Knowledge transfer between diverse employees: Insights into intergenerational knowledge transfer

Dissertation

am Fachbereich IV – Wirtschafts- und Sozialwissenschaften /
Mathematik / Informatik und Wirtschaftsinformatik

der Universität Trier

zur Erlangung des Grades eines Doktors der
Wirtschaftswissenschaften (Dr. rer. pol.)

vorgelegt von

Xenia Schmidt, M.A.

Erstberichterstatterin: Univ.-Prof. Dr. Katrin Muehlfeld
Professur für Management, Organisation und Personal der Universität Trier

Zweitberichterstatter: Univ.-Prof. Dr. Jörn Block
Professur für Unternehmensführung der Universität Trier

Einreichung: 24.10.2018

TABLE OF CONTENTS

List of tables III

List of figures IV

List of abbreviations V

1 Introduction 1

1.1 Focus and relevance 1

1.2 Antecedents to knowledge transfer between diverse employees 6

1.3 Perception of knowledge transfer between diverse employees 10

1.4 Research questions 12

1.5 Outline 13

2 What’s so special about intergenerational knowledge transfer? 15

2.1 Introduction 16

2.2 Background and literature summary 21

2.3 Propositions for a conceptual framework and directions for future research 29

2.4 Discussion and conclusion 45

3 Determinants of knowledge transfer in hierarchical knowledge transfer relationships 49

3.1 Introduction 50

3.2 Theory and hypotheses 55

3.3 Method 61

3.4 Results 63

3.5 Discussion 69

4 Influencing factors on the performance evaluation of employees participating in intergenerational knowledge transfer 73

4.1 Introduction 74

4.2 Theory and hypotheses 79

4.3 Method ... 88
4.4 Analysis ... 91
4.5 Results ... 91
4.6 Discussion ... 93
5 General discussion ... 99
5.1 Summary ... 99
5.2 Theoretical implications ... 102
5.3 Practical implications ... 106
5.4 Limitations and future research ... 107
5.5 Concluding remarks ... 109
References ... 111
Appendix ... 134

LIST OF TABLES

Table 2.1 Summary of empirical studies on intergenerational knowledge transfer 18

Table 3.1 Descriptive statistics and correlations for the subsamples 64

Table 3.2 Multigroup method analysis and model fits 66

Table 3.3 Structural model comparison.. 66

Table 3.4 Mediation analysis via bootstrapping.. 67

Table 4.1 Descriptive statistics and correlations 91

Table 4.2 Means and standard deviations for performance evaluation 92

Table 4.3 Summary of hierarchical regression analysis 93

Table 6.1 Summary of keywords in the literature search 135

Table 6.2 Details on measurements.. 136

Table 6.3. Vignette design.. 175

Table 6.4 Details on measurements.. 175

Table 6.5 Summary of hierarchical regression analysis including all items of generational stereotypes 176

Table 6.6 Means and standard deviations for performance evaluation 176

Table 6.7 Summary of hierarchical regression analysis with bootstrap 177

Table 6.8 Summary of regression analysis.. 177

LIST OF FIGURES

Figure 1.1 Overview of the explored relationships in this doctoral thesis 12

Figure 2.1 Propositions based on various streams of literature... 20

Figure 2.2 Conceptual framework of intergenerational knowledge transfer....................... 28

Figure 3.1 Structural equation modeling results for trainers 68

Figure 3.2 Structural equation modeling results for trainees... 68

Figure 4.1 Means for performance evaluation by knowledge transfer type 92

LIST OF ABBREVIATIONS

aff. trust	affect-based trust
ANCOVA	analysis of covariance
appr.	age-appropriate
CEM	categorization-elaboration model
CFA	confirmatory factor analysis
CFI	comparative fit index
CI	confidence interval
Cog. trust	cognition-based trust
Conf	conflict
e.g.,	exempli gratia, for example
et al.	et alia, and others
ESM	experience sampling method
H	hypothesis
i.e.	it est (that is to say)
inapp.	age-inappropriate
ind. effect	indirect effect
IntKT	intergenerational knowledge transfer
KSe	knowledge seeking
KSh	knowledge sharing
M	mean
N/n	number of units (sample size)
n.a.	not applicable
NS	not significant
p	probability value (p-value)
PADC	perceived age discrimination climate

RQ	research question
RMSEA	root mean square error of approximation
SCT	self-categorization theory
SE	standard error
SEM	structural equation modeling
SET	social exchange theory
SRMR	standardized root mean square residual
SSRN	Social Science Research Network
s.d.	standard deviation
TLI	Tucker-Lewis index
vs.	versus

1 INTRODUCTION

1.1 Focus and relevance

According to the *knowledge-based view* that regards knowledge as the most strategically important resource of organizations (Grant, 1996), knowledge constitutes a competitive advantage for organizations by contributing to superior performance at the individual, team, and organizational level (Argote & Ingram, 2000; Grant, 1996). Knowledge[1] is defined as "information possessed in the mind of individuals" (Alavi & Leidner, 2001: 109) that is interrelated with the values and ideas of individuals (Nonaka, Krogh, & Voelpel, 2006). Two types of knowledge are commonly differentiated: tacit and explicit knowledge (Polanyi, 1969). *Tacit knowledge* captures knowledge that is based on experience and action and is difficult to communicate (Ambrosini & Bowman, 2001; Polanyi, 1969) and *explicit knowledge* captures formal and standardized knowledge that can easily be communicated (Lee, Gillespie, Mann, & Wearing, 2010; Polanyi, 1969).

Because of the importance of knowledge for the competitive advantage of organizations, many organizations have employed knowledge management. Knowledge management can comprise, for example, knowledge creation (i.e., the entire process of making knowledge of individuals available to colleagues and the organization; Nonaka et al., 2006), and knowledge transfer (Nonaka, 1994; Ranjbarfard, Aghdasi, López-Sáez, & Emilio Navas López, 2014). In particular, scholars have suggested that *knowledge transfer* constitutes the core focus of knowledge management (e.g., Argote & Fahrenkopf, 2016; Kaše, Paauwe, & Zupan, 2009). Knowledge transfer refers to "a process through which one unit (e.g., group, department, or division) is affected by the experience of another" (Argote & Ingram, 2000: 151) and involves both knowledge sharing and knowledge seeking (Wilkesmann & Virgillito, 2013; Wilkesmann, Wilkesmann, & Virgillito, 2009b). Transferring knowledge from one source to another (Argote & Ingram, 2000; Van Wijk, Jansen, & Lyles, 2008; Wang & Noe, 2010) may occur in dyadic knowledge transfer between two employees, from employees to groups or between groups (Alavi & Leidner, 2001). An example may help to illustrate this definition: say, an organization has rolled out a new online platform on which employees can complete their travel authorization requests online. An employee who wants to complete his[2] travel authorization request for the first time might be confronted with challenges, such as, that the platform does not accept the cost center. In order to solve that issue, on the one hand, the employee might search the organization's intranet for further information. However, this approach might be time-consuming and does not guarantee quick success. On the other hand, the employee might informally approach a colleague and ask for help. Together they might solve that issue quicker through knowledge sharing. In the long run, the employee might save valuable time that he might dedicate for other important tasks. Thereby, this conceptualization of knowledge transfer emphasizes the relevance of employees and their participation in knowledge transfer for the competitive advantage of organizations (Foss, Minbaeva, Pedersen, & Reinholt, 2009).

---

[1] Scholars in the field of knowledge management have differentiated between data, information, and knowledge (e.g., Davenport & Prusak, 1998). Data refers to raw numbers and facts. Information refers to processed data. The difference from information to knowledge is that knowledge is information in the mind of individuals (Alavi & Leidner, 2001). Thus, according to this common differentiation, the definition of knowledge is inherently human-centric.

Seeking to understand how organizations may benefit from employees' knowledge transfer, scholars were interested in understanding how employees' relationships and employees' characteristics may influence knowledge transfer (Van Wijk et al., 2008). One area that has recently attracted particular attention is the *diversity* of employees as a potential influence on knowledge transfer (e.g., Lauring & Selmer, 2011, 2012). Diversity has been defined as differences between employees concerning a particular characteristic, such as tenure or age (Harrison & Klein, 2007). This interest on the influence of diversity on knowledge transfer stems from a more general debate on the effects of diverse employees on a variety of organizational outcomes (Kearney & Voelpel, 2012; Van Knippenberg, De Dreu, & Homan, 2004). A prominent perspective in this debate is the *information/decision-making perspective*[3] (Williams & O'Reilly, 1998). According to this view, diverse employees possess different skills and expertise they may bring into their work, leading to more knowledge exchange and higher work performance (Roberge & Van Dick, 2010; Williams & O'Reilly, 1998).

---

[2] Use of the masculine pronoun shall be deemed to include usage of the feminine and/or any other gender pronoun where appropriate.

[3] While the perspective is called "information/decision-making perspective", the processes that occur within groups are generally referred to as "information elaboration" (i.e., "the exchange, discussion, and integration of task-relevant information and perspectives"; Van Dick, Van Knippenberg, Hägele, Guillaume, & Brodbeck, 2008: 1466).

In the context of this discussion on the impact of employees' diversity on knowledge transfer, this doctoral thesis investigates selected aspects of knowledge transfer between diverse employees. In particular, this doctoral thesis mainly focuses on *demographic diversity* (e.g., Joshi & Roh, 2009; Kearney & Voelpel, 2012) that captures not directly job-related, demographic attributes which are often visible characteristics, such as age or gender (Harrison & Klein, 2007; Kearney, Gebert, & Voelpel, 2009). Given the demographic change, this doctoral thesis zooms in on age as a key variable of demographic diversity. Additionally, because age is often intertwined with the degree of formalization of knowledge transfer relationships, this doctoral thesis also accounts for differences in a degree of formalization when considering the influence of age diversity on knowledge transfer.

Only recently, scholars have documented the age of employees as a particularly important characteristic of employees participating in knowledge transfer and have highlighted the importance of age of employees as a factor that needs to be managed (Burmeister, Fasbender, & Deller, 2018a), presumably because the demographic change is posing a threat to organizations (Becton, Walker, & Jones-Farmer, 2014). The demographic change implies that societies are aging, leading, in particular, to a growing proportion of older citizens relative to younger individuals (OECD, 2014; Richter, 2014). Employees of the so-called high-birthrate Baby Boomer generation (individuals born between 1945 and 1964) have started retiring and will continue doing so. Consequently, organizations are facing a loss of staff (Burmeister & Deller, 2016; Macky, Wong, Gardiner, Lang, & Coulon, 2008) and in addition, a potential loss of knowledge, if they do not retain the knowledge of retiring employees before their retirement (Burmeister & Deller, 2016; De Long & Davenport, 2003). Losing the knowledge of the retiring employees might be expensive for organizations because reconstructing lost knowledge is complicated and takes time (De Long, 2004; De Long & Davenport, 2003). Consequently, scholars have begun to explore intergenerational knowledge transfer as a subject in its own right (Burmeister et al., 2018a) with *intergenerational knowledge transfer* being defined as knowledge transfer between employees with a large age difference that does not necessarily involve the explicit assignment to specific generations[4] (Gerpott, Lehmann-Willenbrock, & Voelpel, 2017; Harvey, 2012).

---

[4] Across the literature, terms revolving around intergenerational knowledge transfer are not applied consistently. For example, Gerpott and colleagues (2017) use the term "intergenerational learning". A closer

Intergenerational knowledge transfer may occur in formal and informal settings[5]. Informal knowledge transfer emerges between employees through everyday interaction (Ben-Menahem, Krogh, Erden, & Schneider, 2016), and does not necessarily involve coordination by the organization. Formal knowledge transfer, in turn, refers to processes and structures that coordinate knowledge transfer activities, mostly by the organization (Ben-Menahem et al., 2016). To facilitate and manage intergenerational knowledge transfer, many organizations employ formal instruments of intergenerational knowledge transfer, such as mentoring (De Long & Davenport, 2003). These instruments often assign knowledge transfer roles to employees (De Long & Davenport, 2003). This means that a formal knowledge transfer relationship assigns one employee to knowledge seeking, i.e., the knowledge seeker, and the other to knowledge sharing, i.e., the knowledge sharer. In such a formal knowledge transfer setting, younger employees are mostly still to be found at lower hierarchical levels and assigned to knowledge seeking roles, while older employees are mostly still to be found at higher hierarchical levels and assigned to knowledge sharing roles (Burmeister et al., 2018a). Thus, in intergenerational knowledge transfer relationships with higher degrees of formalization, younger knowledge seekers are also tentatively at lower hierarchical levels than older knowledge sharers. Therefore, intergenerational knowledge transfer includes not only a significant age difference between employees but may also be accompanied by differences in the hierarchical organizational position.

Despite the relevance of explicitly investigating knowledge transfer between age-diverse employees, such as due to the demographic change (Kuyken, Ebrahimi, & Saives, 2018), prior studies have mostly focused on the antecedents and outcomes of knowledge transfer, without accounting for the diversity of employees (e.g., Reinholt, Pedersen, & Foss, 2011; Zhang & Begley, 2011). Alternatively, scholars have focused on the antecedents and outcomes of diversity, but have not explored how the diversity of employees may influence their engagement in knowledge transfer (e.g., Horwitz & Horwitz, 2007; Joshi & Roh, 2009).

---

look at their definition of “intergenerational learning” reveals that it largely overlaps with most conceptualizations of “intergenerational knowledge transfer” or “knowledge transfer between age-diverse employees” (e.g., Burmeister, Van Der Heijden, Yang, & Deller, 2018b). Due to the inconsistencies across the literature, this doctoral thesis uses the terms “intergenerational knowledge transfer” as well as “knowledge transfer between age-diverse employees” interchangeably.

[5] Some of the arguments that are applied in the following paragraphs apply to both knowledge transfer in general and intergenerational knowledge transfer in particular. However, given the research focus, the following paragraphs predominantly refer to intergenerational knowledge transfer.

Very few studies have, to date, integrated both aspects, i.e., have explored the impact of diversity on knowledge transfer (Burmeister & Deller, 2016) (for exceptions see, e.g., Gerpott et al., 2017; Burmeister et al., 2018).

For example, Gerpott and colleagues (2017) have explored intergenerational knowledge transfer with a qualitative longitudinal study. They have investigated how knowledge transfer changes over time and whether younger and older employees exchange different types of knowledge throughout this process. They have found that at different times, the types of knowledge that are being exchanged may vary, such as, for example, in the beginning, participants exchange expert knowledge and not social knowledge. Further, they have also documented that while younger and older employees both share and seek knowledge, the content of the knowledge may vary. For instance, younger employees provide expert knowledge related to technical devices, while older employees provide expert knowledge they gained throughout their career.

A second example of a study on intergenerational knowledge transfer is an experimental vignette study by Burmeister and colleagues (2018a). They have tested which types of knowledge transfer activities, i.e., knowledge sharing and knowledge seeking, are expected from younger and older employees. They have shown that knowledge seeking is expected of younger employees and that knowledge sharing is expected of older employees. Despite the significant insights provided by this nascent empirical studies on intergenerational knowledge transfer, many questions remain unanswered regarding the antecedents of knowledge transfer between age-diverse employees, as well as the perception of knowledge transfer between age-diverse employees.

Thus, this doctoral thesis integrates literature on (a) knowledge transfer between diverse employees and, in particular, intergenerational knowledge transfer, (b) knowledge transfer, regardless of the diversity of employees, and (c) the diversity of employees, regardless of knowledge transfer. In particular, this doctoral thesis explores a subset of antecedents that have been acknowledged as critical antecedents to knowledge transfer in at least one of these three literature streams. Moreover, this doctoral thesis explores the perception of knowledge transfer between age-diverse employees and the implications for the performance evaluation of employees engaging in intergenerational knowledge transfer.

1.2 Antecedents to knowledge transfer between diverse employees

Prior literature on knowledge transfer, in general, has classified the antecedents of knowledge transfer into the following categories: directly knowledge-related characteristics (e.g., knowledge ambiguity; Szulanski, Cappetta, & Jensen, 2004), individual characteristics (e.g., affective commitment of employees towards the organization; Camelo-Ordaz, García-Cruz, Sousa-Ginel, & Valle-Cabrera, 2011), interpersonal characteristics (e.g., trust; Burmeister et al., 2018a), and organizational characteristics (e.g., organizational culture; Jo & Joo, 2011) (Argote, McEvily, & Reagans, 2003; Van Wijk et al., 2008; Zhang & Begley, 2011). While these antecedents have been suggested to be important drivers of knowledge transfer, not all of them are necessarily equally relevant to knowledge transfer between diverse employees. Therefore, this doctoral thesis investigates a subset of antecedents at the individual, interpersonal and organizational level that appear to influence intergenerational knowledge transfer. In the following pages, the selection of the antecedents will be explained in more detail.

Individual level antecedents

With regard to individual level characteristics, previous studies on knowledge transfer in general have focused on personality traits, such as, the Big Five personality traits (Costa & McCrae, 1992; Matzler & Mueller, 2011; Matzler, Renzl, Mooradian, Krogh, & Mueller, 2011), and performance orientation (Matzler & Mueller, 2011), and job-related attitudes, such as job satisfaction (De Vries, Van Den Hooff, & De Ridder, 2006) and affective commitment (Camelo-Ordaz et al., 2011). For intergenerational knowledge transfer, in particular, previous studies have recently focused on diversity mindsets as an individual level antecedent (Ellwart, Bündgens, & Rack, 2013). Diversity mindsets are cognitions among employees regarding how diversity affects teams and team outcomes (Homan, Van Knippenberg, Van Kleef, & Dreu, 2007; Kearney & Voelpel, 2012). Building on and extending this prior research (e.g., Ellwart et al., 2013), from among the multitude of individual level antecedents, this doctoral thesis investigates how *diversity mindsets* may be interrelated to the perception and evaluation of employees who participate in intergenerational knowledge transfer.

Given the relevance of knowledge transfer in general and intergenerational knowledge transfer in particular, researchers have suggested including knowledge transfer as an aspect that may contribute to the overall performance evaluation of employees (Arora, 2012). However, the related research stream on the performance evaluation of employees (without explicitly accounting for intergenerational knowledge transfer in particular) (e.g., Bauer & Baltes, 2002) has suggested that performance evaluations are generally susceptible to the evaluating actor and his mindsets. Thereby, the question arises whether this may also hold for the performance evaluation of employees engaging in intergenerational knowledge transfer. In particular, how do diversity mindsets held by the rater influence such a performance evaluation of employees engaging in intergenerational knowledge transfer?

Prior literature has drawn on the categorization-elaboration model (CEM) to theorize about the effects of diversity mindsets on the interaction between diverse employees, and on, in particular, the frequency with which employees engage in intergenerational knowledge transfer (e.g., Ellwart et al., 2013). According to the CEM, the general conditions under which interaction between diverse employees takes place, determine the outcomes of that interaction. That means that the conditions, of which diversity mindsets are an example (Kearney & Voelpel, 2012; Van Knippenberg, Haslam, & Platow, 2007), determine whether the diverse group will produce a beneficial outcome, such as, higher performance (Homan et al., 2007) or a detrimental outcome, such as, more conflicts (Pelled, Eisenhardt, & Xin, 1999). In particular, scholars have noted that positive mindsets about diversity could result in positive outcomes, such as better team performance and increased intergenerational knowledge transfer (Ellwart et al., 2013; Homan et al., 2007), while negative mindsets could result in negative outcomes, such as a negative performance evaluation of employees (Bauer & Baltes, 2002). In particular, prior literature has pointed out the relevance of two particular types of diversity mindsets, namely positive beliefs about age diversity (i.e., beliefs of whether age diversity could be a factor of success for group performance; Ellwart et al., 2013; Van Dick et al., 2008) and generational stereotypes (i.e., stereotypes against employees from the other age group King & Bryant, 2016) (e.g., Bauer & Baltes, 2002; Ellwart et al., 2013). Although prior literature has provided relevant insights into how these types of diversity mindsets may relate, for example, to the team performance (e.g., Homan et al., 2007), it remains mostly unaddressed how these two particular types of diversity mindsets may relate to intergenerational knowledge transfer and the performance evaluation of employees engaging in this type of knowledge transfer. Thus, this doctoral thesis explores the relationship between diversity mindsets, and in particular, positive beliefs about age diversity and generational stereotypes, and intergenerational knowledge transfer.

Interpersonal level antecedents

Given that knowledge transfer has been classified as a social process, scholars have argued that knowledge transfer largely concerns managing employees and their social relationships (Kaše et al., 2009). To expound on these processes, studies on knowledge transfer in general but also on intergenerational knowledge transfer in particular, have drawn on social exchange theory (SET) as a theoretical framework (e.g., Burmeister, Van Der Heijden, Yang, & Deller, 2018b; Cabrera & Cabrera, 2005; Lin & Lo, 2015). According to SET, employees participate in knowledge transfer because they expect to receive rewards in the future (Cabrera & Cabrera, 2005; Cabrera, Collins, & Salgado, 2006). However, employees can never be sure that their colleagues will reciprocate their behavior and, for example, provide knowledge in the future. This uncertainty suggests that knowledge transfer is a vulnerable procedure (Mooradian, Renzl, & Matzler, 2006). To transfer knowledge despite these uncertainties, the interpersonal relationship among employees plays an important role. In particular, prior studies have identified trust as a significant predictor of knowledge transfer that may reduce this vulnerability (Levin & Cross, 2004; Levin, Whitener, & Cross, 2006). Although prior studies have provided many insights into the relationship between trust and knowledge transfer (e.g., Mooradian et al., 2006), empirical evidence for the relationship between trust and knowledge transfer between diverse employees, in particular, is lacking (except for Burmeister et al., 2018a). Given this research gap, this doctoral thesis investigates the impact of trust on knowledge transfer between diverse employees by building on SET.

While SET helps to understand the principle of reciprocity in knowledge transfer, potential issues deriving from the diversity cannot be fully understood within this theoretical framework. Self-categorization theory (SCT)[6] (Turner, 1987) addresses why interpersonal interaction between diverse employees may be rather tense and lead to more conflicts between employees. According to SCT, individuals identify with other individuals belonging to the same in-group (e.g., their age, or gender) (Turner, 1987) and tend to devalue individuals from the out-group (Kunze, Boehm, & Bruch, 2011). When an employee categorizes his colleagues as out-group members, this may inhibit positive social exchanges with colleagues from the out-group and lead to more negative social exchanges. In particular, literature has suggested that diverse employees tend to have more conflicts (Urick, Hollensbe, Masterson, & Lyons, 2017), that, in turn, were found to reduce knowledge transfer (Chen, 2011). Thus, the diversity among employees may also stimulate adverse effects, such as conflicts, that may reduce knowledge transfer. Overall, interpersonal antecedents, such as trust, exert an influence on knowledge transfer between diverse employees and may consequently enhance knowledge transfer, while conflicts may reduce knowledge transfer. Therefore, this doctoral thesis incorporates the impact of trust and conflicts on knowledge transfer between diverse employees.

---

[6] While Turner (1987) has introduced the name “self-categorization theory”, there is some mix-up with the terminology for this theory. Some authors have called this theory “social categorization theory” (Lauring & Selmer, 2012). Moreover, many scholars have called the individual process of categorization “social categorization process” and not “self-categorization process” (e.g., Bell, Villado, Lukasik, Belau, & Briggs, 2011). In this doctoral thesis, the theory is referred to as “self-categorization theory”. The process of categorization is referred to as “social categorization process”, in line with the majority of studies.

Organizational level antecedents

Individual and interpersonal level antecedents are embedded in an organizational context, and therefore, organizational context plays an essential role for employees to transfer their knowledge (Van Wijk et al., 2008). While the organizational context may comprise objective, organizational characteristics, such as organizational age or size (Van Wijk et al., 2008), scholars have emphasized that employees’ perception of the organization, and especially its organizational culture, may influence knowledge transfer (e.g., Suppiah & Singh Sandhu, 2011). In particular, scholars have suggested that whether the organizational climate is perceived to be open to diversity (Burmeister et al., 2018b; Hofhuis, Van Der Rijt, & Vlug, 2016) or to be discriminatory (Kunze et al., 2011) may be particularly important if diverse employees are involved. For example, if employees perceive the organizational climate to be age discriminatory regarding the performance evaluations and promotion opportunities of younger or older employees (Kunze et al., 2011), they may not pursue knowledge transfer with colleagues who are significantly older or younger as themselves because this behavior does not appear to be supported by the organization (Kunze et al., 2011; Triana & García, 2009). Building on and extending this prior literature (e.g., Kunze et al., 2011), perceived age discrimination climate, in particular, appears to be a factor that may hamper intergenerational knowledge transfer. Therefore, this doctoral thesis includes perceived age discrimination climate as an antecedent in the framework of intergenerational knowledge transfer.

1.3 Perception of knowledge transfer between diverse employees

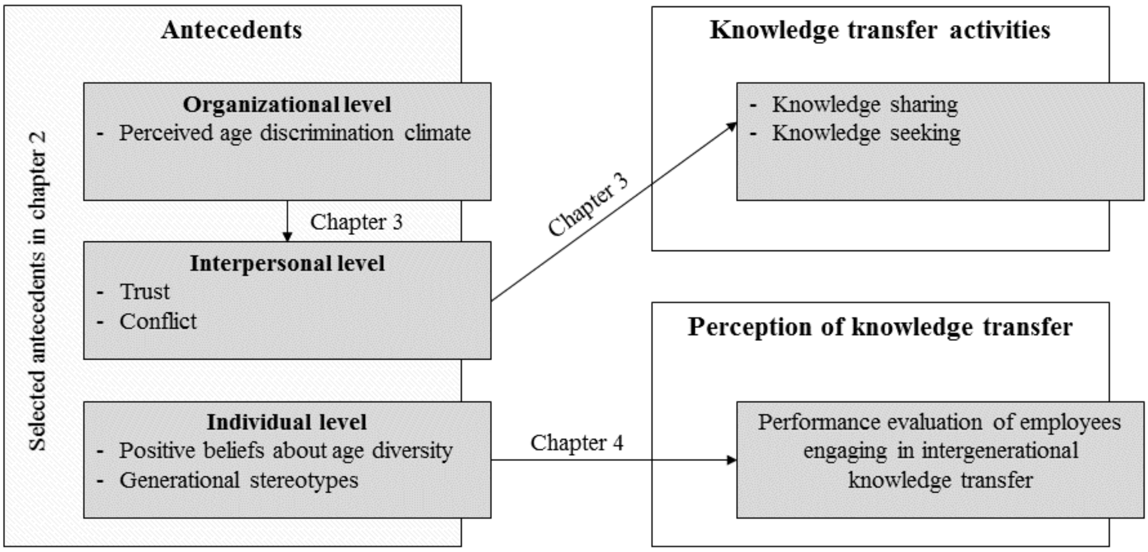
Managers and scholars have suggested integrating knowledge management into performance measurements (Arora, 2002) to benefit from knowledge transfer because it is easier to manage behavior that can be measured (Kaplan & Norton, 1996). In that sense, how employees transfer knowledge with colleagues could contribute to their overall performance evaluation. However, such a performance evaluation is based on perception rather than objective measurements because the evaluating actor, often the supervisor (DeNisi & Murphy, 2017), cannot capture and measure the actual intensity and frequency of the knowledge transfer due to limited insights. Thus, the performance evaluation he provides for other employees may be subjective and thus, may be susceptible to confounding factors. Given the relevance of knowledge transfer to both organizations and employees, scholars and managers could benefit from the identification of mechanisms that influence the performance evaluation of employees engaging in intergenerational knowledge transfer.

Recently, by building on the theory of age effects (Lawrence, 1984, 1988) scholars have suggested that age norms may influence the perception of knowledge transfer (e.g., Burmeister et al., 2018a), and thereby, could also provide a conceptual framework to expound on how intergenerational knowledge transfer may be associated with the performance evaluation of employees. The *theory of age effects* generally posits that age norms prevail in organizations, i.e., certain expectations about which behavior is perceived as appropriate for that age group (*age-appropriate*), and which behavior is not perceived as appropriate (*age-inappropriate*) (Lawrence, 1984, 1988). Behavior that is perceived as age-inappropriate violates age norms and provokes negative reactions, such as a more negative performance evaluation (Kunze & Menges, 2017; Lawrence, 1984, 1996). Moreover, by applying the theory of age effects to knowledge transfer, this doctoral thesis classifies certain types of knowledge transfer behavior as age-inappropriate, such as knowledge sharing by older employees with younger employees (Burmeister et al., 2018a). Combining the arguments, this doctoral thesis suggests that age norms influence the performance evaluation of employees engaging in knowledge transfer. Nevertheless, even though age norms are generally widely shared beliefs, still, the question arises, whether interpersonal heterogeneity exists, as such, that some individuals are more prone towards age norms than others?

The literature on CEM offers a theoretical framework to understand how interpersonal differences may manifest themselves in attitudes and mindsets and therefore, could influence the performance evaluation of employees who engage in intergenerational knowledge transfer. By building on the CEM, this doctoral thesis identifies diversity mindsets as another mechanism that may exert influence on the performance evaluation of employees engaging in knowledge transfer. This doctoral thesis zooms in on two types of diversity mindsets, namely positive beliefs about age diversity and generational stereotypes because both aspects have been linked to intergenerational knowledge transfer or the performance evaluation of employees (e.g., Bauer & Baltes, 2002; Ellwart et al., 2013). Despite the insightful contributions of these previous studies, both types of diversity mindsets have not been linked to the performance evaluation of employees engaging in intergenerational knowledge transfer. Therefore, this doctoral thesis investigates the impact of positive beliefs about age diversity and generational stereotypes on the performance evaluation of employees engaging in intergenerational knowledge transfer.

Overall, this doctoral thesis develops conceptual frameworks for considering intergenerational knowledge transfer and empirically tests the impact of antecedents at the organizational level (perceived age discrimination climate) and interpersonal level (trust, conflict) on intergenerational knowledge transfer. Moreover, it tests the impact of antecedents at the individual level (positive beliefs about age diversity, generational stereotypes) on the performance evaluation of employees engaging in intergenerational knowledge transfer. Figure 1.1 provides an overview of all explored relationships.

Figure 1.1 Overview of the explored relationships in this doctoral thesis


Antecedents
Selected antecedents in chapter 2
Organizational level
- Perceived age discrimination climate
Chapter 3
Interpersonal level
- Trust
- Conflict
Individual level
- Positive beliefs about age diversity
- Generational stereotypes
Chapter 3
Chapter 4
Knowledge transfer activities
- Knowledge sharing
- Knowledge seeking
Perception of knowledge transfer
Performance evaluation of employees engaging in intergenerational knowledge transfer

1.4 Research questions

Overall, despite the practical relevance, research has paid relatively little attention to knowledge transfer between diverse employees. Therefore, this doctoral thesis attempts to fill this research gap by addressing the following three research questions (RQ):

Given the increased relevance of intergenerational knowledge transfer to organizations, the question arises whether intergenerational knowledge transfer is any different from intragenerational knowledge transfer. For example, are there any antecedents that may influence intergenerational knowledge transfer, but not intragenerational knowledge transfer? Thus, the first research question is:

RQ 1: What are the differences between intergenerational and intragenerational knowledge transfer regarding their antecedents?

Organizations strive to retain a competitive advantage by facilitating formal knowledge transfer. Building on SET, trust and conflicts as interpersonal variables appear to constitute important drivers of knowledge transfer. Further, integrating SCT, the organizational climate, and in particular, perceived age discrimination climate may stimulate social categorization processes between employees that in turn, may influence antecedents that are important to knowledge transfer. Therefore, the second research question is:

RQ 2: How do selected organizational level and interpersonal variables, namely, perceived age discrimination climate, conflict, and trust, affect participation in knowledge transfer between employees who are in a highly formalized face-to-face knowledge transfer setting?

Participation in knowledge transfer may contribute to the performance evaluation of employees. Building on the theory of age effects, the evaluation could differ depending on the type of knowledge transfer, as such, whether the knowledge transfer could be classified as either age-appropriate or age-inappropriate. In addition, in line with the CEM, diversity mindsets held by the rater may exert influence on the performance evaluation of employees engaging in knowledge transfer. Therefore, the third research question is:

RQ 3: How does the performance evaluation of employees engaging in age-appropriate and age-inappropriate intergenerational and intergenerational knowledge transfer vary and in this respect, which influence do diversity mindsets, namely positive beliefs about age diversity and generational stereotypes, held by the rater have on the performance evaluation of employees engaging in intergenerational knowledge transfer?

1.5 Outline

The present doctoral thesis consists of three research papers. The first paper represents a systematic literature review and suggests research propositions, while the other two papers (study one and study two) represent empirical studies. All studies focus on knowledge transfer between age-diverse employees.

Chapter two offers an overview of the empirical studies that have explored aspects of intergenerational knowledge transfer. Building on these empirical studies and additionally integrating the literature on knowledge transfer in general, regardless of employees' diversity, and age in the workplace, regardless of knowledge transfer, this chapter offers propositions on how intergenerational and intragenerational knowledge transfer are different from each other concerning the effect of their antecedents. Chapter two addresses the first research question, namely: *"What are the differences between intergenerational and intragenerational knowledge transfer regarding their antecedents?"*

Chapter three empirically investigates knowledge transfer in a trainer-trainee-relationship. The relationship is characterized by an age difference, a high degree of formalization of the knowledge transfer relationships and different organizational hierarchical positions. By building on SET and SCT, the effects of interpersonal and organizational variables, namely, perceived age discrimination climate, conflict, and trust on knowledge sharing and knowledge seeking are explored. Hypotheses are tested with multi-group structural equation modeling (SEM). The sample consists of 444 participants (trainees and trainers). The hypotheses are largely supported for trainees and only partly supported for trainers. This chapter targets the second research question: *"How do selected organizational level and interpersonal variables, namely, perceived age discrimination climate, conflict, and trust, affect participation in knowledge transfer between employees who are in a highly formalized face-to-face knowledge transfer setting?"*

Chapter four draws on the theory of age effects and investigates the performance evaluation of employees participating in intergenerational knowledge transfer. Specifically, it is hypothesized that employees who participate in age-appropriate intergenerational knowledge transfer are evaluated with higher performance than employees who participate in age-inappropriate intergenerational knowledge transfer. Moreover, by including the CEM, the effect of generational stereotypes and positive beliefs about age diversity on the performance evaluation of employees engaging in intergenerational knowledge transfer is analyzed. Hypotheses were tested with a vignette study design, using a sample size of 169 participants. The results are partly supported. The fourth chapter addresses the third research question: *"How does the performance evaluation of employees engaging in age-appropriate and age inappropriate intergenerational and intergenerational knowledge transfer vary and in this respect, which influence do diversity mindsets, namely positive beliefs about age diversity and generational stereotypes, held by the rater have on the performance evaluation of employees engaging in intergenerational knowledge transfer?"*

A concluding chapter offers an overall discussion of this doctoral thesis of a whole by addressing the theoretical contributions of this doctoral thesis, such as a more nuanced conceptualization of knowledge transfer. Further, this chapter discusses managerial implications and limitations. Limitations include, for example, issues regarding the measurement of knowledge transfer. References and appendices are provided for the entire doctoral thesis.

2 WHAT'S SO SPECIAL ABOUT INTERGENERATIONAL KNOWLEDGE TRANSFER?

Abstract: Studies on diversity topics and knowledge management abound in the management literature. However, we still know little about the impact of generational diversity on knowledge transfer. This is surprising, given that particularly the transfer of knowledge between employees who differ substantially in terms of their age is of increasing relevance to organizations: unless firms manage to stimulate intraorganizational knowledge transfer, the knowledge of retiring employees will be lost. This conceptual study first systematically reviews the empirical literature on intergenerational knowledge transfer. Second, the study integrates research on knowledge transfer and generational diversity in order to develop a theoretical framework and set of propositions addressing the specific challenges of intergenerational knowledge transfer.

Notes:

The following chapter is based on an article, published in Management Revue 28(4) (p. 375-411). The published article is joint work with Univ.-Prof. Dr. Katrin Muehlfeld.

The article was published in British English. However, for consistency reasons, spelling was adapted to American English.

2.1 Introduction

Studies on diversity topics and knowledge management abound in the management and psychology literature. Research has focused on either different aspects of knowledge transfer (e.g., Foss et al., 2009) or differences between generations in the workplace (e.g., Lyons & Kuron, 2013). However, research that combines these two fields is still limited. From a knowledge management perspective, scholars have explored antecedents (e.g., interpersonal trust, examined by Lee et al., 2010; Mooradian et al., 2006), and potential outcomes (e.g., performance, examined by Levine & Prietula, 2012) of knowledge transfer. Furthermore, scholars have demonstrated that potential obstacles such as conflicts (Chen, 2011) can reduce the exchange of information between individuals.

Scholars in the field of diversity have looked at age-heterogeneous teams, and how younger and older individuals are distinct from each other (e.g., Costanza, Badger, Fraser, Severt, & Gade, 2012). For instance, younger generations appear to have a stronger learning orientation; they prefer learning new skills and handling new situations compared to older generations (D'Amato & Herzfeldt, 2008). Other findings revealed that these differences might also hinder the interaction between employees due to increased potential for conflicts (Jehn, Northcraft, & Neale, 1999).

Although prior research has reported evidence in each field, little attention has been paid to how specifically the fields of knowledge transfer and generational diversity are interrelated (Ellwart et al., 2013; Harvey, 2012; Noethen & Voelpel, 2011). From a knowledge-based perspective, we seek to combine these two streams in order to address the question whether employees who participate in intergenerational knowledge transfer are confronted with different situations than employees who exchange information with same-generation colleagues (Lauring & Selmer, 2012; Noethen, 2011; Noethen & Voelpel, 2011).

Since research on this topic is still limited, the aim of this paper is to summarize results of empirical research on intergenerational knowledge transfer based on a systematic review of studies, which deal explicitly or implicitly with various aspects of intergenerational knowledge transfer (Table 2.1). Based on this review of the literature, and integrating the existing, still highly limited empirical literature that directly addresses intergenerational knowledge transfer with related insights from studies at the interface of the literature on age/generational diversity and on knowledge transfer (e.g., co-worker support is a topic discussed in both streams) we developed a set of propositions. Figure 2.1 demonstrates how the propositions were developed based on the three different streams of literature. Finally, we incorporated our propositions into an existing, comprehensive conceptual framework relating to knowledge transfer in general (Figure 2.2). In so doing, we adapted and extended the theoretical framework suggested by Wang and Noe (2010).

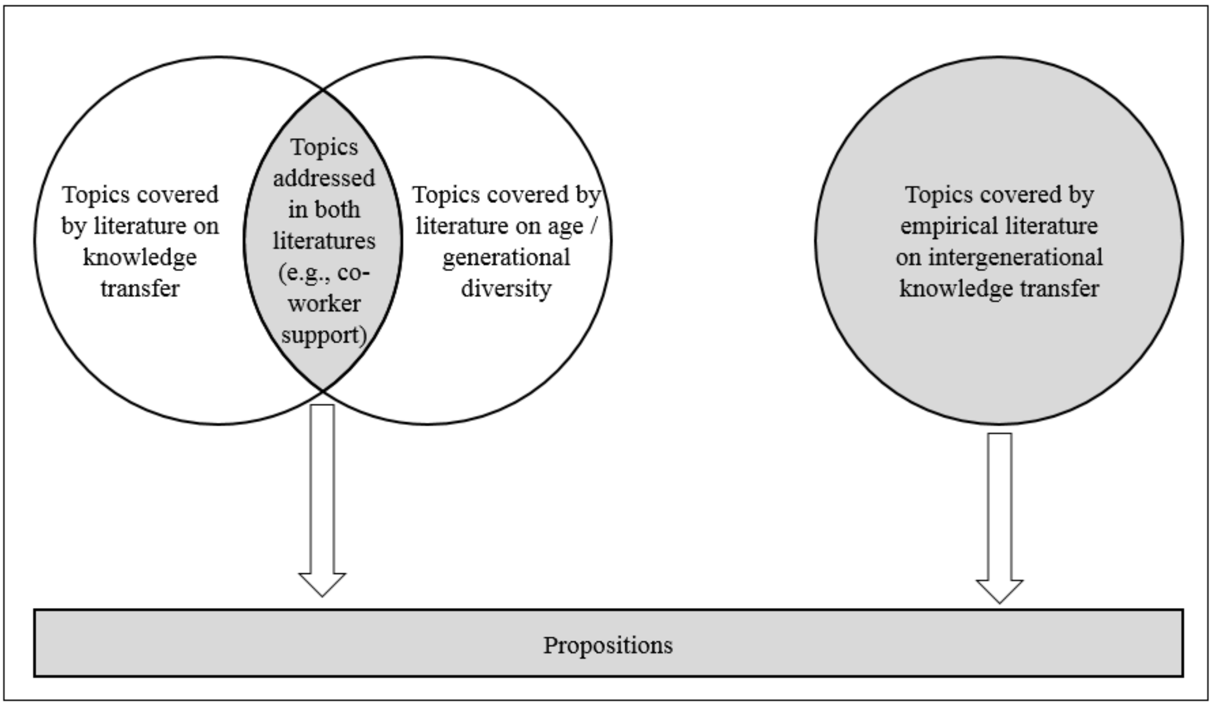
Table 2.1 Summary of empirical studies on intergenerational knowledge transfer

Study	**Theory**	**Outlet**	**Method**	**Key Findings**
Tempest, 2003	Social constructionist theory	Management Learning*	Qualitative interviews (n=32, United Kingdom)	Intergenerational teamwork was found to activate new knowledge combinations and a more efficient exploitation of existent knowledge bases within the television industry.
Ashworth, 2006	Various, e.g., organizational learning theory	International Journal of Human Resource Management*	Quantitative survey (n=65, USA)	The ageing workforce is one of the dominant concerns of human resource executives in the electricity industry. More concerns targeted, for example, issues of attracting and retaining a skilled workforce.
Liebowitz et al., 2007	Not specified	Industrial Management & Data Systems*	Quantitative survey (n=50, USA)	Cross-generational biases were found to reduce tacit knowledge transfer, and knowledge flows in edge organizations. Predominantly uni-generational teams were questioned.
Leiter, Jackson, & Shaughnessy, 2009	Not specified	Journal of Nursing Management	Quantitative survey (n=448, Canada)	Nurses from the Baby Boomer generation were found to share more knowledge than nurses from Generation X.
Levy, 2011	Not specified	Journal of Knowledge Management*	Case study (Israel)	By analyzing several cases the author found that knowledge retention can be achieved through three stages: 1. definition of the scope, 2. documentation and 3. integration of knowledge into the organization.
Lefter et al., 2011	Not specified	Amfiteatru Economic*	Quantitative survey (n=237, Romania)	The research took place in the academic context and demonstrated that most academics prefer knowledge transfer through cooperation, particularly for research grants.
McNichols, 2010	Not specified	Journal of Knowledge Management*	Qualitative, i.e. Adapted Delphi research method (n=24, USA)	The study took place in the aerospace engineering context. Participants of Generation X stated that participative management involvement is a crucial determinant of knowledge sharing culture.
Noethen, 2011	Various, e.g., social exchange theory	Dissertation+	Quantitative surveys (n=572, Germany; n=1940, Germany; n=294, Germany)	Drawing from three projects, age and intrinsic motivation were identified as critical influencing factors of knowledge transfer.

Study	Theory	Outlet	Method	Key Findings
Harvey, 2012	Not specified	Journal of Knowledge Management*	Case study with data analysis and interviews (Canada)	The study investigated strategies for intergenerational knowledge transfer of nurses. It demonstrated that mutual exchange rather than the source-recipient model is more applicable as an innovative and facilitative knowledge management design and that it can encourage intergenerational knowledge transfer better than a bureaucratic and instrumental design.
Ellwart et al., 2013	Categorization-elaboration model	Journal of Managerial Psychology*	Quantitative survey (n=516, Switzerland)	Objective age diversity at the organizational level and perceived age diversity at the individual level were found to reduce knowledge exchange and identification.
Joe et al., 2013	Not specified	Journal of Knowledge Management*	Case study and interviews (n=17, New Zealand)	The authors identified five different types of older experts' knowledge: subject matter expertise, knowledge about business relationships and social networks, organizational knowledge and institutional memory, knowledge of business systems, processes and value chains, and knowledge of governance.
Beck, 2014	Not specified	Management Learning*	Qualitative interviews (n=32, UK)	In interviews, participants stated that older employees have less learning opportunities at work. Further, the respondents implicitly accepted the limited opportunities.
Gerpott et al., 2017	Various, e.g., social identity theory	Academy of Management Learning & Education*	Qualitative interviews (n=23, Germany)	The authors found that in an intergenerational learning program, the younger and older participants possess different types of knowledge (e.g., expert knowledge, social knowledge). The knowledge transfer is bidirectional. However, different types of knowledge are exchanged at different times. And also, not all types of knowledge are exchanged mutually. Moreover, the authors integrated their results into a phase model of intergenerational learning: 1. familiarization, 2. assimilation, and 3. detachment.

Notes:
* peer-reviewed journals are marked with an asterisk
+ Though our criteria of our literature review included published work in progress and journal articles, we decided to integrate this dissertation since it contained relevant information for our paper.

