, arguing that older people were more likely to engage in exchanges where few inducements are promised in return for their contributions, as they attach less value to gaining inducements compared to maintaining the relationship. The SOC model offers an additional explanation, as compensation strategies used by older people may affect the degree of balance in the psychological contract. For example, when people feel that they have to exert additional effort to compensate for certain age-related losses (e.g., diminishing physical and fluid memory capabilities), they are more likely to interpret the exchange as organization underobligation. Vantilborgh et al. also demonstrated that reactions to various degrees of psychological contract imbalance depended on the volunteer's age. Older volunteers were more inclined to leave their organization when faced with organization over-obligation than younger volunteers. While the context of this study was quite specific—namely volunteers working in non-profit organizations—its findings may be relevant to paid employees. There is tentative evidence suggesting that older employees' perceive more obligations on their own behalf than younger employees (Schalk, 2004). This might be because older employees are more benevolent, and hence their own level of contributions is less dependent on the level of inducements received from their organization (Wagner & Rush, 2000). This could mean that older paid employees are also more likely to perceive organization under-obligation or mutual high obligations than younger paid employees. However, additional research is required to test the relationship between age and degree of balance in a context of paid employment. Care should be exerted when generalizing Vantilborgh and colleagues' findings, as the altruistic nature of volunteering can itself influence the degree of balance in exchanges, with volunteers attaching less value to receiving inducements than paid employees.

7.6 Discussion

Theoretical and empirical insights suggest that older employees perceive different obligations in their psychological contract and react differently to breach, fulfillment and the degree of balance in their contract than younger employees. Our metaanalysis suggests that older employees are less likely to perceive transactional obligations in their contract: they have lower expectations regarding tangible inducements in the short-term from their organization, such as commensurate pay and well-defined working hours (Conway & Briner, 2009). Our meta-analysis also indicates that older employees perceive similar levels of relational obligations as younger employees. Hence, there appears to be no decrease in expecting socioemotional inducements that strengthen the long-term relationship with the organization, such as job security and attention to the personal well-being of the employee (Conway & Briner). An alternative explanation for the non-significant relationships between age/tenure and the relational contract in our meta-analysis may be that different components of the relational contract attenuate its overall relationship with age/tenure. While older employees may value the socio-emotional gratification component present in the relational contract, younger employees may value the opportunities for growth and the learning components in this type of contract. Moreover, older employees who do not attach a central role to work in life may report lower levels of relational obligations (Bal & Kooij, 2011).

In general, we can conclude from the literature that older employees tend to react less intensely to breaches in their psychological contract. They experience smaller decreases in commitment and trust when perceiving a breach in their psychological contract (Bal et al., 2008). At the same time, they become more dissatisfied when perceiving a breach. It is possible that older employees consider it unlikely that they will be able to negotiate a similar contract in a different organization (i.e., low contract replicability; Ng & Feldman, 2009). As a result, they disgruntledly stay in the organization when perceiving a breach and 'by necessity' remain committed and trusting. However, the literature suggests that not every older employee reacts similarly to contract breach and fulfillment. In particular, future time perspective needs to be taken into account (Bal et al., 2010; Bal, De Lange, et al., 2013). When older employees perceive that they have ample time left in the organization and in life in general, they tend to react more positively to contract fulfillment and more negatively to contract breach (Bal et al., 2010). When they perceive that they have little time left, older employees start to focus on other goals in life, rendering breach and fulfillment of the psychological contract less relevant. Future time perspective also determines the type of commitment older employees develop when they perceive that the organization fulfills its obligations (Bal, De Lange, et al., 2013).

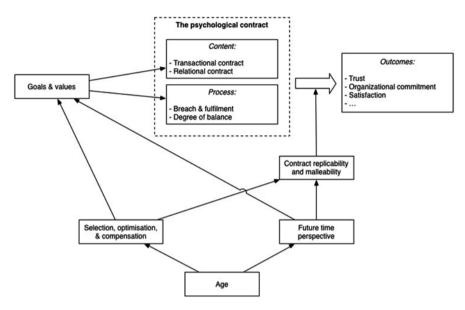


Fig. 7.3 Factors that influence the content and process of older employees' psychological contracts

Finally, tentative evidence suggests that older employees are more likely to perceive a high amount of obligations on their own behalf, resulting in a degree of contract balance that can best be described as either high mutual obligations or organization under-obligation (Schalk, 2004; Vantilborgh et al., 2013). A state of mutual high obligations tends to be desirable, as it has been associated with positive outcomes such as high levels of job and life satisfaction (De Cuyper et al., 2008). In contrast, organization under-obligation is less desirable (De Cuyper et al.), as employees will be likely to lower their own obligations over time to regain balance in their psychological contract.