Figure 2.1 Propositions based on various streams of literature


Topics covered by literature on knowledge transfer
Topics addressed in both literatures (e.g., co-worker support)
Topics covered by literature on age / generational diversity
Topics covered by empirical literature on intergenerational knowledge transfer
Propositions

Therefore, our analysis is methodologically based on a two-step research process. First, we build our literature review on a search of eight major management/psychological databases with 21 keywords related to knowledge transfer and/or intergenerational aspects in organizations, such as ‘knowledge transfer’ and ‘intergenerational contact’. A list of the keywords is provided in the appendix. We were inspired by the paper by Richter (2014) for our database selection because her article also focuses on demographic issues. We applied our keywords to the following databases: ISI Publica, IZA, Ifo Institute, JSTOR, Social Science Research Network (SSRN), EconStor, PsychINFO, and Econbiz. A selection of the databases have been used among published literature reviews as well (e.g., Burmeister & Deller, 2016; Schneid, Isidor, Steinmetz, & Kabst, 2016; Van Wijk et al., 2008).

We, first, included studies that more or less explicitly addressed the topic of ‘intergenerational knowledge transfer’ and were empirical in nature. Second, because of the fairly small number of studies resulting from our first selection criterion, we additionally included studies that did not directly address the topic of intergenerational knowledge transfer but discussed *related topics*. We identified those related topics that we included in the development of our propositions by requiring them to have been investigated in *both* the literature on knowledge transfer and the literature on age/generational diversity (e.g,. co-worker support).

Further, since willingness to engage in knowledge transfer provides an accurate prediction of actual behavior (Schwaer, Biemann, & Voelpel, 2012), we draw on studies that either address actual *behavior* related to knowledge transfer or the *willingness* to engage in knowledge transfer. The database search process took place in June ‑ November 2015[7]. Second, we conducted a complementary search guided by a snowball procedure where we manually checked reference lists (Schneid et al., 2016). The snowball approach was implemented continually until spring 2017.

The remainder of this paper is structured as follows: In the next section, we present the theoretical and empirical background on intergenerational knowledge transfer. Then, we discuss the antecedents of intergenerational knowledge transfer, for which we expect a (more) positive or negative effect in contrast to regular knowledge transfer. Only antecedents are presented that, according to our research, seem to differ from regular knowledge transfer. The paper concludes with a discussion and implications for future research and management practice.

2.2 Background and literature summary

While the importance of knowledge transfer between employees with a large age difference has grown for organizations in the last few years and has been discussed in business publications (e.g., Milligan, 2014), academic research has not kept pace (Burmeister & Deller, 2016). In the near future, many organizations will be confronted with serious challenges due to the demographic transition. In many developed countries, demographic transition implies that societies are ageing and that, for instance, in 2050 one third of the population in Germany is estimated to be aged 65 and over (OECD, 2014). These changes will affect individuals, societies, and, in particular, organizations (Calo, 2008; De Long, 2004; Drabe, Hauff, & Richter, 2015; Kulik, Ryan, Harper, & George, 2014).

The age structure of the labor market will change, and so will the age structure within organizations, with a growing number of older employees relative to younger ones. The resulting changes in the age-mix within organizations are quite likely to influence as well as the ways in which organizational members interact with each other (Calo, 2008; Kuhn & Hetze, 2009; Noethen, 2011; Noethen & Voelpel, 2011). Furthermore, employees of the high-birthrate cohort Baby Boomer will retire in the coming years (Macky et al., 2008). For organizations, the near-simultaneous retirement of large numbers of employees implies a significant threat of losing valuable knowledge.

---

[7] We additionally cross-checked the databases Scopus, Science Direct, Web of Science and EBSCO in February 2017. We applied the key terms 'intergenerational knowledge' transfer and 'intergenerational learning' as they are widely used in the title and keyword selection of articles on intergenerational knowledge transfer (e.g., Harvey, 2012).

Drawing on the knowledge-based perspective, such a development can have tremendous consequences for organizations (Calo, 2008; De Long, 2004; Grant, 1996). The knowledge-based perspective has its roots in the resource-based view of the firm (Grant, 1996). The resource-based view postulates that firms possess particular (scarce) resources, competencies, and capabilities which lead to a competitive advantage (Pfeffer & Salancik, 1978; Spender, 1996). Resources are, for example, skilled employees (Wernerfelt, 1984). While the resource-based view distinguishes between a variety of important resources, such as machine capacity (Wernerfelt, 1984), the knowledge-based perspective regards knowledge as the most important resource an organization may have (Grant, 1996), because it is a fundamental requirement for progress and economic success in a knowledge-intense society (Argote & Ingram, 2000; Grant, 1996; Noethen, 2011; Van Wijk et al., 2008; Wang & Noe, 2010). Hence, knowledge constitutes a key source of competitive advantage for organizations.

Here, in accordance with the dominant view in organizational studies, knowledge is defined as being “created and organized by the very flow of information, anchored on the commitment and beliefs of its holder” (Nonaka, 1994: 15). The most common distinction between different forms of knowledge is the distinction between explicit and tacit knowledge (Alavi & Leidner, 2001; Osterloh & Frey, 2000; Polanyi, 1969). Explicit knowledge, which can be characterized as ‘knowing about’, refers to formal and standardized knowledge and can be codified and transferred more easily. For example, engineering knowledge of machine building can be categorized as explicit knowledge because it can easily be codified. Tacit knowledge captures ‘knowing how’, which is based on experience and action and therefore is hard to formalize and communicate (Grant, 1996; Lee et al., 2010; Nonaka, 1994). For instance, tacit knowledge could be a particular problem-solving strategy, which engineers apply in the innovation process.

A loss of knowledge has a potentially severe, negative impact on organizations, due, for example, to financial costs for reconstructing lost knowledge (De Long, 2004). The threat of losing knowledge is particularly serious for tacit knowledge. Tacit knowledge is not easily transferable, because it is attached to employees, firm-specific, and difficult to imitate and export (Ambrosini & Bowman, 2001). For example, an innovative engineering team can be regarded as a source of major competitive advantage of an organization. The output of this engineering team, i.e., their explicit knowledge, could easily be captured and saved in a Wiki, through patents, and so on. However, the unique resource for the organization may be explained by the procedural strategy of the engineers and not only by their past output. This tacit knowledge contributes to the firm's competitive advantage. Yet, it is considerably more difficult to capture and transfer this tacit knowledge (De Long, 2004).

In the literature, knowledge transfer is viewed as a preventive solution to the threat of losing both tacit and explicit knowledge (Argote & Ingram, 2000; Foss et al., 2009). Knowledge transfer is a fundamental part of organizational learning which involves both individual and collective learning (Argote, Ingram, Levine, & Moreland, 2000; Grant, 1996; Zhao & Anand, 2009). Hence, knowledge transfer can be characterized as "the process through which one unit (e.g., group, department, or division) is affected by the experience of another" (Argote & Ingram, 2000: 151) or in other words, knowledge transfer is a process of transferring information from one source to another (Argote & Ingram, 2000; Van Wijk et al., 2008; Wang & Noe, 2010). While recent research has proposed that knowledge transfer[8] can be operationalized as the combination of sharing of knowledge and seeking knowledge (Foss et al., 2009; Noethen, 2011; Van Den Hooff & De Ridder, 2004; Watson & Hewett, 2006; Wilkesmann & Virgillito, 2013), the majority of prior studies have focused solely or primarily on knowledge sharing (e.g., Cabrera & Cabrera, 2005; Foss et al., 2009). Knowledge sharing captures facets of providing information and knowledge to a source, such as by explicitly showing procedures to colleagues, whereas knowledge seeking describes the obtaining of knowledge from others, such as by asking colleagues (Wilkesmann et al., 2009b). Moreover, knowledge transfer can take place at various levels such as dyads, teams, and organizations (Alavi & Leidner, 2001) and can occur through different channels, such as face-to-face or online (Wang & Noe, 2010).

---

[8] Some authors explicitly distinguish knowledge transfer from similar expressions like knowledge exchange (Wang & Noe, 2010). However, in general, these terms are often used synonymously or in very similar ways (Harvey, 2012). We use the terms knowledge transfer and knowledge exchange interchangeably. If we refer to the sharing or seeking of knowledge, we explicitly use these terms.

Here, our focus lies on dyadic face-to-face intergenerational knowledge transfer between employees from the same organization. Knowledge transfer in organizations always implies a transfer at the individual level (Alavi & Leidner, 2001), and dyadic transfer constitutes the most basic form of knowledge transfer. Moreover, prior literature suggests (e.g., De Long & Davenport, 2003; Liu & Liu, 2011) that for successfully transferring tacit knowledge, in particular, it is, face-to-face interaction that works best, compared to alternative forms of interaction such as, virtual interaction. Finally, drawing from the knowledge-based perspective, tacit knowledge is more important for organizations in terms of representing a source of competitive advantage, precisely, among others, because it is more difficult to transfer. Retaining it also represents by far the greater challenge for organizations faced with the demographic transition, compared to preventing a loss of explicit knowledge. Hence, dyadic face-to-face intergenerational knowledge transfer could, therefore, play a potentially important part in organizations' efforts to retain effectively the tacit knowledge that the Baby Boomers possess when retiring.

Current literature on knowledge transfer does not, usually, refer explicitly to issues related to age or generational aspects. Consequently, we interpret insights related to knowledge transfer in general as referring to 'regular' knowledge transfer, between organizational members of roughly the same age/generation, without any additional potential complications arising from a large age or generational difference between the involved individuals. 'Intergenerational knowledge transfer' can, in turn, be conceptualized as the exchange of information between two individuals (here: employees) with a large age difference (Harvey, 2012; Noethen & Voelpel, 2011). In general, the transfer works bidirectionally; young employees transfer knowledge to older employees and vice versa (Gerpott et al., 2017; Gerpott & Voelpel, 2014). In terms of, for instance, digitization, particularly younger employees might also share knowledge with older employees. Prensky (2001) introduced the terms 'digital natives' and 'digital immigrants' to conceptualize this situation. The younger generations are referred to as 'digital natives', who grew up with technology and intuitively speak the 'language of technology'. Older generations are, in turn, considered as 'digital immigrants', who face problems with learning new technology. In particular, with regard to relatively recent technological knowledge, older generations might benefit from the knowledge of younger employees. However, embedded in the context of the demographic transition, intergenerational knowledge transfer often albeit not always targets the sharing of knowledge by older employees, to the benefit of younger employees and the organization (Burmeister & Deller, 2016). From this view, older generations can, for example, provide important social knowledge to younger employees and share information about how to best deal with workplace conflicts (Gerpott et al., 2017). In this study, we thus use the generic term ‘knowledge transfer’ to refer to intragenerational knowledge transfer; with respect to age/generational differences, the term ‘intergenerational knowledge transfer’ or similar expressions, such as knowledge transfer in age-diverse contexts, are applied. Furthermore, as we zoom in on the context of the demographic transition, we conceptualize intergenerational knowledge transfer as a specific kind of intergenerational knowledge transfer, which focuses on the sharing of information by older employees towards younger employees, and the seeking of knowledge by younger employees from older employees.

We expect intergenerational knowledge transfer to differ from intragenerational knowledge transfer in terms of its positive and negative antecedents. This basic proposition is motivated by insights derived from two theoretical frameworks that are particularly important in relation to age/generational diversity: first, the multigenerational approach, and, second, life-span theory (Cogin, 2012).

The idea of the *multigenerational approach* is that a generation is a cohort of people who share common experiences of life events within some specific time frame, for instance, at similar ages. These experiences impact these individuals and create similarities in attitudes and behaviors (Cogin, 2012; Costanza et al., 2012). Currently, three different generations prevail in the job market: Baby Boomers, Generation X, and Generation Y. Baby Boomers represent the generation born between 1945 and 1964. This generation is characterized as being loyal to their organizations and with a high value of their job (Macky et al., 2008). Generation X captures individuals born between 1965 and 1981. This generation is portrayed as pessimistic and individualistic. They are not loyal to their organization and appreciate a work-life balance that implies a greater emphasis on the ‘life’ dimension, compared to previous generations (Macky et al., 2008). Finally, Generation Y, born between 1982 and 2000, is highly familiar with modern (information and communication) technology and therefore used to change and a flexible working environment. They are also described as willing to learn and open to new challenges (Becton et al., 2014; Macky et al., 2008; Smola

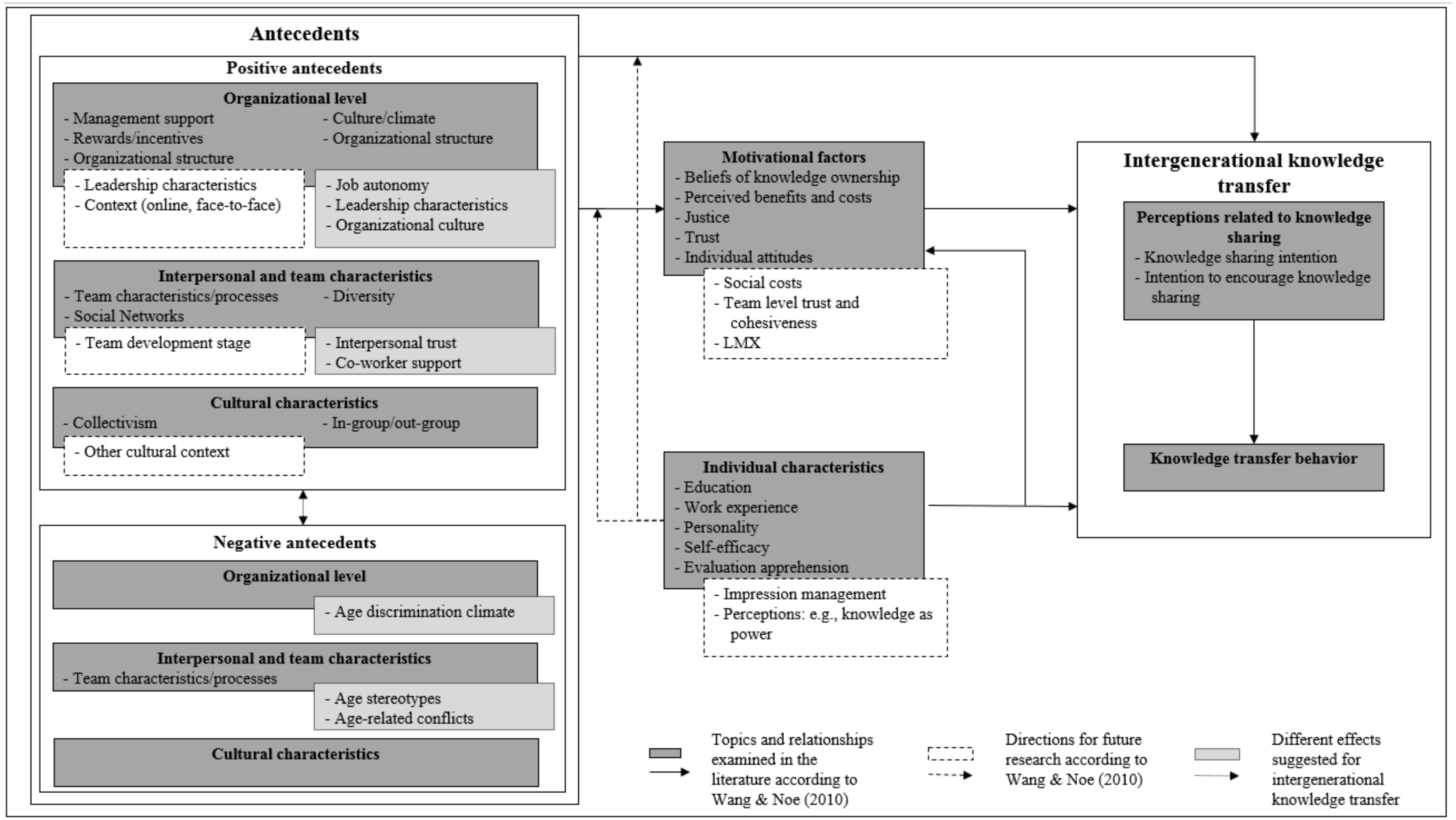
& Sutton, 2002). Yet, life-span theory describes that when individuals grow older, their personality adapts (Cogin, 2012; Jones & Meredith, 1996) and implies that younger individuals have different attitudes and personalities than older individuals.

Given that the prior literature provides empirical support for each of these premises (e.g., Cogin, 2012; Jones & Meredith, 1996), we follow the approach of Joshi and colleagues (2010) who acknowledged the debate about age versus generation effect and integrated the variety of theoretical lenses. In other words, we integrate studies on (a) generational differences and on (b) age diversity in our analyses about intergenerational knowledge transfer. We cannot draw any definitive conclusions as to whether the observed differences between younger and older individuals can be traced back to either age-related development or generational cohort effects (McAdams, De St. Aubin, & Logan, 1993) since it is difficult to disentangle age and cohort effects (Rhodes, 1983). When we refer to older or younger employees, the affiliation to younger or older generations is always implicated and *vice versa*. Taking this into account, both theoretical paradigms highlight that younger and older individuals are different in terms of their attitudes and beliefs, whether the primary source of these differences is age or generation. In any case, what is relevant in the context of this study is that these variations may influence antecedents that affect participation in intergenerational knowledge transfer. Moreover, intergenerational knowledge transfer always implies a genuine heterogeneity which might invoke distinct effects compared to homogenous groups, such as frictions and conflicts (Jehn et al., 1999). We, therefore, expect that intergenerational knowledge transfer will be different from intragenerational knowledge transfer.

So far, there are only a few studies that explicitly focus on intergenerational knowledge transfer, which are summarized in Table 2.1. Literature shows that intergenerational knowledge transfer rests on mutual exchange (Harvey, 2012). Still, Baby Boomers have been found to share more knowledge than members from Generation X (Leiter et al., 2009). Also, different types of knowledge (Gerpott et al., 2017) and expertise (Joe, Yoong, & Patel, 2013) have been distinguished. Interestingly, although younger employees were also found to share knowledge with older employees, there were particular types of knowledge, for example, social knowledge, which was only shared by older employees towards younger employees (Gerpott et al., 2017). Ellwart and colleagues (2013) addressed the question of how objective age diversity at the organizational level and perceived age diversity at the individual level influenced knowledge exchange within teams and identification with a team and found a detrimental effect. Tempest (2003), on the other hand, described positive results of intergenerational teamwork which was found to activate new knowledge combinations and to raise exploitation of existent knowledge.

So while a nascent and promising literature has begun to address important questions related to intergenerational knowledge transfer many open questions remain. For instance, we are not aware of any study that specifically examines the question whether intergenerational knowledge transfer is different from regular knowledge transfer, and if so, in which ways. Hence, in developing a set of propositions for capturing differences in antecedents of inter- and intragenerational knowledge transfer, we integrated with this limited literature studies on knowledge transfer and age/generation diversity, and more generally, in as far as they overlapped in addressing related topics. The result is the conceptual framework shown in Figure 2.2.

Figure 2.2 Conceptual framework of intergenerational knowledge transfer


Antecedents
Positive antecedents
Organizational level
- Management support
- Rewards/incentives
- Organizational structure
- Culture/climate
- Organizational structure
- Leadership characteristics
- Context (online, face-to-face)
- Job autonomy
- Leadership characteristics
- Organizational culture
Interpersonal and team characteristics
- Team characteristics/processes
- Social Networks
- Diversity
- Team development stage
- Interpersonal trust
- Co-worker support
Cultural characteristics
- Collectivism
- In-group/out-group
- Other cultural context
Negative antecedents
Organizational level
- Age discrimination climate
Interpersonal and team characteristics
- Team characteristics/processes
- Age stereotypes
- Age-related conflicts
Cultural characteristics
Motivational factors
- Beliefs of knowledge ownership
- Perceived benefits and costs
- Justice
- Trust
- Individual attitudes
- Social costs
- Team level trust and cohesiveness
- LMX
Individual characteristics
- Education
- Work experience
- Personality
- Self-efficacy
- Evaluation apprehension
- Impression management
- Perceptions: e.g., knowledge as power
Intergenerational knowledge transfer
Perceptions related to knowledge sharing
- Knowledge sharing intention
- Intention to encourage knowledge sharing
Knowledge transfer behavior
Topics and relationships examined in the literature according to Wang & Noe (2010)
Directions for future research according to Wang & Noe (2010)
Different effects suggested for intergenerational knowledge transfer

Source: Adapted from Wang & Noe (2010).

2.3 Propositions for a conceptual framework and directions for future research

Wang and Noe (2010) reviewed the literature on different aspects influencing knowledge transfer in general and developed a conceptual model based on this review of the literature. For instance, they considered environmental antecedents (categorized into organizational level characteristics, network characteristics, and cultural characteristics). Here, we adapted their framework by applying it to the specific setting of intergenerational knowledge transfer and by explicitly distinguishing between positive and negative antecedents.

In so doing, we focused on organizational level antecedents and network characteristics, given that we lacked literature that addressed aspects from a cultural perspective in one of the presented literature streams. We identified those antecedents based on our own literature review that (a) have been studied in a majority of studies on knowledge transfer and (b) that appear to have distinct effects on intergenerational vis-a-vis regular knowledge transfer.

For classifying individual antecedents as either organizational or network level, we followed the dominant classification in the reviewed literature. For example, Van Wijk and colleagues (2008) categorized trust as a network level characteristic, and Wang and Noe (2010) looked at learning culture as an organizational level characteristic. Nonetheless, it may be possible to conceptualize some of the antecedents both at the organizational and the network level. For example, trust can be differentiated into interpersonal trust (Van Wijk et al., 2008) and impersonal trust (Vanhala, Puumalainen, & Blomqvist, 2011). Based on Van Wijk and colleagues (2008) who investigated knowledge transfer in general and considered trust as a network characteristic, we also classified trust as a network characteristic, especially because none of the studies included in our review discussed trust (explicitly) at the organizational level. Moreover, we believe that a focus on trust as a network related variable is also consistent with our focus on face-to-face dyadic knowledge transfer.

Positive antecedents to intergenerational knowledge transfer

Scholars in the literature on knowledge transfer, in general, have explored a variety of antecedents stimulating knowledge transfer. For example, job autonomy (Foss et al., 2009) was found to increase knowledge transfer. Characteristics of the organization and social relationships have an influence on the knowledge exchange of employees (Van Wijk et al., 2008; Wang & Noe, 2010). From among this large number of organizational and network level antecedents that impact regular knowledge transfer, here, we zoom in on those factors that appear to show a different effect in age-diverse knowledge transfer compared to regular knowledge transfer, as suggested by our propositions.

Organizational level characteristics

Job Autonomy

Job autonomy describes the opportunity a job provides for employees to individually plan their work and decide when they carry out their tasks (Hackman & Oldham, 1976). In other words, it is at the discretion of employees to make decisions when and how to perform their assignments at their own pace (Dodd & Ganster, 1996; Foss et al., 2009; Nonaka, 1994). This greater flexibility is associated with positive effects on employee attitudes. Employees with higher job autonomy show a more positive work motivation and higher job satisfaction (e.g., Hackman & Oldham, 1976; Inceoglu, Segers, Bartram, & Vloeberghs, 2009). By definition, autonomy also offers employees more opportunities to interact with colleagues and to exchange knowledge (Nonaka, 1994). Management research has pointed out that job autonomy is a highly relevant antecedent of knowledge sharing (Foss et al., 2009; Noethen, 2011; Noethen & Voelpel, 2011), yet, does not appear to have any effect on knowledge seeking (Noethen, 2011). In a similar vein, Mueller (2014) found that employees who were explicitly allowed to dedicate time to knowledge sharing among project team members actually shared more knowledge. When explicitly encouraged in this way to share their knowledge and in response to this signal indicating the importance of such behavior to the organization, employees might engage in knowledge sharing that would otherwise not happen. Knowledge seeking is arguably less at risk of not taking place without such organizational support: If employees perceive the necessity to seek knowledge on a particular issue in order to be able to fulfil their job duties, they are more likely to take the initiative and seek this knowledge without receiving explicit support from the organization.

Drawing from these findings and combining it with our definition of intergenerational knowledge transfer, we conceptualize that the effect of job autonomy is larger for intergenerational knowledge *sharing* than for regular knowledge sharing and smaller for intergenerational knowledge *seeking* than for regular knowledge seeking. Also, studies that focus on age-related differences complement our prediction. Inceoglu and colleagues (2009) and Inceoglu, Segers, and Bartram (2012) found that for older employees, job autonomy and flexibility on the job were more important than for younger employees. Extending these findings, we suggest that younger employees appreciate job autonomy less than older employees do. Following our definition of intergenerational knowledge transfer, older employees play a key role in knowledge sharing. Hence, it is very likely that job autonomy has an even larger effect on intergenerational knowledge sharing than on regular knowledge sharing. In contrast, younger employees do not only show lower preferences for job autonomy but they also mainly search for knowledge.

Proposition 1a: For knowledge sharing, the positive effect of job autonomy is larger for intergenerational interactions than for intragenerational interactions.

Proposition 1b: For knowledge seeking, the positive effect of job autonomy is smaller for intergenerational interactions than for intragenerational interactions.

Organizational culture

Prior research has identified organizational culture as an important antecedent to knowledge transfer. We interpret organizational culture as beliefs and attitudes in an organization that help to deal with different issues of the organization (Schein, 1984; Smircich, 1983). In other words, organizational culture represents the foundation of values and beliefs that can impact individual and organizational behavior (Mueller, 2014). Organizational culture can embrace different aspects, such as supportive organizational culture and learning culture. Based on our literature review, the notion of a learning organization emerged as particularly relevant.

The term 'learning culture' is often used to conceptualize an environment where most organizational members value learning and strive for high performance through learning (Jo & Joo, 2011; Wei, Zheng, & Zhang, 2011). Research on knowledge management has demonstrated that a high appraisal of learning in organizations enables knowledge sharing (Jo & Joo, 2011; Rhodes, Hung, Lok, Ya‐Hui Lien, & Wu, 2008). Similar to this idea, subjective norms with respect to knowledge sharing also positively influence knowledge transfer (Cabrera & Cabrera, 2005; Minbaeva & Pedersen, 2010). Taken together, an environment that is characterized by a positive appreciation of learning appears to positively affect the exchange of knowledge. Here, we suggest that this effect will be even stronger for both intergenerational knowledge *sharing* and *seeking*, compared to intragenerational settings. This proposition rests on the following arguments, derived from our literature review:

Some scholars have explored learning oriented character traits among different generations (D'Amato & Herzfeldt, 2008; Matzler & Mueller, 2011). Learning oriented individuals favor the development of new skills and want to handle new situations. The process of learning itself is important to them, and they understand their capabilities to be flexible because they can be improved (D'Amato & Herzfeldt, 2008; Matzler & Mueller, 2011). Comparing younger and older generations, younger generations indicate higher scores in learning orientation; suggesting that learning norms might matter more for employees belonging to younger generations. A learning culture may stimulate young employees to request information from older employees and to expand their knowledge (knowledge *seeking*).

Furthermore, we expect that a learning culture enriches the knowledge *sharing* that older employees engage in, based on results of the age stereotypes literature. Studies on the effects of stereotypes have investigated the consequences of negative (Abrams, Crisp, Marques, Fagg, Bedford, & Provias, 2008; Hess, Hinson, & Statham, 2004; Hilton & von Hippel, 1996) and positive age stereotype priming (Levy, Pilver, Chung, & Slade, 2014). For instance, older adults who were primed with negative stereotypes showed a decrease in performance (Hess et al., 2004). Organizational learning culture could reduce the detrimental effects of stereotypes on older employees. When an organizational culture acknowledges the learning of its members, older employees, in particular, may perceive their expertise as valuable and may feel appreciated. This effect may be particularly powerful for older employees as they tend to have, in general, fewer learning opportunities at work than younger employees do (Beck, 2014). In conclusion, learning norms and learning orientation appear to have the potential to increase significantly the seeking of knowledge by young employees and to stimulate older employees to share their knowledge[9].

Proposition 2: The effect of an organization-wide learning culture is more important for stimulating intergenerational knowledge transfer than for facilitating regular knowledge transfer.

---

[9] Finally, although this section focuses on antecedents, prior literature also discusses a reversed causality. Gerpott and Voelpel (2014) suggested that intergenerational knowledge transfer improves the learning culture in organizations.

Leadership characteristics

An employee's perception of the leader and his/her leadership style appears to be a fundamental antecedent of knowledge transfer. Prior studies have suggested that certain types of leadership style may stimulate knowledge transfer particularly effectively. For instance, empowering leadership appears to predict an increase in knowledge sharing (Srivastava, Bartol, & Locke, 2006; Xue, Bradley, & Liang, 2011), presumably because it implies a behavior where power is shared with subordinates, thereby increasing the intrinsic motivation of employees. Aspects of empowering leadership include, for instance, participative decision-making and information sharing (Srivastava et al., 2006).

Transformational leadership style is another type of leadership that appears to be positively associated with knowledge transfer in general. It involves shifts in the beliefs, needs, and values of the employees and is characterized by idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (Bass, Waldman, Avolio, & Bebb, 1987; Kuhnert & Lewis, 1987). There is abundant empirical evidence that supports positive effects of transformational leadership, for example, on organizational learning and innovation (García-Morales, Lloréns-Montes, & Verdú-Jover, 2008) or indirectly on team performance (Schaubroeck, Lam, & Cha, 2007). Moreover, there is some tentative evidence that transformational leadership climate could invoke employees' intention to share knowledge, addressing the question of antecedents to knowledge transfer (Liu & DeFrank, 2013). Taken together, leadership appears to be an important variable which may influence employees' knowledge transfer intention and behavior (Liu & DeFrank, 2013; Srivastava et al., 2006).

The question arises which role leadership behavior plays in intergenerational knowledge transfer. To the best of our knowledge, there are no studies which have directly and explicitly analyzed preferences for different leadership styles depending on age or generation. So far, research has offered only evidence that generations differ in their preferred character traits of leaders (Arsenault, 2004). For instance, Generation X and Generation Y favor determination and ambition in their leaders more strongly than Baby Boomers while Baby Boomers consider competence as particularly important. However, stimulating intergenerational knowledge transfer may represent a comparatively greater leadership challenge because employees of different ages/generations value distinct traits or behaviors in their leaders, and respond positively to them, for example, by effectively engaging in knowledge transfer. This would require leaders to exhibit a larger range of leadership behaviors in order to appeal to these employees belonging to different age groups/generations. Also, when seeking to facilitate intergenerational knowledge transfer, leaders may need to appeal to different motivations and hence may need to use different incentives to encourage younger vis-a-vis older employees to participate. While for intragenerational knowledge exchange, participants are relatively more likely to react positively to the same leadership style, stimulating intergenerational knowledge transfer may thus call for leaders to apply different leadership styles for younger versus older participants. All in all, we thus propose that:

Proposition 3: Stimulating intergenerational knowledge transfer through the adoption of certain leadership styles is more difficult compared to stimulating intragenerational knowledge transfer because it requires incorporating a more multi-faceted leadership style in order to appeal to all employees of different ages/generations.

Network level characteristics

Co-worker support

Many studies on knowledge transfer use social exchange theory as a theoretical background (Cabrera & Cabrera, 2005; Wang & Noe, 2010). We follow this approach and build our arguments on the premises of social exchange theory (Blau, 1964). One assumption of social exchange theory is that individuals adjust their relations with other people based on self-interest and a cost-benefit analysis (Blau, 1964; Cook & Whitmeyer, 1992). Individuals interact with each other because they expect, material or immaterial, reciprocal rewards in the future (Cabrera & Cabrera, 2005; Wang & Noe, 2010). Drawing on social exchange theory, co-worker support might classify as a valuable antecedent that predicts knowledge transfer. Perceived co-worker support captures employees' perception of how much their co-workers, as a collective group, support and value their involvement (Swift & Hwang, 2013). Employees who perceive their co-workers to be supportive tend to assist them in return (Ladd & Henry, 2000). In a similar vein, Collins and Smith (2006) found that a climate of trust for co-workers increased employees' belief that exchange and combination of knowledge will yield personal and organizational value, and also that they believe their colleagues were capable of exchanging and combining information.

Here, we suggest that the effect of co-worker support is larger for intergenerational knowledge sharing and smaller for intergenerational knowledge seeking compared to the corresponding processes between same-generation employees. In regular knowledge transfer, employees are more prone to share knowledge when they perceive their colleagues to be supportive (Cabrera et al., 2006; Cabrera & Cabrera, 2005; Lee, Yoo, & Yun, 2015; Swift & Virick, 2013).

Referring to intergenerational knowledge transfer, we first discuss prior research that has investigated how different generations value co-worker support. Bristow, Amyx, Castleberry, and Cochran (2011) found that members of Generation X valued working with friendly and helpful co-workers more than did members of Generation Y. Further, a related stream of research has investigated the value of social interactions in the work environment for members of different generations. For instance, Twenge, Campbell, Hoffman, and Lance (2010) demonstrated that employees belonging to the Baby Boomer generation place higher value on social interaction than employees belonging to Generation Y. Further, Sirias, Karp, and Brotherton (2007) explored the preference to work alone and discovered evidence that individuals of Generation X show a higher preference to work alone in contrast to Baby Boomers. Twenge (2010) summarized that younger generations prefer working alone more often. In addition, Benson and Brown (2011) have investigated the relationship between co-worker support and job satisfaction among Baby Boomers and Generation X. They found that co-worker support was a predictor of job satisfaction for Baby Boomers, but not for Generation X. Job satisfaction itself, in turn, was found to stimulate knowledge transfer (De Vries et al., 2006).

In conclusion, there is some albeit not fully consistent evidence that employees belonging to younger generations are driven by a comparatively stronger preference to work alone and show a lower appreciation of co-worker support. Based on these findings, we propose that, for intergenerational knowledge sharing, co-worker support is relatively more important because, on the one hand, co-worker support is an important antecedent of knowledge sharing in general and on the other hand, because older employees express a comparatively stronger preference for co-worker support in contrast to younger employees. For the seeking of knowledge from older employees, we expect that the effect of co-worker support is weaker than for knowledge seeking from the same-generational colleagues because younger employees favor co-worker support less.

Proposition 4: The effect of co-worker support is larger for intergenerational knowledge sharing than for regular knowledge sharing, and smaller for intergenerational knowledge seeking than for regular knowledge seeking.

Interpersonal trust

Another important network antecedent of knowledge transfer is trust. Trust can be characterized as the disposition of an individual to put oneself in a position of vulnerability to someone else (Mooradian et al., 2006; Swift & Hwang, 2013). According to McAllister (1995), trust encompasses two components: affect- and cognition-based trust. Cognition-based trust describes a rational decision of whom and under which circumstances an individual develops trust. Affect-based trust is more emotionally based on individuals' belief in the genuine care and concern for their partners (McAllister, 1995; Schwaer et al., 2012). Trust embraces an individual's expectation of how another person will behave in the future (Renzl, 2008)[10].

For dyadic knowledge transfer, we focus on the network level of trust. Wilkesmann and colleagues (2009b) describe knowledge transfer as a social dilemma situation where trust can reduce the potential risks involved in sharing and seeking knowledge. On the one hand, sharing knowledge might imply a loss of status and the hazard to become easily replaceable within the organization, as other employees become more knowledgeable in the corresponding domain (Kankanhalli, Tan, & Wei, 2005; Renzl, 2008). On the other hand, employees who ask colleagues for information might risk exposing themselves as lacking in expertise and thereby become vulnerable. Trust in a peer can decrease these anxieties (Renzl, 2008). Trust appears to increase the knowledge sharing of employees by reducing such risks (Fleig-Palmer & Schoorman, 2011; Hsu & Chang, 2014; Lin, 2007; Maurer, Bartsch, &

---

[10] Yet, trust can also be conceptualized at the organizational level, i.e., as impersonal trust, and therefore, target "the individual employee's expectations about the employing organization's capability and fairness" (Vanhala, Puumalainen, and Blomqvist, 2011, p. 492). Impersonal trust showed a mediating effect between employees' perception of HRM practices and different types of organizational innovativeness (Vanhala & Ritala, 2016). With tentative suggestions, impersonal trust might also be mediating the relationship between HR-practices related to knowledge transfer and intergenerational knowledge transfer. However, although it is conceivable that impersonal trust could influence intergenerational knowledge transfer, we are not aware of any study on impersonal trust that meets the inclusion criteria of our review. As such, we consider this to be an issue beyond the scope of this study, which could, however be very interesting to be addressed in future research.

Ebers, 2011; Mooradian et al., 2006; Van Wijk et al., 2008). Further, Watson and Hewett (2006) found that trust in the knowledge source plays a key role for the frequency of knowledge re-use. Interestingly, cognition-based trust and affect-based trust may lead to different results: Affect-based trust appears to predict knowledge sharing, while the results for cognition-based trust are not significant (Swift & Hwang, 2013) ─ with the underlying reasons for these differential effects so far unaddressed.

Referring to intergenerational knowledge transfer, we propose that the effect of trust is positively related to knowledge sharing and knowledge seeking, yet, the effect is smaller than for intragenerational knowledge transfer. By definition, trust implies vulnerability to another person. The effects are particularly strong in intragenerational relationships. There is a risk that this vulnerability can be interpreted as losing one's power position due to sharing knowledge or by revealing oneself as not knowing relevant information. However, in intergenerational relationships, direct competition is smaller as employees are generally more likely to be at different stages of their careers (Pelled et al., 1999). Older employees may be less afraid of losing power or status by sharing experiences with younger employees vis-a-vis sharing them with colleagues of their same age. Therefore, because vulnerability is less of an issue, lower levels of trust are needed for intergenerational knowledge transfer than for intragenerational knowledge transfer. Also, since age and, consequently, generational affiliation are positively related to job experiences (Noethen, 2011; Pelled et al., 1999), it is generally expected that employees belonging to younger generations possess less job-related expert knowledge. Therefore, the risk of exposing oneself as inexperienced is less pronounced when younger employees seek knowledge from older ones than it is in intragenerational knowledge transfer.

Further, from a generational perspective, studies by Trzesniewski and Donnellan (2010) and Robinson and Jackson (2001) found supporting evidence that today's generations show lower levels of trust, in general. As trust is predominantly lower for younger generations, this argument may relate to intergenerational knowledge transfer as well.

Taken together, younger individuals who receive knowledge from older individuals may need lower levels of trust compared to a situation where they seek knowledge from younger employees. The risk of exposing themselves as lacking in knowledge is smaller in this situation, unlike it would be for knowledge seeking from same-generation employees. Also, younger employees are unlikely to pose a significant career risk to older employees, who share their knowledge with them. Therefore, we expect trust to be less important as a facilitator of knowledge transfer in intergenerational settings, compared to intragenerational ones.

Proposition 5: The positive effect of trust on knowledge transfer is smaller, the larger the age difference is between participants.

Negative antecedents to intergenerational knowledge transfer

Compared to enabling factors, obstacles to knowledge transfer have attracted comparatively less attention. Nevertheless, a few scholars have investigated factors that might harm knowledge transfer. For example, knowledge ambiguity and knowledge stickiness (i.e., sticky information that is difficult to transfer) were shown to decrease knowledge transfer (Sheng, Chang, Teo, & Lin, 2013). Particularly for intergenerational knowledge transfer, we suggest that barriers can be expected to prevail at both the organizational level and interpersonal level. Prior literature that has looked into reasons for the malfunctioning of intergenerational interactions has identified attitudes, for example, stereotypes, and behaviors, such as discrimination, as potential drivers (Joshi et al., 2010; Starks, 2013). In accordance with this differentiation, we identified three main negative antecedents for intergenerational knowledge transfer: perceived age discrimination climate, age stereotypes, and age-related conflicts.

Organizational level characteristics

Perceived age discrimination climate

While discrimination, in general, can be defined as "a situation in which individuals identical in regard to their productive ability are treated differently because of certain of their nonproductive characteristics" (Büsch, Dahl, & Dittrich, 2009: 633) and therefore could also apply at the interpersonal level, perceived age discrimination *climate* has been conceptualized as an organizational level construct. It captures the degree to which organizational members get the impression that employees are treated differently due to their age (Kunze et al., 2011). Consistent with our earlier discussion, we draw on social exchange theory (Blau, 1964) and the complementary concept of perceived organizational support in order to explain the expected impact of perceived age discrimination climate on intergenerational knowledge transfer. While social exchange theory, generally refers to individuals, Eisenberger, Huntington, Hutchison, and Sowa (1986) have extended it as well to organizations. Specifically, perceived organizational support captures the degree to which employees feel supported by their organization and, thus, will show reciprocity, for instance by providing organizational citizenship behaviors that help the organization and co-workers (Ladd & Henry, 2000).

So far, the majority of studies on age discrimination have focused on explicit age discrimination in the hiring or promotion process[11]. Studies on age discrimination climate in everyday working life are comparatively limited (Büsch et al., 2009; Finkelstein & Farrell, 2007). While age discrimination in the recruiting process may foster the emergence of an age discrimination climate, the resulting perception of age discrimination climate in everyday working life might adversely affect intergenerational knowledge transfer as well.

Based on reviewing the related literature, we expect both a direct and an indirect effect of perceived age discrimination climate on intergenerational knowledge transfer. First, we expect that perceived age discrimination climate *indirectly* influences intergenerational knowledge transfer through its negative impact on employee attitudes and resources which otherwise contribute positively to knowledge transfer. Specifically, age discrimination and age discrimination climate have been reported to be related to negative outcomes at the employee level, such as reduced self-esteem (Hassell & Perrewé, 1993), lacking perception of organizational support (Rabl, 2010), lower job satisfaction (Griffin, Bayl-Smith, & Hesketh, 2016; Macdonald & Levy, 2016; Redman & Snape, 2006), reduced affective commitment (Kunze et al., 2011; Rabl & Triana, 2013; Redman & Snape, 2006; Snape & Redman, 2003), and increased fear of failure (Rabl, 2010). There is substantial evidence that these factors are important predictors of knowledge transfer. For example, affective commitment increases knowledge sharing (Martin-Perez & Martin-Cruz, 2015; Matzler et al., 2011; Matzler & Mueller, 2011; Swart, Kinnie, Van Rossenberg, & Yalabik, 2014; Van Den Hooff & De Ridder, 2004) and knowledge seeking (Martin-Perez & Martin-Cruz, 2015; Matzler et al., 2011). Combining these results, studies suggest that age discrimination climate reduces important resources for intergenerational knowledge transfer and, thereby, indirectly hampers intergenerational knowledge transfer. Perceived age discrimination climate may even indirectly reduce intragenerational knowledge transfer. It was shown to reduce job satisfaction, and lower job satisfaction might reduce employees' motivation to engage in knowledge transfer of any kind.

---

[11] Note that while not directly related to interactions between organizational members, age discrimination in the hiring or promotion process may contribute to reducing intergenerational knowledge transfer through its effects on perceived age discrimination climate within the organization: If employees perceive the organization to engage in age discrimination in hiring and promotion procedures, they are likely to infer that this reflects deeply held beliefs and values of the organization in general as to older workers.

In addition, we also anticipate a *direct* effect of age discrimination climate which specifically applies to intergenerational knowledge transfer only. Age discrimination is explained by differential treatment of employees due to their age (Kunze et al., 2011). This different treatment could not only manifest itself in an organization's recruiting process, but also in a disrespectful treatment of older employees. Thus, if older employees notice a lack of support by their organization, they may consequently reduce the sharing of knowledge. Moreover, the perception of an age discrimination climate might even spill-over to the treatment of other employees. As a consequence, in a multigenerational setting, young employees might (sub-) consciously treat older colleagues differently and might refuse to interact with them and *vice versa*, as they perceive such discriminatory behavior to be approved of, either implicitly or explicitly, by the organization. They might thus abstain from interactions that could lead to intergenerational knowledge transfer. Therefore, age discrimination might reduce intergenerational knowledge transfer as well directly.

Proposition 6: Perceived age discrimination climate within an organization is directly and negatively related with intergenerational but not directly related with intragenerational knowledge transfer.

Network level characteristics

Age stereotypes

The potential adverse effects of age stereotypes on intergenerational knowledge transfer can be understood by drawing on self-categorization theory. Self-categorization theory is closely linked to self-identity theory and can be traced back to Tajfel and Turner (1986). This framework is based on the notion that individuals feel related to particular social categories, such as their age, job or gender (Turner, 1987). In order to increase their self-esteem, individuals attempt to build a positive self-concept. This process often implies an identification with peers who belong to the same category (Turner, 1987). Individuals search for advantages and positive images of their own in-group and coincidentally often devalue outgroup members (Joshi et al., 2010; Kunze et al., 2011).

Empirical evidence has supported predictions of this theoretical framework also in relation to groups identified by age as the discriminating criterion. Prior research has, for example, found that individuals who feel related to others of the same age group still often degrade members who they perceive to be substantially older or younger (Lauring & Selmer, 2012; Van Knippenberg et al., 2004). This process often implies age stereotyping. Integrating insights from this literature with extant research on intergenerational knowledge transfer leads us to expect that age stereotypes can harm knowledge exchange between younger and older employees.

Following the dominant view in the literature, we characterize stereotypes as "beliefs about the characteristics, attributes, and behaviors of members of certain groups" (Hilton & von Hippel, 1996: 240). Stereotypes do not have to be negative or positive, per se. Often, mixed stereotypes exist for the same subgroup. For example, older adults are pictured as wise but also as slow (Fiske, Cuddy, Glick, & Xu, 2002). There is substantial empirical evidence that age stereotypes[12] exist. For instance, Lester, Standifer, Schultz, and Windsor (2012), compared self-reports of employees on the values they hold and contrasted it with the ratings other individuals had about this age group. For most aspects, self-reported beliefs did not coincide with attributions.

Many scholars have looked at the explicit content of age stereotypes. The most common beliefs address older employees' presumably lower performance, slow actions, and resistance to change (Hassell & Perrewé, 1995; Kessler & Staudinger, 2007; Kirchner & Dunnette, 1954; Rosen & Jerdee, 1977; Taylor & Walker, 1994). These views are abundant among supervisors (Hassell & Perrewé, 1995; Kirchner & Dunnette, 1954; Rosen & Jerdee, 1977), and particularly among young employees (Hassell & Perrewé, 1995). Yet, providing additional positive job-related information about the employees can reduce the negative rating of older employees compared to younger employees (Finkelstein & Burke, 1995).

---

[12] In recent publications, the term ageism is often applied (e.g., Snape & Redman, 2003). Ageism conceptualizes prejudices and potential discrimination due to age-related aspects (Kunze, Boehm, & Bruch, 2011; Snape & Redman, 2003). Ageism is stereotyping and discrimination grounded on age groups. Since ageism is not a term which is widely used in the literature on stereotypes, we keep referring to the term age stereotypes and rather than ageism.

Interestingly, prior literature has largely studied age stereotypes towards older employees and widely neglected stereotyping younger individuals (Abrams, Eller, & Bryant, 2006).

Drawing on stereotype threat theory, stereotypes can work as a self-fulfilling prophecy. According to stereotype threat theory, individuals who are confronted with negative stereotypes often show poorer performance (Abrams et al., 2006; Lamont, Swift, & Abrams, 2015; Steele & Aronson, 1995). This theory is also consistent with empirical evidence demonstrating that in particular, older individuals adjust their behavior according to age stereotypes (Abrams et al., 2008; Hilton & von Hippel, 1996). For instance, Hess and colleagues (2004) studied the effects of stereotype priming on older adults and found that adults who were primed with age stereotypes showed inferior performance on a memory task compared to the control group.

More generally, this finding is in line with the idea that intergenerational knowledge transfer might be harmed by existing stereotypes. Older employees might (sub-)consciously adopt a negative image of themselves and show lower performance on their job in general, but also in intergenerational knowledge transfer. While we are not aware of any study that focuses on age stereotypes against younger individuals in the workplace, we suspect that younger employees may as well react to age stereotypes about older employees in terms of reducing intergenerational knowledge transfer. Theory of planned behavior suggests that attitudes and norms influence behavioral intention and finally behavior (Ajzen, 1991). When younger employees hold negative stereotypes about older employees (Hassell & Perrewé, 1995), they may seek to reduce their interactions with them and, thereby, may try to avoid transferring knowledge with older employees. Indeed, there is first tentative, empirical evidence suggestive of such a relationship. Harwood and Williams (1998) implemented a scenario study and found that young participants who showed negative attitudes toward older adults in general and exhibited stronger age group identity, rated the perception of intergenerational communication more negatively. Perception of intergenerational communication, for instance, embraced satisfaction in the conversation with the depicted older person.

Overall, there is support for the existence of age stereotypes against older employees in organizations and also tentative support for a potentially damaging effect of those stereotypes on intergenerational knowledge transfer. We propose that age stereotypes decrease intergenerational knowledge transfer[13]. Concerning intragenerational knowledge transfer, we do not expect age stereotypes to be detrimental because participants are of similar age.

Proposition 7: Age stereotypes held by individual employees are negatively related to their propensity to engage in intergenerational knowledge transfer; but unrelated to their likelihood of participating in intragenerational knowledge transfer.

Age-related conflicts

Self-categorization theory also helps to understand how conflicts arise among employees that are heterogeneous with respect to various characteristics. Employees tend to devaluate individuals who do not belong to what they perceive as their in-group. These attitudes may impact behavior and, thereby, might spark conflicts. This conceptual viewpoint has been supported by empirical evidence demonstrating that diversity among team members tends to lead to higher levels of conflicts compared to homogenous groups (Jehn et al., 1999; Pelled et al., 1999).

Following the approach of Jehn (1995), we distinguish between two different types of conflicts: relationship conflicts and task conflicts. Relationship conflicts refer to situations of interpersonal inharmoniousness among group members. Often, tension, hostility, and displeasure are involved. Task conflicts imply disagreements about the content of the tasks that have to be performed, such as differences in standpoints and opinions (Jehn, 1995). Evidence on the outcomes of the conflict types among team members is inconclusive (Van Woerkom & Sanders, 2010). Some studies have demonstrated that conflicts can lead to positive outcomes, as argued, for example, by Stock (2004) in her literature review. While the wide majority of studies demonstrate that in particular relationship conflicts may have potentially tremendous adverse consequences for individual and group level variables, the effects of task conflicts are less clear. In particular, task conflicts are often considered to stimulate group performance, based on the idea that they encourage consideration of a larger range of different perspectives, thereby leading to improved quality of decision-making (Gerpott et al., 2017; Stock, 2004). However, in an extensive meta-analysis by De Dreu and Weingart (2003), relationship-based *as well as* task-based conflicts, were found to decrease team member satisfaction and team performance. Also, de Wit, Greer, and Jehn (2012) came up with similar results in their meta-analysis; task and relationship conflicts were associated with negative individual and group level outcomes, such as reduced trust, lower group member commitment, and less organizational citizenship behaviors; they were positively related to counterproductive work behaviors. For example, relationship conflict was found to reduce group performance while no effect was found for the relationship between task conflict and group performance (De Wit et al., 2012). Furthermore, an often cited study by Jehn (1995) suggested a curvilinear relationship of task conflicts for particular outcomes in non-routine task groups, such as group performance, where low levels of task conflicts would lead to low levels of group performance, and high levels of task conflicts would lead to high levels of group performance. However, potentially positive effects of task conflicts were found to apply only to non-routine groups, while in routine groups, task conflicts as well had only detrimental effects (Jehn, 1995).

---

[13] Remarkably, from an outcome-focused perspective, a high frequency of intergenerational knowledge transfer might also lead to a reduction of age stereotypes (Gerpott et al., 2017; Gerpott &Voelpel, 2014; Pettigrew & Tropp, 2006; Williams, 1947).

Based on these findings, it could be argued that both relationship and task conflicts will negatively impact interaction among employees and, consequently, also knowledge transfer, whether of the intra- or intergenerational kind. When individuals have a dispute, disagreements exist among them. These conflicts might hinder employees to interact with each other and exchange information. Indeed, first empirical evidence suggests that conflicts, in particular, relationship conflicts, decrease knowledge sharing (Chen, 2011) and openness to share opinions (Van Woerkom & Sanders, 2010). Also, both types of conflicts reduce relevant resources of employees that predict participation in knowledge transfer, such as job satisfaction (Jehn, 1995), with job satisfaction itself having been found to constitute an important predictor of knowledge transfer (De Vries et al., 2006). Overall, the evidence appears to suggest that conflicts seem to hurt the process of knowledge transfer. The detrimental effects of relationship conflict can be expected to be even stronger than those of task conflicts (De Wit et al., 2012).

Can we expect intra- or intergenerational knowledge transfer to be differently affected by such conflicts? Considering empirical evidence that age diversity leads to more conflicts and that conflicts reduce participation in knowledge transfer, we expect intergenerational knowledge transfer to be even more prone to conflict-induced derailment than intragenerational knowledge transfer: First, as argued above, age-diverse groups show higher levels of conflicts (Jehn et al., 1999; Pelled et al., 1999). Since intergenerational knowledge transfer is fundamentally characterized by two individuals who differ substantially in terms of age, prior literature point towards a higher risk of conflicts arising in inter-compared to intragenerational knowledge transfer. Second, multigenerational and life-span theories argue that younger and older individuals hold different values. Diverging values may spark, in particular, relationship rather than task conflicts, which are arguably more harmful to knowledge transfer. Overall, in other words, we propose that interactions aiming at intergenerational knowledge transfer are more likely to be fraught with conflicts than regular knowledge transfer and that these conflicts are more likely to be relationship-based.

Proposition 8a: Interactions aiming at intergenerational knowledge transfer are more likely to exhibit conflicts than those aiming at intragenerational knowledge transfer.

Proposition 8b: Interactions aiming at intergenerational knowledge transfer are more likely to be affected by relationship conflicts than those aiming at intragenerational knowledge transfer.

2.4 Discussion and conclusion

The aim of this review was, first, to review existing literature on intergenerational knowledge transfer. Secondly, we aimed at integrating the literature on knowledge transfer and on age/generational diversity. Third, we developed a set of propositions based on reviewing the literature that could stimulate future empirical research. The literature on intergenerational knowledge transfer in organizations is still scarce, which was highlighted by our summary. While a substantial body of literature has examined intergenerational relationships in family contexts (e.g., Hutchison, Fox, Laas, Matharu, & Urzi, 2010), there is a dearth of literature that focuses on the (intra-)organizational context. We first demonstrated what we actually know from studies that directly address intergenerational knowledge transfer, and then tried to fill the gaps of what makes intergenerational knowledge transfer special by integrating related literature from two streams or research, that is knowledge transfer as well as age/generational diversity. By combining insights from these three streams, we derived a set of propositions for future research based on differences between inter- and intragenerational knowledge transfer.

Our analysis tentatively suggests that organizational level characteristics and network characteristics might have different effects on intergenerational knowledge transfer compared to knowledge transfer between employees of a similar age. We found that social relations with respect to co-worker support appear to be more important to employees belonging to older generations. Thus, they might be even more important to sharing knowledge in intergenerational relations because these older employees are often the sending party of this information. Interestingly, trust in the communication partner might be less important since vulnerability in the intergenerational relationship may be smaller as participants are less likely to be direct competitors for positions within the organizational hierarchy. Additionally, we suggested that different obstacles to knowledge transfer prevail between different generations. For example, age difference might constitute a negative antecedent and thus function as a barrier in intergenerational knowledge transfer. Other negative antecedents, such as conflicts, may be more or less pronounced, depending on whether an interaction aims at fostering inter- or intragenerational knowledge transfer.

Therefore, we believe that our study makes two major contributions. First, we identified a lack of research in the domain of (positive and negative) antecedents to intergenerational knowledge transfer, despite the profound importance of the topic for managerial practice. While a nascent stream of studies has begun to address this issue, to the best of our knowledge, no study has, to date, investigated the question of whether it might be necessary to explicitly look at intergenerational knowledge transfer. By integrating two major but mostly separate research streams, we argued that we expect intergenerational knowledge transfer to function somewhat differently compared to intragenerational knowledge transfer because antecedents will pose different effects. Moreover, we formulated propositions, which can be used in future empirical studies.

Second, we also contributed to the knowledge transfer literature by highlighting the importance of distinguishing between *knowledge sharing* and *knowledge seeking*. By proposing that particular in intergenerational knowledge transfer the effects of antecedents might vary among the sender and receiver of information, we could emphasize the importance of such a distinction. Though different results can be expected, many scholars only focus on knowledge sharing and neglect knowledge seeking.

To sum up, our findings offer new insights that intergenerational knowledge transfer is indeed special. Our study suggests that generations differ across a variety of factors and that these characteristics impact positive as well as negative antecedents of intergenerational knowledge transfer. Since research on the particular topic of intergenerational knowledge transfer is still limited, our primary contribution was the integration of two different perspectives ‐ generational diversity and knowledge transfer — by advancing propositions for future research.

Limitations and future research

Several limitations of this review should be noted, which, at the same time, offer directions for future research. First, although we adopted a conceptual research design based on an extensive literature review, we may still have missed studies. For example, we accessed eight databases, and therefore we may have missed relevant articles which were not available through these databases as well as unpublished studies and studies, which are currently under review. Also, we searched solely for articles published in either English or German. This is a common restriction to researchers that they are only able to tap into a pool of research published in a limited number of languages. We believe that the increasing trend to publish in English over the past few decades in combination with our research focus on a fairly novel and recent topic implies that it is unlikely that we missed out on a large body of related research, at least compared to topics that have been discussed in the literature over many decades and in many different languages. Also, by applying an additional ongoing snowball approach, we did our very best to integrate the relevant literature. Still, it constitutes a limitation of our study.

Second, many studies on knowledge transfer and generational diversity employ distinct conceptualizations of (the same or related) issues. This may have given rise to the partly inconclusive empirical results, which we represented in our review. For instance, some studies consider only the sharing of knowledge, whereas other studies include knowledge seeking as well as the sharing of knowledge, making a direct comparison difficult. We made an effort to clearly point out when studies only offered results on sharing and when seeking was also considered. However, not all studies made this distinction explicit; in particular, earlier literature on knowledge transfer often lacks this information.

Also, we only included antecedents that we found to have been discussed either in the empirical literature on intergenerational knowledge transfer directly, or in both of the literature on knowledge transfer and age/generational diversity (e.g., co-worker support). This implies that due to our criteria for including studies, we may have missed complementary interesting antecedents, for which there is currently a lack of literature. For example, it might also be interesting to examine further the association between impersonal trust towards the organization and intergenerational knowledge transfer (Vanhala et al., 2011; Vanhala & Ahteela, 2011) ─ an issue that we, therefore, refer to future research.

Finally, we would like to emphasize that empirical research on intergenerational knowledge transfer is still scant. Integrating articles from the perspective of generational diversity and knowledge transfer has yielded propositions for future research. Future studies might test our propositions by comparing intergenerational knowledge transfer in organizations to intragenerational knowledge transfer. Additional work might also investigate a more detailed interpretation of intergenerational knowledge transfer by distinguishing between formal and informal ways of communication.

3 DETERMINANTS OF KNOWLEDGE TRANSFER IN HIERARCHICAL KNOWLEDGE TRANSFER RELATIONSHIPS

– THE EFFECTS OF PERCEIVED AGE DISCRIMINATION CLIMATE, CONFLICT, AND TRUST

Abstract: The paper aims to examine the antecedents of knowledge transfer taking place in hierarchical relationships in which employees are separated by an age difference. Drawing on social exchange theory and self-categorization theory, we hypothesize how perceived age discrimination climate, conflict, that may potentially result from such a climate, and interpersonal trust affect both sharing and seeking knowledge in highly formalized face-to-face knowledge transfer settings. Hypotheses are tested based on survey data from 444 participants (trainees and trainers) in a variety of organizations within the context of a vocational education training. Data was analyzed with multigroup structural equation modeling approach using Mplus 8, allowing to check results for trainees and trainers separately. The results largely support our theory but also reveal interesting counter-intuitive findings. For trainees, all hypotheses were supported, except for a reversed effect of cognition-based trust on knowledge sharing. For trainers, the positive relationship between perceived age discrimination climate and conflicts found support, as well as a (marginally significant) positive association between affect-based trust and knowledge seeking. While knowledge transfer has become a popular instrument for organizations striving to retain their competitive advantage, knowledge transfer taking place in hierarchical relationship among employees who are separated by an age difference has remained unaddressed in prior literature. This paper attempts to study antecedents of that knowledge transfer in such a hierarchical relationship.

Notes and acknowledgement:

The following chapter is currently under review. Only slight changes have been made to the chapter after the journal submission (e.g., adjustment of spelling for consistency reasons).

The article is joint work with Univ.-Prof. Dr. Katrin Muehlfeld and has been presented at the Annual Meeting of the Academy of Management in 2017.

I thank the “Forschungsstelle Mittelstand” for their financial support.

3.1 Introduction

To remain competitive, firms strive to retain valuable knowledge within their organizations (Argote et al., 2000; Argote & Fahrenkopf, 2016). To do so, organizations employ different instruments of knowledge transfer, such as online communities (Hwang, Singh, & Argote, 2015), or mentoring (De Long & Davenport, 2003), with the most appropriate one depending, among others, on the type of knowledge in question. Organizations are particularly concerned about keeping tacit knowledge, i.e., know-how that is attached to the application of tasks (Ambrosini & Bowman, 2001), even when those employees in whom this knowledge is embedded leave the organization. Its very nature implies that such knowledge does not lend itself easily to imitation, is difficult to substitute and thus not readily available to competitors — making it particularly valuable as a potential resource and source of competitive advantage (e.g., Argote & Ingram, 2000). When it comes to transferring such tacit knowledge, the most suitable choice in many settings remains interpersonal face-to-face contact (Grant, 1996; Harvey, 2012), that comprises knowledge sharing and knowledge seeking (Wilkesmann et al., 2009b). Transferring knowledge through interpersonal face-to-face interaction may occur both informally and formally[14] within organizations. Informal knowledge transfer plays an important part in transferring implicit knowledge through daily practices (Ben-Menahem et al., 2016), yet is less susceptible to the direct management of the organization. Therefore, organizations are particularly interested in formal methods of interpersonal face-to-face knowledge transfer for being much more amenable to their deliberate knowledge management. Formal methods of interpersonal knowledge transfer include, in particular, workshops, coaching, mentoring, and training (De Long & Davenport, 2003).

While interpersonal knowledge transfer is unambiguously beneficial from the viewpoint of the organization (Argote et al., 2000), it carries, however, significant risks for the individual employees involved in it (Mooradian et al., 2006). When seeking knowledge, employees may risk exposing themselves as ignorant (Levin et al., 2006). When sharing their implicit knowledge, they may potentially waste their resources by investing additional costs for knowledge sharing (Szulanski et al., 2004), such as time, — or worse, they may be afraid of losing status and power (Borchert, Röhling, & Heine, 2003; Connelly, 2014). How can interpersonal knowledge still thrive, given the associated risks and vulnerabilities that may make organizational members hesitant to fully engage in both sharing knowledge with and seeking knowledge from their colleagues?

---

[14] Adapting the approach of Ben-Menahem and colleagues (2016), we define formal knowledge transfer by structures that “are necessary for effectively coordinating knowledge intensive work” (p. 1309) and informal knowledge transfer “as informally emerging patterns of interactions enacted through specialists’ everyday practices” (p. 1309).

Prior literature suggests several possible interpersonal determinants related to the vulnerability that employees perceive or experience in association with (interpersonal) knowledge transfer. One of them is *interpersonal trust*. Interpersonal trust appears to encourage individuals to take risks associated with interpersonal cooperation (McAllister, 1995) in general, and more specifically with transferring knowledge (Holste & Fields, 2010). In particular, prior studies have established a positive effect of trust on knowledge sharing (e.g., Maurer et al., 2011; Mooradian et al., 2006). Despite these significant insights, many important questions remain, however, regarding the relationship between trust and knowledge transfer. For example, in contrast to knowledge sharing, knowledge seeking has remained mostly unexplored, possibly because it has only been recently that literature on knowledge transfer has acknowledged the relevance of explicitly distinguishing between sharing and seeking knowledge (Wilkesmann et al., 2009b). Moreover, the majority of studies has not differentiated between affect-based and cognition-based trust (e.g., Hofhuis et al., 2016), although these two dimensions of trust appear to be conceptually and empirically distinct (McAllister, 1995) and thus, may have distinct effects on individuals' engagement in knowledge transfer.

Second, to the extent that *conflicts* adversely affect the relational aspect of the social networks that connect employees, it has been argued that conflicts may negatively impact employees' engagement in knowledge transfer (Chen, 2011; for a meta-analytic review on antecedents of intraorganizational knowledge transfer, see Van Wijk et al., 2008); possibly through its effects on the perception of risks or vulnerability. For example, Chen (2011) found a negative impact of conflicts on knowledge sharing. However, despite its intuitive appeal, the proposition that conflicts, in general, reduce knowledge transfer between individuals, has not remained uncontested. Van Woerkom and Sanders (2010), for example, failed to find any significant results when investigating the relationship between two constructs similar to conflict and knowledge transfer: disagreement, and asking and giving advice. In a conceptual study, Lau and Cobb (2010) proposed an indirect effect through trust of conflicts on co-worker exchange, a construct that arguably may relate to knowledge transfer as well. Prior studies exist on the various outcomes of conflicts, such as group performance (e.g., De Wit et al., 2012) or trust (e.g., Langfred, 2007); but little research exists on the direct effect of conflicts on knowledge transfer. Thus, overall, similar questions remain regarding the relationship between conflicts and knowledge transfer, for example concerning the impact on seeking rather than on sharing knowledge.

Beyond the interpersonal level, knowledge transfer is embedded in an organizational context. Organizational factors, such as organizational size, absorptive capacity, and organizational climate or culture have been found to influence employees' behavior in transferring knowledge (Hofhuis et al., 2016; Van Wijk et al., 2008). For example, Collins and Smith (2006) analyzed trust, cooperation and shared language as components of the organizational climate and found them to promote knowledge exchange of employees. An aspect of the organizational climate that is of particular relevance given the demographic transition and resulting shifts in the age distribution of employees within many organizations in favor of growing numbers of older employees (Bieling, Stock, & Dorozalla, 2015; Streb, Voelpel, & Leibold, 2009) is an organization's perceived age discrimination climate (Kunze et al., 2011). Age discrimination — whether it has been personally experienced or observed within the organization — has been shown to adversely affect various job-related attitudes, such as organizational commitment (Kunze et al., 2011) and job satisfaction (Redman & Snape, 2006), which in turn have been found to be associated with knowledge transfer (Camelo-Ordaz et al., 2011). However, prior research offers little direct evidence on the relationship between perceived age discrimination and knowledge transfer.

Overall, we, therefore, investigate as our main research question: How are perceived age discrimination climate within an organization, conflict that may potentially result from such a climate, and interpersonal trust linked to both sharing and seeking knowledge in highly formalized face-to-face knowledge transfer settings?

We analyze this question in the specific context of formalized on-the-job trainer-trainee-relationships because this type of setting offers several advantages considering our research question. First, trainees and trainers are separated by a large age difference (e.g., BIBB, 2015). This implies that they are involved, essentially by definition, in intergenerational knowledge transfer[15], a type of knowledge transfer that can be expected to be particularly sensitive to the perceived age discrimination climate within an organization. Second, trainees and trainers have formally assigned distinct roles for the transfer of knowledge, making this a highly formalized and pre-structured setting for transferring knowledge. Moreover, third, their distinct roles are associated with different hierarchical positions within the organization. This combination of an age difference, knowledge transfer roles and diverging hierarchical positions may emphasize vulnerability issues, especially when employees perform a *role-incongruent behavior* (i.e., trainers seeking knowledge, trainees sharing knowledge). Finally, given that many organizations make large investments in the training programs, they expect benefits from the training programs, such as skilled trainees being employed by the organization after completing their training programs. Therefore, for training programs, the same economic reasoning applies as for any other type of workplace learning (Wenzelmann, Muehlemann, & Pfeifer, 2017), making this research setting a suitable research framework for studying formalized, intergenerational knowledge transfer.

For this setting, we suggest that trust (both affect- and cognition-based) is positively related to knowledge transfer (both in terms of knowledge sharing and seeking), and, further, that trust (again both affect- and cognition-based) mediates the relationship between conflict and knowledge transfer (both sharing and seeking). Additionally, we propose that perceived age discrimination climate increases conflicts among trainees and trainers. To test our hypotheses, we conducted a quantitative survey study gathering data from 444 respondents (trainees and trainers). We analyzed the data with the multigroup structural equation modeling (SEM) approach using Mplus 8. The results mainly support our hypotheses, especially for trainees, but also reveal some interesting counterintuitive results, especially for trainers, which we discuss in detail.

Thereby, we believe that this study makes three significant contributions. First, it extends the broader literature on knowledge transfer (e.g., Argote & Fahrenkopf, 2016), by simultaneously considering both knowledge *seeking* and knowledge *sharing*. While most prior studies have not explicitly distinguished between the two types of behavior (e.g.,

---

[15] While many studies employ the term “intergenerational knowledge transfer”, they do not explicitly account for generations, but instead interpret this process as knowledge transfer among employees with a significant age difference (Gerpott et al., 2017; Tempest, 2003). We, therefore, use these two terms synonymously.

Cabrera & Cabrera, 2005), our empirical results demonstrate the importance of doing so because antecedents such as the effect of trust, may differ across knowledge sharing and knowledge seeking.

Second, we add to a small but growing body of empirical work on intergenerational knowledge transfer (e.g., Gerpott et al., 2017) by looking at the antecedents of intergenerational knowledge transfer. While first studies have examined antecedents of intergenerational knowledge transfer (e.g., Burmeister et al., 2018a), our knowledge is still limited. Further, by drawing attention to the interrelation of age and hierarchy in knowledge transfer relationships, we argue that it is difficult to disentangle age effects from hierarchy-based effects. Implicit age norms suggest that age and hierarchy are often viewed as being interrelated and have an impact on the evaluation of employees' behavior based on whether their behavior is age-appropriate or age-inappropriate (Lawrence, 1996).

Third, we contribute to the literature on organizational diversity. Diversity comprises demography-related aspects, such as age or gender, and job-related aspects, such as tenure, and functional background (Kearney & Voelpel, 2012). In this study, we zoom in on the specifics features of age as an aspect of demography-related diversity and organizational hierarchy as an aspect of job-related diversity that we conceptualize as highly susceptible to perceived age discrimination climate as a facet of the organizational climate. In our setting, we empirically test how perceived age discrimination climate impacts interpersonal interaction. Prior literature has often mainly captured individually experienced age discrimination (e.g., Rabl & Triana, 2013) and has not referred it to the organizational level. Also, if studies have measured age discrimination at the organizational level, they have not captured interpersonal interaction as an outcome variable of perceived age discrimination climate (e.g., Boehm, Kunze, & Bruch, 2013). Yet, to our best knowledge, no prior study has looked at the effect of perceived age discrimination climate on employee interaction. The study concludes by deriving implications for managerial practice and discussing limitations and opportunities for future research.

3.2 Theory and hypotheses

Theoretical foundation of knowledge transfer among employees

Social exchange theory (SET) offers a possible explanation for why trainees and trainers would engage in a knowledge transfer behavior that is *role-congruent* (i.e., trainees seeking knowledge from trainers, trainers sharing knowledge with trainees), and also why they may perform a role-incongruent behavior (i.e., trainers seeking knowledge, trainees sharing knowledge). According to this theory, employees interact with each other based on self-interest and a cost and benefit analysis (Blau, 1964), meaning that they provide and expect reciprocity, either tangible, such as promotions, or intangible, such as appreciation (Cabrera & Cabrera, 2005). Hence, employees react positively to affirmative behavior by their co-workers and organization, but at the same time they also reciprocate negative behavior (Cropanzano & Mitchell, 2005; Eisenberger et al., 1986); for example, the experience of conflicts with co-workers may lead to negative reactions, such as decreased group performance (De Wit et al., 2012).

Building on SET, we propose that trainees and trainers perceive risks associated with knowledge transfer even when they behave role-congruent. When trainees seek knowledge they may risk exposing themselves by “asking ‘dumb’ questions in the learning process” (Murphy, 2012: 562); also, when trainers share knowledge they may risk wasting their resources, such as their time (e.g., Ellwart et al., 2013), which may not be appreciated by the trainees. Still, the vulnerability appears to be even higher for knowledge transfer behavior that is role-incongruent. Trainers who seek knowledge from their trainees may be particularly vulnerable as they may potentially undermine the authority that is associated with their hierarchically defined role (Iszatt-White, Kempster, & Carroll, 2017; Levin et al., 2006). Trainees, in turn, could be confronted with difficulties when sharing knowledge with their trainers, who may be unwilling to accept new knowledge from their younger trainees (Murphy, 2012). In that sense, SET proposes high vulnerability of the knowledge transfer among trainees and trainers.

Further, integrating self-categorization theory (SCT) with this theoretical perspective, allows us to investigate reciprocal knowledge transfer as additionally being compounded by the prevalence of perceived age discrimination climate at the organizational level, and potential conflicts. SCT (Turner, 1987) proposes that individuals tend to classify themselves into social categories, such as their generation or job role, and identify themselves with other individuals of the same category, i.e., the in-group (Lau & Cobb, 2010; Turner, 1987). This categorization mobilizes individuals to search for advantages and a positive image for their own in-group and often leads to a devaluation of out-group members (Kunze et al., 2011). SCT has been widely used in diversity literature (e.g., Kearney & Voelpel, 2012) and is well suited to explain the emergence of potential conflicts.

The effect of trust on knowledge transfer

As already argued, knowledge transfer involves vulnerability, and prior literature has identified trust as one important aspect that allows individuals to encounter these risks associated with knowledge transfer (Mooradian et al., 2006). Trust can be characterized as the willingness of an individual to put oneself in a position of vulnerability vis-a-vis another person and consist of two dimensions: affect- and cognition-based trust (McAllister, 1995). Affect-based trust builds on the honest care and concern for one's peers and relies on the belief that the other person cares about our interest and welfare. Cognition-based trust is guided by a rational decision and involves a systematic assessment of the other person's intention and ability to fulfill a particular task. Although these dimensions of trust capture two conceptually distinct aspects, they often coexist in the same relationship and correlate (Lau & Cobb, 2010).

While prior research has established that affect-based trust stimulates knowledge sharing (e.g., Mooradian et al., 2006), the effect of cognition-based trust on knowledge sharing has mostly been neglected (e.g., Holste & Fields, 2010). Additionally, scholars' understanding of the relationship between trust and knowledge seeking is limited by the fact that most studies have solely included knowledge sharing, and not knowledge seeking as an outcome variable. Hence, we first discuss the effects of affect-based trust on knowledge transfer, before turning towards cognition-based trust. In both cases, we explicitly distinguish between sharing and seeking knowledge as two conceptually distinct aspects of knowledge transfer (Burmeister et al., 2018a); and between trainers and trainees, due to their distinct hierarchically-defined roles within the knowledge transfer relationship.

Effects of affect-based trust on knowledge transfer

Regarding *knowledge sharing*, we argue that affect-based trust stimulates knowledge sharing by both trainees and trainers. Although knowledge sharing is an inherent part of the trainer's role, trainers' affect-based trust in their trainees may intensify this knowledge sharing. Knowledge sharing consumes many work-related resources, of which time is a particularly crucial one (Ellwart et al., 2013). Many trainers do not train their trainees as their primary activity at work but rather have further activities besides their function as a trainer. Thus, trainers may not be willing to dedicate time and resources (beyond the minimum required) if they do not perceive trainees to appreciate them in their capacity as trainers and the knowledge sharing process as such. We also argue that affect-based trust increases knowledge sharing by trainees with their trainees, but for different reasons. Trainees who share knowledge with their trainers may be in a challenging position as older employees may have difficulties accepting new information and learning from younger co-workers (Murphy, 2012). When trainees engage in knowledge sharing with their trainers, they are likely to experience adverse consequences and may be inclined to limit knowledge sharing with their trainers. Affect-based trust in the trainer arguably reduces this risk. Consequently, in sum, affect-based trust may increase knowledge sharing by both trainees and trainers.

Concerning knowledge *seeking*, trainers who seek knowledge from their trainees may face similar risks as outlined above for trainees who share knowledge, due to the incongruence of this knowledge sharing with their trainer role (Kunze & Menges, 2017; Triana, Richard, & Yücel, 2017). Their vulnerability is particularly high as they risk undermining their authority and may thus endanger their reputation (Levin et al., 2006). We argue that affect-based trust in the trainee reduces the perception of vulnerability in this respect and consequently may increase knowledge seeking by trainers. As for trainees, this implies that they primarily act as knowledge seekers. Still, they may be cautious about asking too many or "dumb" questions (Murphy, 2012; Szulanski et al., 2004). Affect-based trust in their trainer may thus reduce the potential risks associated with knowledge seeking.

Therefore, we hypothesize:

H1a: Affect-based trust in trainees (trainers) is positively related to knowledge sharing by trainers (trainees).

H1b: Affect-based trust in trainees (trainers) is positively related to knowledge seeking by trainers (trainees).

Effects of cognition-based trust on knowledge transfer

Turning to cognition-based trust, we are only aware of two studies explicitly examining its impact on *knowledge sharing*. Swift and Hwang (2013) hypothesized a positive relationship between cognition-based trust and knowledge sharing, yet, empirically, did not find a significant effect, possibly due to small sample size. Holste and Fields (2010) found a positive, significant impact of cognition-based trust on the *willingness* to share tacit knowledge, yet, they did not assess actual knowledge sharing behavior. Given the paucity of direct prior evidence, our hypotheses regarding the relationship between cognition-based trust and knowledge sharing remain exploratory. We argue that trainers who have cognition-based trust in their trainees may be more ready to share their knowledge extensively with them as they perceive them to be more capable to understand and process the shared information. Similarly, trainees may be more inclined to share knowledge with their trainers if they regard them as more interested and open-minded about learning new information, even if it comes from subordinates.

Moreover, concerning *knowledge seeking*, trusting that the other person possesses the required competence can be viewed as a precondition to request what one considers valuable knowledge (Levin & Cross, 2004), and hence may apply similarly to trainees and trainers. Consequently, we expect cognition-based trust to increase both sharing and seeking of knowledge; and that this basic argument equally applies to trainees and trainers.

H1c: Cognition-based trust in trainees (trainers) is positively related to knowledge sharing by trainers (trainees).

H1d: Cognition-based trust in trainees (trainers) is positively related to knowledge seeking by trainers (trainees).

Trust as a mediator between conflict and knowledge transfer

Building on SET, employees reciprocate negative interaction with co-workers, implying that the experience of conflicts with co-workers may potentially reduce trust and knowledge transfer. Prior studies have stressed the harmful effects of conflicts[16] on interpersonal outcomes, such as group performance and group member identification (De Wit et al., 2012), trust of employees (e.g., De Wit et al., 2012) and concepts closely related to trust (e.g., Jehn, Greer, Levine, & Szulanski, 2008). Building on SET and prior empirical evidence, we would also suggest that conflicts may directly reduce knowledge transfer; however, the empirical results of this relationship are inconclusive. A limited number of studies have directly and explicitly examined this link. Chen (2011) found a detrimental effect of relationship conflict on knowledge sharing; however, the study did not include knowledge seeking. Van Woerkom and Sanders (2010) analyzed the impact of disagreement on knowledge sharing and providing advice but did not find a significant effect.

These inconclusive results suggest that there may be no strong direct link; instead, it is possible that conflicts might indirectly influence knowledge sharing and knowledge seeking — a mechanism that would also be in line with the model by Lau and Cobb (2010). Drawing on SET, Lau and Cobb (2010) argued that relationship-based trust mediates the link between relationship conflict and exchange in general among employees. Here, we argue that their model may be applied as well to our trainee-trainer setting and may cover cognition-based trust as well, as these two dimensions often correlate (Lau & Cobb, 2010).

Therefore, we hypothesize:

H2a: Affect-based trust mediates the relationship between conflict and knowledge sharing.

H2b: Affect-based trust mediates the relationship between conflict and knowledge seeking.

H2c: Cognition-based trust mediates the relationship between conflict and knowledge sharing.

H2d: Cognition-based trust mediates the relationship between conflict and knowledge seeking.

---

[16] While a few previous studies have explicitly distinguished two dimensions of conflicts, i.e., relationship and task conflicts (e.g., Lehmann-Willenbrock, Grohmann, & Kauffeld, 2011), we conceptualize conflicts as one construct. Both conflict types are mutually dependent (Pelled, Eisenhardt, & Xin, 1999) and generally harmful (De Wit, Greer, & Jehn, 2012), and also, many prior authors have not made that explicit distinction (e.g, Langfred, 2007).

The effect of a perceived age discrimination climate on conflict

Drawing on SCT, we suggest that trainees and trainers may see each other as out-group members due to their age difference and different hierarchical positions. The perception of differences may potentially lead to conflicts that on the one hand may relate to task-related aspects, e.g., trainees who generally belong to the younger generation may prefer to employ technological solutions for task fulfillment in contrast to their trainers (Prensky, 2001). On the other hand, differences in values and experiences often impede the establishment of personal connections (Murphy, 2012), and the lack of personal connection may potentially intensify conflicts, in turn.

The organizational context may either serve to attenuate or reinforce these conflicts (Cropanzano & Mitchell, 2005). An element of the organizational context that appears to be particularly relevant when considering the relationships (and potential conflicts) between employees who simultaneously belong to different age groups as well as different hierarchically linked roles is the perceived age discrimination climate within the organization. Perceived age discrimination (climate) [17] has consistently been found to affect job attitudes negatively (e.g., Kunze et al., 2011; Redman & Snape, 2006). While direct empirical evidence on the relationship between perceived age discrimination climate and conflicts is limited, SET and SCT offer an explanation that perceived age discrimination climate may not only negatively affect personal resources, but also interpersonal interaction. Employees who experience perceived age discrimination climate may reciprocate organizational behavior and feel their categorizing behavior being approved by the organization. In turn, this may lead to more conflicts between trainees and trainers.

H3: A perceived age discrimination climate is positively related to the occurrence of conflicts between trainees and trainers.

---

[17] Note that these studies investigate age discrimination at different levels, e.g., Rabl and Triana (2013) measure individually experienced age discrimination, whereas Kunze and colleagues (2011) measure age discrimination climate more broadly at the organizational level.

3.3 Method

Sample and procedures

Data collection was based on a cooperation with a local Chamber of Commerce in Germany. We sent letters containing a link to an anonymous online survey to all trainees and trainers of all listed organizations that were members of this Chamber of Commerce. The final sample used in this study included 444 respondents that answered the questionnaire, including 106 trainers (with an average age of 43.78 years) and 338 trainees (with an average age of 20.86 years). The age structure of this sample is similar to the age structure of the general population of trainers (average age of trainers: 47.7 years) and trainees (average age of trainees: 20.1 years) (BIBB, 2015).

Measures

Unless otherwise noted, items were translated into German via back-translation by bilingual individuals (Brislin, 1980). The questionnaire was as similar as possible for trainees and trainers. We only adapted items to the specific role (i.e., either trainer or trainee) if necessary (e.g., address the trainee as a cooperation partner for trainers and vice versa).

Knowledge transfer. We adapted a measure by Wilkesmann, Virgillito, and Wilkesmann (2009a) that explicitly distinguishes between *knowledge sharing* and *knowledge seeking*. As argued before, the relationship between trainees and trainers is formally a uni-directional, hierarchical relationship, requiring us to adapt some items slightly (e.g., "I learn a lot by observing my colleague doing his/her job." was adapted by adding the softening word "sometimes"). *Knowledge sharing* was measured with three items on a five-point Likert scale (1 = *strongly disagree* and 5 = *strongly agree*). Cronbach's Alpha is .83 for trainees and .67 for trainers. *Knowledge seeking* was measured by four items on a five-point Likert scale (1 = *strongly disagree* and 5 = *strongly agree*). Cronbach's Alpha is .87 for trainees and .89 for trainers.

Perceived age discrimination climate. We used five items by Kunze et al. (2011) in a five-point response format (1 = *strongly disagree* and 5 = *strongly agree*). Cronbach's alpha is .93 for trainees and .92 for trainers.

Trust. Following McAllister (1995), *affect-based trust* was measured with five items on a seven-point Likert scale. Cronbach's alpha is .91 for trainees and .88 for trainers. Six items on a seven-point Likert scale measured *cognition-based trust*. Cronbach's alpha is .94 for trainees and .90 for trainers.

Conflict. We measured conflict with an adapted and short 6-item version of the scale by Jehn (1995), provided by Lehmann-Willenbrock and colleagues (2011) that reflects both aspects of *relationship conflict* and *task conflict.* However, we theoretically conceptualized conflicts as one construct as both dimensions are harmful and often occur at the same time (De Wit et al., 2012; Pelled et al., 1999). In addition, a preliminary exploratory factor analysis revealed that in our sample all items load only on one factor. Cronbach's alpha is .94 for trainees and .84 for trainers.

Control variables. Following prior literature (e.g., Kunze et al., 2011), we controlled for age, gender, organizational size (number of employees), and frequency of face-to-face interaction between trainees and trainers (single item, asking for the frequency of their general face-to-face interaction).

Analyses

We tested the proposed hypotheses with a multigroup[18] SEM, using the software Mplus 8, that allowed us to check the effects across our two groups, trainees and trainers, following the approach by Anderson and Gerbing (1988), combined with the multigroup method by Vandenberg (2002). In the first step, we tested our measurement model with a confirmatory factor analysis (CFA), and a test for measurement invariance across our groups (Vandenberg, 2002). In the second step, we investigated our structural model, applying the bootstrapping procedure for the indirect effects (Preacher, Rucker, & Hayes, 2007). We generally report Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root-Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR) to assess the model fit. We used common cut-off points for our indices: >.90 for CFI and TLI, <.08 for RMSEA and SRMR (Browne & Cudeck, 1993; Hu & Bentler, 1999; Tabachnick & Fidell, 2014). In line with previous studies, we drew on maximum likelihood estimation being the predominant approach (Tabachnick & Fidell, 2014).

---

[18] We did not employ multilevel SEM as we cannot match trainees and trainers. Asking questions about possible identification would have been too delicate.

3.4 Results

Table 3.1 shows the means, standard deviations, Cronbach’s alphas and inter-correlations of all variables included in the study.

Table 3.1 Descriptive statistics and correlations for the subsamples

	Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10
Trainees (n = 338)													
1	Age	20.86	3.09	n.a.									
2	Gender (m)	1.51	n.a.	.05	n.a.								
3	Organizational size	2.7	1.01	-.11*	-.11	n.a.							
4	Interaction frequency	4.22	1.54	-.02	-.03	-.13	n.a.						
5	Affect-based trust	3.91	1.63	-.05	.09	.05	.36***	(.91)					
6	Cognition-based trust	5.13	1.66	-.13*	.11*	.08	.31***	.76***	(.94)				
7	Conflict	1.79	.88	.14**	-.07	-.17	-.03	-.45***	-.54***	(.94)			
8	Knowledge sharing	1.88	.92	.04	.04	-.06	.19***	.26***	.044	.03	(.83)		
9	Knowledge seeking	3.19	1.14	-.08	.07	.01	.34***	.65***	.66***	-.37***	.24***	(.87)	
10	Perceived age discrimination climate	1.77	.89	.05	-.08	-.03	-.24***	-.32***	-.36***	-.42***	.00	-.35***	(.93)
Trainers (n = 106)													
1	Age	43.78	10.64	n.a.									
2	Gender (m)	1.45	n.a.	-.28**	n.a.								
3	Organizational size	2.92	.84	.13	-.09	n.a.							
4	Interaction frequency	4.87	1.27	.04	-.15	-.34**	n.a.						
5	Affect-based trust	3.88	1.47	-.07	.09	-.10	.18	(.88)					
6	Cognition-based trust	5.34	1.13	.02	.19	.09	-.05	.47***	(.90)				
7	Conflict	1.89	.58	.18	-.26	-.04	.04	-.04	-.45***	(.84)			
8	Knowledge sharing	4.12	.68	.01	.15	-.03	.26**	.14	.22*	-.08	(.67)		
9	Knowledge seeking	2.66	.98	.18	.00	.07	.18	.24*	.09	.19	.43***	(.89)	
10	Perceived age discrimination climate	1.57	.73	.05	-.14	.16	-.00	-.12	-.31**	.31**	-.09	.14	(.92)

Notes: Where applicable, Cronbach's alpha is reported in parentheses on the diagonal; not applicable (n.a.); standard deviation (s.d.);
* $p < .05$; ** $p < .01$; *** $p < .001$.

Measurement model

We investigated CFA requirements for each group separately but also crosschecked without grouping. The overall model fit for our first six-factor model[19], that was aligned with our hypothesis, revealed satisfactory results (Trainees: $\chi^2 = 981.25$, $df = 352$, RMSEA = .07, CFI = .92, TLI = .91, SRMR = .06; Trainers $\chi^2 = 588.97$, $df = 362$, RMSEA = .08, CFI = .94, TLI = .93, SRMR = .07). The six factors include perceived age discrimination climate, affect-based trust, cognition-based trust, conflicts, knowledge sharing, and knowledge seeking. In addition, we hypothesized three further models, none of which achieved a better model fit. For further analyses, we excluded one item of cognition-based trust due to a factor loading of <.45 among the two subgroups (Tabachnick & Fidell, 2014).

To test invariance among the two subgroups, we tested for configural invariance, metric invariance and scalar invariance (Vandenberg, 2002). Table 3.2 provides the model fit indices. The baseline model fit shows a good model fit and thus, configural invariance ($\chi^2 = 1496.47$, $df = 670$, RMSEA = .08, CFI = .93, TLI = .93, SRMR = .06). Comparing the model with the constrained factor loadings to the baseline model, we find support for metric invariance using a ΔCFI $\leq$ -.01 as an indicator of invariance (Cheung & Rensvold, 2002). However, for scalar invariance we find a larger difference than ΔCFI $\leq$ -.01.

By freeing three intercepts, we obtain a model fit that is acceptable and shows a difference of ΔCFI $\leq$ -.01. Based on these findings, we conclude that our data provides configural invariance, metric invariance and partial scalar invariance across the two groups. Since most studies only capture configural and metric invariance as requirements (Vandenberg, 2002), we conclude that we meet the requirements to fulfill the assessment of the structural model.

---

[19] Model 1 (six-factor model with six distinct factors). Model 2 (five-factor model, knowledge transfer as a second-order factor). Model 3 (five-factor model, trust as second-order factor). Model 4 (four-factor model, knowledge transfer as a second-order factor and trust as a second-order factor). Moreover, we ran variations, that is, we tested for the items of knowledge sharing and knowledge seeking as one factor.