While empirical findings to date clearly indicate that the content and process of older employees' psychological contracts differs from that of younger employees, the underlying mechanisms explaining these differences are not yet fully understood. Figure 7.3 provides an overview of such factors. As can be seen in this figure, lifespan theories propose that aging triggers certain processes. On the one hand aging is associated with a narrowing future time perspective, while on the other it necessitates selection, optimization, and compensation strategies (Bajor & Baltes, 2003). These changes in future time perspective and strategies lead to shifting priorities in goals and values (e.g., a decreasing importance of growth and an increasing importance of social relationships). Goals and values in turn influence the content of the psychological contract, as employees seek out exchange agreements or construe their current exchange relationship in line with their goals and values (De Vos, Buyens, & Schalk, 2005). Goals and values also influence the process of the contract, as prioritized goals become salient in the psychological contract, causing employees to monitor whether the obligations related to these prioritized goals

are fulfilled or not (Morrison & Robinson, 1997). Likewise, a new priority in goals may elicit a shift in the preferred degree of psychological contract balance (Vantilborgh et al., 2013).

Lastly, selection, optimization and compensation strategies and future time perspective influence how older workers respond to the psychological contract through perceptions of contract replicability and malleability (Ng & Feldman, 2009). For example, diminishing resources due to aging may cause employees to optimize their current job. These older employees may believe that negotiating a similar deal in another organization is unlikely, creating the perception that their current contract is not replicable. As a result, they will react less negatively to breach. At the same time, the improved emotion regulation skills of older employees—according to socioemotional selectivity theory—will improve older employees' tolerance for deviations in the psychological contract (i.e., high contract malleability).

7.6.1 Research Agenda

We believe that two major challenges for future research on older employees' psychological contracts need to be addressed. The first challenge is conceptual, as research needs to move beyond relating age or tenure to the psychological contract. Age and tenure are merely umbrella concepts, which subsume several changes in people's lives and careers (Bal, De Lange, et al., 2013). Instead, attention should be paid to studying the mechanisms underlying these relationships. While recent studies have started to explore the role of future time perspective (e.g., Bal et al., 2010; De Lange et al., 2011), the majority of the mechanisms linking older employees' characteristics to the content and the process of the psychological contract (see Fig. 7.3) have not yet been empirically tested. For example, it is not clearly understood how changing goals and values relate to changes in the desired and actual content of employees' psychological contract. Future research should also take into account the role of the environment in which older employees work. For example, Ng and Feldman (2009) argue that age dissimilarity determines whether employees will perceive their contract as replicable and malleable. As such, an older employee working in a team with young colleagues may react less intensely to psychological contract breach than an older employee working in a team with similarly aged colleagues, because he or she occupies a minority status in the former situation. Relatedly, in line with the majority of research to date, we compared older employees' psychological contract to those of younger employees. However, older employees form a heterogeneous group, meaning that future studies should explore psychological contract differences within this group of older employees. The second challenge is methodological, as future studies should ideally adopt longitudinal or cross-sequential designs (Kanfer & Ackerman, 2004). As shown in our meta-analysis, the effects of older employees' characteristics are intertwined and cannot be fully disentangled in cross-sectional research (e.g., Vantilborgh et al., 2013) or in meta-analyses based on predominantly cross-sectional primary studies (e.g., Bal et al., 2008). To date, evidence is available that psychological contracts (content and process) are subject to change over time but this has only been studied for a very specific time period, namely the socialization period (e.g. De Vos, Buyens & Schalk, 2003; Lee, Liu, Rousseau, Hui, & Chen, 2011). Psychological contracts are conceived as a mental model and once established, it is the lens through which employees perceive and evaluate their employment relationship. This model is unlikely to change unless clear events force individuals to reconsider the terms of their employment relationship (Rousseau, 2001). It would therefore be interesting to examine under what conditions older employees become likely to change their psychological contract.