Table 3.2 Multigroup method analysis and model fits

	χ^2	*df*	RMSEA	CFI	TLI	SRMR
Model 1	1496.47	670	.08	.93	.92	.06
Model 2	1571.382	692	.08	.93	.92	.06
Model 3a	1901.338	714	.09	.90	.90	.07
Model 3b	1662.78	711	.08	.92	.91	.07

Notes: n = 444; RMSEA = root mean squared error of approximation; CFI = comparative fit index; TLI = Tucker-Lewis index; SRMR = standardized root mean square residual.
Model 1 (No constraints, baseline model), Model 2 (Factor loadings constrained), Model 3a (Factor loadings constrained; intercepts constrained), Model 3b (Factor loadings constrained; intercepts constrained, except for item 3 of knowledge sharing, item 2 and 4 of affect-based trust).

Structural model

Next, we examined our specified model including control variables (Kunze & Boehm, 2013). Additionally, we allowed for covariation between affect-based and cognition-based trust due to theoretical reasons (Lau & Cobb, 2010; McAllister, 1995). In addition to our hypothesized model, we hypothesized four alternative models. None of them showed better fit. Table 3.3 summarizes the model fits of the different model comparisons.

Table 3.3 Structural model comparison

	χ^2	*df*	$\Delta\chi^2$	*p*	Δ*df*	RMSEA	CFI	TLI	SRMR
Hypothesized model	2290.81	916				.08	.91	.90	.80
Alternative model 1	3208.65	948	917.84	.00	32	.10	.85	.84	.26
Alternative model 2	2983.21	934	692.4	.00	18	.10	.87	.86	.23
Alternative model 3	1920.44	584	370.37	.07	332	.10	.87	.85	.16
Alternative model 4	1921.61	722	369.20	.00	194	.09	.90	.89	.08

Notes: n = 444; RMSEA = root mean squared error of approximation; CFI = comparative fit index; TLI = Tucker-Lewis index; SRMR = standardized root mean square residual.
All models are compared to the hypothesized model.
Alternative model 1: Direct effect from perceived age discrimination climate (PADC) to knowledge sharing and knowledge seeking; Alternative model 2: Indirect effect from PADC to knowledge sharing and knowledge seeking through conflict; Alternative model 3: Indirect effect from PADC to knowledge sharing and knowledge seeking through trust; Alternative model 4: No control variables applied.

Figure 3.2 and Figure 3.1 show the SEM results for both groups. *H1a* and *H1b* predicted a positive relationship between affect-based trust and knowledge sharing and knowledge seeking. For trainees, we found support for *H1a* (β = .77, p = .00) and *H1b* (β = .39, p = .00). For trainers, only affect-based trust was positively and (marginally) significantly related to knowledge seeking (β = .30, p = .07). Affect-based trust was unrelated to the knowledge sharing by trainers. *H1c* predicted a positive impact of cognition-based trust on knowledge sharing, and *H1d* postulated a positive relationship between cognition-based trust and knowledge seeking. For trainees, we found an effect in the opposite direction of *H1c* (β = -.55, p = .00), and support for *H1d* (β = .42, p = .00). For trainers, neither one of the hypotheses was supported.

H2a-d considered the mediating role of affect- and cognition-based trust on the relationship between conflict and knowledge transfer. They were supported for trainees (*H2a*: *B* = -.43 (95% CI [-.65 – -.27]); *H2b*: *B* = .33 (95% CI [.16 – .59]); *H2c*: *B* = -.21 (95% CI [-.36 – -.09]); *H2d*: *B* = -.25 (95% CI [-.41 – -.10])), but not for trainers. Table 3.4 provides confidence intervals and effect indices of the mediation analyses.

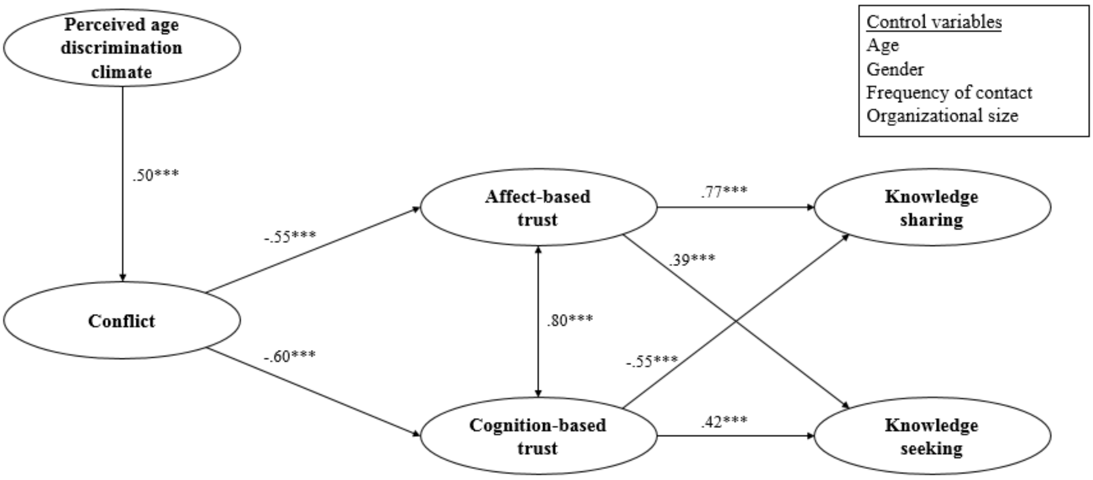
H3 suggested that perceived age discrimination climate increases conflicts. *H3* is supported for both trainees (β = .50, p = .00), and trainers (β = .81, p = .00). To summarize, we found support for most of our hypotheses for the trainees, however, for trainers, we only found two significant effects, i.e., a positive relationship between perceived age discrimination climate and conflicts and a marginally significant association between affect-based trust and knowledge seeking.

Table 3.4 Mediation analysis via bootstrapping

	Trainers (n = 106)				Trainees (n = 338)			
	SE	Ind. Effect	95% CI	p-value	SE	Ind. Effect	95% CI	p-value
Conf. → Aff. trust → KSh	.02	.00	-.04 ─ .03	.98	.10	-.43	-.65 ─ -.27	.00
Conf. → Cog. trust → KSh	.07	-.03	-.02 ─ .04	.63	.11	.33	.16 ─ .59	.00
Conf. → Aff. trust → KSe	.02	-.00	-.05 ─ .04	.98	.07	-.21	-.36 ─ -.09	.00
Conf. → Cog. trust → KSe	.05	.01	-.13 ─ .08	.92	.08	-.25	-.41 ─ -.10	.00

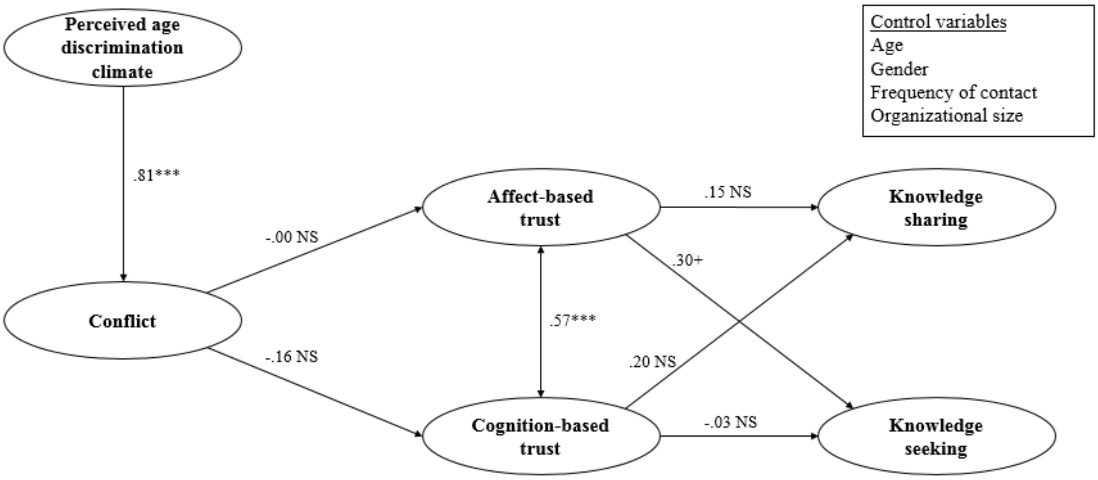
Notes: Standardized estimates are shown. 1,000 bootstraps samples were used.
Conf. = conflict; Aff. trust = affect-based trust; Cog. trust = cognition-based trust; KSh = knowledge sharing; KSe = knowledge seeking; SE = standard error; Ind. Effect = indirect effect; CI = confidence interval.

Figure 3.2 Structural equation modeling results for trainees


Perceived age discrimination climate
Control variables
Age
Gender
Frequency of contact
Organizational size
.50***
Affect-based trust
.77***
Knowledge sharing
-.55***
.39***
Conflict
.80***
-.60***
-.55***
Cognition-based trust
.42***
Knowledge seeking

Notes: N = 338, NS = not significant, + p < .1, * p < .05, ** p < .01, *** p < .001.

Figure 3.1 Structural equation modeling results for trainers


Perceived age discrimination climate
Control variables
Age
Gender
Frequency of contact
Organizational size
.81***
Affect-based trust
.15 NS
Knowledge sharing
-.00 NS
.30+
Conflict
.57***
-.16 NS
.20 NS
Cognition-based trust
-.03 NS
Knowledge seeking

Notes: N = 106, NS = not significant, + p < .1, * p < .05, ** p < .01, *** p < .001.

3.5 Discussion

Building on SET and SCT, we explored how perceived age discrimination climate, conflicts, that may potentially result from such a climate, and interpersonal trust are related to both sharing and seeking knowledge in highly formalized knowledge transfer relationships of trainees and trainers. To answer our research question we employed a multigroup SEM approach that allowed us to examine our hypotheses separately for trainees and trainers and to demonstrate that effects varied across the two subgroups. All hypotheses were supported for trainees, except for a reversed effect of cognition-based trust on knowledge sharing. For trainers, we only found support for the positive relationship between perceived age discrimination climate and conflicts and the (marginally significant) positive association between affect-based trust and knowledge seeking.

Theoretical contributions

This study contributes to the literature on knowledge transfer in general, on intergenerational knowledge transfer, more specifically, and on organizational diversity. First, we add to research on knowledge transfer by empirically demonstrating the importance of studying knowledge transfer as compromising two distinct behaviors, i.e. knowledge sharing and knowledge seeking (Wilkesmann et al., 2009b). Prior studies on knowledge transfer have often focused solely on knowledge sharing (e.g., Cabrera & Cabrera, 2005). Yet, knowledge seeking and knowledge sharing constitute two distinct behaviors within the domain of transferring knowledge, and key antecedents may differ across both behaviors (Burmeister et al., 2018a). Our results indeed provide empirical evidence that this can be the case and suggest, thus, that it is important for future research to conceptually as well as empirically distinguish between both of these types of knowledge transfer.

The study also contributes to the nascent literature on intergenerational knowledge transfer (e.g., Gerpott et al., 2017). Prior studies on intergenerational knowledge transfer have shed light on the relevance of this topic, by looking at the process (e.g., Gerpott et al., 2017), employers' views of older employees' learning (e.g., Beck, 2014) or the types of knowledge older employees' may share (e.g., Joe et al., 2013). But only recently, scholars have begun to analyze explicitly antecedents of intergenerational knowledge transfer, such as age diversity beliefs (e.g., Ellwart et al., 2013) or trust (e.g., Burmeister et al., 2018a). We complement these studies by adding a further interpersonal level antecedent — i.e., conflict between employees — and also an organization level antecedent—i.e., perceived age discrimination climate, and by empirically demonstrating their importance.

Further, we conceptually argued that, while intergenerational knowledge transfer is often defined as knowledge transfer between two employees with a substantial age difference (Gerpott et al., 2017), in practice, this age gap often overlaps, to a large extent, with a hierarchical gap (Kunze & Menges, 2017; Lawrence, 1996). Although we were not able to empirically disentangle these effects, our conceptualization suggest that future studies might seek to account explicitly for the roles of hierarchy, and assigned knowledge transfer roles, when examining intergenerational knowledge transfer.

Finally, the results of this study add to the literature on organizational diversity by considering age discrimination at the organizational level and linking it to interpersonal outcome variables. Previous research on age discrimination has typically focused on employees' experience of age discrimination at the individual level (e.g., Rabl & Triana, 2013), and has often related this experience as individual level antecedent to individual level outcome variables, such as job satisfaction (e.g., Redman & Snape, 2006). In turn, studies that have analyzed age discrimination at the organizational level have, similarly, mostly linked this organization level construct to outcome variables at the organizational level, such as collective affective commitment and organizational performance (e.g., Kunze et al., 2011). Our conceptualization and empirical results show that there are cross-level interrelations: Perceived age discrimination climate at the organizational level is related to interpersonal outcome variables, such as conflict, trust, and interpersonal knowledge transfer.

Practical contributions

Organizations seeking to establish knowledge transfer among hierarchically diverse employees need to increase trust among employees and avoid age discrimination. Trust could be enhanced, for example, through informal get-togethers where employees receive the opportunity to get to know each other (Swift & Hwang, 2013). Since conflicts were found to harm trust, organizations should attempt to reduce conflicts, for example, with conflict training programs (Langfred, 2007).

Moreover, organizations and managers need to be aware of the role of the organizational climate in facilitating or reducing behavior that leads to interpersonal knowledge transfer

(Van Wijk et al., 2008). This may be particularly serious when the organizational climate appears to be discriminatory. In practice, organizations could employ employee surveys to capture the perception of potential discrimination (Kunze et al., 2011). If employees declare feelings of discrimination, it is essential to take them seriously. Clear guidelines prohibiting (age-related) discrimination could be another strategy that would provide employees the impression that their organization does not support discrimination. HR policies are also particularly significant and should not be age-biased (Kunze & Boehm, 2013).

Limitations and future research

As with most research, our results have several limitations. First, our data provides only two significant effects for the trainers, of which neither is a mediating effect, in contrast to the sample of trainees. Effects, in particular, mediation effects, can differ across groups for several reasons (Preacher et al., 2007). Trainers may perceive knowledge sharing primarily from a job assignment perspective, meaning that they perform this behavior regardless of whether they trust their trainees or have conflicts with them. Alternatively, the much smaller sample sizes for trainers may be responsible for the results. Future research should thus attempt to replicate and extend our findings with a larger sample size to assess whether theoretical or methodological reasons led to these results.

Given the statistical results, we acknowledge issues concerning the measurement of knowledge transfer. While (cross-sectional) surveys (like ours) still are the most common approach to gauge knowledge transfer within organizations (Argote & Fahrenkopf, 2016), knowledge transfer reflects procedural behavior. Applying a one-time measurement does not capture the complexity of this behavior. Future studies should thus build on and extend our research by assessing knowledge transfer over a more extended time period, using a different research methodology, such as, for example, an experience sampling method (ESM). ESM allows researchers to capture data repeatedly in a given time period. Since behavior may change daily, this method could offer certain advantages over cross-sectional surveys (Alliger & Williams, 1993). Nevertheless, ESM is very resource-consuming and, hence, may lead to an increase in dropouts (Alliger & Williams, 1993).

In addition, our study only captured job-related knowledge transfer. Gerpott and colleagues (2017) have demonstrated in a qualitative study that different types of knowledge may be more easily shared or requested than others. Notably, in times of digitization, younger employees may also share technology-related knowledge with older employees (Prensky, 2001). Future studies should therefore explicitly examine different types of knowledge.

Finally, although we were able to study knowledge transfer among employees who are age-diverse, knowledge transfer role, and hierarchical position, generalizability may be limited by our specific research context. Trainees and trainers in our setting are linked by an official trainer-trainee relationship, which explicitly assigns the knowledge transfer roles. Our study design does not allow disentangling one of these factors from each other, although we have conceptually pointed out the necessity to do so. Further research may validate our study design in a different context, examining younger and older employees that are not officially assigned to specific knowledge transfer roles, and potentially comparing it to formalized knowledge transfer.

4 INFLUENCING FACTORS ON THE PERFORMANCE EVALUATION OF EMPLOYEES PARTICIPATING IN INTERGENERATIONAL KNOWLEDGE TRANSFER

Abstract: Given the relevance of knowledge transfer, scholars have suggested to include participation in knowledge transfer into the performance evaluation of employees. However, the complex nature of knowledge transfer makes it difficult to capture and evaluate. Therefore, it is important to identify factors that may influence the performance evaluation being associated with intergenerational knowledge transfer. Thereby, first, this study investigates the knowledge transfer itself by distinguishing between age-appropriate intergenerational knowledge transfer (i.e., knowledge transfer that is perceived as appropriate for the age of employees) and age-inappropriate intergenerational knowledge transfer (i.e., knowledge transfer that is perceived as inappropriate for the age of employees). Second, by building on the categorization-elaboration model, this study accounts for interpersonal heterogeneity in the ratings by including the mindsets held by the rater. Therefore, this study first, hypothesizes that performance evaluations are higher when employees participate in an age-appropriate intergenerational knowledge transfer, in contrast, to age-inappropriate intergenerational knowledge transfer. Second, this study hypothesizes that diversity mindsets held by the rater, namely positive beliefs about age diversity and generational stereotypes, influence the performance evaluation of employees being associated with intergenerational knowledge transfer. The hypotheses were tested with an experimental vignette study design on a sample of 169 individuals. Empirical support was found that positive age diversity beliefs held by the rater predict a higher performance evaluation of employees participating in intergenerational knowledge transfer. However, no significant results were found for the effect of generational stereotypes held by the rater, and for the differences in the ratings for age-appropriate intergenerational knowledge transfer and age-inappropriate intergenerational knowledge transfer.

Acknowledgement:

I thank Lucia Bales and Alize Karaca for their valuable support in collecting the data.

4.1 Introduction

Many organizations use performance evaluations of employees to manage them and make better strategic decisions on, for example, salary increase, or training opportunities (Aguinis, Joo, & Gottfredson, 2011; Posthuma, Charles Campion, & Campion, 2018). To do so, traditionally, organizations have mostly evaluated employees' performance with a past-oriented, quantifiable, and outcome-focused approach (Aguinis & Pierce, 2008). However, particularly since the 1990s (Kaplan & Norton, 1996), organizations have increasingly attempted to capture a more comprehensive image of the performance of employees. Therefore, organizations have included factors that are not explicitly and directly focused on the produced outcomes of employees (e.g., whether tasks have been completed on time) and may be more related to their behavior, such as the general learning and development of employees (Aguinis & Pierce, 2008; DeNisi & Murphy, 2017; Kaplan & Norton, 1996).

In particular, given the relevance of knowledge to organizations as a competitive advantage (Argote & Ingram, 2000; Grant, 1996), scholars have suggested that organizations should include how employees engage in knowledge transfer in performance evaluations (e.g., Arora, 2002). Knowledge transfer, that is "the process through which one unit (e.g., group, department, or division) is affected by the experience of another" (Argote & Ingram, 2000: 151), drives the performance enhancement at the employee, team, and organizational level (e.g., Gray & Meister, 2004; Kaše et al., 2009; Mesmer-Magnus & Dechurch, 2009). Thus, knowledge transfer between employees contributes significantly to the competitive advantage of organizations (Argote & Ingram, 2000). In addition, the relevance of knowledge transfer is further reinforced by the fact that organizations are currently trying to stimulate, in particular, intergenerational knowledge transfer (Harvey, 2012), that is knowledge transfer between employees with a large age difference[20] (Gerpott et al., 2017; Schmidt & Muehlfeld, 2017). These attempts are mainly motivated by the demographic change that is challenging organizations to retain the knowledge of the Baby Boomer generation before their retirement (Burmeister & Deller, 2016; De Long & Davenport, 2003). In other words, how employees participate in intergenerational knowledge transfer may contribute to their overall performance evaluation. However, the very nature of knowledge transfer implies that it is difficult to observe and assess. For example, supervisors ─ who typically provide the performance evaluation (DeNisi & Murphy, 2017) ─ have only limited insights into how often employees engage in knowledge transfer. Therefore, the following question arises: Which factors influence the performance evaluation that is associated with employees engaging in intergenerational knowledge transfer?

---

[20] As extant research has interpreted and empirically analyzed "intergenerational knowledge transfer" as knowledge transfer between employees with a large age difference (Gerpott et al., 2017; Harvey, 2012) without accounting for specific generational affiliation, this study uses terms, such as intergenerational knowledge transfer and knowledge transfer between age-diverse employees, interchangeably.

Particularly two factors appear to be relevant. Generally at the most basic level, these factors can be classified into first factors that relate to the object itself that is being evaluated, i.e., the type of knowledge transfer that is associated with the performance evaluation of employees (DeNisi & Murphy, 2017), and second, factors associated with the evaluating actor him/herself (e.g., supervisors) (DeNisi & Murphy, 2017; Finkelstein & Burke, 1998). Regarding the object itself that is being evaluated, it is important to acknowledge that the age difference is a constituting characteristic of intergenerational knowledge transfer. Therefore, the *organizational theory of age effects* (Lawrence, 1987) may offer a theoretical framework for the investigation of intergenerational knowledge transfer itself and its association with the performance evaluation of employees. The theory of age effects links age of employees to their behavior by suggesting that within organizations age norms exist (Lawrence, 1987). These age norms comprise shared behavioral expectations for employees based on their age and involve an evaluation of whether the behavior can be regarded as appropriate for employees at their age (*age-appropriate)* or not (*age-inappropriate)* (Lawrence, 1984, 1996; Neugarten, Moore, & Lowe, 1965). A deviation from these age norms, i.e., age-inappropriate behavior, will be sanctioned. In particular, other organizational actors may respond negatively, such as employees may respond with negative emotions or supervisors may provide a lower performance evaluation for the person who acted age-inappropriate (Collins, Hair, & Rocco, 2009; Kunze & Menges, 2017).

Applying the theory of age effects to knowledge transfer, we argue that also expectations prevail within organizations of what constitutes age-appropriate and age-inappropriate knowledge transfer. An employee who engages in age-inappropriate knowledge transfer, and thereby violates age norms, will presumably be sanctioned. For example, for older employees, it may not be regarded as acceptable when they frequently request information because they are expected to have completed their training phase and thus, should already possess the expertise that is relevant to their job (Burmeister et al., 2018a; Tempest, 2003).

However, if they, despite these norms, frequently seek knowledge, their behavior may be interpreted as a lack of competence, and thereby, may result in a lower performance evaluation. Therefore, we posit that employees who engage in age-appropriate knowledge transfer may receive a higher performance evaluation than employees who engage in age-inappropriate knowledge transfer.

While the theory of age effects may offer a conceptual framework to expound on how intergenerational knowledge transfer may be associated with the performance evaluation of employees, it does not explicitly account for the possible interpersonal heterogeneity of the evaluating actors (after this also referred to as raters; terms are used interchangeably). Therefore, the second aspect targets the evaluating actor him/herself. To understand how individual characteristics of the rater may influence the performance evaluation of employees, the categorization-elaboration model (CEM) (Van Knippenberg et al., 2004) as a conceptual framework may offer further insights. The CEM proposes that encounters between diverse employees can either lead to positive or negative outcomes and that the conditions, under which the encounters of diverse employees take place, determine whether the outcome will be rather positive or negative (Kearney & Voelpel, 2012; Van Knippenberg et al., 2004; Van Knippenberg et al., 2007).

In particular, the literature has suggested that diversity mindsets ─ i.e., mindsets based on the belief that diversity is prosperous for the team and organizational performance (Homan et al., 2007; Kearney et al., 2009) ─ held by the evaluating actor[21] constitute such a condition (Kearney & Voelpel, 2012). Prior literature has suggested that specifically two types of diversity mindsets are relevant when it comes to the interaction between diverse employees, namely positive beliefs about age diversity and (generational) stereotypes (Kearney & Voelpel, 2012; Van Knippenberg et al., 2004). Positive beliefs about age diversity reflect the beliefs of how much individuals perceive age diversity to be a factor of success for group performance (Ellwart et al., 2013; Van Dick et al., 2008). Generational stereotypes, in turn, reflect stereotypes against employees outside the own generation (King & Bryant, 2016). Prior research has provided evidence for the relationship between these two types of diversity mindsets and participation in intergenerational knowledge transfer (e.g., Ellwart et al., 2013), and for the relationship between these two types of diversity mindsets and the performance evaluation of employees (e.g., Rudolph, Wells, Weller, & Baltes, 2009). However, to the best of our knowledge, no prior study has, to date, directly examined how these two types of diversity mindsets, namely positive beliefs about age diversity and generational stereotypes, held by the evaluating actor may influence how he/she evaluates the performance that is associated with employees engaging in intergenerational knowledge transfer.

---

[21] Not all of the cited studies (e.g., Ellwart et al., 2013) have explicitly accounted for the relationship between diversity mindsets held by the evaluating actor and their impact on the performance evaluation of employees, but some have explored interactions among diverse employees at a more broader level.

Therefore, this study addresses the following two research questions: 1) How do participants evaluate the performance of employees engaging in age-appropriate vs. age-inappropriate intergenerational knowledge transfer? 2) How do diversity mindsets held by the evaluating actor impact the performance evaluation of employees engaging in intergenerational knowledge transfer?

This study draws on the theory of age effects and CEM to derive the following hypotheses. First, it is hypothesized that the performance of employees engaging in age-appropriate intergenerational knowledge transfer is evaluated higher than the performance of employees engaging in age-inappropriate intergenerational knowledge transfer. Then it is hypothesized that positive beliefs about age diversity held by the rater lead to higher a performance evaluation of employees engaging in intergenerational knowledge transfer. It is further hypothesized that generational stereotypes held by the rater lead to a lower performance evaluation of employees engaging in intergenerational knowledge transfer.

In order to test the hypotheses, this study builds on an experimental vignette study with a between-subject design with 169 individuals. The empirical results partly confirm the theory. Positive beliefs about age diversity held by the rater result in a higher performance evaluation of employees engaging in intergenerational knowledge transfer. Surprisingly, generational stereotypes held by the rater are unrelated to the performance evaluation of employees engaging in intergenerational knowledge transfer. Moreover, there was no significant difference in the performance evaluation of employees engaging in age-appropriate intergenerational knowledge transfer vs. employees engaging in age-inappropriate intergenerational knowledge transfer.

Thereby, this study makes three contributions. First, this study contributes to the knowledge transfer literature by including how participation in knowledge transfer may affect the performance evaluation. Although scholars have devoted increasing attention to knowledge transfer in organizations (e.g., Argote & Fahrenkopf, 2016), relatively little research has focused on how employees' engagement in knowledge transfer may contribute to their performance evaluation. Prior studies that have investigated the knowledge transfer – performance relationship have mostly focused on the effect of knowledge transfer on performance at the team or organizational level (e.g., Collins & Smith, 2006; Levine & Prietula, 2012; Mesmer-Magnus & Dechurch, 2009; Srivastava et al., 2006). Also, these studies have not considered how participation in different types of knowledge transfer (i.e., age-appropriate and age-inappropriate intergenerational knowledge transfer) contributes to the overall performance evaluation of employees. Thereby, by linking different types of knowledge transfer to the performance evaluation of employees, this study contributes to the literature on the knowledge transfer – performance relationship.

Second, this study contributes to the knowledge transfer literature by conceptually and empirically distinguishing between knowledge sharing and knowledge seeking. Most prior studies have not explicitly conceptualized and captured these behaviors as two distinct behaviors of knowledge transfer (Burmeister et al., 2018a). In contrast, this study considers both behaviors, i.e., knowledge sharing and knowledge seeking, by proposing a classification of knowledge transfer that is inherently based on the distinction of who is sharing and who is seeking knowledge. Thereby, this study proposes the relevance of distinguishing between knowledge sharing and knowledge seeking as fundamental to the classification of different types of knowledge transfer.

Third, this study contributes to the nascent literature on intergenerational knowledge transfer by including new antecedents and a new dependent variable. Recently, scholars have demonstrated the relevance of exploring intergenerational knowledge transfer as a type of knowledge transfer in its own right subject (e.g., Harvey, 2012; Ropes, 2013) by investigating antecedents, such as trust (Burmeister et al., 2018a), age-inclusive human resource practices, (i.e., HR practices that are designed to provide equal opportunities for employees of all age groups, such as recruiting and training; Burmeister et al., 2018b), and perceived age diversity among group members (Ellwart et al., 2013). By including positive beliefs about age diversity and generational stereotypes as antecedents that may influence how raters evaluate the performance of employees who participate in intergenerational knowledge transfer, this study contributes to the current discussion on intergenerational knowledge transfer.

4.2 Theory and hypotheses

Performance evaluation of employees

Many organizations evaluate the performance of employees (Townley, Cooper, & Oakes, 2003). To do so, traditionally, they have used *performance appraisals* that are past-oriented, outcome-focused, mostly quantifiable, often occur once or twice a year (Aguinis & Pierce, 2008) and do not necessarily include an evaluation of behavior that is not easily measurable (Aguinis & Pierce, 2008), such as engagement in knowledge transfer. Due to this limitation, organizations have started to use *performance management* to evaluate the performance of employees more comprehensively. Performance management "is a continuous process of identifying, measuring, and developing the performance of individuals and teams and aligning performance with the strategic goals of organization" (Aguinis, 2013: 2) and includes, in contrast to performance appraisals, also behavioral aspects in the performance evaluation of employees that may be more difficult to observe (e.g., learning and development) (Aguinis & Pierce, 2008; DeNisi & Murphy, 2017). Advantages are, for example, that organizations can more adequately capture the strengths and weakness of employees by having more insights on *how* work outcomes are achieved, as suggested by Aguinis and colleagues (2011). Thereby, by incorporating a more extensive variety of aspects that may contribute to the performance evaluation of employees, organizations may be more able to set incentives to reinforce desired behaviors.

In line with this new approach to the performance evaluation of employees, scholars have suggested that organizations include knowledge transfer as a behavior that may contribute to the performance evaluation of employees (Arora, 2002; Lin, 2015). Many organizations have a keen interest in facilitating knowledge transfer between employees (Argote & Ingram, 2000) because knowledge transfer improves performance outcomes through its positive impact on shared mental models and transactive memory systems by allowing easier communication and more efficient coordination among employees (Gruenfeld, Mannix, Williams, & Neale, 1996; Mathieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000; Srivastava et al., 2006). Shared mental models refer to "common knowledge held by team members about their task and/or social processes" (Srivastava et al., 2006: 1242) and for transactive memory systems, co-workers are viewed as sources of knowledge (Heavey & Simsek, 2017). This interest in interpersonal knowledge transfer becomes further prevalent, in the increasing attempts of organizations to facilitate intergenerational knowledge transfer

(Gerpott et al., 2017), presumably because of the demographic change (Schmidt & Muehlfeld, 2017). The demographic change puts pressure on organizations to deal with the potential knowledge loss that may result from the retirement of the high birthrate cohort, the Baby Boomers (Kuyken et al., 2018). Organizations strive to prevent the potential knowledge loss by retaining the knowledge of older employees, such as, by ensuring intergenerational knowledge transfer (De Long, 2004; De Long & Davenport, 2003).

Thereby, it appears that organizations may benefit from including engagement in (intergenerational) knowledge transfer in the overall performance evaluation of employees because it might allow more deliberate management of (intergenerational) knowledge transfer. For example, organizations that acknowledge how employees engage in (intergenerational) knowledge transfer could provide more targeted incentives to ensure (intergenerational) knowledge transfer. Given that performance evaluations are often linked to pay rise and training opportunities of employees (DeNisi & Murphy, 2017), employees may also benefit from (intergenerational) knowledge transfer being associated with their performance evaluation because they can actively enhance their performance evaluation by participating in knowledge transfer.

Despite the advantages, it may also be complex to incorporate (intergenerational) knowledge transfer in the performance evaluation of employees. Knowledge transfer in general, as well as intergenerational knowledge transfer in particular, is difficult to observe, not easily quantifiable, and thereby, we argue that it might be susceptible to many influencing factors. In particular, we have identified two factors that may influence the performance evaluation of employees associated with their engagement in intergenerational knowledge transfer, namely, the object itself that is being evaluated[22], i.e., the type of knowledge transfer employees engage in and the individual characteristics of the evaluating actor (DeNisi & Murphy, 2017).

---

[22] While scholars have explored the object itself that was rated, they have mainly explored the choice of rating scale (DeNisi & Murphy, 2017) and not necessarily, what we refer to, the type of behavior employees perform and whether that behavior may contribute to higher or lower performance evaluations.

Engagement in intergenerational knowledge transfer

The organizational theory of age effects (Lawrence, 1987) offers a theoretical framework for conceptualizing how characteristics of the object itself, i.e., how employees' participation in intergenerational knowledge transfer may be associated with their performance evaluation. The theory of age effects links age with the behavior of employees and proposes that within organizations, implicit organizational timetables of career developments exist (Neugarten et al., 1965). These implicit organizational timetables suggest that there is an order in which employees should achieve career levels (Lawrence, 1984). For instance, younger employees should be subordinates, and older employees should be supervisors (Kunze & Menges, 2017). Further, the theory suggests that age norms, i.e., "widely shared judgments of the standard or typical ages of individuals holding a role or status" (Lawrence, 1988: 309–310), influence how employees' behavior in a work environment is perceived and evaluated. Their behavior could be perceived as either age-appropriate or age-inappropriate (Lawrence, 1996). For example, if an older employee dresses casually in the office, his/her behavior may be perceived as more age-inappropriate than it would have been the case for a younger employee. Moreover, the theory of age effects posits that an employee who deviates from age norms by performing age-inappropriate behavior causes negative reactions, such as mocking comments (Lawrence, 1996).

Applying the theory of age effects to intergenerational knowledge transfer, we propose that certain types of knowledge transfer could be classified as age-appropriate and age-inappropriate. In particular, this study conceptualizes *age-appropriate intergenerational knowledge transfer* as knowledge sharing by older employees and knowledge seeking by younger employees. Burmeister and colleagues (2018a) have provided empirical support for this assumption. By implementing a vignette study, they have documented that older employees are perceived to have a higher motivation to share knowledge, while younger employees are perceived to have a higher ability and motivation to receive knowledge. These results may be explained by the higher tenure of older employees that is likely to be interrelated with higher levels of expertise and higher hierarchical positions (Neugarten et al., 1965; Pelled et al., 1999). Possessing more knowledge could potentially result in more knowledge sharing. Also, older employees express higher levels of generativity motives — i.e., the need to provide for the next generation (McAdams et al., 1993; McAdams & De St. Aubin, 1992) — that may lead to knowledge sharing. Thus, because knowledge sharing by older employees may be viewed as the norm in organizations, knowledge sharing by older employees may be regarded as age-appropriate knowledge transfer within intergenerational relationships.

For younger employees, knowledge seeking may be viewed as the norm because implicit timetables entail that younger employees are still in a learning phase (Leonard, Fuller, & Unwin, 2018). This assumption is reflected in the formally appointed roles of younger employees that assign them the role of knowledge seekers (Leonard et al., 2018). For example, in training programs, such as mentoring, younger employees mostly take the position of knowledge receivers (Finkelstein, Allen, & Rhoton, 2003). And given that members of organizations may tend to accept that younger employees seek knowledge frequently (Schmidt & Muehlfeld, 2017), we posit that knowledge seeking by younger employees appears to constitute age-appropriate knowledge transfer.

In contrast, we propose that *age-inappropriate intergenerational knowledge transfer* can be viewed to represent knowledge seeking by older employees and knowledge sharing by younger employees. Implicit timetables suggest a linear career progression, implying that older employees should have completed their education (Lawrence, 1984). Indeed, older employees starting a new career is still seen as uncommon (Leonard et al., 2018). In that sense, training opportunities, which inherently involve knowledge receiving, are perceived as less appropriate for older employees than for younger employees (Dedrick & Dobbins, 1991).

In addition, studies on leader-subordinate relationships, in which the leader is younger than the subordinates (e.g., Triana et al., 2017), provide empirical evidence that knowledge sharing by younger employees may be perceived as age-inappropriate. Scholars have found that younger employees engender harmful outcomes when they are in a position where they frequently share knowledge with older employees. For example, Kunze and Menges (2017) have explored the age difference in supervisory relationships. They have found that when the supervisor is younger than the workforce, the workforce experiences negative emotions. The negative emotions are experienced even more frequently, the larger the age difference between the supervisor and the workforce is. Also, Collins and colleagues (2009) have explored the age difference in the supervisory relationship and have, among other aspects, found that older employees expect less effective leadership behaviors from their younger supervisors in contrast to younger employees with younger supervisors. The empirical results indicate that knowledge sharing by younger employees toward older employees may trigger adverse reactions among those who observe this behavior.

These results are in line with the theory of age effects that posits that age-inappropriate behavior may cause undesirable reactions of bystanders (Lawrence, 1988, 1996). In particular, in the context of this research, we argue that age-inappropriate intergenerational knowledge transfer may cause negative reactions and that such a negative reaction could imply a lower performance evaluation. Therefore, combining these arguments, we propose that employees who engage in age-inappropriate intergenerational knowledge transfer (i.e., knowledge sharing by younger employees and knowledge seeking by older employees) may receive a lower performance evaluation than employees who engage in age-appropriate intergenerational knowledge transfer (i.e., knowledge sharing by older employees and knowledge seeking by younger employee).

H1: The performance of employees engaging in age-appropriate intergenerational knowledge transfer is evaluated higher than the performance of employees engaging in age-inappropriate intergenerational knowledge transfer.

Influence of rater characteristics

The theory of age effects is well suited to expound on how the object itself that is being rated may be linked to the performance evaluation of employees engaging in intergenerational knowledge transfer. However, it does not account for individual differences between the evaluating actors and how these differences may impact the performance evaluation they provide. From related studies, we know that the individual characteristics of raters, such as demographic features (e.g., Jonnergård, Stafsudd, & Elg, 2010), and mindsets (e.g., Bauer & Baltes, 2002), may influence how they evaluate the performance of employees. Therefore, to account for the interpersonal heterogeneity among raters, it is necessary to additionally draw on a complementary theoretical framework that addresses these issues. Given the research focus on intergenerational knowledge transfer, the CEM (Van Knippenberg et al., 2004) appears to be a suitable conceptual framework to expound on that relationship.

The CEM, in general, proposes that diversity may result in positive and negative outcomes (Van Knippenberg et al., 2004; Van Knippenberg et al., 2007). When employees view diversity as positive for the group and its outcome, the process occurring is generally referred to as information elaboration processes. When this occurs, outcomes tend to be positive. In particular, diverse groups are believed to possess a broader range of knowledge and skills they may exchange, that in turn, may lead to higher work performance and creativity (Roberge & Van Dick, 2010; Van Knippenberg et al., 2004). In contrast, when employees group themselves and others into social groups, the process occurring is generally referred to as social categorization processes (Van Knippenberg et al., 2007). When this occurs, outcomes tend to be negative because employees who belong to the other category, the out-group, tend to be devalued (Tajfel & Turner, 1986; Turner, 1987), and often stereotyped and discriminated (Boehm, Dwertmann, Kunze, Michaelis, Parks, & McDonald, 2014; Sprinkle & Urick, 2018).

Whether information elaboration processes or social categorization processes are stimulated among diverse employees, depends on the conditions under which the interaction among diverse employees takes place, as suggested by the CEM (Van Knippenberg et al., 2004; Van Knippenberg et al., 2007). Conditions include, for example, the autonomy of employees and diversity mindsets (Van Knippenberg et al., 2004; Van Knieppenberg et al., 2007; Kearney & Voelpel, 2012). Prior research has suggested that diversity mindsets, in particular, appear to have a substantial impact on whether diversity leads to positive or negative outcomes because they may elicit both social categorization processes and information elaboration processes (Homan et al., 2007; Kearney & Voelpel, 2012). In other words, individuals who hold more positive diversity mindsets may also respond more positively to diversity in contrast to individuals who hold more negative diversity mindsets. Building on the CEM, this study investigates the impact of diversity mindsets on the performance evaluation of employees engaging in intergenerational knowledge transfer[23] by explicitly addressing positive beliefs about age diversity and generational stereotypes as two important types of diversity mindsets.

---

[23] Moreover, regarding the relationship between diversity mindsets and the performance evaluation of employees engaging in intergenerational knowledge transfer, this study does not explicitly differentiate between age-appropriate vs. age-inappropriate intergenerational knowledge transfer but captures intergenerational knowledge transfer in general. This assumption can be explained by the very nature of diversity mindsets that considers and compares the attitudes towards diverse employees vs. heterogeneous employees, instead of age-appropriate behavior within the context of diverse encounters vs. age-inappropriate behavior within the context of diverse encounters (Van Knippenberg et al., 2007). Still, given the paucity of direct prior evidence on this relationship, our assumptions remain exploratory.

Positive beliefs about age diversity

Previous studies have suggested that younger and older employees possess different types of knowledge. For example, younger employees have been argued to be more familiar with the latest technology (Prensky, 2001), while older employees have been argued to have accumulated valuable social knowledge (Gerpott et al., 2017). Positive beliefs about age diversity[24] refer to the beliefs of whether these differences (in knowledge but also in general) between younger and older employees are perceived as either beneficial or adverse for teams and their performance (Ellwart et al., 2013; Van Dick et al., 2008). Holding positive beliefs about age diversity may elicit information elaboration processes within diverse groups, because employees who believe in the positive effects of diversity may be more likely to exploit the capabilities of all involved employees (Homan et al., 2007). That in turn, may lead to superior performance at the employee level (Gellert & Schalk, 2012). In contrast, holding more negative beliefs about age diversity may stimulate social categorization processes, because employees tend to perceive diversity to be detrimental to the group performance. Thus, they may experience their interaction with diverse employees as rather negative (Kearney et al., 2009) and may less endeavor to exploit all resources. Consequently, this might lead to lower performance at the employee and group level.

And indeed, scholars from related research streams have provided empirical support that positive beliefs about diversity (and general, and not necessarily linked to age diversity) are associated with having experienced more frequent and positive interaction with employees that are diverse. For example, Ellwart and colleagues (2013) have documented that more positive beliefs about age diversity lead to more frequent participation in intergenerational knowledge transfer. Another example is an experimental study by Homan and colleagues (2007) who have found that diverse groups with positive diversity beliefs showed better group performance than groups with so-called pro similarity beliefs (i.e., groups that believed that similarity is better for the group). Although scholars have previously provided valuable insights into the relationship between beliefs about diversity and participation in intergenerational knowledge transfer (Ellwart et al., 2013) and the relationship between beliefs about diversity and the performance of diverse groups (Homan et al., 2007), it remains untested to date whether positive beliefs about age diversity could also predict a higher performance evaluation of employees engaging in intergenerational knowledge transfer.

---

[24] We follow the approach of Ellwart and colleagues (2013) to apply the term “positive beliefs about age diversity”. However, it is necessary to note that this variable is measured on a continuum where lower parameters reflect less positive beliefs.

By building on the definition of positive beliefs about age diversity that suggests that raters with positive beliefs about age diversity generally believe that diverse groups perform well, we argue that these beliefs may also apply to the performance evaluation of employees engaging in intergenerational knowledge transfer. Employees with more positive beliefs about age diversity may view diversity in general as beneficial to groups and group performance. Given that intergenerational knowledge transfer inherently refers to interaction between age-diverse employees, evaluating actors with more positive beliefs about age diversity may also believe that participation in intergenerational knowledge transfer leads to superior performance. Therefore, we hypothesize that positive beliefs about age diversity held by the evaluating actor are positively related to the performance evaluation of employees engaging in intergenerational knowledge transfer.

H2: Positive beliefs about age diversity held by the rater are positively related to the performance evaluation of employees engaging in intergenerational knowledge transfer.

Generational stereotypes

Generational stereotypes[25], i.e., views individuals have about characteristics, attributes and behaviors of members of the other age group (Abrams et al., 2006; Hilton & von Hippel, 1996), have been found to be a pervasive element in organizations (Hassell & Perrewé, 1995). Many prior studies have pointed out the harmful consequences of stereotypes in the workplace. For example, one research stream has documented that *being confronted with (generational) stereotypes* decreases relevant workplace attitudes, such as affective commitment (Rabl & Triana, 2013; Snape & Redman, 2003) and job satisfaction (McDonald & Levy, 2016; Redman & Snape, 2006). In turn, scholars have found that these attitudes are important drivers of organizational extra-role behavior, of which knowledge transfer is an example (De Vries et al., 2006; Martin-Perez & Martin-Cruz, 2015; Matzler et al., 2011). Therefore, being confronted with generational stereotypes may indirectly reduce participation in intergenerational knowledge transfer by reducing antecedents relevant to knowledge transfer.

---

[25] The definition of stereotypes does not involve behavioral actions against employees from the other age group. Behavioral actions against individuals from the out-group refer to discrimination (Goldman, Gutek, Stein, & Lewis, 2006). However, previous studies have not consistently differentiated between these terms (Chiu, Chan, Snape, & Redman, 2001). Also, scholars have suggested that stereotypes and discrimination are interrelated (Chung & Park, 2018). Therefore, this study includes literature both on stereotypes and discrimination.

Another research stream has explored the consequences of *having (generational) stereotypes*. For example, scholars have contended that having generational stereotypes may reduce intergenerational knowledge transfer (e.g., Schmidt & Muehlfeld, 2017). Holding stereotypes about individuals who belong to a different age group inherently implies distrust in the ability and competence of colleagues because of their age (King & Bryant, 2016). Given that trust in the competence and ability of colleagues was argued to be a predictor of knowledge transfer (Holste & Fields, 2010), an employee who holds generational stereotypes might be reluctant to engage in intergenerational knowledge transfer.

Moreover, other scholars have suggested that *having stereotypes held by evaluating actors* might also affect the performance evaluation they provide for employees that belong to the category against they have stereotypes. Yet, these scholars have investigated the relationship between having stereotypes and performance evaluations for other diversity categories than age (e.g., gender). For example, Bauer and Baltes (2002) have explored the relationship between gender stereotypes and the performance evaluation of women using a vignette study. They found that evaluating actors provided more negative performance evaluations of women when they held strong traditional stereotypes of women. Rudolph and colleagues (2009) have investigated the impact of weight-based bias on workplace outcomes using a meta-analysis. Their results pointed out that weight-based bias led to adverse evaluative workplace outcomes, of which the performance evaluation was one aspect that has been explored. Although many prior studies have investigated the impact of stereotypes on the performance evaluation of employees (e.g., Bauer & Baltes, 2002), it is striking that no prior study has explicitly investigated how generational stereotypes could be related to the performance evaluation of employees who participate in intergenerational knowledge transfer.

Overall, prior literature has provided support for the link between holding (generational) stereotypes and engagement in intergenerational knowledge transfer, as well as for the link between holding stereotypes and the performance evaluation of employees. Thereby, this study integrates both literature streams and suggests a link between holding generational stereotypes and the performance evaluation of employees being associated with intergenerational knowledge transfer. Therefore, this study hypothesizes:

H3: Generational stereotypes held by the rater are negatively related to the performance evaluation of employees engaging in intergenerational knowledge transfer.

4.3 Method

Study design

This study uses an experimental vignette study with a randomized between-subject design to test the hypotheses (Aguinis & Bradley, 2014). In this type of experiment, participants receive scenarios they have to evaluate (Aguinis & Bradley, 2014). A vignette study is a research strategy that allows for evaluating fictional workplace situations that participants may not experience in their actual working life (Beham, Baierl, & Poelmans, 2014); for instance, the age structure of the company may not allow for experiencing different types of knowledge transfer. Thus, unlike the commonly accepted surveys for investigating knowledge transfer (Argote & Fahrenkopf, 2016), vignette studies provide experimental realism and evaluation of different types of knowledge transfer. Building on the literature (e.g., Kuyken et al., 2018), the vignette design consists of three different scenarios that describe intergenerational knowledge transfer. Table 6.3 in the appendix summarizes the dimensions of the vignettes.

Within the study, participants were asked to read an experimental vignette that described how two fictitious employees transfer knowledge. Based on the vignette, participants had to evaluate the performance of the two described employees, and further, provide self-reports on demographic questions, and their diversity mindsets.

The following vignette is an example: "*Mr. Mueller*[26] *(age) and Mr. Schmidt (age) work in a medium-sized enterprise in Germany. Mr. Mueller and Mr. Schmidt work in the same*

---

[26] The vignette uses the two most common surnames in Germany to reduce possible associations with surnames (Akademie der Wissenschaften und der Literatur, n.d.). The chance of having strong associations with these names is relatively small because of their frequency; most people have met various people with that name.

department and they have been working on the same project for two years. Usually, Mr. Mueller shares knowledge [type of knowledge transfer] with Mr. Schmidt. Mr. Schmidt turns to Mr. Mueller for advice [type of knowledge transfer] regarding special procedures at work."

Sample and procedures

Following previous literature (e.g., Haar, Russo, Suñe, & Ollier-Malaterre, 2014; Michel, Bosch, & Rexroth, 2014), this study has applied a snowball procedure combined with a randomized online distribution in Germany. In total, 169 individuals participated in the study. For each vignette, between 49 and 61 participants evaluated the performance of the two described employees. Of the participants, 61.5% were female, and 38.5% were male. Participants were on average 30.81 years old (s.d. = 11.46). Of the participants were 51.5% employees, 42.6% students, 1.8% trainees and 3.6% had no current occupation (including 1.8% pensioners), and 0.5% gave no information.

Measures

Participants replied to the items in German. The items were translated via back-translation procedure as suggested by Brislin (1980).

Performance evaluation. To capture performance evaluation of the two described employees, five items on a seven-point Likert scale were adapted from Conger and colleagues (2000). The original scale measured task performance of groups. We adapted the items to the described employee dyad. Participants were presented with the following instruction "Please indicate how you would evaluate the work performance of Mr. Mueller and Mr. Schmidt." Items were, for example, "Most of the tasks of Mr. Mueller and Mr. Schmidt are accomplished quickly and efficiently." Cronbach's Alpha is .88.

Generational stereotypes. To capture generational stereotypes this study used three[27] items of the lack of generational stereotypes measurement by King and colleagues (2016), measured on a seven-point Likert scale. The measurement ought to capture *lack* of generational stereotypes; however, since items have already been reverse coded, representing generational stereotypes in its original version, the items were retained as *generational stereotypes* due to the paucity of literature on *lack of generational stereotypes*. Items were, for example, “Co-workers outside my generation are not interested in making friends outside their generation.“ (reverse scored). Cronbach’s Alpha is .92.

---

[27] In the original version, the measurement consists of four items. In an early stage of research, we conducted an exploratory factor analysis (EFA) to consolidate and summarize patterns of correlations in order to avoid distorted loadings (Tabachnick & Fidell, 2014). One item of generational stereotypes and one item of positive beliefs about age diversity loaded poorly on both factors. Because there is no consensus on the criteria to use for EFA, and researchers suggested to make the cut-off decision on a case-by-case basis (Hayton, Allen, & Scarpello, 2004; Tabachnick & Fidell, 2014), we excluded one item of lack of

Positive beliefs about age diversity. Following the approach of Ellwart and colleagues (2013), this study measured positive beliefs about age diversity with two items taken from Van Knippenberg and colleagues (2007) on a seven-point Likert scale. The items were, for example, “A group like this performs better if it consists of a roughly equal number of younger and older employees.” Cronbach’s Alpha is .68[28].

Control variables. This study included three control variables. First, we controlled for the age of the respondents because prior research suggested, for example, that younger and older people may differ regarding age-related stereotypes and discriminatory behavior (e.g., Chung & Park, 2018). Participants had to report their birth year and based on that, age was calculated in years. Second, we controlled for the gender of participants, given that prior studies on performance evaluations have suggested that the gender of the rater may influence performance evaluations (e.g., Jonnergård et al., 2010). Third, we accounted for the occupation of the raters because also students participated in the survey. Since scholars have criticized research that is solely based on student samples due to external validity issues (e.g., Landers & Behrend, 2015), it was necessary to control for this factor. Participants had to report their occupation to one of the following categories: employees, self-employed, students, pensioners and no current employment, as well as an open “other field”.

---

generational stereotypes and consequently had better results for the EFA. Also, we ran a robustness check including all items of generational stereotypes and found similar parameter estimates for this hierarchical regression in comparison to the hierarchical regression that included three items of generational stereotypes. Results for the robustness check are provided in Table 6.5 in the appendix.

[28] Although some authors (e.g., McAllister & Bigley, 2002) have referred to Nunnally (1978) to suggest a minimum cut-off of .70, Lance and colleagues (2006) have argued that this commonly cited source was misquoted. Therefore, that there is no standard threshold. Further, given that Cronbach’s Alpha is sensitive to the number of items (Cortina, 1993), it is appropriate to retain positive beliefs about age diversity as a two-item measurement, despite Cronbach’s Alpha being .68.

4.4 Analysis

Descriptive statistics were initially analyzed to determine the correlations and directions of variables. Table 4.1 presents the descriptive statistics and correlations.

Table 4.1 Descriptive statistics and correlations

	Variable	M	s.d.	1	2	3	4	5
1	Age	30.81	11.46					
2	Gender (f)	61.5	n.a.	.09				
3	Occupation	n.a.	n.a.	-.45***	-.11			
4	Positive beliefs about age diversity	5.22	1.11	.05	.05	-.16**		
5	Generational stereotypes	3.66	1.42	-.13	-.03	.09	.34***	
Dependent Variable								
6	Performance evaluation							
	IntKT (total)	3.47	.86	.06	-.03	-.10	.23**	-.16*
	IntKT (appr)	3.45	.85	.06	.09	-.12	.18	-.00
	IntKT (inappr.)	3.14	.89	.26	-.16	-.17	.28	-.32*

Notes: Intergenerational knowledge transfer (IntKT), age-appropriate (appr.), age-inappropriate (inappr.), not applicable (n.a.); Mean (M); standard deviation (s.d.).
N = 169.
* *p* < .05; ** *p* < .01; *** *p* < .001.

4.5 Results

A one-way analysis of covariance (ANCOVA) was conducted to test *H1*, controlling for age, gender, and occupation. Table 4.2 and Figure 4.1 depict the results of the ANCOVA. *H1* postulated that respondents are more likely to rate the performance of employees engaging in age-appropriate intergenerational knowledge transfer higher than of employees engaging in age-inappropriate intergenerational knowledge transfer. The results were not significant for *H1*, $F(1,105) = 2.64$, $p = .11$.

In order to test the robustness of the findings for *H1*, a bootstrap with 2,000 parameter estimates was tested for both ANCOVAs. The bootstrap coefficients showed robustness for the empirical results[29]. The coefficient was not significant for employees engaging in intergenerational knowledge transfer. Additionally, we tested an ANCOVA for all three types of intergenerational knowledge transfer, including our control variables. Table 6.6 in the appendix depicts the results. The results are significant, $F(2,163) = 7.11$, $p = .001$

---

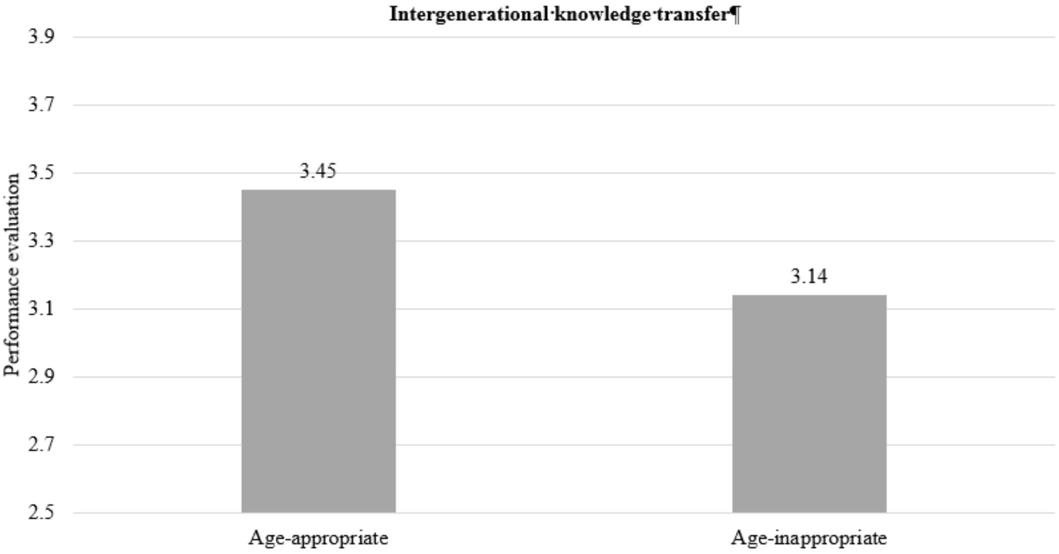
[29] The bootstrap procedure provides only limited parameter estimates for ANCOVAs that are different from the parameter estimates provided for the ANCOVAs without bootstrap. Therefore, no additional parameter estimates are provided for the bootstrap procedure.

Table 4.2 Means and standard deviations for performance evaluation

Performance evaluation	Intergenerational knowledge transfer	
	Age-appropriate	**Age-inappropriate**
M	3.45	3.14
s.d.	.85	.89
N	61	49

Notes: Greater values indicate that performance was evaluated higher. Standard deviation (s.d.)

Figure 4.1 Means for performance evaluation by knowledge transfer type



To test the relationship between diversity mindsets held by the rater and the performance evaluation of employees engaging in intergenerational knowledge transfer, a three-stage hierarchical multiple regression analysis with performance evaluation as the dependent variable was conducted. Table 4.3 shows the results. *H2* suggested that positive beliefs about age diversity would be positively related to the performance evaluation of employees engaging in intergenerational knowledge transfer. In support of *H2,* positive beliefs about age diversity contributed significantly to the performance evaluation of employees engaging in intergenerational knowledge transfer ($ß = .19$, $p = .02$). For *H3*, the negative relationship between generational stereotypes was not significantly related to the performance evaluation of employees engaging in intergenerational knowledge transfer.

For robustness checks for *H2* and *H3*, two different methods were applied. First, a bootstrap with 2,000 parameter estimates was performed for the hierarchical regression analysis. The bootstrap coefficient provided similar results and thus, showed the robustness of the empirical results, as provided in Table 6.7 in the appendix. Second, a model with entering all independent variables at once was tested that also provided support for *H2* but not for *H3*, as shown in Table 6.8 in the appendix.

To sum up, support was found for *H1b*, *H2*, while *H1a* and *H3* are not supported.

Table 4.3 Summary of hierarchical regression analysis

	ß	**T**	**p-value**	ΔR^2	ΔF
Step 1				.01	.71
Gender	-.04	-.57	.57		
Occupation	-.10	-1.17	.24		
Age	.01	.16	.87		
Step 2				.06	2.63
Gender	-.05	-.68	.50		
Occupation	-.06	-.75	.45		
Age	.02	.25	.81		
Positive beliefs about age diversity	.22	2.88	.01		
Step 3				.07	2.33
Gender	-.05	-.68	.50		
Occupation	-.07	-.77	.44		
Age	.01	.12	.91		
Positive beliefs about age diversity	.19	2.35	.02		
Generational stereotypes	.09	1.05	.30		

Notes: N =169.

4.6 Discussion

By building on the theory of age effects and the CEM, this study has first examined whether the performance evaluation of employees participating in intergenerational knowledge transfer varies across age-appropriate and age-inappropriate knowledge transfer. Second, this study has examined how positive beliefs about age diversity and generational stereotypes might influence the performance evaluation of employees engaging in intergenerational knowledge transfer. The difference in the performance evaluation of employees engaging in age-appropriate and age-inappropriate intergenerational knowledge transfer was not empirically significant. However, we found support that all three types of intergenerational knowledge transfer significantly diff regarding the performance evaluations. In line with the CEM, the empirical results indicate that positive beliefs about age diversity lead to a higher performance evaluation of employees engaging in intergenerational knowledge transfer. However, generational stereotypes are not significantly related to the performance evaluation of employees who participate in intergenerational knowledge transfer.

Theoretical contributions

This study extends the prior literature in several ways. First, the study contributes to the knowledge transfer – performance relationship literature by investigating the performance evaluation of employees engaging in intergenerational knowledge transfer. Prior studies have demonstrated that knowledge transfer leads to higher performance at the group and organizational level (e.g., Collins & Smith, 2006; Levine & Prietula, 2012; Mesmer-Magnus & Dechurch, 2009; Srivastava et al., 2006). However, to the best of our knowledge, no prior study has explored how knowledge transfer may relate to the performance *evaluation* of employees. By focusing on the performance evaluation of employees engaging in different types of knowledge transfer, this study contributes to the knowledge transfer – performance literature.

Second, this study has demonstrated that it is essential to conceptualize knowledge transfer as a behavior that consists of knowledge sharing *and* knowledge seeking. Most prior studies have examined only knowledge sharing without including knowledge seeking (e.g., Foss et al., 2009), despite the recent debate that knowledge sharing and knowledge seeking describe two distinct activities (Burmeister et al., 2018a) because, for example, employees who seek knowledge might respond differently to antecedents than employees who share knowledge (Burmeister et al., 2018a; Schmidt & Muehlfeld, 2017). This approach to knowledge transfer is also in line with the robustness check that we performed for the first hypothesis. Even though we did not find significant results for the first hypothesis, the robustness check revealed that all three types of intergenerational knowledge transfer are statistically different regarding the performance evaluation. Given that these three types of intergenerational knowledge transfer distinguish themselves by knowledge sharing and knowledge seeking, this study acknowledges that knowledge transfer is a process that consists of knowledge sharing and knowledge seeking.

The third contribution is closely related to the second contribution. By building on the theory of age effects (Lawrence, 1988, 1996), this study introduces a framework of knowledge transfer that distinguishes between age-appropriate and age-inappropriate knowledge transfer. Given the importance of knowledge transfer for organizations (e.g., Osterloh & Frey, 2000), organizations that want to exploit the knowledge of all employees ─ because both younger and older may employees possess valuable knowledge to exchange (Gerpott et al., 2017) ─ may need to acknowledge the potential implications that derive from the variety of knowledge transfer types. Given that empirical findings were not statistically significant, the findings make it appear that age norms do not really matter for the performance evaluation of employees. Nevertheless, we contend that these weak relationships may be explained by the oversimplification of age-appropriate and age-inappropriate knowledge transfer. The robustness check has demonstrated that employees engaging in different types of intergenerational knowledge transfer may receive different performance evaluations. However, the distinction of whether some types may be perceived as age-appropriate or age-inappropriate may be more nuanced. For example, could bidirectional intergenerational knowledge transfer also be perceived as age-appropriate? Also, this vignette study design does not include information about the knowledge type that is transferred. Thereby, we argue, despite the insignificant results, both researchers and managers can utilize this classification of different types of knowledge transfer (age-appropriate and age-inappropriate) to draw a more nuanced distinction of knowledge transfer and its implications.

Fourth, the study contributes to the nascent literature stream on intergenerational knowledge transfer and addresses calls to expand the intergenerational knowledge transfer domain (Harvey, 2012; Sprinkle & Urick, 2018) by examining two antecedents to the performance evaluation of employees engaging in intergenerational knowledge transfer, namely positive beliefs about age diversity and generational stereotypes. In particular, this study has found that positive beliefs about age diversity held by the rater may lead to higher a performance evaluation of employees engaging in intergenerational knowledge transfer.

However, despite the implications of the CEM that holding generational stereotypes tend to be harmful to interactions among diverse employees (e.g., Chiu, Chan, Snape, & Redman, 2001), the empirical findings did not provide empirical support that generational stereotypes are significantly related to the performance evaluation of employees engaging in intergenerational knowledge transfer. The results were presumably not significant because of a large overlap between the two constructs. Therefore, this study could demonstrate that diversity mindsets influence the performance evaluation of employees engaging in intergenerational knowledge transfer, however, these assumptions should be further explored in future studies.

Practical contributions

A number of practical implications arise from this study. For organizations, interpersonal knowledge transfer constitutes an essential resource for the performance of employees and the organization (Argote et al., 2003; Grant, 1996). Organizations that want to exploit all resources associated with employees' knowledge may want to facilitate all types of knowledge transfer, even though they might represent age-inappropriate knowledge transfer. To enhance all different types of interpersonal knowledge transfer (age-appropriate and age-inappropriate), despite the challenges associated with age-inappropriate knowledge transfer, organizations may want to acknowledge the sensitivity of age-inappropriate behavior, for example, by encouraging employees to perform age-inappropriate knowledge transfer behavior. In particular, organizations could establish reverse mentoring ─ i.e., the mentor is younger than the mentee (Chaudhuri & Ghosh, 2012; Murphy, 2012) ─ to foster intergenerational interaction.

Moreover, organizations should attempt to tackle the root of differences in the performance evaluations by changing the attitudes of employees and by improving age diversity mindsets within the organization (Chung & Park, 2018). This can be achieved through diversity training offered by the organization (Jones, King, Nelson, Geller, & Bowes-Sperry, 2013; Kunze et al., 2011). Training programs could educate employees and supervisors about the abilities of younger and older employees (Dedrick & Dobbins, 1991). The establishment of age-inclusive HR practices may also improve age diversity climate within the organization (Boehm et al., 2013), since diversity climate is associated with a reduction of workgroup discrimination (Boehm et al., 2014), increased knowledge sharing (Hofhuis et al., 2016), and organizational performance (Kunze, Boehm, & Bruch, 2013).

Limitations and future research

As with most research, several limitations of the study can be noted. First, the constraints inherent to the written, experimental vignette study design need to be considered. By definition, a vignette implies a hypothetical scenario (Beham et al., 2014). In this particular scenario, participants had to evaluate the performance of two employees engaging in knowledge transfer. For a few participants, it may have been difficult to envision and assess the described situation because they have not personally interacted with or seen the fictitious characters (Dedrick & Dobbins, 1991). Future studies could employ more realistic descriptions (Pelletier, 2012), such as video clips (Pierce et al., 2000), to resolve that issue. However, only a small number of prior studies have included video clips (Aguinis & Bradley, 2014), presumably because of the financial costs and the impact of the appearance, voice and other confounding factors that may come into place. Therefore, written vignette studies are still considered to be a suitable strategy to explore knowledge transfer (Burmeister et al., 2018a).

To not overburden respondents, research shows that study designs can only include a limited number of factors (Aguinis & Bradley, 2014; Beham et al., 2014). As suggested by previous research, it would have been interesting to integrate different types of knowledge, such as social or expert knowledge, because younger and older employees were shown to exchange different types of knowledge (Gerpott et al., 2017). Although we have argued before that knowledge seeking by older employees from younger employees may refer to age-inappropriate knowledge transfer, prior research suggests that this may not account for all types of knowledge. For example, could it be viewed as acceptable when younger employees, the so-called digital natives, share technological knowledge with older employees, the so-called digital immigrants (Prensky, 2001)? This distinction of knowledge types could also offer an explanation of why there was no significant difference between age-appropriate and age-inappropriate intergenerational knowledge transfer. Thus, future studies integrating different types of knowledge would help increase our understanding of knowledge transfer and its evaluation.

Conclusion

By building on the theory of age effects, this study has suggested that intergenerational knowledge transfer can be classified as either age-appropriate or age-inappropriate. Yet, it this study did not find empirical support for this assumption. Furthermore, by integrating the CEM, this study has demonstrated that positive beliefs about age diversity held by the rater impact the performance evaluation of employees who engage in intergenerational knowledge transfer.

5 GENERAL DISCUSSION

5.1 Summary

Building on the knowledge-based view of the firm (Grant, 1996), a key reason for organizations to facilitate knowledge transfer is to benefit from the competitive advantage of knowledge (Argote & Ingram, 2000). Because of the relevance of knowledge transfer for organizations, prior literature on knowledge transfer, in general, has already provided many valuable insights (e.g., the association between personality traits, such as the Big Five personality traits; Matzler & Mueller, 2011).

However, one aspect that has only recently been considered by scholars is the age diversity of employees as a possible influence on knowledge transfer (Burmeister & Deller, 2016). Scholars have interpreted the growing interest in this topic as a consequence of the demographic change (e.g., Kuyken et al., 2018) because the demographic change is challenging organizations to retain the knowledge of retiring employees (De Long & Davenport, 2003). Therefore, given the practical relevance, scholars have begun to zoom in on knowledge transfer between age-diverse employees (Kuyken et al., 2018) and have, for example, investigated the impact of HR-inclusive diversity climate on intergenerational knowledge transfer (Burmeister et al., 2018b). Despite the recently growing number of studies that explicitly account for the influence of the diversity of employees on knowledge transfer, scholars still view this research field as developing (e.g., Kuyken et al., 2018). Given that the literature on knowledge transfer, in general, is a well-established research field, however, the question arises whether intergenerational knowledge transfer is different from knowledge transfer between employees of a similar age. Therefore, chapter two ought to address the following research question:

RQ 1: What are the differences between intergenerational and intragenerational knowledge transfer regarding their antecedents?

Overall findings for research question 1: Chapter two combines studies from three research streams (i.e., literature on intergenerational knowledge transfer, literature on knowledge transfer that has not explicitly accounted for the influence of diversity on knowledge transfer, and literature on the diversity of employees that has not explicitly explored how diverse employees engage in knowledge transfer) to propose that intergenerational and intragenerational knowledge transfer vary regarding several antecedents. In particular, this chapter proposes that various antecedents at the interpersonal and organizational level have different effects on intergenerational and intragenerational knowledge transfer, such as age stereotypes and organizational culture. Thereby, this chapter demonstrates that intergenerational knowledge transfer is different from intragenerational knowledge transfer and thus, is a subject of its own right.

However, given that chapter two relies on a conceptual framework without empirically testing it, chapter three addresses this limitation by carrying out an empirical investigation. In particular, chapter three chooses a subset of antecedents that have been discussed in chapter two (e.g., trust) and tests these antecedents within the realm of intergenerational knowledge transfer between employees in a highly formalized face-to-face knowledge transfer setting. Thereby, chapter three addresses the following research question:

RQ 2: How do selected organizational level and interpersonal variables, namely, perceived age discrimination climate, conflict, and trust, affect participation in knowledge transfer between employees who are in a highly formalized face-to-face knowledge transfer setting?

Overall findings for research question 2: Chapter three builds on SET and SCT as theoretical frameworks to propose that within a highly formalized face-to-face knowledge transfer setting, perceived age discrimination climate increases conflicts and that conflicts reduce knowledge sharing and knowledge seeking through adversely affecting trust. These hypotheses were tested using a sample of trainers and trainees. For the trainees, results were statistically significant, with the exception of an unexpected negative effect of cognition-based trust on knowledge sharing. For trainers, perceived age discrimination climate was found to increase conflicts with trainees, as predicted. Also, affect-based trust was found to increase knowledge seeking from trainees, yet, these results were only marginally significant. The other hypotheses were not supported for trainers. Overall, this chapter first shows that variables at the organizational and interpersonal level influence knowledge transfer. Second, this chapter points out that it is relevant to conceptually distinguish between the knowledge sharer and the knowledge seeker in highly formalized face-to-face knowledge transfer settings, mainly because the knowledge sharer and knowledge seeker may respond differently to organizational and interpersonal antecedents.

While chapter three offers valuable insights into the antecedents of intergenerational knowledge transfer, it does not test for an outcome that may be associated with intergenerational knowledge transfer. Although previously scholars have provided relevant insights and demonstrated that knowledge transfer contributes to the competitive advantage of organizations (e.g., Argote & Ingram, 2000) by improving the performance at the team and organizational level (e.g., Mesmer-Magnus & Dechurch, 2009), many questions remain unaddressed. For example, past research has not clarified how intergenerational knowledge transfer, in particular, may be linked to the performance and more specifically to the performance evaluation of employees. Therefore, chapter four explores how the performance evaluation of employees may be linked to their participation in intergenerational knowledge transfer. In particular, chapter four addresses the following research questions:

RQ 3: How does the performance evaluation of employees engaging in age-appropriate and age-inappropriate intergenerational and intergenerational knowledge transfer vary and in this respect, which influence do diversity mindsets, namely positive beliefs about age diversity and generational stereotypes, held by the rater have on the performance evaluation of employees engaging in intergenerational knowledge transfer?

Overall findings for research questions 3: Chapter four draws on the theory of age effects to analyze the performance evaluation of employees participating in age-appropriate intergenerational knowledge transfer vs. employees participating in age-inappropriate intergenerational knowledge transfer. Moreover, this chapter integrates the CEM to propose that positive beliefs about age diversity and generational stereotypes held by the rater influence the performance evaluation of employees being associated with their participation in intergenerational knowledge transfer. As expected, the study of this chapter reports that positive beliefs about age diversity lead to a higher performance evaluation of employees engaging in knowledge transfer. However, unlike predicted, generational stereotypes held by the rater are unrelated to the performance evaluation. Also, this chapter did not find empirical support that employees participating in age-appropriate intergenerational knowledge transfer receive a higher performance evaluation than employees participating in age-inappropriate intergenerational knowledge transfer. Overall, this chapter shows that diversity mindsets held by the rater may influence the performance evaluation they provide for employees participating in intergenerational knowledge transfer. This chapter highlights the relevance of distinguishing between age-appropriate vs. age-inappropriate knowledge transfer conceptually. Also, it empirically demonstrates that diversity mindsets may influence the performance evaluation that is being associated with employees engaging in intergenerational knowledge transfer.

Overall, by building on prior literature, this doctoral thesis provides a conceptual framework for intergenerational knowledge transfer and empirical results on intergenerational knowledge transfer.

5.2 Theoretical implications

This doctoral thesis builds on and extends prior literature in a number of important ways. While each chapter discusses the theoretical implications separately, the following section presents the theoretical implications of the doctoral dissertation as a whole. In particular, all following theoretical implications demonstrate that in order to capture the process of knowledge transfer more adequately, a more nuanced conceptualization of knowledge transfer should be applied.

Multi-theoretical approach. Knowledge transfer in general and intergenerational knowledge transfer, in particular, is characterized by the vulnerability of employees (Mooradian et al., 2006). For example, an employee who possesses valuable knowledge might decide to hide his knowledge (Connelly, Zweig, Webster, & Trougakos, 2012). For example, an employee who generally believes that knowledge is power (Bock, Zmud, Kim, & Lee, 2005) may fear to lose his advantage in knowledge by knowledge sharing and consequently become more easily replaceable. In order to address the issues deriving from the vulnerability of knowledge transfer, scholars, such as Cabrera and Cabrera (2005), have previously suggested to include SET (Blau, 1964) as a theoretical framework. By focusing on the reciprocity in interpersonal interactions, SET provides a conceptual framework to expound on how employees might engage in knowledge transfer despite the vulnerability. Prior literature has particularly highlighted the role of trust as an important determinant of knowledge transfer that might reduce the vulnerability (Levin & Cross, 2004; Levin et al., 2006). In line with these studies, chapter two and chapter three build on SET to acknowledge the vulnerability in intergenerational knowledge transfer and discuss trust as a crucial interpersonal driver of intergenerational knowledge transfer.

Nevertheless, even though SET may conceptualize knowledge transfer as a social process, it does not account for the particular difficulties that may arise in intergenerational knowledge transfer (e.g., Burmeister et al., 2018b). For example, by suggesting various propositions, chapter two shows that intergenerational knowledge transfer is indeed “special” because it appears to be different from intragenerational knowledge transfer regarding several antecedents. Thus, in order to grasp the distinct features of intergenerational knowledge transfer, it is necessary to integrate another theory. This approach to intergenerational knowledge transfer is also in line with the propositions of many scholars who have suggested adopting a multi-theoretical approach to knowledge transfer (e.g., Watson & Hewett, 2006). Following this research direction, this doctoral thesis includes a multi-theoretical approach to intergenerational knowledge transfer across all chapters.

In particular, chapter two builds on various theoretical frameworks to derive the propositions (e.g., SET, SCT). The choice of theory (e.g., SET, SCT) depends on the specific research focus. For example, SET (Blau, 1964) is applied to explore the relationship between trust and knowledge transfer, while SCT (Tajfel & Turner, 1986; Turner, 1987) is used to predict age-related conflicts. Chapter three also builds on SET (Blau, 1964) and SCT (Turner, 1987). SET allows for explaining why employees share and seek knowledge despite the potential vulnerabilities. SCT is additionally applied to account for the potential challenges that derive from the diversity of employees. It is important to include these two theories to account both for the social processes in knowledge transfer and for the social categorization processes due to the diversity of the employees. Moreover, chapter four also relies on two theoretical frameworks, namely the theory of age effects (Lawrence, 1984; Neugarten et al., 1965) and the CEM (Van Knippenberg et al., 2004) to explore the performance evaluation of employees engaging in intergenerational knowledge transfer. Overall, all chapters demonstrate that bringing together theoretical streams can generate unique insights and allows for a more nuanced conceptualization of knowledge transfer between diverse employees.

Types of knowledge transfer. Another aspect that should be considered in order to facilitate a more nuanced conceptualization of knowledge transfer is the consideration of different types of knowledge transfer. This doctoral thesis discusses that the formality of knowledge transfer is one aspect that is important. Knowledge transfer can take place both in informal settings (e.g., a chat in the coffee kitchen) and in formal settings (e.g., in a trainee-trainer relationship). This doctoral thesis addresses both types of knowledge transfer. Chapter three explores a formalized knowledge transfer relationship that explicitly assigns knowledge transfer roles. Indeed, the empirical results highlight that it is critical to account for the assigned knowledge transfer roles because antecedents have a different impact on whether the employee has the role of the knowledge sharer or the role of the knowledge seeker. However, given that knowledge transfer may also occur in less formalized settings, chapter four explores knowledge transfer in a dyadic relationship that is not primarily defined by a high degree of formality. Interestingly, this chapter suggests that ─ although no formal knowledge transfer roles are assigned ─ there may be some implicit expectations about the outcomes of different types of knowledge transfer. Although it was not explicitly tested, the results might indicate that also for knowledge transfer relationships that are less formalized, implicit knowledge transfer roles exist. Thereby, by offering insights into both knowledge transfer in a specific formal setting and a rather informal setting, this doctoral thesis suggests that the formality of knowledge transfer may contribute to a more nuanced conceptualization of knowledge transfer.

In addition to the formality of knowledge transfer, it also provides a classification of knowledge transfer that goes beyond the conceptualization of knowledge sharing. Although prior studies in the field of knowledge transfer have exerted a significant impact on the field, often, they have only captured one type of knowledge transfer behavior, or they have implied them in knowledge transfer, used them interchangeably, or have confounded them with one another (e.g., Foss et al., 2009). However, scholars have recently acknowledged that the differentiation between knowledge sharing and knowledge seeking is particularly important for intergenerational knowledge transfer (e.g., Burmeister et al., 2018a), because the perception of who should share and who should seek knowledge may vary according to the age of employees (Burmeister et al., 2018a). This doctoral thesis addresses this limitation in prior research by incorporating a model of knowledge transfer that separates knowledge sharing from knowledge seeking across all chapters. In addition, this doctoral thesis goes one step further and documents the profound implications of this classification of different types of knowledge transfer behaviors. In particular, chapter three discusses the challenges of employees to perform a knowledge transfer behavior (i.e., knowledge sharing or knowledge seeking) that may be interpreted as role-incongruent. For example, it is striking that for trainers only affect-based trust stimulates a knowledge transfer behavior that is not congruent with their knowledge transfer role, i.e., knowledge seeking. Also, chapter four discusses how important it is to differentiate between knowledge sharing and knowledge seeking, given that these behaviors could be potentially linked to the performance evaluation of employees. Overall, all chapters distinguish knowledge sharing from knowledge seeking as a fundamental differentiation. Further, the chapters discuss the implications that derive from such a conceptualization, for example, for the performance evaluation of employees. Thereby, all chapters demonstrate that it is important to apply a nuanced conceptualization of knowledge transfer that goes beyond the conceptualization of knowledge sharing and knowledge seeking.

Age as an important determinant. Finally, this doctoral thesis emphasizes the age of employees as a relevant determinant of knowledge transfer. Scholars have recently paid attention to the age of employees who participate in knowledge transfer, presumably because of the demographic change (Burmeister & Deller, 2016). However, the empirical literature is still limited, as demonstrated by chapter two. The doctoral thesis adds to this nascent literature stream across all chapters. In particular, chapter two provides various arguments that intergenerational and intragenerational knowledge transfer are two distinct types of knowledge transfer, for example, because of social categorization processes. Therefore, chapter two suggests that intergenerational knowledge transfer is a subject in its own right that needs more empirical investigations. Chapter three explores knowledge transfer in a highly formalized face-to-face knowledge transfer setting. The age of employees plays a vital role in this type of knowledge transfer because formalized knowledge transfer roles and by that organizational hierarchy are often interrelated with age (Pelled et al., 1999). Further, on average, trainers tend to be much older than trainees (BIBB, 2015). Thereby, chapter three suggests that age difference is often intertwined with the degree of formalization of knowledge transfer relationships, and consequently, the organizational hierarchy to which employees belong. Moreover, chapter four links age with expectations about the behavior of employees and conceptualizes the linkage between age and behavior of employees as crucial determinants that may impact the overall performance evaluation of employees. Overall, all chapters in this doctoral thesis address the age of employees as a crucial determinant of knowledge transfer. Thereby, this doctoral thesis contributes to the recent literature on intergenerational knowledge transfer.

Overall, this doctoral thesis demonstrates that intergenerational knowledge transfer is a subject in its own right that has only been explored by a limited number of empirical studies. Also, it attempts to fill the research gap, as demonstrated by chapter two, by providing evidence-based insights into intergenerational knowledge transfer.

5.3 Practical implications

This doctoral thesis offers several practical implications for organizations. Because knowledge transfer contributes to a competitive advantage of organizations (Argote & Ingram, 2000), organizations take a keen interest in knowledge transfer to take place. For these benefits of knowledge transfer to accrue, organizations need to become aware of which type of knowledge transfer they want to facilitate because different types of knowledge transfer may need different types of management. For example, if organizations want to retain knowledge from retiring employees, they may offer tools of intergenerational knowledge transfer, such as traditional mentoring programs. In mentoring, mentors (often senior employees) are given responsibility for the mentees (often younger employees). During their encounters mentors have the opportunity to share tacit knowledge with their mentees (De Long & Davenport, 2003). Therefore, organizations that want to ensure knowledge transfer need to become aware of which type of knowledge transfer they may want to promote in order to be effective.

Further, this doctoral thesis demonstrates the relevance of interpersonal relationships for knowledge transfer between diverse employees. Organizations should target interpersonal relationships to ensure knowledge transfer. In particular, trust was documented to increase knowledge transfer, and therefore, organizations could implement instruments that improve interpersonal trust. For example, employees may play icebreaker games to enhance teamwork and knowledge transfer by building trust (Geister, Konradt, & Hertel, 2006). This doctoral thesis also shows that interpersonal conflicts reduce knowledge transfer through adversely affecting trust. Thus, it could also be helpful to avoid the emergence of conflicts by introducing conflict management instruments, such as training programs (Langfred, 2007). These instruments could be especially efficient if the training is cross-generational (Urick et al., 2017).

Moreover, the organizational climate appears to constitute a significant predictor of knowledge transfer (Goh, 2002). Therefore, in order to effectively implement knowledge transfer, organizations need to become aware of the role of the organizational climate because organizations may undermine their efforts to establish knowledge transfer. Notably, this doctoral thesis demonstrates that perceived age discrimination climate hampers important antecedents to knowledge transfer. One way to prevent perceived age discrimination climate could be through establishing clear guidelines that forbid age discrimination (Kunze et al., 2011); these would give employees the impression that their organization actively disapproves discrimination (Bayl-Smith & Griffin, 2014). Another way could be capturing employees' perceptions by means of employee surveys (Kunze et al., 2011). If employees report feelings of discrimination, it is crucial that the organization takes a stand. HR policies and in particular how employees perceive such practices are also important and should not be age-biased. For instance, organizations should monitor whether their recruiting and career management may be discriminatory since these areas can enable a discriminatory culture to flourish (Kunze et al., 2013). Therefore, considering the central role that knowledge transfer plays in organizations worldwide, organizations may take an interest in enabling knowledge transfer through improving interpersonal interaction and the organizational climate.

5.4 Limitations and future research

Despite several strengths, including the use of an experimental vignette study, this doctoral thesis has some limitations that should be noted. The first limitation concerns the conceptualization of knowledge transfer. Knowledge transfer is conceptualized as a process that consists of knowledge sharing and knowledge seeking. Because many prior studies have not captured both knowledge sharing and knowledge seeking (Burmeister et al., 2018a), this doctoral thesis addresses this limitation and contributes to the research stream on knowledge transfer by conceptualizing both behaviors. Nonetheless, other models of knowledge transfer have suggested a more comprehensive model of knowledge transfer. For example, Szulanski (1996) has conceptualized four phases of knowledge transfer: initiation, implementation, ramp-up, and integration[30]. By focusing only on knowledge sharing and knowledge seeking, this doctoral thesis reflects only the implementation phase of Szulanski's framework. However, although Szulanski's model may provide a more nuanced model of knowledge transfer, it is more difficult to observe the behavior of employees in all phases because, for example, participants would have to participate in the study over an extended period. Therefore, while this doctoral thesis uses a reductionist approach to knowledge transfer, it still provides significant contributions to the stream on knowledge transfer by differentiating between knowledge sharing and knowledge seeking.

---

[30] The initiation phase encompasses all events that lead to the decision to transfer knowledge, for example, the discovery of the need for knowledge. The implementation phase comprises the knowledge transfer itself. The third phase, the ramp-up, begins when the knowledge seeker uses the received knowledge. The final phase, the integration phase, comprises the time when the use of the transferred knowledge becomes routinized (Szulanski, 1996).

This doctoral thesis also shares a limitation with many organizational research studies: the use of respondents' perception instead of objective indicators and the use of cross-sectional study designs instead of longitudinal study designs. To avoid biases associated with self-report measurements, scholars could observe knowledge transfer in a laboratory (e.g., Boland, Singh, Salipante, Aram, Fay, & Kanawattanachai, 2001) or implement computer-based strategic decision-making simulations (e.g., Quigley & Tesluk, 2007). Although these experimental studies may offer more objective parameters (e.g., how often individuals share and seek knowledge), they have several disadvantages. For example, such an experimental setting would represent an artificial situation and thus, would not capture knowledge transfer in the normal course of organizational life. Also, scholars have suggested that subjective perceptions of diversity play an essential role (Harrison, Price, Gavin Joanne H., & Florey, 2002; Schneid et al., 2016), because the behavior of individuals is not only driven by objective facts and data, but also by their individual perceptions of themselves, others and their environment (Ajzen, 1991). Thereby, it is also helpful to capture the individual perception of employees by employing self-reports.

Further, all study designs build on a cross-sectional design which is not without bias because knowledge transfer is an ongoing process. Studies could measure knowledge transfer with a longitudinal design, such as ESM, to avoid biases associated with cross-sectional designs. For ESM, participants repeatedly reply to surveys over a specified period (Alliger & Williams, 1993). For example, employees may provide daily information on how often or how much they engage in knowledge transfer for a given period. Such longitudinal study designs could be fruitful in uncovering the dynamic relationship of knowledge transfer because the intensity of which employees participate in knowledge transfer may vary on a daily basis. However, given the limitations of ESM and other longitudinal study designs, such as being time-consuming and potentially leading to higher dropout rates of participants

(Alliger & Williams, 1993), cross-sectional surveys are still the most common approach to measure knowledge transfer (Argote & Fahrenkopf, 2016).

Fourth, this doctoral thesis uses only data collected in Germany. However, a recent study by Kuyken and colleagues (2018) suggested that the perception and relevance of intergenerational knowledge transfer may vary across countries. They have compared participation in and perception of intergenerational knowledge transfer in Germany and Canada, with a focus on Quebec. Their study results have documented that the view on knowledge transfer varies in both countries. In Germany, knowledge transfer is viewed from a more traditional perspective, i.e., older employees should share knowledge with younger employees. In Quebec, it is more important which specializations employee have. Thereby, although this doctoral thesis captures many facets of intergenerational knowledge transfer, generalizations to intergenerational knowledge transfer in other countries are difficult to make. Thus, future studies should attempt to explore the assumptions of this doctoral research in other countries.

Fifth, although this doctoral thesis explores knowledge transfer between diverse employees, it only captures age as a characteristic of diversity (Kearney & Voelpel, 2012). Yet, prior literature has shown that also other diversity characteristics may influence knowledge transfer (e.g., Lauring & Selmer, 2011, 2012). For example, Lauring & Selmer (2012) have documented that cultural diversity is associated with, for example, knowledge location (i.e., the extent to which team members know where knowledge resources are found; Lauring & Selmer, 2012). Therefore, future research could include cultural background as a dimension of diversity and clarify the impact of cultural background on knowledge transfer. Still, instead of providing an overview of multiple diversity characteristics, this doctoral thesis zooms in on age diversity. This approach is also in line with prior suggestions that research should consider distinct diversity attributes separately (Schneid et al., 2016).

5.5 Concluding remarks

Practical-oriented management publications have highlighted the urgency of dealing with the knowledge-related challenges associated with the demographic change (Milligan, 2014; Moore, 2016), for example, by ensuring intergenerational knowledge transfer. However, despite the practical relevance, so far, there has been comparatively little academic research on intergenerational knowledge transfer (Burmeister et al., 2016; Schmidt & Muehlfeld, 2017). Therefore, this doctoral thesis addresses this research topic by covering a multitude of antecedents of intergenerational knowledge transfer, as well as how participation in intergenerational knowledge transfer may be associated with the performance evaluation of employees. Thus, by providing theoretical and empirical insights into intergenerational knowledge transfer, this doctoral thesis documents that intergenerational knowledge transfer is a subject in its own right that constitutes an important avenue for future research.

REFERENCES

Abrams, D., Crisp, R. J., Marques, S., Fagg, E., Bedford, L., & Provias, D. 2008. Threat inoculation: Experienced and imagined intergenerational contact prevents stereotype threat effects on older people’s math performance. ***Psychology and Aging***, 23(4): 934–939.

Abrams, D., Eller, A., & Bryant, J. 2006. An age apart: The effects of intergenerational contact and stereotype threat on performance and intergroup bias. ***Psychology and Aging***, 21(4): 691–702.

Aguinis, H. 2013. ***Performance management***. Upper Saddle River, NJ: Pearson Education.

Aguinis, H., & Bradley, K. J. 2014. Best practice recommendations for designing and implementing experimental vignette methodology studies. ***Organizational Research Methods***, 17(4): 351–371.

Aguinis, H., Joo, H., & Gottfredson, R. K. 2011. Why we hate performance management - And why we should love it. ***Business Horizons***, 54(6): 503–507.

Aguinis, H., & Pierce, C. A. 2008. Enhancing the relevance of organizational behavior by embracing performance management research. ***Journal of Organizational Behavior***, 29(1): 139–145.