Overall, we believe that the topic of older employees' psychological contracts offers a rich and exciting agenda for future research. Given the societal relevance of this line of research, we urge scholars to not merely treat age or tenure as control variables, but rather to consider their substantive effects and the underlying mechanisms linking them to the content and the process of the psychological contract.

7.6.2 Recommendations for Practitioners

Organizations trying to implement age-conscious Human Resource policies should be aware that it is not aging itself that determines the mutual obligations that older employees perceive and how they react to (un)fulfilled obligations (Bal, De Lange, et al., 2013). Rather, there are a number of underlying mechanisms that are influenced by the age of employees. Organizations should therefore do well to ascertain these underlying mechanisms. For example, organizations could regularly dialogue with employees to inquire if they perceive an open future in the organization and what goals and values they prioritize. These results could then be used to design tailor-made Human Resource policies, adjusted to the specific needs of employees. This may require that organizations take a more flexible stand towards the needs of different age groups and use idiosyncratic deals (Bal et al., 2010).

While prior findings suggest that older employees react less negatively to psychological contract breach, organizations should still strive to prevent breaches (De Lange et al., 2011). This can be done by creating realistic expectations through effective communication (Rousseau, 1995). The direct supervisor of employees plays an important role in this regard, as he or she represent the organization and forms the first and foremost actor to communicate promises to employees. For older employees, it seems advisable to communicate on mutual expectations and, if necessary, renegotiate the content of the psychological contract at set intervals. This would ensure that there is a fit between the goals and values of older employees and the content of the psychological contract, and will decrease the likelihood of psychological contract breaches due to incongruent expectations of both parties in the contract (Morrison & Robinson, 1997).

If psychological contract breach cannot be prevented, organizations can still take steps to reduce the negative consequences of the breach. Morrison and Robinson (1997) stress the importance of ensuring that employees (1) correctly

attribute the reason of the breach and (2) perceive that, while an obligation was not met, the procedures used by the organization were fair. In case of older employees, organizations may not easily notice that they have experienced psychological contract breach, as they do not react as intensely as their younger colleagues (Bal et al., 2008). Nonetheless, perceptions of contract breach will have deleterious effects for older employees as they may remain in the organization, but at the same time psychologically withdraw due to increased dissatisfaction. This may be especially true if these older employees belief to have little chance of finding a similar deal in another organization or if they perceive to have little future left in the organization (Bal et al., 2010; Bal, De Lange, et al., 2013; Ng & Feldman, 2009). An open organizational climate where employees—young and old—can voice their complaints therefore seems advisable.

7.6.3 Conclusions

Based on the literature and on our own meta-analysis, we can conclude that the content and process of older employees' psychological contracts differs from that of younger employees. Content-wise, older employees are less likely to perceive transactional obligations, but perceive the same amount of relational obligations as younger employees. Process-wise, older employees tend to react less strongly to negative situations such as psychological contract breach and psychological contract imbalance characterized by organization under-obligation. Socioemotional selectivity theory, the selection, optimization, and compensation model, and the contract replicability and malleability model are able to explain these differences. We recommend future studies to assess the underlying mechanisms proposed by these theories and models.

References³

- Bajor, J. K., & Baltes, B. B. (2003). The relationship between selection optimization with compensation, conscientiousness, motivation, and performance. *Journal of Vocational Behavior*, 63(3), 347–367.
- Bal, P. M., De Lange, A. H., Jansen, P. G. W., & Van Der Velde, M. E. G. (2008). Psychological contract breach and job attitudes: A meta-analysis of age as a moderator. *Journal of Vocational Behavior*, 72(1), 143–158.
- *Bal, P. M., De Lange, A. H., Zacher, H., & Van der Heijden, B. I. J. M. (2013). A lifespan perspective on psychological contracts and their relations with organizational commitment. *European Journal of Work and Organizational Psychology*, 22(3), 279–292.
- Bal, P. M., Jansen, P. G. W., Van der Velde, M. E. G., De Lange, A. H., & Rousseau, D. (2010). The role of future time perspective in psychological contracts: A study among older workers. *Journal* of Vocational Behavior, 76(3), 474–486.

³ References marked with an asterisk (*) indicate studies included in the meta-analysis.

- *Bal, P. M., & Kooij, D. (2011). The relations between work centrality, psychological contracts, and job attitudes: The influence of age. *European Journal of Work and Organizational Psychology*, 20(4), 497–523.
- *Bal, P. M., Kooij, D. T. A. M., & De Jong, S. B. (2013). How do developmental and accommodative HRM enhance employee engagement and commitment? The role of psychological contract and SOC strategies. *Journal of Management Studies*, 50(4), 545–572.
- Blau, P. (1964). Exchange and power in social life. New York: Wiley.
- Carstensen, L. L., & Löckenhoff, C. E. (2004). Socioemotional selectivity theory, aging, and health: The increasingly delicate balance between regulating emotions and making tough choices. *Journal of Personality*, 72(6), 1395–1424.
- *Castanheira, F., & Chambel, M. J. (2009). Emotion work, psychological contract, and their relationship with burnout. In E. Morin, N. Ramalho, J. Neves, & A. Savoie (eds.), New research trends in effectiveness, health, and work: A Criteos scientific and professional account (pp. 101–120). Montreal: Criteos.
- *Chambel, M. J., & Alcover, C.-M. (2011). The psychological contract of call-centre workers: Employment conditions, satisfaction and civic virtue behaviours. *Economic and Industrial Democracy*, 32(1), 115–134.
- *Chambel, M. J., & Castanheira, F. (2006). Different temporary work status, different behaviors in organization. *Journal of Business and Psychology*, 20(3), 351–367.
- *Cohen, A. (2011). Values and psychological contracts in their relationship to commitment in the workplace. *Career Development International*, 16(7), 646–667.
- Conway, N., & Briner, R. B. (2009). Fifty years of psychological contract research: What do we know and what are the main challenges? *International Review of Industrial and Organizational Psychology*, 21, 71–131.
- *Coyle-Shapiro, J., & Kessler, I. (2000). Consequences of the psychological contract for the employment relationship: A large scale survey. *Journal of Management Studies*, 37(7), 903–930.
- *Dabos, G. E., & Rousseau, D. (2004). Mutuality and reciprocity in the psychological contracts of employees and employers. *Journal of Applied Psychology*, 89(1), 52–72.
- *De Cuyper, N., & De Witte, H. (2007). Job insecurity in temporary versus permanent workers: Associations with attitudes, well-being, and behaviour. *Work & Stress*, 21(1), 65–84.
- De Cuyper, N., Rigotti, T., De Witte, H., & Mohr, G. (2008). Balancing psychological contracts: Validation of a typology. *The International Journal of Human Resource Management*, 19(4), 543–561.
- De Lange, A., Bal, P., Van der Heijden, B., De Jong, N., & Schaufeli, W. (2011). When I'm 64: Psychological contract breach, work motivation and the moderating roles of future time perspective and regulatory focus. Work & Stress, 25(4), 338–354.
- De Vos, A., Buyens, D., & Schalk, R. (2003). Psychological contract development during organizational socialization: Adaptation to reality and the role of reciprocity. *Journal of Organizational Behavior*, 24(5), 537–559.
- De Vos, A., Buyens, D., & Schalk, R. (2005). Making sense of a new employment relationship: Psychological contract-related information seeking and the role of work values and locus of control. *International Journal of Selection and Assessment*, 13(1), 41–52.
- *Eatough, E. M. (2013). *Illegitimate tasks and employee well-being: A daily diary study*. Unpublished doctoral dissertation, The University of South Florida, Tampa, FL.
- Freund, A. M., & Baltes, P. B. (1998). Selection, optimization, and compensation as strategies of life management: Correlations with subjective indicators of successful aging. *Psychology and Aging*, 13(4), 531–543.
- *Gardner, D. G., Huang, G., Pierce, J. L., Niu, X., & Lee, C. L. (2010). Organization-based self-esteem: Relationships with psychological contracts and perceived employment opportunities. Academy of Management Best Papers Proceedings, 1, 1–6.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. American Sociological Review, 25(2), 161–178.
- *Haq, I. U., Jam, F. A., Azeem, M. U., Ali, M. A., & Fatima, T. (2011). Psychological contract and job outcomes: Mediating role of affective commitment. *African Journal of Business Management*, 5(19), 7972–7979.