Ajzen, I. 1991. The theory of planned behavior. ***Organizational Behavior and Human Decision Processes***, 50(2): 179–211.

Akademie der Wissenschaften und der Literatur n.d. ***Digitales Familiennamenwörterbuch Deutschlands (DFD)***.

Alavi, M., & Leidner, D. E. 2001. Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. ***MIS Quarterly***, 25(1): 107–136.

Alliger, G., & Williams, K. 1993. Using signal-contingent experience sampling methodology to study work in the field: A discussion and illustration examining task perceptions and mood. ***Personnel Psychology***, 46(3): 525–549.

Ambrosini, V., & Bowman, C. 2001. Tacit knowledge: Some suggestions for operationalization. ***Journal of Management Studies***, 38(6): 811–829.

Anderson, J., & Gerbing, D. 1988. Structural equation modeling in practice: A review and recommended two-step approach. ***Psychological Bulletin***, 103(3): 411–423.

Argote, L., & Fahrenkopf, E. 2016. Knowledge transfer in organizations: The roles of members, tasks, tools, and networks. ***Organizational Behavior and Human Decision Processes***, 136: 146–159.

Argote, L., & Ingram, P. 2000. Knowledge transfer: A basis for competitive advantage in firms. ***Organizational Behavior and Human Decision Processes***, 82(1): 150–169.

Argote, L., Ingram, P., Levine, J. M., & Moreland, R. L. 2000. Knowledge transfer in organizations: Learning from the experience of others. ***Organizational Behavior and Human Decision Processes***, 82(1): 1–8.

Argote, L., McEvily, B., & Reagans, R. 2003. Managing knowledge in organizations: An integrative framework and review of emerging themes. ***Management Science***, 49(4): 571–582.

Arora, R. 2002. Implementing KM – A balanced score card approach. ***Journal of Knowledge Management***, 6(3): 240–249.

Arsenault, P. M. 2004. Validating generational differences. ***Leadership & Organization Development Journal***, 25(2): 124–141.

Ashworth, M. J. 2006. Preserving knowledge legacies: Workforce aging, turnover and human resource issues in the US electric power industry. ***The International Journal of Human Resource Management***, 17(9): 1659–1688.

Bass, B. M., Waldman, D. A., Avolio, B. J., & Bebb, M. 1987. Transformational leadership and the falling dominoes effect. ***Group & Organization Management***, 12(1): 73–87.

Bauer, C. C., & Baltes, B. B. 2002. Reducing the effects of gender stereotypes on performance evaluations. ***Sex Roles***, 47(9/10): 465-476.

Bayl-Smith, P. H., & Griffin, B. 2014. Age discrimination in the workplace: Identifying as a late-career worker and its relationship with engagement and intended retirement age. ***Journal of Applied Social Psychology***, 44(9): 588–599.

Beck, V. 2014. Employers’ views of learning and training for an ageing workforce. ***Management Learning***, 45(2): 200–215.

Becton, J. B., Walker, H. J., & Jones-Farmer, A. 2014. Generational differences in workplace behavior. ***Journal of Applied Social Psychology***, 44(3): 175–189.

Beham, B., Baierl, A., & Poelmans, S. 2014. Managerial telework allowance decisions – A vignette study among German managers. ***The International Journal of Human Resource Management***, 26(11): 1385–1406.

Bell, S. T., Villado, A. J., Lukasik, M. A., Belau, L., & Briggs, A. L. 2011. Getting specific about demographic diversity variable and team performance relationships: A meta-analysis. ***Journal of Management***, 37(3): 709-743.

Ben-Menahem, S., Krogh, G. von, Erden, Z., & Schneider, A. 2016. Coordinating knowledge creation in multidisciplinary teams: Evidence from early-stage drug discovery. ***Academy of Management Journal***, 59(4): 1308–1338.

Benson, J., & Brown, M. 2011. Generations at work: Are there differences and do they matter? ***The International Journal of Human Resource Management***, 22(9): 1843–1865.

BIBB 2015. ***Datenreport zum Berufsbildungsbericht 2015***: ***Informationen und Analysen zur Entwicklung der beruflichen Bildung***, URL: https://www.bibb.de/dokumente/pdf/bibb_datenreport_2015.pdf. Accessed 28 Sept 2018.

Bieling, G., Stock, R. M., & Dorozalla, F. 2015. Coping with demographic change in job markets: How age diversity management contributes to organisational performance. ***German Journal of Human Resource Management: Zeitschrift für Personalforschung***, 29(1): 5–30.

Blau, P. M. 1964. ***Exchange and power in social life***. New York: Wiley.

Bock, G. W., Zmud, R. W., Kim, Y. G., & Lee, J. N. 2005. Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. ***MIS Quarterly***, 29(1): 87-111.

Boehm, S., Dwertmann, D., Kunze, F., Michaelis, B., Parks, K., & McDonald, D. 2014. Expanding insights on the diversity climate-performance link: The role of workgroup discrimination and group size. ***Human Resource Management***, 53(3): 379–402.

Boehm, S., Kunze, F., & Bruch, H. 2013. Spotlight on age-diversity climate: The impact of age-inclusive HR practices on firm-level outcomes. ***Personnel Psychology***: 667–704.

Boland, R. J., Singh, J., Salipante, P., Aram, J. D., Fay, S. Y., & Kanawattanachai, P. 2001. Knowledge representations and knowledge transfer. ***Academy of Management Journal***, 44(2).

Borchert, M., Röhling, T., & Heine, S. 2003. Wissensweitergabe als spieltheoretisches Problem. ***German Journal of Human Resource Management: Zeitschrift für Personalforschung***, 17(1): 37-57.

Brislin, R. 1980. Translation and content analysis of oral and written materials. In H. C. Triandis (Ed.), ***Handbook of cross-cultural psychology. Methodology***: 389–444. Boston: Allyn and Bacon.

Bristow, D., Amyx, D., Castleberry, S. B., & Cochran, J. J. 2011. A cross-generational comparison of motivational factors in a sales career among Gen-X and Gen-Y college students. ***Journal of Personal Selling & Sales Management***, 31(1): 77–85.

Browne, M., & Cudeck, R. 1993. Alternative ways of assessing model fit. In K. A. Bollen & S. J. Long (Eds.), ***Testing structural equation models***: 136–162. Newbury Park: Sage Publications.

Burmeister, A., & Deller, J. 2016. Knowledge retention from older and retiring workers: What do we know, and where do we go from here? ***Work, Aging and Retirement***, 2(2): 87–104.

Burmeister, A., Fasbender, U., & Deller, J. 2018a. Being perceived as a knowledge sender or knowledge receiver: A multistudy investigation of the effect of age on knowledge transfer. ***Journal of Occupational and Organizational Psychology***, 17(4): 351.

Burmeister, A., Van Der Heijden, B. I. J. M., Yang, J., & Deller, J. 2018b. Knowledge transfer in age-diverse co-worker dyads in China and Germany: How and when do age-inclusive human resource practices have an effect? ***Human Resource Management Journal*** (Pre-print).

Büsch, V., Dahl, S.-Å., & Dittrich, D. A. V. 2009. An empirical study of age discrimination in Norway and Germany. ***Applied Economics***, 41(5): 633–651.

Cabrera, A., Collins, W. C., & Salgado, J. F. 2006. Determinants of individual engagement in knowledge sharing. ***The International Journal of Human Resource Management***, 17(2): 245–264.

Cabrera, E., & Cabrera, A. 2005. Fostering knowledge sharing through people management practices. ***The International Journal of Human Resource Management***, 16(5): 720–735.

Calo, T. J. 2008. Talent management in the era of the aging workforce: The critical role of knowledge transfer. ***Public Personnel Management***, 37(4): 403–416.

Camelo-Ordaz, C., García-Cruz, J., Sousa-Ginel, E., & Valle-Cabrera, R. 2011. The influence of human resource management on knowledge sharing and innovation in Spain: The mediating role of affective commitment. ***The International Journal of Human Resource Management***, 22(7): 1442–1463.

Chaudhuri, S., & Ghosh, R. 2012. Reverse mentoring: A social exchange tool for keeping the boomers engaged and millennials committed. ***Human Resource Development Review***, 11(1): 55–76.

Chen, Z. 2011. The interactive effects of relationship conflict, reward, and reputation on knowledge sharing. ***Social Behavior and Personality***, 39(10): 1387–1397.

Cheung, G. W., & Rensvold, R. B. 2002. Evaluating goodness-of-fit indexes for testing measurement invariance. ***Structural Equation Modeling: A Multidisciplinary Journal***, 9(2): 233–255.

Chiu, W. C. K., Chan, A. W., Snape, E., & Redman, T. 2001. Age stereotypes and discriminatory attitudes towards older workers: An east-west comparison. ***Human Relations***, 54(5): 629–661.

Chung, S., & Park, H. 2018. How young and older people differ in discriminatory behaviour towards older people?: An explanation of the knowledge–attitude–behaviour continuum model. ***Ageing and Society***, 30: 1–22.

Cogin, J. 2012. Are generational differences in work values fact or fiction?: Multi-country evidence and implications. ***The International Journal of Human Resource Management***, 23(11): 2268–2294.

Collins, C., & Smith, K. 2006. Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. ***Academy of Management Journal***, 49(3): 544–560.

Collins, M. H., Hair, J. J. F., & Rocco, T. S. 2009. The older-worker-younger-supervisor dyad: A test of the reverse pygmalion effect. ***Human Resource Development Quarterly***, 20(1): 21–41.

Conger, J. A., Kanungo, R. N., & Menon, S. T. 2000. Charismatic leadership and follower effects. ***Journal of Organizational Behavior***, 21(7): 747–767.

Connelly, C. E., Zweig, D., Webster, J., & Trougakos, J. P. 2012. Knowledge hiding in organizations. ***Journal of Organizational Behavior***, 33(1): 64-88.

Connelly, C. E. 2014. “I’m busy (and competitive)!”: Antecedents of knowledge sharing under pressure. ***Knowledge Management Research & Practice***, 12(1): 74–85.

Cook, K. S., & Whitmeyer, J. M. 1992. Two approaches to social structure: Exchange theory and network analysis. ***Annual Review of Sociology***, 18(1): 109–127.

Cortina, J. M. 1993. What is coefficient alpha? An examination of theory and applications. ***Journal of Applied Psychology***, 78(1): 98–104.

Costa, P. T., & McCrae, R. R. 1992. Four ways five factors are basic. ***Personality and Individual Differences***, 13(6): 667–673.

Costanza, D. P., Badger, J. M., Fraser, R. L., Severt, J. B., & Gade, P. A. 2012. Generational differences in work-related attitudes: A meta-analysis. ***Journal of Business and Psychology***, 27(4): 375–394.

Cropanzano, R., & Mitchell, M. S. 2005. Social exchange theory: An interdisciplinary review. ***Journal of Management***, 31(6): 874–900.

D'Amato, A., & Herzfeldt, R. 2008. Learning orientation, organizational commitment and talent retention across generations. ***Journal of Managerial Psychology***, 23(8): 929–953.

Davenport, T. H., & Prusak, L. 1998. ***Working knowledge: How organizations manage what they know***. Boston: Harvard Business School Press.

De Dreu, C., & Weingart, L. R. 2003. Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. ***Journal of Applied Psychology***, 88(4): 741–749.

De Long, D. 2004. ***Lost knowledge***: ***Confronting the threat of an aging workforce***. Oxford: Oxford University Press.

De Long, D., & Davenport, T. H. 2003. Better practices for retaining organizational knowledge: Lessons from the leading edge. ***Employment Relations Today***, 30(3): 51–63.

De Vries, R. E., Van Den Hooff, B., & De Ridder, J. A. 2006. Explaining knowledge sharing: The role of team communication styles, job satisfaction, and performance beliefs. ***Communication Research***, 33(2): 115–135.

De Wit, F., Greer, L., & Jehn, K. 2012. The paradox of intragroup conflict: A meta-analysis. ***Journal of Applied Psychology***, 97(2): 360–390.

Dedrick, E. J., & Dobbins, G. H. 1991. The influence of subordinate age on managerial actions: An attributional analysis. ***Journal of Organizational Behavior***, 12(5): 367–377.

DeNisi, A. S., & Murphy, K. R. 2017. Performance appraisal and performance management: 100 years of progress? ***Journal of Applied Psychology***, 102(3): 421–433.

Dodd, N. G., & Ganster, D. C. 1996. The interactive effects of variety, autonomy, and feedback on attitudes and performance. ***Journal of Organizational Behavior***, 17(4): 329–347.

Drabe, D., Hauff, S., & Richter, N. F. 2015. Job satisfaction in aging workforces: An analysis of the USA, Japan and Germany. ***The International Journal of Human Resource Management***, 26(6): 783–805.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. 1986. Perceived organizational support. ***Journal of Applied Psychology***, 71(3): 500–507.

Ellwart, T., Bündgens, S., & Rack, O. 2013. Managing knowledge exchange and identification in age diverse teams. ***Journal of Managerial Psychology***, 28(7/8): 950–972.

Finkelstein, L. M., Allen, T. D., & Rhoton, L. A. 2003. An examination of the role of age in mentoring relationships. ***Group & Organization Management***, 28(2): 249–281.

Finkelstein, L. M., & Burke, M. J. 1995. Age discrimination in simulated employment contexts: An integrative analysis. ***Journal of Applied Psychology***, 80(6): 652–663.

Finkelstein, L. M., & Burke, M. J. 1998. Age stereotyping at work: The role of rater and contextual factors on evaluations of job applicants. ***The Journal of General Psychology***, 125(4): 317-345.

Finkelstein, L. M., & Farrell, S. K. 2007. An expanded view of age bias in the workplace. In K. S. Shultz & G. A. Adams (Eds.), ***Aging and work in the 21st century***: 73–108. Mahwah, NJ: Lawrence Erlbaum Associates.

Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. 2002. A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. ***Journal of Personality and Social Psychology***, 82(6): 878–902.

Fleig-Palmer, M. M., & Schoorman, F. D. 2011. Trust as a moderator of the relationship between mentoring and knowledge transfer. ***Journal of Leadership & Organizational Studies***, 18(3): 334–343.

Foss, N. J., Minbaeva, D. B., Pedersen, T., & Reinholt, M. 2009. Encouraging knowledge sharing among employees: How job design matters. ***Human Resource Management***, 48(6): 871–893.

García-Morales, V. J., Lloréns-Montes, F. J., & Verdú-Jover, A. J. 2008. The effects of transformational leadership on organizational performance through knowledge and innovation. ***British Journal of Management***, 19(4): 299–319.

Geister, S., Konradt, U., & Hertel, G. 2006. Effects of process feedback on motivation, satisfaction, and performance in virtual teams. ***Small group research***, 37(5): 459-489.

Gellert, F. J., & Schalk, R. 2012. Age-related attitudes: The influence on relationships and performance at work. ***Journal of health organization and management***, 26(1): 98–117.

Gerpott, F. H., Lehmann-Willenbrock, N., & Voelpel, S. 2017. A phase model of intergenerational learning in organizations. ***Academy of Management Learning & Education***, 16(2): 193–216.

Gerpott, F. H., & Voelpel, S. 2014. Wer lernt was von wem? Wissensaustausch in altersgemischten Lerngruppen. ***PERSONALquarterly***, 66(3): 16–21.

Goh, S. C. 2002. Managing effective knowledge transfer: An integrative framework and some practice implications. ***Journal of Knowledge Management***, 6(1): 23–30.

Goldman, B. M., Gutek, B. A., Stein, J. H., & Lewis, K. 2006. Employment discrimination in organizations: Antecedents and consequences. ***Journal of Management***, 32(6): 786–830.

Grant, R. 1996. Toward a knowledge-based theory of the firm. ***Strategic Management Journal***, 17(2): 109–122.

Gray, P. H., & Meister, D. B. 2004. Knowledge sourcing effectiveness. ***Management Science***, 50(6): 821–834.

Griffin, B., Bayl-Smith, P. H., & Hesketh, B. 2016. The longitudinal effects of perceived age discrimination on the job satisfaction and work withdrawal of older employees. ***Work, Aging and Retirement***: 1–13.

Gruenfeld, D. H., Mannix, E. A., Williams, K. Y., & Neale, M. A. 1996. Group composition and decision making: How member familiarity and information distribution affect process and performance. ***Organizational Behavior and Human Decision Processes***, 67(1): 1–15.

Haar, J. M., Russo, M., Suñe, A., & Ollier-Malaterre, A. 2014. Outcomes of work–life balance on job satisfaction, life satisfaction and mental health: A study across seven cultures. ***Journal of Vocational Behavior***, 85(3): 361–373.

Hackman, J. R., & Oldham, G. R. 1976. Motivation through the design of work: Test of a theory. ***Organizational Behavior and Human Performance***, 16(2): 250–279.

Harrison, D. A., & Klein, K. J. 2007. What’s the difference? Diversity constructs as separation, variety, or disparity in organizations. ***Academy of Management Review***, 32(4): 1199–1228.

Harrison, D. A., Price, K. H., Gavin Joanne H., & Florey, A. T. 2002. Time, teams, and task performance: Changing effects of surface- and deep-level diversity on group functioning. ***Academy of Management Journal***, 45(5): 1029–1045.

Harvey, J.-F. 2012. Managing organizational memory with intergenerational knowledge transfer. ***Journal of Knowledge Management***, 16(3): 400–417.

Harwood, J., & Williams, A. 1998. Expectations for communication with positive and negative subtypes of older adults. ***International Journal of Aging and Human Development***, 47(1): 11–33.

Hassell, B. L., & Perrewé, P. L. 1993. An examination of the relationship between older workers' perceptions of age discrimination and employee psychological states. ***Journal of Managerial Issues***, 5(1): 109–120.

Hassell, B. L., & Perrewé, P. L. 1995. An examination of beliefs about older workers: Do stereotypes still exist? ***Journal of Organizational Behavior***, 16(5): 457–468.

Hayton, J. C., Allen, D. G., & Scarpello, V. 2004. Factor retention decisions in exploratory factor analysis: A tutorial on parallel analysis. ***Organizational Research Methods***, 7(2): 191–205.

Heavey, C., & Simsek, Z. 2017. Distributed cognition in top management teams and organizational ambidexterity. ***Journal of Management***, 43(3): 919–945.

Hess, T. M., Hinson, J. T., & Statham, J. A. 2004. Explicit and implicit stereotype activation effects on memory: Do age and awareness moderate the impact of priming? ***Psychology and Aging***, 19(3): 495–505.

Hilton, J. L., & von Hippel, W. 1996. Stereotypes. ***Annual Review of Psychology***, 47(1): 237–271.

Hofhuis, J., Van Der Rijt, P., & Vlug, M. 2016. Diversity climate enhances work outcomes through trust and openness in workgroup communication. ***SpringerPlus***, 5(1): 714.

Holste, J., & Fields, D. 2010. Trust and tacit knowledge sharing and use. ***Journal of Knowledge Management***, 14(1): 128–140.

Homan, A. C., Van Knippenberg, D., Van Kleef, G. A., & Dreu, C. K. W. De 2007. Bridging faultlines by valuing diversity: Diversity beliefs, information elaboration, and performance in diverse work groups. ***The Journal of Aplied Psychology***, 92(5): 1189–1199.

Horwitz, S. K., & Horwitz, I. B. 2007. The effects of team diversity on team outcomes: A meta-analytic review of team demography. ***Journal of Management***, 33(6): 987–1015.

Hsu, M.-H., & Chang, C.-M. 2014. Examining interpersonal trust as a facilitator and uncertainty as an inhibitor of intra-organisational knowledge sharing. ***Information Systems Journal***, 24(2): 119–142.

Hu, L.-T., & Bentler, P. M. 1999. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. ***Structural Equation Modeling: A Multidisciplinary Journal***, 6(1): 1–55.

Hutchison, P., Fox, E., Laas, A. M., Matharu, J., & Urzi, S. 2010. Anxiety, outcome expectancies, and young people's willingness to engage in contact with the elderly. ***Educational Gerontology***, 36(10-11): 1008–1021.

Hwang, E., Singh, P., & Argote, L. 2015. Knowledge sharing in online communities: Learning to cross geographic and hierarchical boundaries. ***Organization Science***, 26(6): 1593–1611.

Inceoglu, I., Segers, J., & Bartram, D. 2012. Age-related differences in work motivation. ***Journal of Occupational and Organizational Psychology***, 85(2): 300–329.

Inceoglu, I., Segers, J., Bartram, D., & Vloeberghs, D. 2009. Age differences in work motivation in a sample from five northern European countries. ***Zeitschrift für Personalpsychologie***, 8(2): 59–70.

Iszatt-White, M., Kempster, S., & Carroll, B. 2017. An educator's perspective on reflexive pedagogy: Identity undoing and issues of power. ***Management Learning***, 48(5): 582–596.

Jehn, K. 1995. A multimethod examination of the benefits and detriments of intragroup conflict. ***Administrative Science Quarterly***, 40(2): 256–282.

Jehn, K., Greer, L., Levine, S., & Szulanski, G. 2008. The effects of conflict types, dimensions, and emergent states on group outcomes. ***Group Decision and Negotiation***, 17(6): 465–495.

Jehn, K., Northcraft, G., & Neale, M. 1999. Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. ***Administrative Science Quarterly***, 44(4): 741–763.

Jo, S. J., & Joo, B.-K. 2011. Knowledge sharing: The influences of learning organization culture, organizational commitment, and organizational citizenship behaviors. ***Journal of Leadership & Organizational Studies***, 18(3): 353–364.

Joe, C., Yoong, P., & Patel, K. 2013. Knowledge loss when older experts leave knowledge-intensive organisations. ***Journal of Knowledge Management***, 17(6): 913–927.

Jones, C. J., & Meredith, W. 1996. Patterns of personality change across the life span. ***Psychology and Aging***, 11(1): 57–65.

Jones, K. P., King, E. B., Nelson, J., Geller, D. S., & Bowes-Sperry, L. 2013. Beyond the business case: An ethical perspective of diversity training. ***Human Resource Management***, 52(1): 55–74.

Jonnergård, K., Stafsudd, A., & Elg, U. 2010. Performance evaluations as gender barriers in professional organizations: A study of auditing firms. ***Gender, Work & Organization***, 17(6): 721–747.

Joshi, A., Dencker, J. C., Franz, G., & Martocchio, J. 2010. Unpacking generational identities in organizations. ***Academy of Management Review***, 35(3): 392–414.

Joshi, A., & Roh, H. 2009. The role of context in work team diversity research: A meta-analytic review. ***Academy of Management Journal***, 52(3): 599–627.

Kankanhalli, A., Tan, B. C. Y., & Wei, K.-K. 2005. Contributing knowledge to electronic knowledge repositories: An empirical investigation. ***MIS Quarterly***, 29(1): 113–143.

Kaplan, R. S., & Norton, D. P. 1996. ***The balanced scorecard: Translating strategy into action***. Boston: Harvard Business Press.

Kaše, R., Paauwe, J., & Zupan, N. 2009. HR practices, interpersonal relations, and intrafirm knowledge transfer in knowledge-intensive firms: A social network perspective. ***Human Resource Management***, 48(4): 615–639.

Kearney, E., Gebert, D., & Voelpel, S. 2009. When and how diversity benefits teams: The importance of team members' need for cognition. ***Academy of Management Journal***, 52(3): 581–598.

Kearney, E., & Voelpel, S. 2012. Diversity research - What do we currently know about how to manage diverse organizational units? ***Zeitschrift für Betriebswirtschaft***, 82(S2): 3–18.

Kessler, E.-M., & Staudinger, U. M. 2007. Intergenerational potential: Effects of social interaction between older adults and adolescents. ***Psychology and Aging***, 22(4): 690–704.

King, S. P., & Bryant, F. B. 2016. The workplace intergenerational climate scale (WICS): A self-report instrument measuring ageism in the workplace. ***Journal of Organizational Behavior***, 38(1): 124-151.

Kirchner, W. K., & Dunnette, M. D. 1954. Attitudes toward older workers. ***Personnel Psychology***, 7(2): 257–265.

Kuhn, M., & Hetze, P. 2009. Knowledge transfer within teams and demographic change. In M. Kuhn & C. Ochsen (Eds.), ***Labour Markets and Demographic Change***: 148–168. Wiesbaden: VS Verlag für Sozialwissenschaften.

Kuhnert, K. W., & Lewis, P. 1987. Transactional and transformational leadership: A constructive/developmental analysis. ***Academy of Management Review***, 12(4): 648–657.

Kulik, C. T., Ryan, S., Harper, S., & George, G. 2014. Aging populations and management. ***Academy of Management Journal***, 57(4): 929–935.

Kunze, F., & Boehm, S. 2013. Research on age diversity in the workforce: Current trends and future research directions. In J. Field, R. J. Burke & C. L. Cooper (Eds.), ***Aging, work and society***: 41–59. London: Sage Publications.

Kunze, F., Boehm, S., & Bruch, H. 2011. Age diversity, age discrimination climate and performance consequences - A cross organizational study. ***Journal of Organizational Behavior***, 32(2): 264–290.

Kunze, F., Boehm, S., & Bruch, H. 2013. Organizational performance consequences of age diversity: Inspecting the role of diversity-friendly HR policies and top managers' negative age stereotypes. ***Journal of Management Studies***, 50(3): 413–442.

Kunze, F., & Menges, J. 2017. Younger supervisors, older subordinates: An organizational-level study of age differences, emotions, and performance. ***Journal of Organizational Behavior***, 38(4): 461–486.

Kuyken, K., Ebrahimi, M., & Saives, A.-L. 2018. Towards a taxonomy of intergenerational knowledge transfer practices. ***The Learning Organization***, 25(2): 81–91.

Ladd, D., & Henry, R. A. 2000. Helping coworkers and helping the organization: The role of support perceptions, exchange ideology, and conscientiousness. ***Journal of Applied Social Psychology***, 30(10): 2028–2049.

Lamont, R. A., Swift, H. J., & Abrams, D. 2015. A review and meta-analysis of age-based stereotype threat: Negative stereotypes, not facts, do the damage. ***Psychology and Aging***, 30(1): 180–193.

Lance, C. E., Butts, M. M., & Michels, L. C. 2006. The sources of four commonly reported cutoff criteria. ***Organizational Research Methods***, 9(2): 202–220.

Landers, R. N., & Behrend, T. S. 2015. An inconvenient truth: Arbitrary distinctions between organizational, mechanical turk, and other convenience samples. ***Industrial and Organizational Psychology***, 8(02): 142–164.

Langfred, C. 2007. The downside of self-management: A longitudinal study of the effects of conflict on trust, autonomy, and task interdependence in self-managing teams. ***Academy of Management Journal***, 50(4): 885–900.

Lau, R., & Cobb, A. 2010. Understanding the connections between relationship conflict and performance: The intervening roles of trust and exchange. ***Journal of Organizational Behavior***, 31(6): 898–917.

Lauring, J., & Selmer, J. 2011. Multicultural organizations: Common language, knowledge sharing and performance. ***Personnel Review***, 40(3): 324–343.

Lauring, J., & Selmer, J. 2012. Knowledge sharing in diverse organisations. ***Human Resource Management Journal***, 22(1): 89–105.

Lawrence, B. S. 1984. Age grading: The implicit organizational timetable. ***Journal of Occupational Behaviour***, 5(1): 23–35.

Lawrence, B. S. 1987. An organizational theory of age effects. In S. Bacharach & N. DiTomaso (Eds.), ***Research in the sociology of organizations***, Vol. 5: 37–71. Greenwich: JAI Press.

Lawrence, B. S. 1988. New wrinkles in the theory of age: Demography, norms, and performance ratings. ***Academy of Management Journal***, 31(2): 309–337.

Lawrence, B. S. 1996. Organizational age norms: Why is it so hard to know one when you see one? ***The Gerontological Society of America***, 36(2): 209–220.

Lee, P., Gillespie, N., Mann, L., & Wearing, A. 2010. Leadership and trust: Their effect on knowledge sharing and team performance. ***Management Learning***, 41(4): 473–491.

Lee, S., Yoo, Y., & Yun, S. 2015. Sharing my knowledge? An interactional perspective. ***Journal of Managerial Psychology***, 30(8): 986–1002.

Lefter, V., Bratianu, C., Agapie, A., Agoston, S., & Orzea, I. 2011. Intergenerational knowledge transfer in the academic environment of knowledge-based economy. ***Amfiteatru Economic***, 13(30): 392–403.

Lehmann-Willenbrock, N., Grohmann, A., & Kauffeld, S. 2011. Task and relationship conflict at work. ***European Journal of Psychological Assessment***, 27(3): 171–178.

Leiter, M. P., Jackson, N. J., & Shaughnessy, K. 2009. Contrasting burnout, turnover intention, control, value congruence and knowledge sharing between Baby Boomers and Generation X. ***Journal of Nursing Management***, 17(1): 100–109.

Leonard, P., Fuller, A., & Unwin, L. 2018. A new start? Negotiations of age and chrononormativity by older apprentices in England. ***Ageing and Society***, 38(8): 1667–1692.

Lester, S. W., Standifer, R. L., Schultz, N. J., & Windsor, J. M. 2012. Actual versus perceived generational differences at work: An empirical examination. ***Journal of Leadership & Organizational Studies***, 19(3): 341–354.

Levin, D., & Cross, R. 2004. The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. ***Management Science***, 50(11): 1477–1490.

Levin, D., Whitener, E., & Cross, R. 2006. Perceived trustworthiness of knowledge sources: The moderating impact of relationship length. ***Journal of Applied Psychology***, 91(5): 1163–1171.

Levine, S. S., & Prietula, M. J. 2012. How knowledge transfer impacts performance: A multilevel model of benefits and liabilities. ***Organization Science***, 23(6): 1748–1766.

Levy, B. R., Pilver, C., Chung, P. H., & Slade, M. D. 2014. Subliminal strengthening: Improving older individuals’ physical function over time with an implicit-age-stereotype intervention. ***Psychological Science***, 25(12): 2127–2135.

Levy, M. 2011. Knowledge retention: Minimizing organizational business loss. ***Journal of Knowledge Management***, 15(4): 582–600.

Liebowitz, J., Ayyavoo, N., Nguyen, H., Carran, D., & Simien, J. 2007. Cross-generational knowledge flows in edge organizations. ***Industrial Management & Data Systems***, 107(8): 1123–1153.

Lin, C.-P. 2007. To share or not to share: Modeling tacit knowledge sharing, its mediators and antecedents. ***Journal of Business Ethics***, 70(4): 411–428.

Lin, H.-F. 2015. Linking knowledge management orientation to balanced scorecard outcomes. ***Journal of Knowledge Management***, 19(6): 1224–1249.

Lin, S.-W., & Lo, L. Y.-S. 2015. Mechanisms to motivate knowledge sharing: Integrating the reward systems and social network perspectives. ***Journal of Knowledge Management***, 19(2): 212–235.

Liu, N.-C., & Liu, M.-S. 2011. Human resource practices and individual knowledge-sharing behavior – An empirical study for Taiwanese R&D professionals. ***The International Journal of Human Resource Management***, 22(4): 981–997.

Liu, Y., & DeFrank, R. S. 2013. Self-interest and knowledge-sharing intentions: The impacts of transformational leadership climate and HR practices. ***The International Journal of Human Resource Management***, 24(6): 1151–1164.

Lyons, S., & Kuron, L. 2013. Generational differences in the workplace: A review of the evidence and directions for future research. ***Journal of Organizational Behavior***, 35(1): 139–157.

Macdonald, J. L., & Levy, S. R. 2016. Ageism in the workplace: The role of psychosocial factors in predicting job satisfaction, commitment, and engagement. ***Journal of Social Issues***, 72(1): 169–190.

Macky, K., Wong, M., Gardiner, E., Lang, W., & Coulon, L. 2008. Generational differences in personality and motivation: Do they exist and what are the implications for the workplace? ***Journal of Managerial Psychology***, 23(8): 878–890.

Martin-Perez, V., & Martin-Cruz, N. 2015. The mediating role of affective commitment in the rewards–knowledge transfer relation. ***Journal of Knowledge Management***, 19(6): 1167–1185.

Mathieu, J. E., Heffner, T. S., Goodwin, G. F., Salas, E., & Cannon-Bowers, J. A. 2000. The influence of shared mental models on team process and performance. ***Journal of Applied Psychology***, 85(2): 273–283.

Matzler, K., & Mueller, J. 2011. Antecedents of knowledge sharing - Examining the influence of learning and performance orientation. ***Journal of Economic Psychology***, 32(3): 317–329.

Matzler, K., Renzl, B., Mooradian, T., Krogh, G. von, & Mueller, J. 2011. Personality traits, affective commitment, documentation of knowledge, and knowledge sharing. ***The International Journal of Human Resource Management***, 22(2): 296–310.

Maurer, I., Bartsch, V., & Ebers, M. 2011. The value of intra-organizational social capital: How it fosters knowledge transfer, innovation performance, and growth. ***Organization Studies***, 32(2): 157–185.

McAdams, D. P., & De St. Aubin, E. 1992. A theory of generativity and its assessment through self-report, behavioral acts, and narrative themes in autobiography. ***Journal of Personality and Social Psychology***, 62(6): 1003–1015.

McAdams, D. P., De St. Aubin, E., & Logan, R. L. 1993. Generativity among young, midlife, and older adults. ***Psychology and Aging***, 8(2): 221–230.

McAllister, D. 1995. Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. ***Academy of Management Journal***, 38(1): 24–59.

McAllister, D., & Bigley, G. 2002. Work context and the definition of self: How organizational care influences organization-based self-esteem. ***Academy of Management Journal***, 45(5): 894–904.

McNichols, D. 2010. Optimal knowledge transfer methods: A Generation X perspective. ***Journal of Knowledge Management***, 14(1): 24–37.

Mesmer-Magnus, J. R., & Dechurch, L. A. 2009. Information sharing and team performance: A meta-analysis. ***Journal of Applied Psychology***, 94(2): 535–546.

Michel, A., Bosch, C., & Rexroth, M. 2014. Mindfulness as a cognitive - emotional segmentation strategy: An intervention promoting work - life balance. ***Journal of Occupational and Organizational Psychology***, 87(4): 733–754.

Milligan, S. 2014. ***Capturing the wisdom of four generations. HRMagazine***. URL: https://www.shrm.org/publications/hrmagazine/editorialcontent/2014/1114/pages/1114-intergenerational-knowledge-transfer.aspx, Accessed 28 Sept 2018.

Minbaeva, D. B., & Pedersen, T. 2010. Governing individual knowledge-sharing behaviour. ***International Journal of Strategic Change Management***, 2(2/3): 200–222.

Mooradian, T., Renzl, B., & Matzler, K. 2006. Who trusts? Personality, trust and knowledge sharing. ***Management Learning***, 37(4): 523–540.

Moore, J. 2016. ***Part 6 - Knowledge transfer***. URL: https://www.linkedin.com/pulse/part-6-knowledge-transfer-jason-moore-mba-ms-pmp, Accessed 10 Sep 2018.

Mueller, J. 2014. A specific knowledge culture: Cultural antecedents for knowledge sharing between project teams. ***European Management Journal***, 32(2): 190–202.

Murphy, W. 2012. Reverse mentoring at work: Fostering cross-generational learning and developing millennial leaders. ***Human Resource Management***, 51(4): 549–573.

Neugarten, B. L., Moore, J. W., & Lowe, J. C. 1965. Age norms, age constraints, and adult socialization. ***The American Journal of Sociology***, 70(6): 710–717.

Noethen, D. 2011. ***Knowledge transfer in teams and its role for the prevention of knowledge loss.*** Dissertation. Jacobs University. Bremen.

Noethen, D., & Voelpel, S. 2011. Baby-Boomer-Wissen, Bye-bye?: Ein wissenschaftlicher Blick auf den intergenerationalen Wissenstransfer. ***Ökologisches Wirtschaften***, 25(2): 39–42.

Nonaka, I. 1994. A dynamic theory of organizational knowledge creation. ***Organization Science***, 5(1): 14–37.

Nonaka, I., Krogh, G. von, & Voelpel, S. 2006. Organizational knowledge creation theory: Evolutionary paths and future advances. ***Organization Studies***, 27(8): 1179–1208.

Nunnally, J. C. 1978. ***Psychometric theory***. New York: McGraw-Hill.

OECD 2014. ***Germany***: ***Keeping the edge: Competitiveness for inclusive growth.*** "Better Policies" Series. URL: https://read.oecd-ilibrary.org/economics/germany-keeping-the-edge_9789264216006-en#page1, Accessed 28 Sept 2018.

Osterloh, M., & Frey, B. S. 2000. Motivation, knowledge transfer, and organizational forms. ***Organization Science***, 11(5): 538–550.

Pelled, L., Eisenhardt, K., & Xin, K. 1999. Exploring the black box: An analysis of work group diversity, conflict, and performance. ***Administrative Science Quarterly***, 44(1): 1–28.

Pelletier, K. L. 2012. Perceptions of and reactions to leader toxicity: Do leader–follower relationships and identification with victim matter? ***The Leadership Quarterly***, 23(3): 412–424.

Pettigrew, T. F., & Tropp, L. R. 2006. A meta-analytic test of intergroup contact theory. ***Journal of Personality and Social Psychology***, 90(5): 751–783.

Pfeffer, J., & Salancik, G. R. 1978. ***The external control of organizations***: ***A resource dependence perspective***. New York, Hagerstow: Harper & Row, Publishers.

Polanyi, M. 1969. ***Personal knowledge***: ***Towards a post-critical philosophy***. London: Routledge & Kegan Paul.

Posthuma, R. A., Charles Campion, M., & Campion, M. A. 2018. A taxonomic foundation for evidence-based research on employee performance management. ***European Journal of Work and Organizational Psychology***, 27(2): 168–187.

Preacher, K., Rucker, D., & Hayes, A. 2007. Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. ***Multivariate Behavioral Research***, 42(1): 185–227.

Prensky, M. 2001. Digital natives, digital immigrants part 1. ***On the Horizon***, 9(5): 1–6.

Quigley, N. R., & Tesluk, P. E. 2007. A multilevel investigation of the motivational mechanisms underlying knowledge sharing and performance. ***Organization Science***, 18(1): 71–88.

Rabl, T. 2010. Age, discrimination, and achievement motives: A study of German employees. ***Personnel Review***, 39(4): 448–467.

Rabl, T., & Triana, M. 2013. How German employees of different ages conserve resources: Perceived age discrimination and affective organizational commitment. ***The International Journal of Human Resource Management***, 24(19): 3599–3612.

Ranjbarfard, M., Aghdasi, M., López-Sáez, P., & Emilio Navas López, J. 2014. The barriers of knowledge generation, storage, distribution and application that impede learning in gas and petroleum companies. ***Journal of Knowledge Management***, 18(3): 494–522.

Redman, T., & Snape, E. 2006. The consequences of perceived age discrimination amongst older police officers: Is social support a buffer? ***British Journal of Management***, 17(2): 167–175.

Reinholt, M., Pedersen, T., & Foss, N. J. 2011. Why a central network position isn’t enough: The role of motivation and ability for knowledge sharing in employee networks. ***Academy of Management Journal***, 54(6): 1277–1297.

Renzl, B. 2008. Trust in management and knowledge sharing: The mediating effects of fear and knowledge documentation. ***Omega***, 36(2): 206–220.

Rhodes, J., Hung, R., Lok, P., Ya-Hui Lien, B., & Wu, C.-M. 2008. Factors influencing organizational knowledge transfer: Implication for corporate performance. ***Journal of Knowledge Management***, 12(3): 84–100.

Rhodes, S. R. 1983. Age-related differences in work attitudes and behavior: A review and conceptual analysis. ***Psychological Bulletin***, 93(2): 328–367.

Richter, D. 2014. Demographic change and innovation: The ongoing challenge from the diversity of the labor force. ***Management Revue***, 25(3): 166–184.

Roberge, M.-É., & Van Dick, R. 2010. Recognizing the benefits of diversity: When and how does diversity increase group performance? ***Human Resource Management Review***, 20(4): 295–308.

Robinson, R. V., & Jackson, E. F. 2001. Is trust in others declining in America? An age-period-cohort analysis. ***Social Science Research***, 30(1): 117–145.

Ropes, D. 2013. Intergenerational learning in organizations. ***European Journal of Training and Development***, 37(8): 713–727.

Rosen, B., & Jerdee, T. H. 1977. Too old or not too old. ***Harvard Business Review***, 55(6): 97–106.

Rudolph, C. W., Wells, C. L., Weller, M. D., & Baltes, B. B. 2009. A meta-analysis of empirical studies of weight-based bias in the workplace. ***Journal of Vocational Behavior***, 74(1): 1–10.

Schaubroeck, J., Lam, S. S. K., & Cha, S. E. 2007. Embracing transformational leadership: Team values and the impact of leader behavior on team performance. ***Journal of Applied Psychology***, 92(4): 1020–1030.

Schein, E. H. 1984. Coming to a new awareness of organizational culture. ***Sloan Management Review***, 25(2): 3–16.

Schmidt, X., & Muehlfeld, K. 2017. What’s so special about intergenerational knowledge transfer? Identifying challenges of intergenerational knowledge transfer. ***Management Revue***, 28(4): 375–411.

Schneid, M., Isidor, R., Steinmetz, H., & Kabst, R. 2016. Age diversity and team outcomes: A quantitative review. ***Journal of Managerial Psychology***, 31(1): 2–17.

Schwaer, C., Biemann, T., & Voelpel, S. 2012. Antecedents of employee’s preference for knowledge-sharing tools. ***The International Journal of Human Resource Management***, 23(17): 3613–3635.

Sheng, M. L., Chang, S.-Y., Teo, T., & Lin, Y.-F. 2013. Knowledge barriers, knowledge transfer, and innovation competitive advantage in healthcare settings. ***Management Decision***, 51(3): 461–478.

Sirias, D., Karp, H. B., & Brotherton, T. 2007. Comparing the levels of individualism/collectivism between baby boomers and generation X. ***Management Research News***, 30(10): 749–761.

Smircich, L. 1983. Concepts of culture and organizational analysis. ***Administrative Science Quarterly***, 28(3): 339–358.

Smola, K. W., & Sutton, C. D. 2002. Generational differences: Revisiting generational work values for the new millennium. ***Journal of Organizational Behavior***, 23(4): 363–382.

Snape, E., & Redman, T. 2003. Too old or too young? The impact of perceived age discrimination. ***Human Resource Management Journal***, 13(1): 78–89.

Spender, J.-C. 1996. Making knowledge the basis of a dynamic theory of the firm. ***Strategic Management Journal***, 17(S2): 45–62.

Sprinkle, T. A., & Urick, M. J. 2018. Three generational issues in organizational learning. ***The Learning Organization***, 25(2): 102–112.

Srivastava, A., Bartol, K. M., & Locke, E. A. 2006. Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance. ***Academy of Management Journal***, 49(6): 1239–1251.

Starks, A. 2013. The forthcoming generational workforce transition and rethinking organizational knowledge transfer. ***Journal of Intergenerational Relationships***, 11(3): 223–237.

Steele, C. M., & Aronson, J. 1995. Stereotype threat and the intellectual test performance of African Americans. ***Journal of Personality and Social Psychology***, 69(5): 797–811.

Stock, R. 2004. Drivers of team performance: What do we know and what have we still to learn? ***Schmalenbach Business Review***, 56(3): 274–306.

Streb, C., Voelpel, S., & Leibold, M. 2009. Aging workforce management in the automobile industry: Defining the concept and its constituting elements. ***German Journal of Human Resource Management: Zeitschrift für Personalforschung***, 23(1): 8–27.

Suppiah, V., & Singh Sandhu, M. 2011. Organisational culture’s influence on tacit knowledge-sharing behaviour. ***Journal of Knowledge Management***, 15(3): 462–477.

Swart, J., Kinnie, N., Van Rossenberg, Y., & Yalabik, Z. Y. 2014. Why should I share my knowledge? A multiple foci of commitment perspective. ***Human Resource Management Journal***, 24(3): 269–289.

Swift, M. L., & Virick, M. 2013. Perceived support, knowledge tacitness, and provider knowledge sharing. ***Group & Organization Management***, 38(6): 717–742.

Swift, P., & Hwang, A. 2013. The impact of affective and cognitive trust on knowledge sharing and organizational learning. ***The Learning Organization***, 20(1): 20–37.

Szulanski, G. 1996. Exploring internal stickiness: Impediments to the transfer of best practice within the firm. ***Strategic Management Journal***, 17(2): 27–43.

Szulanski, G., Cappetta, R., & Jensen, R. 2004. When and how trustworthiness matters: Knowledge transfer and the moderating effect of casual ambiguity. ***Organization Science***, 15(5): 600–613.

Tabachnick, B., & Fidell, L. S. 2014. ***Using multivariate statistics***. Harlow: Pearson.

Tajfel, H., & Turner, J. C. 1986. The socal identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), ***Psychology of intergroup relations***: 7–24. Chicago: Nelson-Hall.

Taylor, P. E., & Walker, A. 1994. The ageing workforce. Employers' attitudes towards older people. ***Work, Employment and Society***, 8(4): 569–591.

Tempest, S. 2003. Intergenerational learning: A reciprocal knowledge development process that challenges the language of learning. ***Management Learning***, 34(2): 181–200.

Townley, B., Cooper, D. J., & Oakes, L. 2003. Performance measures and the rationalization of organizations. ***Organization Studies***, 24(7): 1045–1071.