- Hess, N., & Jepsen, D. M. (2009). Career stage and generational differences in psychological contracts. *Career Development International*, 14(3), 261–283.
- *Ho, V. T., Rousseau, D., & Levesque, L. (2006). Social networks and the psychological contract: Structural holes, cohesive ties, and beliefs regarding employer obligations. *Human Relations*, 59(4), 459–481.
- Isaksson, K., De Cuyper, N., Oettel, C., & De Witte, H. (2010). The role of the formal employment contract in the range and fulfilment of the psychological contract: Testing a layered model. *European Journal of Work and Organizational Psychology*, 19(6), 696–716.
- *Jamil, A., Raja, U., & Darr, W. (2013). Psychological contract types as moderator in the breachviolation and violation-burnout relationships. *Journal of Psychology*, 147(5), 491–515.
- Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development, and work motivation. Academy of Management Review, 29(3), 440–458.
- Kanfer, R., Beier, M. E., & Ackerman, P. L. (2013). Goals and motivation related to work in later adulthood: An organizing framework. European Journal of Work and Organizational Psychology, 22(3), 253–364.
- Kooij, D. T. A. M., De Lange, A., Jansen, P. G. W., & Dikkers, J. (2008). Older workers' motivation to continue to work: Five meanings of age: A conceptual review. *Journal of Managerial Psychology*, 23(4), 364–394.
- Kooij, D. T. A. M., De Lange, A. H., Jansen, P. G. W., Kanfer, R., & Dikkers, J. E. (2011). Age and work-related motives: Results of a meta-analysis. *Journal of Organizational Behavior*, 32(2), 197–225.
- Lee, C., Liu, J., Rousseau, D. M., Hui, C., & Chen, Z. X. (2011). Inducements, contributions, and fulfillment in new employee psychological contracts. *Human Resource Management*, 50(2), 201–226.
- Lub, X., Bijvank, M. N., Bal, P. M., Blomme, R., & Schalk, R. (2012). Different or alike?: Exploring the psychological contract and commitment of different generations of hospitality workers. *International Journal of Contemporary Hospitality Management*, 24(4), 553–573.
- *Lub, X., Blomme, R., & Bal, P. (2011). Psychological contract and organizational citizenship behavior: A new deal for new generations? *Advances in Hospitality and Leisure*, 7, 109–130.
- *Luksyte, A., Spitzmueller, C., & Maynard, D. C. (2011). Why do overqualified incumbents deviate? Examining multiple mediators. *Journal of Occupational Health Psychology*, 16(3), 279–296.
- Millward, L. J., & Hopkins, L. J. (1998). Psychological contracts, organizational and job commitment. *Journal of Applied Social Psychology*, 28(16), 1530–1556.
- Morrison, E., & Robinson, S. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22(1), 226–256.
- Ng, T. W. H., & Feldman, D. C. (2008). Can you get a better deal elsewhere? The effects of psychological contract replicability on organizational commitment over time. *Journal of Vocational Behavior*, 73(2), 268–277.
- Ng, T. W. H., & Feldman, D. C. (2009). Age, work experience, and the psychological contract. *Journal of Organizational Behavior*, 30, 1053–1075.
- *Purvis, L. J., & Cropley, M. (2003). The psychological contracts of National Health Service nurses. *Journal of Nursing Management*, 11(2), 107–120.
- *Raja, U., Johns, G., & Bilgrami, S. (2011). Negative consequences of felt violations: The deeper the relationship, the stronger the reaction. *Applied Psychology*, 60(3), 397–420.
- *Raja, U., Johns, G., & Ntalianis, F. (2004). The impact of personality on psychological contracts. *Academy of Management Journal*, 47(3), 350–367.
- *Ravlin, E. C., Liao, Y., Morrell, D. L., Au, K., & Thomas, D. C. (2012). Collectivist orientation and the psychological contract: Mediating effects of creditor exchange ideology. *Journal of International Business Studies*, 43(8), 772–782.
- *Richard, O. C., McMillan-Capehart, A., Bhuian, S. N., & Taylor, E. C. (2009). Antecedents and consequences of psychological contracts: Does organizational culture really matter? *Journal of Business Research*, 62(8), 818–825.
- Rousseau, D. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2(2), 121–139.