Triana, M. D. C., & García, M. F. 2009. Valuing diversity: A group-value approach to understanding the importance of organizational efforts to support diversity. ***Journal of Organizational Behavior***, 30(7): 941–962.

Triana, M. D. C., Richard, O. C., & Yücel, İ. 2017. Status incongruence and supervisor gender as moderators of the transformational leadership to subordinate affective organizational commitment relationship. ***Personnel Psychology***, 70(2): 429–467.

Trzesniewski, K. H., & Donnellan, M. B. 2010. Rethinking "Generation Me": A study of cohort effects from 1976-2006. ***Perspectives on Psychological Science***, 5(1): 58–75.

Turner, J. 1987. ***Rediscovering the social group***: ***A self-categorization theory***. Oxford: B. Blackwell.

Twenge, J. M. 2010. A review of the empirical evidence on generational differences in work attitudes. ***Journal of Business and Psychology***, 25(2): 201–210.

Twenge, J. M., Campbell, S. M., Hoffman, B. J., & Lance, C. E. 2010. Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. ***Journal of Management***, 36(5): 1117–1142.

Urick, M. J., Hollensbe, E. C., Masterson, S. S., & Lyons, S. T. 2017. Understanding and managing intergenerational conflict: An examination of influences and strategies. ***Work, Aging and Retirement***, 3(2): 166–185.

Van Den Hooff, B., & De Ridder, J. A. 2004. Knowledge sharing in context: The influence of organizational commitment, communication climate and CMC use on knowledge sharing. ***Journal of Knowledge Management***, 8(6): 117–130.

Van Dick, R., Van Knippenberg, D., Hägele, S., Guillaume, Y. R. F., & Brodbeck, F. C. 2008. Group diversity and group identification: The moderating role of diversity beliefs. ***Human Relations***, 61(10): 1463–1492.

Van Knippenberg, D., De Dreu, C., & Homan, A. 2004. Work group diversity and group performance: An integrative model and research agenda. ***Journal of Applied Psychology***, 89(6): 1008–1022.

Van Knippenberg, D., Haslam, S. A., & Platow, M. J. 2007. Unity through diversity: Value-in-diversity beliefs, work group diversity, and group identification. ***Group Dynamics: Theory, Research, and Practice***, 11(3): 207–222.

Van Wijk, R., Jansen, J., & Lyles, M. 2008. Inter- and intra-organizational knowledge transfer: A meta-analytic review and assessment of its antecedents and consequences. ***Journal of Management Studies***, 45(4): 830–853.

Van Woerkom, M., & Sanders, K. 2010. The romance of learning from disagreement. The effect of cohesiveness and disagreement on knowledge sharing behavior and individual performance within teams. ***Journal of Business and Psychology***, 25(1): 139–149.

Vandenberg, R. 2002. Toward a further understanding of and improvement in measurement invariance methods and procedures. ***Organizational Research Methods***, 5(2): 139–158.

Vanhala, M., & Ahteela, R. 2011. The effect of HRM practices on impersonal organizational trust. ***Management Research Review***, 34(8): 869–888.

Vanhala, M., Puumalainen, K., & Blomqvist, K. 2011. Impersonal trust: The development of the construct and the scale. ***Personnel Review***, 40(4): 485–513.

Vanhala, M., & Ritala, P. 2016. HRM practices, impersonal trust and organizational innovativeness. ***Journal of Managerial Psychology***, 31(1): 95–109.

Wang, S., & Noe, R. A. 2010. Knowledge sharing: A review and directions for future research. ***Human Resource Management Review***, 20(2): 115–131.

Watson, S., & Hewett, K. 2006. A multi-theoretical model of knowledge transfer in organizations: Determinants of knowledge contribution and knowledge reuse. ***Journal of Management Studies***, 43(3): 141–173.

Wei, J., Zheng, W., & Zhang, M. 2011. Social capital and knowledge transfer: A multi-level analysis. ***Human Relations***, 64(11): 1401–1423.

Wenzelmann, F., Muehlemann, S., & Pfeifer, H. 2017. The costs of recruiting apprentices: Evidence from German workplace-level data. ***German Journal of Human Resource Management: Zeitschrift für Personalforschung***, 31(2): 1–24.

Wernerfelt, B. 1984. A resource-based view of the firm. ***Strategic Management Journal***, 5(2): 171–180.

Wilkesmann, U., & Virgillito, A. 2013. Wissenstransfer im Betriebsrat. ***Industrielle Beziehungen***, 21(2): 133–158.

Wilkesmann, U., Virgillito, A., & Wilkesmann, M. 2009a. Unterstützungsfaktoren für den Wissenstransfer im Kontext von sozialer Arbeit. ***Zeitschrift für Arbeitsforschung, Arbeitsgestaltung und Arbeitspolitik***(1): 5–18.

Wilkesmann, U., Wilkesmann, M., & Virgillito, A. 2009b. The absence of cooperation is not necessarily defection: Structural and motivational constraints of knowledge transfer in a social dilemma situation. ***Organization Studies***, 30(10): 1141–1164.

Williams, K. Y., & O'Reilly, C. A. 1998. Demography and diversity in organizations: A review of 40 years of research. ***Research in Organizational Behavior***, 20: 77–140.

Williams, R. M. 1947. ***The reduction of intergroup tensions: A survey of research on problems of ethnic, racial, and religious group relations***. New York: Social Science Research Council.

Xue, Y., Bradley, J., & Liang, H. 2011. Team climate, empowering leadership, and knowledge sharing. ***Journal of Knowledge Management***, 15(2): 299–312.

Zhang, Y., & Begley, T. M. 2011. Perceived organisational climate, knowledge transfer and innovation in China-based research and development companies. ***The International Journal of Human Resource Management***, 22(1): 34–56.

Zhao, Z. J., & Anand, J. 2009. A multilevel perspective on knowledge transfer: Evidence from the Chinese automotive industry. ***Strategic Management Journal***, 30(9): 959–983.

6 APPENDIX

TABLE OF CONTENTS FOR APPENDIX

Appendix for chapter 2 135

Appendix for chapter 3 136

- Measurements 136
- Survey for trainers 138
- Survey for trainees 156

Appendix for chapter 3 175

- Vignette design 175
- Measurements 175
- Robustness checks 176
- Survey 178

Appendix for chapter 2

Table 6.1 Summary of keywords in the literature search

Applied keywords	
Keywords related to knowledge transfer in general	“Knowledge Transfer” “Knowledge Search” “Knowledge Sharing” “Knowledge Exchange”
Keywords related to intergenerational knowledge transfer	“Intergenerational Knowledge Transfer” “Intergenerational Knowledge Search” “Intergenerational Knowledge Sharing” “Intergenerational Knowledge Exchange” “Intergenerational Learning” “Intergenerational Contact” “Intergenerational Relations” “Leaving Expert” “Generational Differences” “Older Employees” AND “Knowledge” “Generativity” AND “Knowledge” “Babyboomer” AND “Knowledge” “Intergenerational” AND “Knowledge transfer” “Intergenerational” AND “Knowledge Search” “Intergenerational” AND “Knowledge Sharing” “Intergenerational” AND “Knowledge Exchange” “Age Diversity” AND “Teams”

Appendix for chapter 3

Measurements

Table 6.2 Details on measurements

Measure	Sub-dimensions	Items for trainers (if applicable)	Items for trainees (if applicable)
Knowledge transfer	Knowledge sharing	• I show my trainee special procedures so that he[31] can learn them. • I support my trainees' efforts to gain work experience. • My trainee learns a lot by watching me on the job.	• I show my trainer special procedures so that he can learn them. • I also support my trainer to gain work experience. • Sometimes my trainer learns a lot by watching me on the job.
	Knowledge seeking	• Sometimes, I also learn by watching work results from my trainee. • Sometimes I turn to my trainee for advice regarding special procedures so that I learn them. • I learn a lot by asking my trainee sometimes. • Sometimes I learn by observing my trainee doing his job.	• My trainer supports my efforts to gain work experience. • I turn to my trainer for advice regarding special procedures so that I learn them. • I learn a lot by asking my trainer. • I learn a lot by observing my trainer doing his job.
Trust	Affect-based	• My trainee and I have a sharing relationship. We can both freely share our ideas, feelings, and hopes. • I can talk freely to my trainee about difficulties I am having at work and know that he will want to listen. • My trainee and I would both feel a sense of loss if one of us was transferred and we could no longer work together. • If I shared my problems with my trainee, I know he would respond constructively and caringly. • I would have to say that we have both made considerable emotional investments in our working relationship	• My trainer and I have a sharing relationship. We can both freely share our ideas, feelings, and hopes. • I can talk freely to my trainer about difficulties I am having at work and know that he will want to listen. • My trainer and I would both feel a sense of loss if one of us was transferred and we could no longer work together. • If I shared my problems with my trainer, I know he would respond constructively and caringly. • I would have to say that we have both made considerable emotional investments in our working relationship

---

[31] In the German version, only masculine nouns were applied.

Measure	Sub-dimensions	Items for trainers (if applicable)	Items for trainees (if applicable)
Trust	Cognition-based	• My trainee approaches his job with professionalism and dedication. • Given my trainee's track record, I see no reason to doubt his competence and preparation for the job • I can rely on my trainee not to make my job more difficult by careless work. • Most people, even those who are not close friends of my trainee, trust and respect him as a co-worker. • Other work associates of mine who must interact with my trainee consider him to be trustworthy. • If people knew more about my trainee and his background, they would be more concerned and monitor his performance more closely.	• My trainer approaches his job with professionalism and dedication. • Given my trainer's track record, I see no reason to doubt his competence and preparation for the job • I can rely on my trainer not to make my job more difficult by careless work. • Most people, even those who are not close friends of my trainer, trust and respect him as a co-worker. • Other work associates of mine who must interact with my trainer consider him to be trustworthy. • If people knew more about my trainer and his background, they would be more concerned and monitor his performance more closely.
Conflict		• How much friction is there among you and your trainee? • How much are personality conflicts evident between you and your trainee? • How much tension is there between you and your trainee? • How often do you and your trainee disagree about opinions regarding the work being done? • How frequently are there conflicts about ideas among you and your trainee? • How much conflict about the work you do is there between you and your trainee?	• How much friction is there among you and your trainer? • How much are personality conflicts evident between you and your trainer? • How much tension is there between you and your trainer? • How often do you and your trainer disagree about opinions regarding the work being done? • How frequently are there conflicts about ideas among you and your trainer? • How much conflict about the work you do is there between you and your trainer?
Perceived age discrimination climate		• Age-discriminatory behavior regarding job assignments exists in our company. • Age-discriminatory behavior regarding opportunities for individual promotion exists in our company. • Age-discriminatory behavior regarding performance evaluation exists in our company. • Age-discriminatory behavior regarding opportunities for personal and professional development of employees exists in our company. • Age-discriminatory behavior in the daily leadership of the seniors exists in our company.	

Survey for trainers

STUDIE:[32]

„KOMMUNIKATION IM AUSBILDUNGSVERHÄLTNIS“

ZIEL DER STUDIE

Das deutsche Ausbildungssystem ist ein wichtiger Pfeiler im deutschen Bildungs- und Wirtschaftssystem. Daher möchten wir die Qualität der Ausbildungen untersuchen und den Fokus auf das **kommunikative Verhältnis zwischen Auszubildenden und ihren Ausbilder/innen** im Betrieb legen.

Ziel der Studie ist es, die Kommunikation zwischen Auszubildenden und Ausbilder/innen zu untersuchen.

VERTRAULICHKEIT

Alle im Fragebogen gesammelten Antworten und Informationen werden selbstverständlich **streng vertraulich und anonymisiert** erfasst. Die anschließende statistische Auswertung erfolgt in einer aggregierten Form, die keine Rückschlüsse auf Sie als Person oder Ihr Unternehmen zulässt.

HINWEISE ZUM FRAGEBOGEN

- Die Beantwortung des Fragebogens nimmt **ca. 20 Minuten** in Anspruch.
- Für die Auswertung der Ergebnisse ist es sehr wichtig, dass Sie **alle Fragen beantworten**, auch wenn Sie sich bei der Antwort nicht ganz sicher sind. Eine ungefähre Angabe ist für uns hilfreicher als ein unvollständig ausgefüllter Fragebogen.
- Es gibt keine richtigen oder falschen Antworten. Wir bitten Sie bewusst um Ihre **persönlichen Sichtweise und Kenntnisse**.
- Bitte **lesen** Sie die Anweisungen und die folgenden Fragen **aufmerksam durch**.
- Alle Fragen sind unabhängig voneinander. Es wird nicht erwartet, dass Ihre Antworten eine logische Meinung aufweisen oder übereinstimmend sind.
- In diesem Fragebogen wird der Einfachheit halber nur die männliche Form verwendet. Die weibliche Form ist selbstverständlich immer mit eingeschlossen.

Wir danken Ihnen sehr herzlich für die Teilnahme!

Mit freundlichen Grüßen

Prof. Dr. Katrin Muehlfeld und Xenia Schmidt, M.A.

---

[32] Since we have conducted an online survey, there are layout differences between the online survey and this version of the survey.

Bitte geben Sie Ihr Alter in Jahren an.
______ Jahre

Bitte geben Sie Ihr Geschlecht an.
☐ Männlich
☐ Weiblich

Bitte geben Sie Ihren derzeitigen Familienstand an.
☐ Single
☐ Partnerschaft
☐ Verheiratet
☐ Geschieden
☐ Verwitwet

Bitten geben Sie das Land an, in dem Sie geboren wurden.
☐ Deutschland
☐ Luxemburg
☐ Türkei
☐ Russland
☐ Frankreich
☐ Sonstiges: _______________________________

Bitte geben Sie Ihren höchsten erzielten Bildungsabschluss an.
☐ Ohne Abschluss
☐ Hauptschulabschluss
☐ Mittlere Reife
☐ (Fach-)Abitur
☐ Hochschulabschluss
☐ Sonstiges: _______________________________

Welchen Beruf üben Sie derzeit aus?

____

Wie viele Beschäftigte hat Ihr Betrieb an dem Standort, an dem Sie die meiste Zeit verbringen?
☐ 1 - 9 Beschäftigte
☐ 10 - 49 Beschäftigte
☐ 50 - 249 Beschäftigte
☐ 250 Beschäftigte und mehr

Seit wann sind Sie in Ihrem jetzigen Beruf tätig?

______

Seit wann sind Sie bei Ihrem jetzigen Arbeitgeber beschäftigt?

______

Sind Sie voll berufstätig, teilzeitbeschäftigt oder geringfügig bzw. unregelmäßig erwerbstätig?
☐ Voll berufstätig (mindestens 35 Wochenstunden)
☐ Teilzeitbeschäftigt (20 bis 34 Wochenstunden)
☐ Geringfügig oder unregelmäßig erwerbstätig

Haben Sie einen unbefristeten Arbeitsvertrag oder einen befristeten Arbeitsvertrag?
☐ Unbefristeter Arbeitsvertrag
☐ Befristeter Arbeitsvertrag

Sind Sie hauptberuflich als Ausbilder tätig?
☐ Ja
☐ Nein

Seit wann sind Sie als Ausbilder in Ihrem derzeitigen Betrieb tätig? Bitte geben Sie die ungefähre Dauer in Jahren an.

______

Für wie viele Auszubildende sind Sie zurzeit zuständig?
☐ 1 Auszubilender
☐ 2 Auszubilende
☐ 3 Auszubilende
☐ 4 Auszubilende
☐ 5 Auszubilende und mehr

Wenn Sie für mehrere Auszubildende zuständig sind, wie viele sind männlich und wie viele weiblich?
☐ Männlich ___
☐ Weiblich ___

Wie hoch ist das ungefähre mittlere Alter der Auszubildenden, für die Sie zuständig sind?

______

Wie alt ist der jüngste Auszubildende, für den Sie zuständig sind?

______

Wie alt ist der älteste Auszubildende, für den Sie zuständig sind?

______

Wie häufig und auf welchen Wegen halten Sie Kontakt zu Ihrem Auszubildenden?
Hinweis: Wenn Sie für mehr als einen Auszubildenden verantwortlich sind, nehmen Sie bitte eine durchschnittliche Einordnung des Kontakts zu allen Auszubildenden vor.

	Nie	Selten	Mehrmals im Monat	Einmal in der Woche	Mehrmals in der Woche	Täglich
Insgesamt	☐	☐	☐	☐	☐	☐
Persönlich	☐	☐	☐	☐	☐	☐
Telefonisch	☐	☐	☐	☐	☐	☐
E-Mail	☐	☐	☐	☐	☐	☐
Soziale Netzwerke (z.B. Facebook)	☐	☐	☐	☐	☐	☐
Messenger (z.B. WhatsApp)	☐	☐	☐	☐	☐	☐
Sonstiges: ________________	☐	☐	☐	☐	☐	☐

Wie viel Zeit wenden Sie ungefähr pro Woche für die Betreuung eines Auszubildenden auf? Nennen Sie bitte den ungefähren Durchschnitt.

☐ Weniger als 15 Minuten
☐ 15 - 30 Minuten
☐ 31 - 60 Minuten
☐ 1 - 2 Stunden
☐ 2 - 3 Stunden
☐ 3 - 4 Stunden
☐ 4 Stunden und mehr

Welche institutionalisierten Möglichkeiten bietet Ihr Betrieb Auszubildenden neben der Berufsschule, um benötigte Kenntnisse zu erwerben?
Hinweis: Mehrfachauswahl möglich

☐ Keine, die Kenntnisse werden bei der täglichen Arbeit vermittelt
☐ Teilnahme an Schulungen (z.B. von Lieferanten oder Herstellern)
☐ Regelmäßige Einweisungen durch Vorgesetzte/Ausbilder/Kollegen
☐ Bereitstellen von Informationsmaterial (z.B. Prospekte)
☐ Sonstiges, und zwar: ___________________________________

Wie häufig und in welchem Kontext haben Sie Kontakt zu Personen ab 50 Jahren?

	Nie	Selten	Mehrmals im Monat	Einmal in der Woche	Mehrmals in der Woche	Täglich
Insgesamt	☐	☐	☐	☐	☐	☐
Familie (Kernfamilie, Partner)	☐	☐	☐	☐	☐	☐
Familie (weitläufige Verwandtschaft)	☐	☐	☐	☐	☐	☐
Freunde	☐	☐	☐	☐	☐	☐
Bekannte	☐	☐	☐	☐	☐	☐
Sportverein	☐	☐	☐	☐	☐	☐
Ehrenamt	☐	☐	☐	☐	☐	☐
Sonstiges: ________________	☐	☐	☐	☐	☐	☐

Inwieweit stimmen Sie den nachfolgenden Aussagen im Hinblick auf Ihr Unternehmen zu?

	Stimme überhaupt nicht zu 1	Stimme nicht zu 2	Stimme eher nicht zu 3	Weder noch 4	Stimme eher zu 5	Stimme zu 6	Stimme voll zu 7
Die Menschen in meinem Unternehmen teilen dieselben Ziele und Visionen.	☐	☐	☐	☐	☐	☐	☐
Die Menschen in meiner Abteilung verfolgen mit Begeisterung die gemeinsamen Ziele und die Missionen des gesamten Unternehmens.	☐	☐	☐	☐	☐	☐	☐

Im Folgenden geht es um das Ausbildungsverhältnis zwischen Ihnen und Ihrem Auszubildenden. Inwieweit treffen diese Aussagen auf Ihr Verhältnis zu?
Hinweis: Wenn Sie für mehr als einen Auszubildenden verantwortlich sind, nehmen Sie bitte eine durchschnittliche Einordnung des Kontakts zu allen Auszubildenden vor.

	Trifft gar nicht zu 1	Trifft wenig zu 2	Trifft teils-teils zu 3	Trifft ziemlich zu 4	Trifft völlig zu 5
Ich zeige meinem Auszubildenden bestimmte Vorgänge, damit er sie erlernt.	☐	☐	☐	☐	☐
Ich unterstütze meinen Auszubildenden dabei, eigene Arbeitserfahrungen zu sammeln.	☐	☐	☐	☐	☐
Mein Auszubildender lernt eine Menge dadurch, indem er sich Sachen von mir abschaut.	☐	☐	☐	☐	☐
Manchmal lerne ich auch dadurch, indem ich mir Sachen von meinem Auszubildenden anschaue.	☐	☐	☐	☐	☐
Ich lasse mir auch hin und wieder bestimmte Vorgänge von meinem Auszubildenden zeigen, damit ich sie erlerne.	☐	☐	☐	☐	☐
Ich lerne auch hin und wieder dadurch, dass ich meinen Auszubildenden frage.	☐	☐	☐	☐	☐
Ich lerne auch manchmal dadurch, dass ich meinen Auszubildenden bei der Erledigung seiner Arbeit beobachte.	☐	☐	☐	☐	☐

Im Folgenden geht es zuerst um das Ausbildungsverhältnis zwischen Ihnen und Ihrem Auszubildenden. Anschließend beziehen sich die Fragen auf Sie und Ihre Kollegen. Bitte geben Sie an, wie häufig Sie die jeweiligen Tätigkeiten durchschnittlich ausgeübt haben.
Hinweis: Wenn Sie für mehr als einen Auszubildenden verantwortlich sind, nehmen Sie bitte eine durchschnittliche Einordnung des Kontakts zu allen Auszubildenden vor.

	Nie 1	Selten 2	Mehrmals im Monat 3	Einmal in der Woche 4	Mehrmals in der Woche 5	Täglich 6
Wie häufig haben Sie in der letzten Zeit Fachwissen mit Ihrem Auszubildenden geteilt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Erfahrungen mit Ihrem Auszubildenden geteilt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Ihren Auszubildenden nach Fachwissen gefragt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Ihren Auszubildenden nach Erfahrungen gefragt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Fachwissen mit Ihren Kollegen geteilt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Erfahrungen mit Ihren Kollegen geteilt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Ihre Kollegen nach Fachwissen gefragt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Ihre Kollegen nach Erfahrungen gefragt?	☐	☐	☐	☐	☐	☐

Im Folgenden geht es um das Ausbildungsverhältnis zwischen Ihnen und Ihrem Auszubildenden. Inwieweit treffen diese Aussagen auf Ihr Verhältnis zu?
Hinweis: Wenn Sie für mehr als einen Auszubildenden verantwortlich sind, nehmen Sie bitte eine durchschnittliche Einordnung des Kontakts zu allen Auszubildenden vor.

	Trifft gar nicht zu 1	Trifft wenig zu 2	Trifft teils-teils zu 3	Trifft ziemlich zu 4	Trifft völlig zu 5
Wenn ich einen Fehler in diesem Job mache, wird er mir oft vorgehalten.	☐	☐	☐	☐	☐
Es ist schwierig, andere in diesem Betrieb um Hilfe zu bitten.	☐	☐	☐	☐	☐
Mein Auszubildender ermutigt mich oft, neue Aufgaben anzugehen oder Tätigkeiten zu erlernen, die ich zuvor noch nie gemacht habe.	☐	☐	☐	☐	☐
Wenn ich darüber nachdenken würde, diesen Betrieb zu verlassen und einen besseren Job woanders anzunehmen, würde ich mit meinem Auszubildenden darüber reden.	☐	☐	☐	☐	☐
Wenn ich ein Problem in diesem Betrieb hätte, könnte ich mich darauf verlassen, dass mein Auszubildender mir beistehen würde.	☐	☐	☐	☐	☐
Wenn ich meinem Auszubildenden Probleme schildere, dann wirkt er nicht besonders interessiert, mir bei der Lösung zu helfen.	☐	☐	☐	☐	☐

Im Folgenden geht es um das Ausbildungsverhältnis zwischen Ihnen und Ihrem Auszubildenden. Inwieweit treffen diese Aussagen auf Ihr Verhältnis zu?
Hinweis: Wenn Sie für mehr als einen Auszubildenden verantwortlich sind, nehmen Sie bitte eine durchschnittliche Einordnung des Kontakts zu allen Auszubildenden vor.

	Stimme über-haupt nicht zu 1	Stimme nicht zu 2	Stimme eher nicht zu 3	Weder noch 4	Stimme eher zu 5	Stimme zu 6	Stimme voll zu 7
Mein Auszubildender und ich tauschen uns regelmäßig aus. Wir können Ideen, Gefühle und Hoffnungen offen miteinander teilen.	☐	☐	☐	☐	☐	☐	☐
Ich kann mit meinem Auszubildenden frei über Schwierigkeiten, die ich auf der Arbeit habe, sprechen und weiß, dass er zuhören wird.	☐	☐	☐	☐	☐	☐	☐
Mein Auszubildender und ich würden es beide als Verlust empfinden, wenn einer von uns versetzt würde und wir so nicht mehr länger zusammen arbeiten könnten.	☐	☐	☐	☐	☐	☐	☐
Wenn ich meine Probleme meinem Auszubildenden gegenüber mitteilen würde, wüsste ich, dass er konstruktiv und mitfühlend damit umgehen würde.	☐	☐	☐	☐	☐	☐	☐
Ich würde schon sagen, dass wir beide in diese Arbeitsbeziehung emotional viel investiert haben.	☐	☐	☐	☐	☐	☐	☐
Mein Auszubildender verfolgt seinen Job mit Professionalität und Engagement.	☐	☐	☐	☐	☐	☐	☐
Angesichts der Erfolgsbilanz meines Auszubildenden, habe ich keinen Zweifel an seiner Kompetenz und Befähigung für diesen Job.	☐	☐	☐	☐	☐	☐	☐
Ich kann meinem Auszubildenden vertrauen, dass er meinen Job nicht durch unachtsame Arbeit erschwert.	☐	☐	☐	☐	☐	☐	☐
Die meisten Menschen vertrauen und respektieren meinen Auszubildenden als Kollegen, auch wenn sie nicht mit ihm befreundet sind.	☐	☐	☐	☐	☐	☐	☐
Andere Kollegen von mir, die mit meinem Auszubildenden tun haben, halten ihn für vertrauenswürdig.	☐	☐	☐	☐	☐	☐	☐
Wenn andere Menschen mehr über meinen Auszubildenden und seinen Hintergrund wüssten, wären sie besorgter und würden seine Leistung stärker kontrollieren.	☐	☐	☐	☐	☐	☐	☐

Im Folgenden geht es um Ihre Ansicht zu Ihrer Arbeit. Inwieweit stimmen Sie den nachfolgenden Aussagen zu?

	Stimme überhaupt nicht zu 1	Stimme nicht zu 2	Weder noch 3	Stimme zu 4	Stimme voll zu 5
Ich fühle mich ziemlich zufrieden mit meiner derzeitigen Arbeit.	☐	☐	☐	☐	☐
An den meisten Tagen bin ich von meiner Arbeit begeistert.	☐	☐	☐	☐	☐
Es scheint jeden Tag so, als ob meine Arbeit nie enden würde.	☐	☐	☐	☐	☐
Ich empfinde Freude an meiner Arbeit.	☐	☐	☐	☐	☐
Ich sehe meine Arbeit als eher unerfreulich an.	☐	☐	☐	☐	☐

Im Folgenden geht es um das Ausbildungsverhältnis zwischen Ihnen und Ihrem Auszubildenden. Inwieweit treffen diese Aussagen auf Ihr Verhältnis zu?
Hinweis: Wenn Sie für mehr als einen Auszubildenden verantwortlich sind, nehmen Sie bitte eine durchschnittliche Einordnung des Kontakts zu allen Auszubildenden vor.

	Keine / Nie 1	Wenig / Selten 2	Mittel 3	Viel / Häufig 4	Sehr viel / Sehr häufig 5
Wie viele Reibereien gibt es zwischen Ihnen und Ihrem Auszubildenden?	☐	☐	☐	☐	☐
Wie offensichtlich sind persönliche Konflikte zwischen Ihnen und Ihrem Auszubildenden?	☐	☐	☐	☐	☐
Wie viele Spannungen gibt es zwischen Ihnen und Ihrem Auszubildenden?	☐	☐	☐	☐	☐
Wie oft sind Sie und Ihr Auszubildender sich uneinig, wie die Arbeit zu erledigen ist?	☐	☐	☐	☐	☐
Wie häufig gibt es Ideenkonflikte zwischen Ihnen und Ihrem Auszubildenden?	☐	☐	☐	☐	☐
Wie viele die Arbeit betreffende Konflikte gibt es zwischen Ihnen und Ihrem Auszubildenden?	☐	☐	☐	☐	☐

Im Folgenden geht es darum, wie Sie persönlich die Situation in Ihrem Betrieb einschätzen. Inwieweit treffen die folgenden Aussagen auf Ihren Betrieb zu?

	Trifft überhaupt nicht zu 1	Trifft wenig zu 2	Trifft teils-teils zu 3	Trifft ziemlich zu 4	Trifft voll zu 5
In unserem Betrieb gibt es altersdiskriminierendes Verhalten in Bezug auf Arbeitsaufgaben.	☐	☐	☐	☐	☐
In unserem Betrieb gibt es altersdiskriminierendes Verhalten in Bezug auf individuelle Beförderungsmöglichkeiten.	☐	☐	☐	☐	☐
In unserem Betrieb gibt es altersdiskriminierendes Verhalten in Bezug auf die Leistungsbeurteilung.	☐	☐	☐	☐	☐
In unserem Betrieb gibt es altersdiskriminierendes Verhalten in Bezug auf die persönliche und berufliche Entwicklung von Arbeitnehmern.	☐	☐	☐	☐	☐
In unserem Betrieb gibt es altersdiskriminierende Verhaltensweisen in Bezug auf das tägliche Führungsverhalten der Vorgesetzten.	☐	☐	☐	☐	☐

Im Folgenden finden Sie jeweils zwei gegensätzliche Begriffspaare. Bitte geben Sie für jedes Begriffspaar an, wie Sie tendenziell jüngere Erwachsene im Gegensatz zu älteren Erwachsenen wahrnehmen. Als jüngere Erwachsene zählen Personen bis 34 Jahre. Als ältere Erwachsene zählen bei dieser Frage dementsprechend Personen ab 50 Jahren. Bitte kreuzen Sie das Feld an, zu dem Sie ganz spontan neigen.

	-4	-3	-2	-1	0	1	2	3	4	
Aktiv	☐	☐	☐	☐	☐	☐	☐	☐	☐	Passiv
Produktiv	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unproduktiv
Fortschrittlich	☐	☐	☐	☐	☐	☐	☐	☐	☐	Altmodisch
Mutig	☐	☐	☐	☐	☐	☐	☐	☐	☐	Vorsichtig
Kreativ	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unkreativ
Lernfähig	☐	☐	☐	☐	☐	☐	☐	☐	☐	Nicht lernfähig
Motiviert	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unmotiviert

Im Folgenden finden Sie jeweils zwei gegensätzliche Begriffspaare. Bitte geben Sie für jedes Begriffspaar an, wie Sie tendenziell ältere Erwachsene im Gegensatz zu jüngeren Erwachsenen wahrnehmen. Als ältere Erwachsene zählen bei dieser Frage Personen ab 50 Jahren. Als jüngere Erwachsene zählen dementsprechend bei dieser Frage Personen bis 34 Jahre. Bitte kreuzen Sie das Feld an, zu dem Sie ganz spontan neigen.

	-4	-3	-2	-1	0	1	2	3	4	
Aktiv	☐	☐	☐	☐	☐	☐	☐	☐	☐	Passiv
Produktiv	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unproduktiv
Fortschrittlich	☐	☐	☐	☐	☐	☐	☐	☐	☐	Altmodisch
Mutig	☐	☐	☐	☐	☐	☐	☐	☐	☐	Vorsichtig
Kreativ	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unkreativ
Lernfähig	☐	☐	☐	☐	☐	☐	☐	☐	☐	Nicht lernfähig
Motiviert	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unmotiviert

Im Folgenden geht es um Ihre ganz persönliche Meinung. Inwieweit stimmen Sie den nachfolgenden Aussagen zu?

	Stimme überhaupt nicht zu 1	Stimme eher nicht zu 2	Stimme eher zu 3	Stimme voll und ganz zu 4
Wenn eine Mutter einer bezahlten Arbeit nachgeht, leiden ihre Kinder.	☐	☐	☐	☐
Alles in allem sind Männer bessere Politiker als Frauen.	☐	☐	☐	☐
Eine Hochschulausbildung ist für Jungen wichtiger als für Mädchen.	☐	☐	☐	☐
Alles in allem sind Männer bessere Wirtschaftsführer als Frauen.	☐	☐	☐	☐
Eine Hausfrau zu sein ist genauso erfüllend wie eine bezahlte Arbeit.	☐	☐	☐	☐

Im Folgenden geht es darum, wie Sie persönlich zu Ihrer Arbeitsstelle stehen. Wie stark stimmen Sie den folgenden Aussagen zu?

	Stimme überhaupt nicht zu 1	Stimme nicht zu 2	Weder noch 3	Stimme zu 4	Stimme voll zu 5
Ich werde in der Zukunft wahrscheinlich nach einer neuen Arbeitsstelle suchen.	☐	☐	☐	☐	☐
Zurzeit suche ich aktiv nach einer anderen Arbeitsstelle in einem anderen Betrieb.	☐	☐	☐	☐	☐
Ich habe nicht vor, meine Arbeitsstelle zu kündigen.	☐	☐	☐	☐	☐
Es ist unwahrscheinlich, dass ich im nächsten Jahr nach einem anderen Betrieb suche, für den ich arbeiten kann.	☐	☐	☐	☐	☐
Zurzeit denke ich nicht darüber nach, meine Arbeitsstelle zu kündigen.	☐	☐	☐	☐	☐

Haben in der Vergangenheit von Ihnen betreute Auszubildende den Ausbildungsvertrag gelöst?
☐ Ja
☐ Nein

Falls in der Vergangenheit von Ihnen betreute Auszubildende den Ausbildungsvertrag gelöst haben, um wie viele handelt es sich?
☐ 1 Auszubildender
☐ 2 Auszubildende
☐ 3 Auszubildende
☐ 4 Auszubildende
☐ 5 Auszubildende und mehr

Falls in der Vergangenheit von Ihnen betreute Auszubildende den Ausbildungsvertrag gelöst haben, was waren nach Ihrer Einschätzung die Gründe hierfür?

	Trifft überhaupt nicht zu 1	2	3	4	Trifft voll zu 5
Die Auszubildenden hatten eine andere Vorstellung vom Beruf.	☐	☐	☐	☐	☐
Die Auszubildenden haben eine bessere Ausbildungsstelle gefunden.	☐	☐	☐	☐	☐
Die Auszubildenden wollten lieber eine Ausbildung in einem anderen Beruf machen.	☐	☐	☐	☐	☐
Die Auszubildenden wollten stattdessen ein Studium aufnehmen.	☐	☐	☐	☐	☐
Die Auszubildenden wollten ohne Ausbildung in dem Bereich arbeiten.	☐	☐	☐	☐	☐
Die Auszubildenden empfanden die Ausbildung als zu schwierig.	☐	☐	☐	☐	☐
Die Auszubildenden hatten keine Motivation für eine Ausbildung im Allgemeinen.	☐	☐	☐	☐	☐
Die Auszubildenden hatten keine Motivation für eine Ausbildung in diesem Betrieb.	☐	☐	☐	☐	☐
Es hatte gesundheitliche Gründe.	☐	☐	☐	☐	☐
Es hatte familiäre Gründe.	☐	☐	☐	☐	☐
Es hatte finanzielle Gründe.	☐	☐	☐	☐	☐
Die Auszubildenden hatten Konflikte mit anderen Kollegen im Betrieb.	☐	☐	☐	☐	☐
Die Auszubildenden hatten Konflikte mit mir, ihrem Ausbilder.	☐	☐	☐	☐	☐
Die Auszubildenden hatten Konflikte mit dem Betriebsinhaber.	☐	☐	☐	☐	☐
Die Auszubildenden haben sich ausgenutzt gefühlt.	☐	☐	☐	☐	☐

	Trifft überhaupt nicht zu 1	2	3	4	Trifft voll zu 5
Die Auszubildenden empfanden die Qualität der Ausbildung als mangelhaft.	☐	☐	☐	☐	☐
Die Auszubildenden waren der Ansicht, dass sie nicht ausreichend im Ausbildungsbetrieb angelernt wurden.	☐	☐	☐	☐	☐
Die Auszubildenden mussten ausbildungsfremde Tätigkeiten vollziehen.	☐	☐	☐	☐	☐
Die Auszubildenden empfanden die Arbeitszeiten als ungünstig.	☐	☐	☐	☐	☐

Falls in der Vergangenheit von Ihnen betreute Auszubildende den Ausbildungsvertrag gelöst haben, möchten Sie sich weiter zu möglichen Ursachen äußern?

____
____
____

Welche Möglichkeiten zur Reduktion von Konflikten, wie z.B. zwischen Auszubildenden und Ausbildern, bietet Ihr Betrieb?
Hinweis: Mehrfachauswahl möglich
☐ Keine
☐ Regelmäßiges Treffen, bei dem auch Konflikte angesprochen werden können.
☐ Weiterbildung der Ausbilder
☐ Weiterbildung der Auszubildenden
☐ Mediation und Krisenberatung
☐ Sensibilisierungstrainings (z.B. zum Thema Diskriminierung)
☐ Sonstiges, und zwar: ____________________________________

Es gibt manchmal Konflikte zwischen Ausbildern und Auszubildenden bedingt durch den Altersunterschied. Welche Reaktion würden Sie sich in diesem Fall von Ihrem Betrieb wünschen?

____
____
____

Vielen Dank für Ihre Teilnahme!

Survey for trainees

STUDIE:[33]

„KOMMUNIKATION IM AUSBILDUNGSVERHÄLTNIS“

ZIEL DER STUDIE

Das deutsche Ausbildungssystem ist ein wichtiger Pfeiler im deutschen Bildungs- und Wirtschaftssystem. Daher möchten wir die Qualität der Ausbildungen untersuchen und den Fokus auf das **kommunikative Verhältnis zwischen Auszubildenden und ihren Ausbildern** im Betrieb legen.

Ziel der Studie ist es, die Kommunikation zwischen Auszubildenden und Ausbilder/innen zu untersuchen.

VERTRAULICHKEIT

Alle im Fragebogen gesammelten Antworten und Informationen werden selbstverständlich **streng vertraulich** und **anonymisiert** erfasst. Die anschließende statistische Auswertung erfolgt in einer aggregierten Form, die keine Rückschlüsse auf Sie als Person oder Ihr Unternehmen zulässt.

HINWEISE ZUM FRAGEBOGEN

- Die Beantwortung des Fragebogens nimmt **ca. 20 Minuten** in Anspruch.
- Für die Auswertung der Ergebnisse ist es sehr wichtig, dass Sie **alle Fragen beantworten**, auch wenn Sie sich bei der Antwort nicht ganz sicher sind. Eine ungefähre Angabe ist für uns hilfreicher als ein unvollständig ausgefüllter Fragebogen.
- Es gibt keine richtigen oder falschen Antworten. Wir bitten Sie bewusst um Ihre **persönliche Sichtweise**.
- Bitte **lesen** Sie die Anweisungen und die folgenden Fragen **aufmerksam durch.**
- Alle Fragen sind unabhängig voneinander. Es wird nicht erwartet, dass Ihre Antworten eine logische Struktur aufweisen oder übereinstimmend sind.
- In diesem Fragebogen wird der Einfachheit halber nur die männliche Form verwendet. Die weibliche Form ist selbstverständlich immer mit eingeschlossen.

Wir danken Ihnen sehr herzlich für die Teilnahme!

Mit freundlichen Grüßen

Univ.-Prof. Dr. Katrin Muehlfeld und Xenia Schmidt, M.A.

---

[33] Since we have conducted an online survey, there are layout differences between the online survey and this version of the survey.

Bitte geben Sie Ihr Alter in Jahren an.
______ Jahre

Bitte geben Sie Ihr Geschlecht an.
☐ Männlich
☐ Weiblich

Bitte geben Sie Ihren derzeitigen Familienstand an.
☐ Single
☐ Partnerschaft
☐ Verheiratet
☐ Geschieden
☐ Verwitwet

Bitten geben Sie das Land an, in dem Sie geboren wurden.
☐ Deutschland
☐ Luxemburg
☐ Türkei
☐ Russland
☐ Frankreich
☐ Sonstiges: ________________________________

Bitte geben Sie Ihren höchsten erzielten Bildungsabschluss an.
☐ Ohne Abschluss
☐ Hauptschulabschluss
☐ Mittlere Reife
☐ (Fach-)Abitur
☐ Hochschulabschluss
☐ Sonstiges: ________________________________

Welchen Ausbildungsberuf erlernen Sie? ________________________________

Wie viele Beschäftigte hat Ihre Ausbildungseinrichtung an dem Standort, an dem Sie bisher die meiste Zeit ausgebildet wurden? Rechnen Sie sich selbst und andere Auszubildende mit ein.
☐ 1 - 9 Beschäftigte
☐ 10 - 49 Beschäftigte
☐ 50 - 249 Beschäftigte
☐ 250 Beschäftigte und mehr

Handelt es sich um Ihre erste Ausbildung?
☐ Ja
☐ Nein

Besuchen Sie die Berufsschule in Form von Blockunterricht oder wöchentlichen Unterrichtszeiten?
☐ Blockunterricht
☐ Wöchentlicher Unterricht

Wie viele Stunden arbeiten Sie durchschnittlich pro Woche im Betrieb (ohne Überstunden)?
☐ Weniger als 15 Stunden
☐ 15 - 20 Stunden
☐ 21 - 25 Stunden
☐ 26 - 30 Stunden
☐ 31 - 35 Stunden
☐ Mehr als 35 Stunden

An wie vielen Tagen pro Woche arbeiten Sie durchschnittlich im Betrieb?
☐ 1 Tag
☐ 2 Tage
☐ 3 Tage
☐ 4 Tage
☐ 5 Tage
☐ 6 Tage und mehr

In welchem Ausbildungsjahr befinden Sie sich?
☐ 1. Jahr
☐ 2. Jahr
☐ 3. Jahr
☐ 4. Jahr
☐ 5. Jahr
☐ Sonstiges

Wie viele Auszubildende hat Ihre Ausbildungseinrichtung, Sie miteingeschlossen, an dem Standort, an dem Sie bisher die meiste Zeit ausgebildet wurden?
☐ 1 – 5 Auszubildende
☐ 6 – 10 Auszubildende
☐ 11 – 20 Auszubildende
☐ 21 Auszubildende und mehr
☐ Weiß nicht

Wie häufig und von wem wurden Sie bisher angelernt?

	Nie	Selten	Mehrmals im Monat	Einmal in der Woche	Mehrmals in der Woche	Täglich
Von Ausbildern	☐	☐	☐	☐	☐	☐
Vom Meister, Abteilungsleiter, Chef	☐	☐	☐	☐	☐	☐
Von anderen Kollegen, Gesellen	☐	☐	☐	☐	☐	☐
Von anderen Auszubildenden	☐	☐	☐	☐	☐	☐
Von externen Personen	☐	☐	☐	☐	☐	☐
Sonstiges: __________________	☐	☐	☐	☐	☐	☐

Wie viele Ausbilder sind in Ihrem Betrieb offiziell für Sie verantwortlich?
☐ 1 Ausbilder
☐ 2 Ausbilder
☐ 3 Ausbilder
☐ 4 Ausbilder
☐ 5 Ausbilder und mehr

Bitte geben Sie das Geschlecht des Ausbilders an, der für Sie verantwortlich ist.
Hinweis: Wenn mehr als ein Ausbilder für Sie verantwortlich ist, beziehen Sie Ihre Angabe bitte auf denjenigen Ausbilder, mit dem Sie am häufigsten Kontakt haben. Bitte beziehen Sie sich bei den folgenden Fragen auf denselben Ausbilder.
☐ Männlich
☐ Weiblich

Bitte geben Sie das Alter des Ausbilders an, der für Sie verantwortlich ist.
☐ 21 – 30 Jahre
☐ 31 – 40 Jahre
☐ 41 – 50 Jahre
☐ 51 – 60 Jahre
☐ 61 Jahre und älter

Hat Ihr Ausbilder denselben fachlichen Ausbildungshintergrund wie Sie?
☐ Ja
☐ Nein

Wie häufig und auf welchen Wegen halten Sie Kontakt zu Ihrem Ausbilder?

	Nie	Selten	Mehrmals im Monat	Einmal in der Woche	Mehrmals in der Woche	Täglich
Insgesamt	☐	☐	☐	☐	☐	☐
Persönlich	☐	☐	☐	☐	☐	☐
Telefonisch	☐	☐	☐	☐	☐	☐
E-Mail	☐	☐	☐	☐	☐	☐
Soziale Netzwerke (z.B. Facebook)	☐	☐	☐	☐	☐	☐
Messenger (z.B. WhatsApp)	☐	☐	☐	☐	☐	☐
Sonstiges: _________________	☐	☐	☐	☐	☐	☐

Wie viel Zeit wendet Ihr Ausbilder ungefähr pro Woche für Ihre Ausbildung auf? Nennen Sie bitte den ungefähren Durchschnitt.
☐ Weniger als 15 Minuten
☐ 15 – 30 Minuten
☐ 31 – 60 Minuten
☐ 1 – 2 Stunden
☐ 2 – 3 Stunden
☐ 3 – 4 Stunden
☐ 4 Stunden und mehr

Welche institutionalisierten Möglichkeiten bietet Ihr Betrieb neben der Berufsschule, um benötigte Kenntnisse zu erwerben?
Hinweis: Mehrfachauswahl möglich
☐ Keine, ich erwerbe die Kenntnisse bei der täglichen Arbeit
☐ Teilnahme an Schulungen (z.B. von Lieferanten oder Herstellern)
☐ Regelmäßige Einweisungen durch Vorgesetzte/Ausbilder/Kollegen
☐ Bereitstellen von Informationsmaterial (z.B. Prospekte)
☐ Sonstiges, und zwar: _______

Werden Sie im Anschluss an Ihre Ausbildung vom Betrieb übernommen?
☐ Ja
☐ Nein
☐ Weiß nicht

Wie häufig und in welchem Kontext haben Sie Kontakt zu Personen ab 50 Jahren?