- Rousseau, D. (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior*, 11(5), 389–400.
- Rousseau, D. (1995). Psychological contracts in organizations: Understanding written and unwritten agreements. Thousand Oaks, CA: Sage.
- Rousseau, D. (2001). Schema, promise and mutuality: The building blocks of the psychological contract. *Journal of Occupational and Organizational Psychology*, 74(4), 511–541.
- Rousseau, D., & Tijoriwala, S. A. (1998). Assessing psychological contracts: Issues, alternatives and measures. *Journal of Organizational Behavior*, 19(1), 679–695.
- Schalk, R. (2004). Changes in the employment relation across time. In J. A.-M. Coyle-Shapiro, L. M. Shore, M. S. Taylor, & L. E. Tetrick (Eds.), *The employment relationship. Examining psychological and contextual perspectives* (pp. 284–311). Oxford, UK: Oxford University Press.
- *Schieven, A. G. (2009). The quality of employment relationships in small organizations: The influence of relational and transactional dominance of psychological contracts and agreement between employee and immediate-manager. Master's thesis. University of Tilburg, Tilburg, The Netherlands.
- *Shih, C.-T., & Chen, S. (2011). The social dilemma perspective on psychological contract fulfilment and organizational citizenship behaviour. *Management and Organization Review*, 7(1), 125–151.
- Shore, L., & Barksdale, K. (1998). Examining degree of balance and level of obligation in the employment relationship: A social exchange approach. *Journal of Organizational Behavior*, 19(1), 731–744.
- *Syed, F. (2010). Interactive effects of contract types and organizational justice types on perceived breach and outcomes (Unpublished MS Leading to PhD Dissertation). International Islamic University Islamabad, Pakistan.
- *Uen, J., & Chien, M. S. (2010). The relationships among commitment-based HR systems, psychological contracts, and role behaviors: An empirical study of knowledge workers in Taiwan's high-tech firms. *Asia Pacific Management Review*, 15(1), 43–55.
- United Nations. (2007). World economic and social survey 2007: Development in an ageing world. New York: United Nations Publication.
- Vantilborgh, T., Bidee, J., Pepermans, R., Willems, J., Huybrechts, G., & Jegers, M. (2012). Effects of ideological and relational psychological contract breach and fulfilment on volunteers' work effort. European Journal of Work and Organizational Psychology, iFirst, 1–14. doi:10.1080/13 59432X.2012.740170.
- Vantilborgh, T., Bidee, J., Pepermans, R., Willems, J., Huybrechts, G., & Jegers, M. (2013). From "getting" to "giving": Exploring age-related differences in perceptions of and reactions to psychological contract balance. *European Journal of Work and Organizational Psychology*, 22(3), 293–305.
- Viechtbauer, W. (2010). Conducting meta-analyses in R with the metafor package. *Journal of Statistical Software*, 36(3), 1–48.
- Wagner, S., & Rush, M. (2000). Altruistic organizational citizenship behavior: Context, disposition, and age. *The Journal of Social Psychology*, 140(3), 379–391.
- Zacher, H., & Frese, M. (2009). Remaining time and opportunities at work: Relationships between age, work characteristics, and occupational future time perspective. *Psychology and Aging*, 24(2), 487–493.
- *Zagenczyk, T. J., Restubog, S. L. D., Kiewitz, C., Kiazad, K., & Tang, R. L. (2011). Psychological contracts as a mediator between Machiavellianism and employee citizenship and deviant behaviors. *Journal of Management, early online*. doi: 10.1177/0149206311415420.
- *Zhao, J., & Chen, L. (2008). Individualism, collectivism, selected personality traits, and psychological contract in employment: A comparative study. *Management Research News*, 31(4), 289–304.
- Zhao, H., Wayne, S. J., Glibkowski, B. C., & Bravo, J. (2007). The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Personnel Psychology*, 60(3), 647–680.