	Nie	Selten	Mehrmals im Monat	Einmal in der Woche	Mehrmals in der Woche	Täglich
Insgesamt	☐	☐	☐	☐	☐	☐
Familie (Kernfamilie, Partner)	☐	☐	☐	☐	☐	☐
Familie (weitläufige Verwandtschaft)	☐	☐	☐	☐	☐	☐
Freunde	☐	☐	☐	☐	☐	☐
Bekannte	☐	☐	☐	☐	☐	☐
Sportverein	☐	☐	☐	☐	☐	☐
Ehrenamt	☐	☐	☐	☐	☐	☐
Sonstiges: ___________________	☐	☐	☐	☐	☐	☐

Inwieweit stimmen Sie den nachfolgenden Aussagen im Hinblick auf Ihr Unternehmen zu?

	Stimme überhaupt nicht zu 1	Stimme nicht zu 2	Stimme eher nicht zu 3	Weder noch 4	Stimme eher zu 5	Stimme zu 6	Stimme voll zu 7
Die Menschen in meinem Unternehmen teilen dieselben Ziele und Visionen.	☐	☐	☐	☐	☐	☐	☐
Die Menschen in meiner Abteilung verfolgen mit Begeisterung die gemeinsamen Ziele und die Missionen des gesamten Unternehmens.	☐	☐	☐	☐	☐	☐	☐

Im Folgenden geht es um das Ausbildungsverhältnis zwischen Ihnen und Ihrem zuständigen Ausbilder. Inwieweit treffen diese Aussagen auf Ihr Verhältnis zu?
Hinweis: Wenn mehr als ein Ausbilder für Sie zuständig ist, beziehen Sie Ihre Angabe bitte auf denjenigen Ausbilder, mit dem Sie am häufigsten Kontakt haben.

	Trifft gar nicht zu 1	Trifft wenig zu 2	Trifft teils-teils zu 3	Trifft ziemlich zu 4	Trifft völlig zu 5
Ich lasse mir bestimmte Vorgänge von meinem Ausbilder zeigen, damit ich sie erlerne.	☐	☐	☐	☐	☐
Ich lerne viel dadurch, dass ich meinen Ausbilder frage.	☐	☐	☐	☐	☐
Mein Ausbilder unterstützt mich dabei, meine eigenen Arbeitserfahrungen zu sammeln.	☐	☐	☐	☐	☐
Ich lerne eine Menge dadurch, dass ich meinen Ausbilder bei der Erledigung seiner Arbeit beobachte.	☐	☐	☐	☐	☐
Ich zeige meinem Ausbilder manchmal bestimmte Vorgänge, damit er sie erlernt.	☐	☐	☐	☐	☐
Ich unterstütze meinen Ausbilder auch dabei, eigene Arbeitserfahrungen zu sammeln.	☐	☐	☐	☐	☐
Mein Ausbilder lernt manchmal auch dadurch, indem er sich Sachen von mir abschaut.	☐	☐	☐	☐	☐

Im Folgenden geht es zuerst um das Ausbildungsverhältnis zwischen Ihnen und Ihrem zuständigen Ausbilder. Anschließend beziehen sich die Fragen auf Sie und Ihre Kollegen. Bitte geben Sie an, wie häufig Sie die jeweiligen Tätigkeiten durchschnittlich ausgeübt haben.
Hinweise: Wenn mehr als ein Ausbilder für Sie zuständig ist, beziehen Sie Ihre Angabe bitte auf denjenigen Ausbilder, mit dem Sie am häufigsten Kontakt haben.
Unter Kollegen werden Personen verstanden, mit denen Sie gemeinsam arbeiten und die ihre Ausbildung bereits abgeschlossen haben.

	Nie 1	Selten 2	Mehrmals im Monat 3	Einmal in der Woche 4	Mehrmals in der Woche 5	Täglich 6
Wie häufig haben Sie in der letzten Zeit Fachwissen mit Ihrem Ausbilder geteilt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Erfahrungen mit Ihrem Ausbilder geteilt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Ihren Ausbilder nach Fachwissen gefragt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Ihren Ausbilder nach Erfahrungen gefragt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Fachwissen mit Ihren Kollegen geteilt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Erfahrungen mit Ihren Kollegen geteilt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Ihre Kollegen nach Fachwissen gefragt?	☐	☐	☐	☐	☐	☐
Wie häufig haben Sie in der letzten Zeit Ihre Kollegen nach Erfahrungen gefragt?	☐	☐	☐	☐	☐	☐

Im Folgenden geht es um das Ausbildungsverhältnis zwischen Ihnen und Ihrem zuständigen Ausbilder. Inwieweit treffen diese Aussagen auf Ihr Verhältnis zu?
Hinweis: Wenn mehr als ein Ausbilder für Sie zuständig ist, beziehen Sie Ihre Angabe bitte auf denjenigen Ausbilder, mit dem Sie am häufigsten Kontakt haben.

	Trifft gar nicht zu 1	Trifft wenig zu 2	Trifft teils-teils zu 3	Trifft ziemlich zu 4	Trifft völlig zu 5
Wenn ich einen Fehler in diesem Job mache, wird er mir oft vorgehalten.	☐	☐	☐	☐	☐
Es ist schwierig, andere in diesem Betrieb um Hilfe zu bitten.	☐	☐	☐	☐	☐
Mein Ausbilder ermutigt mich oft, neue Aufgaben anzugehen oder Tätigkeiten zu erlernen, die ich zuvor noch nie gemacht habe.	☐	☐	☐	☐	☐
Wenn ich darüber nachdenken würde, diesen Betrieb zu verlassen und einen besseren Job woanders anzunehmen, würde ich mit meinem Ausbilder darüber reden.	☐	☐	☐	☐	☐
Wenn ich ein Problem in diesem Betrieb hätte, könnte ich mich darauf verlassen, dass mein Ausbilder mir beistehen würde.	☐	☐	☐	☐	☐
Wenn ich meinem Ausbilder Probleme schildere, dann wirkt er nicht besonders interessiert, mir bei der Lösung zu helfen.	☐	☐	☐	☐	☐

Im Folgenden geht es um das Ausbildungsverhältnis zwischen Ihnen und Ihrem Ausbilder. Inwieweit treffen diese Aussagen auf Ihr Verhältnis zu?
Hinweise: Wenn mehr als ein Ausbilder für Sie zuständig ist, beziehen Sie Ihre Angabe bitte auf denjenigen Ausbilder, mit dem Sie am häufigsten Kontakt haben.

	Stimme über-haupt nicht zu 1	Stimme nicht zu 2	Stimme eher nicht zu 3	Weder noch 4	Stimme eher zu 5	Stimme zu 6	Stimme voll zu 7
Mein Ausbilder und ich tauschen uns regelmäßig aus. Wir können Ideen, Gefühle und Hoffnungen offen miteinander teilen.	☐	☐	☐	☐	☐	☐	☐
Ich kann mit meinem Ausbilder frei über Schwierigkeiten, die ich auf der Arbeit habe, sprechen und weiß, dass er zuhören wird.	☐	☐	☐	☐	☐	☐	☐
Mein Ausbilder und ich würden es beide als Verlust empfinden, wenn einer von uns versetzt würde und wir so nicht mehr länger zusammen arbeiten könnten.	☐	☐	☐	☐	☐	☐	☐
Wenn ich meine Probleme meinem Ausbilder gegenüber mitteilen würde, wüsste ich, dass er konstruktiv und mitfühlend damit umgehen würde.	☐	☐	☐	☐	☐	☐	☐
Ich würde schon sagen, dass wir beide in diese Arbeitsbeziehung emotional viel investiert haben.	☐	☐	☐	☐	☐	☐	☐
Mein Ausbilder verfolgt seinen Job mit Professionalität und Engagement.	☐	☐	☐	☐	☐	☐	☐
Angesichts der Erfolgsbilanz meines Ausbilders, habe ich keinen Zweifel an seiner Kompetenz und Befähigung für diesen Job.	☐	☐	☐	☐	☐	☐	☐
Ich kann meinem Ausbilder vertrauen, dass er meinen Job nicht durch unachtsame Arbeit erschwert.	☐	☐	☐	☐	☐	☐	☐
Die meisten Menschen vertrauen und respektieren meinen Ausbilder als Kollegen, auch wenn sie nicht mit ihm befreundet sind.	☐	☐	☐	☐	☐	☐	☐
Andere Kollegen von mir, die mit meinem Ausbilder zu tun haben, halten ihn für vertrauenswürdig.	☐	☐	☐	☐	☐	☐	☐
Wenn andere Menschen mehr über meinen Ausbilder und seinen Hintergrund wüssten, wären sie besorgter und würden seine Leistung stärker kontrollieren.	☐	☐	☐	☐	☐	☐	☐

Im Folgenden geht es um Ihre Ansicht zu Ihrer Arbeit. Inwieweit stimmen Sie den nachfolgenden Aussagen zu?

	Stimme überhaupt nicht zu 1	Stimme nicht zu 2	Weder noch 3	Stimme zu 4	Stimme voll zu 5
Ich fühle mich ziemlich zufrieden mit meiner derzeitigen Arbeit.	☐	☐	☐	☐	☐
An den meisten Tagen bin ich von meiner Arbeit begeistert.	☐	☐	☐	☐	☐
Es scheint jeden Tag so, als ob meine Arbeit nie enden würde.	☐	☐	☐	☐	☐
Ich empfinde Freude an meiner Arbeit.	☐	☐	☐	☐	☐
Ich sehe meine Arbeit als eher unerfreulich an.	☐	☐	☐	☐	☐

Inwieweit treffen die nachfolgenden Aussagen auf das Ausbildungsverhältnis zwischen Ihnen und Ihrem derzeitigen Ausbilder zu?
Hinweise: Wenn mehr als ein Ausbilder für Sie zuständig ist, beziehen Sie Ihre Angabe bitte auf denjenigen Ausbilder, mit dem Sie am häufigsten Kontakt haben.

	Keine / Nie 1	Wenig / Selten 2	Mittel 3	Viel / Häufig 4	Sehr viel / Sehr häufig 5
Wie viele Reibereien gibt es zwischen Ihnen und Ihrem Ausbilder?	☐	☐	☐	☐	☐
Wie offensichtlich sind persönliche Konflikte zwischen Ihnen und Ihrem Ausbilder?	☐	☐	☐	☐	☐
Wie viele Spannungen gibt es zwischen Ihnen und Ihrem Ausbilder?	☐	☐	☐	☐	☐
Wie oft sind Sie und Ihr Ausbilder sich uneinig, wie die Arbeit zu erledigen ist?	☐	☐	☐	☐	☐
Wie häufig gibt es Ideenkonflikte zwischen Ihnen und Ihrem Ausbilder?	☐	☐	☐	☐	☐
Wie viele die Arbeit betreffende Konflikte gibt es zwischen Ihnen und Ihrem Ausbilder?	☐	☐	☐	☐	☐

Im Folgenden geht es darum, wie Sie persönlich die Situation in Ihrem Betrieb einschätzen. Inwieweit treffen die folgenden Aussagen auf Ihren Betrieb zu?

	Trifft überhaupt nicht zu 1	Trifft wenig zu 2	Trifft teils-teils zu 3	Trifft ziemlich zu 4	Trifft voll zu 5
In unserem Betrieb gibt es altersdiskriminierendes Verhalten in Bezug auf Arbeitsaufgaben.	☐	☐	☐	☐	☐
In unserem Betrieb gibt es altersdiskriminierendes Verhalten in Bezug auf individuelle Beförderungsmöglichkeiten.	☐	☐	☐	☐	☐
In unserem Betrieb gibt es altersdiskriminierendes Verhalten in Bezug auf die Leistungsbeurteilung.	☐	☐	☐	☐	☐
In unserem Betrieb gibt es altersdiskriminierendes Verhalten in Bezug auf die persönliche und berufliche Entwicklung von Arbeitnehmern.	☐	☐	☐	☐	☐
In unserem Betrieb gibt es altersdiskriminierende Verhaltensweisen in Bezug auf das tägliche Führungsverhalten der Vorgesetzten.	☐	☐	☐	☐	☐

Im Folgenden finden Sie jeweils zwei gegensätzliche Begriffspaare. Bitte geben Sie für jedes Begriffspaar an, wie Sie tendenziell jüngere Erwachsene im Gegensatz zu älteren Erwachsenen wahrnehmen. Als jüngere Erwachsene zählen Personen bis 34 Jahre. Als ältere Erwachsene zählen bei dieser Frage dementsprechend Personen ab 50 Jahren. Bitte kreuzen Sie das Feld an, zu dem Sie ganz spontan neigen.

	-4	-3	-2	-1	0	1	2	3	4	
Aktiv	☐	☐	☐	☐	☐	☐	☐	☐	☐	Passiv
Produktiv	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unproduktiv
Fortschrittlich	☐	☐	☐	☐	☐	☐	☐	☐	☐	Altmodisch
Mutig	☐	☐	☐	☐	☐	☐	☐	☐	☐	Vorsichtig
Kreativ	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unkreativ
Lernfähig	☐	☐	☐	☐	☐	☐	☐	☐	☐	Nicht lernfähig
Motiviert	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unmotiviert

Im Folgenden finden Sie jeweils zwei gegensätzliche Begriffspaare. Bitte geben Sie für jedes Begriffspaar an, wie Sie tendenziell ältere Erwachsene im Gegensatz zu jüngeren Erwachsenen wahrnehmen. Als ältere Erwachsene zählen bei dieser Frage Personen ab 50 Jahren. Als jüngere Erwachsene zählen dementsprechend bei dieser Frage Personen bis 34 Jahre. Bitte kreuzen Sie das Feld an, zu dem Sie ganz spontan neigen.

	-4	-3	-2	-1	0	1	2	3	4	
Aktiv	☐	☐	☐	☐	☐	☐	☐	☐	☐	Passiv
Produktiv	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unproduktiv
Fortschrittlich	☐	☐	☐	☐	☐	☐	☐	☐	☐	Altmodisch
Mutig	☐	☐	☐	☐	☐	☐	☐	☐	☐	Vorsichtig
Kreativ	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unkreativ
Lernfähig	☐	☐	☐	☐	☐	☐	☐	☐	☐	Nicht lernfähig
Motiviert	☐	☐	☐	☐	☐	☐	☐	☐	☐	Unmotiviert

Im Folgenden geht es um Ihre ganz persönliche Meinung. Inwieweit stimmen Sie den nachfolgenden Aussagen zu?

	Stimme überhaupt nicht zu 1	Stimme eher nicht zu 2	Stimme eher zu 3	Stimme voll und ganz zu 4
Wenn eine Mutter einer bezahlten Arbeit nachgeht, leiden ihre Kinder.	☐	☐	☐	☐
Alles in allem sind Männer bessere Politiker als Frauen.	☐	☐	☐	☐
Eine Hochschulausbildung ist für Jungen wichtiger als für Mädchen.	☐	☐	☐	☐
Alles in allem sind Männer bessere Wirtschaftsführer als Frauen.	☐	☐	☐	☐
Eine Hausfrau zu sein ist genauso erfüllend wie eine bezahlte Arbeit.	☐	☐	☐	☐

Im Folgenden geht es darum, wie Sie persönlich zu Ihrer Arbeitsstelle stehen. Wie stark stimmen Sie den folgenden Aussagen zu?

	Stimme überhaupt nicht zu 1	Stimme nicht zu 2	Weder noch 3	Stimme zu 4	Stimme voll zu 5
Ich werde in der Zukunft wahrscheinlich nach einer neuen Arbeitsstelle suchen.	☐	☐	☐	☐	☐
Zurzeit suche ich aktiv nach einer anderen Arbeitsstelle in einem anderen Betrieb.	☐	☐	☐	☐	☐
Ich habe nicht vor, meine Arbeitsstelle zu kündigen.	☐	☐	☐	☐	☐
Es ist unwahrscheinlich, dass ich im nächsten Jahr nach einem anderen Betrieb suche, für den ich arbeiten kann.	☐	☐	☐	☐	☐
Zurzeit denke ich nicht darüber nach, meine Arbeitsstelle zu kündigen.	☐	☐	☐	☐	☐

Haben Sie in den letzten 12 Monaten konkret darüber nachgedacht, Ihre Ausbildung abzubrechen?
☐ Ja, sehr häufig
☐ Ja, schon öfter
☐ Ja, aber selten
☐ Nein

Falls Sie schon einmal darüber nachgedacht haben, die Ausbildung abzubrechen, was waren die Gründe hierfür?

	Trifft überhaupt nicht zu 1	2	3	4	Trifft voll zu 5
Ich hatte eine andere Vorstellung vom Beruf.	☐	☐	☐	☐	☐
Ich hatte eine bessere Ausbildungsstelle in Aussicht.	☐	☐	☐	☐	☐
Ich wollte lieber eine Ausbildung in einem anderen Beruf machen.	☐	☐	☐	☐	☐
Ich wollte statt einer Ausbildung ein Studium aufnehmen.	☐	☐	☐	☐	☐
Ich wollte ohne eine Ausbildung in meinem Bereich weiterarbeiten.	☐	☐	☐	☐	☐
Ich empfand die Ausbildung als zu schwierig.	☐	☐	☐	☐	☐
Ich hatte keine Motivation für eine Ausbildung im Allgemeinen.	☐	☐	☐	☐	☐
Ich hatte keine Motivation für eine Ausbildung in diesem Betrieb.	☐	☐	☐	☐	☐
Es hatte gesundheitliche Gründe.	☐	☐	☐	☐	☐
Es hatte familiäre Gründe.	☐	☐	☐	☐	☐
Es hatte finanzielle Gründe	☐	☐	☐	☐	☐
Ich hatte Konflikte mit anderen Kollegen im Betrieb.	☐	☐	☐	☐	☐
Ich hatte Konflikte mit meinem Ausbilder.	☐	☐	☐	☐	☐
Ich hatte Konflikte mit dem Betriebsinhaber.	☐	☐	☐	☐	☐
Ich habe mich ausgenutzt gefühlt.	☐	☐	☐	☐	☐
Ich fand die Qualität der Ausbildung mangelhaft.	☐	☐	☐	☐	☐
Ich wurde nicht ausreichend im Ausbildungsbetrieb angelernt.	☐	☐	☐	☐	☐
Ich musste ausbildungsfremde Tätigkeiten vollziehen.	☐	☐	☐	☐	☐
Die Arbeitszeiten waren ungünstig.	☐	☐	☐	☐	☐

Falls Sie schon einmal darüber nachgedacht haben, die Ausbildung abzubrechen, warum haben Sie sich doch dafür entschieden, die Ausbildung fortzuführen?

Welche Möglichkeiten zur Reduktion von Konflikten, wie z.B. zwischen Auszubildenden und Ausbildern, bietet Ihr Betrieb?
Hinweis: Mehrfachauswahl möglich
☐ Keine
☐ Regelmäßiges Treffen, bei dem auch Konflikte angesprochen werden können.
☐ Weiterbildung der Ausbilder
☐ Weiterbildung der Auszubildenden
☐ Mediation und Krisenberatung
☐ Sensibilisierungstrainings (z.B. zum Thema Diskriminierung)
☐ Sonstiges, und zwar: ____________________________________

Es gibt manchmal Konflikte zwischen Ausbildern und Auszubildenden bedingt durch den Altersunterschied. Welche Reaktion würden Sie sich in diesem Fall von Ihrem Betrieb wünschen?

Vielen Dank für Ihre Teilnahme!

Appendix for chapter 3

Vignette design

Table 6.3. Vignette design

Manipulation	Dimension 1	Dimension 2	Dimension 3
Age composition	Mueller 58; Schmidt 24	Mueller 58; Schmidt 24	Mueller 58; Schmidt 24
Knowledge sharer	Mr. Mueller	Mr. Schmidt	Both
Knowledge receiver	Mr. Schmidt	Mr. Mueller	Both

Measurements

Table 6.4 Details on measurements

Measure	Source	Items
Performance evaluation	Conger et al., 2000	• Mr. Mueller and Mr. Schmidt have a high work performance. • Most of the tasks by Mr. Mueller and Mr. Schmidt are accomplished quickly and efficiently. • Mr. Mueller and Mr. Schmidt set a high standard of task accomplishment. • Mr. Mueller and Mr. Schmidt always achieve a high standard of task accomplishment. • Mr. Mueller and Mr. Schmidt always beat their targets.
Positive beliefs about age diversity	Van Knippenberg et al., 2007	• A group like this performs better if it consists of a roughly equal number of younger and older employees. • A group like this performs better if it consists of either only men or only women.
Generational stereotypes	King & Bryant, 2016	• Co-workers outside my generation are not interested in making friends outside their generation. • Co-workers outside my generation complain more than co-workers my age do. • Co-workers outside my generation usually talk about things that don’t interest me. • Co-workers outside my generation tend to work differently than co-workers my age do.

Robustness checks

Table 6.5 Summary of hierarchical regression analysis including all items of generational stereotypes

	ß	**t**	**p-value**	**ΔR^2**	**Δ*F***
Step 1				-.01	.71
Gender	-.04	-.57	.57		
Occupation	.01	.16	.87		
Age	-.10	-1.17	.24		
Step 2				.05	8.29
Gender	-.05	-.68	.50		
Occupation	.02	.25	.81		
Age	-.07	-.75	.45		
Positive beliefs about age diversity	.22	2.90	.01		
Step 3				.01	1.48
Gender	-.06	-.74	.46		
Occupation	.00	.04	.97		
Age	-.07	-.79	.43		
Positive beliefs about age diversity	.19	2.41	.02		
Generational stereotypes	-.10	-1.22	.23		

Notes: N =169

Table 6.6 Means and standard deviations for performance evaluation

	Intergenerational knowledge transfer		
Performance evaluation	**Age-appropriate**	**Age-inappropriate**	**Bidirectional (both share and seek knowledge)**
M	3.45	3.14	3.76
s.d.	.85	.89	.75
N	61	49	59

Notes: Greater values indicate that performance was evaluated higher. Standard deviation (s.d.)

Table 6.7 Summary of hierarchical regression analysis with bootstrap

	ß	T	p-value	ΔR^2	ΔF
Step 1	-.08			.01	.71
Gender	-.06	-.57	.53		
Occupation	.00	-1.17	.16		
Age		.16	.87		
Step 2	-.09			.06	2.63
Gender	-.04	-.68	.46		
Occupation	.00	-.75	.40		
Age	.16	.25	.80		
Positive beliefs about age diversity		2.88	.01		
Step 3	-.09			.07	2.33
Gender	-.04	-.68	.46		
Occupation	.00	-.77	.40		
Age	.15	.12	.90		
Positive beliefs about age diversity	.05	2.35	.02		
Generational stereotypes	-.08	1.05	.35		

Notes: N =169, results are based on 2,000 bootstrap samples.

Table 6.8 Summary of regression analysis

	ß	t	p-value	ΔR^2	ΔF
				.04	2.33
Gender	-.05	-.68	.50		
Occupation	-.07	-.77	.44		
Age	.01	.12	.91		
Diversity Beliefs	.19	2.35	.02		
Generational stereotypes	.09	1.05	.30		

Notes: N =169.

Survey

STUDIE:[34]

„TEAMARBEIT"

Sehr geehrte Teilnehmerin,
sehr geehrter Teilnehmer,

willkommen und herzlichen Dank für Ihre Teilnahme an meiner Umfrage zum Thema „Teamarbeit". Ihre Teilnahme wird dazu beitragen, dass wir in der Lage sind, Unternehmen dabei zu unterstützen, Teamarbeit effektiver zu gestalten.

Eine gewissenhafte Beantwortung des Fragebogens nimmt ca. 15 Minuten Ihrer Zeit in Anspruch.

Vielen Dank für Ihre Unterstützung!
Bei Rückfragen stehe ich Ihnen gerne zur Verfügung.

Mit freundlichen Grüßen,

Xenia Schmidt

Kontaktdaten der Ansprechpartnerin

Xenia Schmidt, M.A.
Universität Trier
Wissenschaftliche Mitarbeiterin an der Professur BWL für Management, Organisation und Personal
Email: schmidtx@uni-trier.de

---

[34] Since we have conducted an online survey, there are layout differences between the online survey and this version of the survey.

Allgemeine Informationen:

1. Bitte lesen Sie die Anleitung und Fragen genau.
2. Alle Fragen zielen auf Ihre persönliche Sichtweise und Meinung ab.
3. Jeder hat seine eigenen Meinungen, Sichtweisen und Gewohnheiten. Wir sind ausschließlich an Ihrer Meinung interessiert, nicht an dem was andere darüber denken, wie sie sich fühlen sollten.
4. Es gibt keine richtigen oder falschen Antworten.
5. Beantworten Sie jede Frage spontan und wahrheitsgemäß.
6. Für die Qualität der Datenerhebung ist es wichtig, dass Sie alle Fragen beantworten.
7. Alle Fragen sind unabhängig voneinander. Es wird nicht erwartet, dass Ihre Antworten logisch oder konsistent sind.

Datenschutzerklärung

Wir garantieren Ihnen absolute Anonymität unter Einhaltung des gesetzlichen Datenschutzes bei der Erhebung und Auswertung der Daten, welche ausschließlich Forschungszwecken vorbehalten sind. Durch die Anonymisierung sind keine Rückschlüsse auf Ihre Person möglich. Verwenden Sie zum Wechsel zwischen den Umfrageseiten bitte nicht die Navigationselemente des Browsers, sondern die Schalter am Ende der Umfrageseiten.

Bitte geben Sie Ihr Geschlecht an.
☐ Männlich
☐ Weiblich

Bitte geben Sie Ihr Geburtsjahr an.

____

Bitte geben Sie Ihre derzeitige Beschäftigung an:
☐ Angestellter
☐ Selbstständiger
☐ ohne Anstellung
☐ Schüler / Student
☐ Rentner
☐ Sonstiges ____

Bitte geben Sie Ihren derzeitigen Familienstand an.
☐ Single
☐ Partnerschaft
☐ Verlobt
☐ Verheiratet
☐ Geschieden
☐ Verwitwet

In welcher Branche sind Sie derzeit beschäftigt?
☐ Land-, Forst- und Tierwirtschaft und Gartenbau
☐ Rohstoffgewinnung, Produktion und Fertigung
☐ Bau, Architektur, Vermessung und Gebäudetechnik
☐ Naturwissenschaft, Geografie und Informatik
☐ Verkehr, Logistik, Schutz und Sicherheit
☐ Kaufmännische Dienstleistungen, Warenhandel, Vertrieb, Hotel und Tourismus
☐ Unternehmensorganisation, Buchhaltung, Recht und Verwaltung
☐ Gesundheit, Soziales, Lehre und Erziehung
☐ Sprach-, Literatur-, Geistes-, Gesellschafts- und Wirtschaftswissenschaften, Medien, Kunst, Kultur und Gestaltung
☐ Militär
☐ Sonstiges ____

#[35]	Text
1	Herr Müller (58 Jahre) und Herr Schmidt (24 Jahre) arbeiten in einem mittelständischen Unternehmen in Deutschland. Herr Müller und Herr Schmidt sind in derselben Abteilung eingestellt und arbeiten seit zwei Jahren gemeinsam an einem Projekt. In der Regel teilt Herr Schmidt sein Wissen mit Herrn Müller. Herr Müller lässt sich häufiger Arbeitsabläufe von Herrn Schmidt erklären. Im Folgenden werden Ihnen einige Fragen zu diesen Mitarbeitern gestellt. Wir bitten Sie, die folgenden Fragen mit Blick auf die beiden Mitarbeiter zu beurteilen.
2	Herr Müller (58 Jahre) und Herr Schmidt (24 Jahre) arbeiten in einem mittelständischen Unternehmen in Deutschland. Herr Müller und Herr Schmidt sind in derselben Abteilung eingestellt und arbeiten seit zwei Jahren gemeinsam an einem Projekt. In der Regel teilt Herr Schmidt sein Wissen mit Herrn Müller. Herr Müller lässt sich häufiger Arbeitsabläufe von Herrn Schmidt erklären. Im Folgenden werden Ihnen einige Fragen zu diesen Mitarbeitern gestellt. Wir bitten Sie, die folgenden Fragen mit Blick auf die beiden Mitarbeiter zu beurteilen.
3	Herr Müller (58 Jahre) und Herr Schmidt (24 Jahre) arbeiten in einem mittelständischen Unternehmen in Deutschland. Herr Müller und Herr Schmidt sind in derselben Abteilung eingestellt und arbeiten seit zwei Jahren gemeinsam an einem Projekt. In der Regel tauschen Herr Müller und Herr Schmidt häufig miteinander Wissen aus und erklären sich gegenseitig Arbeitsabläufe. Im Folgenden werden Ihnen einige Fragen zu diesen Mitarbeitern gestellt. Wir bitten Sie, die folgenden Fragen mit Blick auf die beiden Mitarbeiter zu beurteilen.
4	Herr Müller (25 Jahre) und Herr Schmidt (24 Jahre) arbeiten in einem mittelständischen Unternehmen in Deutschland. Herr Müller und Herr Schmidt sind in derselben Abteilung eingestellt und arbeiten seit zwei Jahren gemeinsam an einem Projekt. In der Regel teilt Herr Müller sein Wissen mit Herrn Schmidt. Herr Schmidt lässt sich häufiger Arbeitsabläufe von Herrn Müller erklären. Im Folgenden werden Ihnen einige Fragen zu diesen Mitarbeitern gestellt. Wir bitten Sie, die folgenden Fragen mit Blick auf die beiden Mitarbeiter zu beurteilen.
5	Herr Müller (25 Jahre) und Herr Schmidt (24 Jahre) arbeiten in einem mittelständischen Unternehmen in Deutschland. Herr Müller und Herr Schmidt sind in derselben Abteilung eingestellt und arbeiten seit zwei Jahren gemeinsam an einem Projekt. In der Regel tauschen Herr Müller und Herr Schmidt häufig miteinander Wissen aus und erklären sich gegenseitig Arbeitsabläufe. Im Folgenden werden Ihnen einige Fragen zu diesen Mitarbeitern gestellt. Wir bitten Sie, die folgenden Fragen mit Blick auf die beiden Mitarbeiter zu beurteilen.
6	Herr Müller (58 Jahre) und Herr Schmidt (57 Jahre) arbeiten in einem mittelständischen Unternehmen in Deutschland. Herr Müller und Herr Schmidt sind in derselben Abteilung eingestellt und arbeiten seit zwei Jahren gemeinsam an einem Projekt. In der Regel teilt Herr Müller sein Wissen mit Herrn Schmidt. Herr Schmidt lässt sich häufiger Arbeitsabläufe von Herrn Müller erklären. Im Folgenden werden Ihnen einige Fragen zu diesen Mitarbeitern gestellt. Wir bitten Sie, die folgenden Fragen mit Blick auf die beiden Mitarbeiter zu beurteilen.
7	Herr Müller (58 Jahre) und Herr Schmidt (57 Jahre) arbeiten in einem mittelständischen Unternehmen in Deutschland. Herr Müller und Herr Schmidt sind in derselben Abteilung eingestellt und arbeiten seit zwei Jahren gemeinsam an einem Projekt. In der Regel tauschen Herr Müller und Herr Schmidt häufig miteinander Wissen aus und erklären sich gegenseitig Arbeitsabläufe. Im Folgenden werden Ihnen einige Fragen zu diesen Mitarbeitern gestellt. Wir bitten Sie, die folgenden Fragen mit Blick auf die beiden Mitarbeiter zu beurteilen.

---

[35] Please note: Participants were randomly assigned to one of the following seven vignettes. All participants received the same questions regarding the vignette. Also, please note that although originally the entire body of vignettes contained seven variations, we decided to analyze only vignettes on intergenerational knowledge transfer for a more specialized research focus.

Bitte geben Sie an, wie Sie die Arbeitsergebnisse von Herrn Müller und Herrn Schmidt beurteilen würden.

	Weit unter dem Durchschnitt 1	Unter dem Durchschnitt 2	Etwas unter dem Durchschnitt 3	Durchschnitt 4	Etwas über dem Durchschnitt 5	Über dem Durchschnitt 6	Weit über dem Durchschnitt 7
Wie würden Sie die Qualität der Arbeitsergebnisse von Herrn Müller und Herrn Schmidt einschätzen?	☐	☐	☐	☐	☐	☐	☐
Wie würden Sie die Quantität der Arbeitsergebnisse von Herrn Müller und Herrn Schmidt einschätzen?	☐	☐	☐	☐	☐	☐	☐
Wie würden Sie die allgemeine Arbeitsleistung von Herrn Müller und Herrn Schmidt einschätzen?	☐	☐	☐	☐	☐	☐	☐

Bitte geben Sie an, wie Sie die Arbeit von Herrn Müller und Herrn Schmidt beurteilen würden.

	Nicht 1	Wenig 2	Mittelmäßig 3	Ziemlich 4	Sehr 5
Wie kreativ ist die Arbeit von Herrn Müller und Herrn Schmidt? (Kreativität bezieht sich auf den Umfang, in dem Herr Müller und Herr Schmidt Ideen, Methoden oder Produkte entwickeln, die originell und nützlich für die Organisation sind.)	☐	☐	☐	☐	☐
Wie originell und praktisch ist die Arbeit von Herrn Müller und Herrn Schmidt? (Originelle und praktische Arbeit bezieht sich auf die Entwicklung von Ideen, Methoden und Produkten, die absolut einzigartig und besonders nützlich für die Organisation sind.)	☐	☐	☐	☐	☐

Bitte geben Sie an, wie Sie die Arbeitsleistung von Herrn Müller und Herrn Schmidt beurteilen würden.

	Trifft zu 1	Trifft eher zu 2	Neutral 3	Trifft eher nicht zu 4	Trifft nicht zu 5
Herr Müller und Herr Schmidt haben eine hohe Arbeitsleistung.	☐	☐	☐	☐	☐
Herr Müller und Herr Schmidt bearbeiten den Großteil ihrer Arbeitsaufgaben schnell und effizient.	☐	☐	☐	☐	☐
Herr Müller und Herr Schmidt setzen einen hohen Standard in ihrer Arbeitsleistung.	☐	☐	☐	☐	☐
Herr Müller und Herr Schmidt erreichen stets einen hohen Standard in der Aufgabenerfüllung.	☐	☐	☐	☐	☐
Herr Müller und Herr Schmidt übertreffen fast immer ihre Vorgaben.	☐	☐	☐	☐	☐

Bitte geben Sie an, wie Sie das Arbeitsverhältnis von Herrn Müller und Herrn Schmidt beurteilen würden.

	Keine/Nie 1	Wenig/Selten 2	Mittel 3	Viel/häufig 4	Sehr viel/Sehr häufig 5
Wie viele Reibereien gibt es zwischen Herrn Müller und Herrn Schmidt?	☐	☐	☐	☐	☐
Wie offensichtlich sind persönliche Konflikte zwischen Herrn Müller und Herrn Schmidt?	☐	☐	☐	☐	☐
Wie viele Spannungen gibt es zwischen Herrn Müller und Herrn Schmidt?	☐	☐	☐	☐	☐
Wie viele emotionale Konflikte gibt es zwischen Herrn Müller und Herrn Schmidt?	☐	☐	☐	☐	☐
Wie oft sind Herr Müller und Herr Schmidt sich uneinig, wie die Arbeit zu erledigen ist?	☐	☐	☐	☐	☐
Wie häufig gibt es Ideenkonflikte zwischen Herrn Müller und Herrn Schmidt?	☐	☐	☐	☐	☐
Wie viele die Arbeit betreffende Konflikte gibt es zwischen Herrn Müller und Herrn Schmidt?	☐	☐	☐	☐	☐
In welchem Maß gibt es Meinungsverschiedenheiten zwischen Herrn Müller und Herrn Schmidt?	☐	☐	☐	☐	☐

Bitte geben Sie an, inwiefern die folgenden Aussagen auf Ihre Persönlichkeit zutreffen.

	Stimme voll zu 1	Stimme zu 2	Stimme eher zu 3	Neutral 4	Stimme eher nicht zu 5	Stimme nicht zu 6	Stimme über-haupt nicht zu 7
Wenn sich Widerstände auftun, finde ich Mittel und Wege, mich durchzusetzen.	☐	☐	☐	☐	☐	☐	☐
Die Lösung schwieriger Probleme gelingt mir immer, wenn ich mich darum bemühe.	☐	☐	☐	☐	☐	☐	☐
Es bereitet mir keine Schwierigkeiten, meine Absichten und Ziele zu verwirklichen.	☐	☐	☐	☐	☐	☐	☐
In unerwarteten Situationen weiß ich immer, wie ich mich verhalten soll.	☐	☐	☐	☐	☐	☐	☐
Auch bei überraschenden Ereignissen glaube ich, dass ich gut mit ihnen zurechtkommen kann.	☐	☐	☐	☐	☐	☐	☐

Bitte geben Sie an, inwiefern die folgenden Aussagen auf Sie zutreffen.

	Stimme voll zu 1	Stimme zu 2	Stimme eher zu 3	Neutral 4	Stimme eher nicht zu 5	Stimme nicht zu 6	Stimme über-haupt nicht zu 7
Mir ist bewusst, dass meine eigene Existenz auf diesem Planeten flüchtig ist.	☐	☐	☐	☐	☐	☐	☐
Ich möchte, dass man sich nach meinem Tod an mich erinnert.	☐	☐	☐	☐	☐	☐	☐
Wie ich meine Spuren in der Gesellschaft hinterlasse ist etwas, worüber ich oft nachdenke.	☐	☐	☐	☐	☐	☐	☐
Ich hoffe, dass in irgendeiner Weise ein Teil von mir nach meinem Tod weiterleben wird.	☐	☐	☐	☐	☐	☐	☐
Ich möchte eine bleibende Wirkung in dieser Welt hinterlassen.	☐	☐	☐	☐	☐	☐	☐
Ich glaube, dass ich das Leben vieler Menschen beeinflusst habe.	☐	☐	☐	☐	☐	☐	☐
Ich habe Dinge bewirkt, die eine Auswirkung auf andere haben.	☐	☐	☐	☐	☐	☐	☐
Ich glaube, dass es etwas von mir gibt, das mich überleben wird.	☐	☐	☐	☐	☐	☐	☐
Ich glaube, dass die Samen, die ich gesät habe, weiter gedeihen werden, nachdem ich verstorben bin.	☐	☐	☐	☐	☐	☐	☐

Bitte geben Sie an, inwiefern die folgenden Aussagen auf Ihre Lerngewohnheiten zutreffen.

	Stimme voll zu 1	Stimme zu 2	Stimme eher zu 3	Neutral 4	Stimme eher nicht zu 5	Stimme nicht zu 6	Stimme über-haupt nicht zu 7
Ich ziehe es vor, in einer Umgebung zu arbeiten, die viel von mir verlangt.	☐	☐	☐	☐	☐	☐	☐
Ich mag anspruchsvolle und schwierige Aufgaben in meiner Arbeit, bei denen ich neue Fertigkeiten lerne.	☐	☐	☐	☐	☐	☐	☐
Mein Leistungsvermögen weiterzuentwickeln ist für mich so wichtig, dass ich dafür auch mal etwas riskiere.	☐	☐	☐	☐	☐	☐	☐
Ich suche regelrecht nach Gelegenheiten, um neue Fertigkeiten und Kenntnisse entwickeln zu können.	☐	☐	☐	☐	☐	☐	☐
Ich suche mir gerne anspruchsvolle Aufgaben aus, so dass ich viel lernen kann.	☐	☐	☐	☐	☐	☐	☐

Bitte geben Sie an, inwiefern die folgenden Aussagen auf Ihre Persönlichkeit zutreffen.

	Trifft zu 1	Trifft eher zu 2	Neutral 3	Trifft eher nicht zu 4	Trifft nicht zu 5
Ich schätze künstlerische und ästhetische Eindrücke.	☐	☐	☐	☐	☐
Ich bin vielseitig interessiert.	☐	☐	☐	☐	☐
Ich habe eine aktive Vorstellungskraft, bin fantasievoll.	☐	☐	☐	☐	☐
Ich bin tiefsinnig, denke gerne über Sachen nach.	☐	☐	☐	☐	☐
Ich habe nur wenig künstlerisches Interesse.	☐	☐	☐	☐	☐

Bitte geben Sie an, inwiefern die folgenden Aussagen auf Sie zutreffen.

	Stimme voll zu 1	Stimme zu 2	Stimme eher zu 3	Neutral 4	Stimme eher nicht zu 5	Stimme nicht zu 6	Stimme über-haupt nicht zu 7
Kollegen außerhalb meiner Generation sind nicht daran interessiert, sich mit Personen außerhalb deren Generation anzufreunden.	☐	☐	☐	☐	☐	☐	☐
Kollegen anderer Generationen beschweren sich häufiger als Kollegen, die so alt sind wie ich.	☐	☐	☐	☐	☐	☐	☐
Kollegen anderer Generationen sprechen meistens über Themen, die mich nicht interessieren.	☐	☐	☐	☐	☐	☐	☐
Kollegen anderer Generationen neigen dazu, anders zu arbeiten als Kollegen in meinem Alter.	☐	☐	☐	☐	☐	☐	☐
Ich fühle mich wohl, wenn Kollegen anderer Generationen mit mir ein Gespräch führen möchten.	☐	☐	☐	☐	☐	☐	☐
Mir macht es Spaß mit Kollegen anderer Generationen zusammenzuarbeiten.	☐	☐	☐	☐	☐	☐	☐
Meine Kollegen anderer Generationen sind interessante und einzigartige Individuen.	☐	☐	☐	☐	☐	☐	☐
Menschen erledigen ihre Arbeit am besten, wenn sie mit anderen gleichaltrigen zusammenarbeiten.	☐	☐	☐	☐	☐	☐	☐

Bitte geben Sie an, wie häufig Sie die folgenden Tätigkeiten ausüben.

	Nie 1	Selten 2	Gelegentlich 3	Oft 4	Immer 5
Wie oft führen Sie Gespräche mit Kollegen von anderen Generationen?	☐	☐	☐	☐	☐
Wie oft führen Sie Gespräche mit Kollegen von anderen Generationen, die um andere Themen gehen als Arbeit?	☐	☐	☐	☐	☐
Wie oft sprechen Sie mit Kollegen von anderen Generationen über Ihr Privatleben?	☐	☐	☐	☐	☐
Wie oft essen Sie während der Arbeitszeit gemeinsam mit Kollegen von anderen Generationen?	☐	☐	☐	☐	☐

Bitte geben Sie an, inwiefern die folgenden Aussagen zutreffend sind.

	Trifft voll und ganz zu 1	Trifft zu 2	Trifft eher zu 3	Neutral 4	Trifft eher nicht zu 5	Trifft nicht zu 6	Trifft gar nicht zu 7
Eine Arbeitsgruppe erbringt bessere Leistungen, wenn sie zu gleichen Teilen aus jüngeren und älteren Personen besteht.	☐	☐	☐	☐	☐	☐	☐
Eine Arbeitsgruppe ist leistungsstärker, wenn sie entweder nur aus jüngeren Personen oder nur aus älteren Personen besteht.	☐	☐	☐	☐	☐	☐	☐

Bitte geben Sie an, inwiefern die folgenden Aussagen auf Sie zutreffen.

	Stimme voll zu 1	Stimme zu 2	Stimme eher zu 3	Neutral 4	Stimme eher nicht zu 5	Stimme nicht zu 6	Stimme über-haupt nicht zu 7
Stereotype über Mitarbeiter meiner Generation betreffen mich nicht persönlich.	☐	☐	☐	☐	☐	☐	☐
Ich mache mir nie Sorgen, dass mein Verhalten als stereotypisch für Mitarbeiter meiner Generation angesehen wird.	☐	☐	☐	☐	☐	☐	☐
Wenn ich mit Mitarbeitern der anderen Generation interagiere, habe ich das Gefühl, dass sie mein Verhalten in Bezug auf mein Alter interpretieren.	☐	☐	☐	☐	☐	☐	☐
Die meisten Mitarbeiter der anderen Generation bewerten Mitarbeiter meiner Generation nicht auf Basis ihres Alters.	☐	☐	☐	☐	☐	☐	☐
Mein Alter beeinflusst nicht, wie sich Mitarbeiter der anderen Generation mir gegenüber verhalten.	☐	☐	☐	☐	☐	☐	☐
Ich denke eigentlich nie an mein Alter, wenn ich mit Mitarbeitern der anderen Generation interagiere.	☐	☐	☐	☐	☐	☐	☐
Die meisten Mitarbeiter der anderen Generation, haben sehr viel mehr Vorurteile gegenüber Mitarbeitern meiner Generation, als sie zugeben.	☐	☐	☐	☐	☐	☐	☐

Bitte geben Sie an, inwiefern die folgenden Aussagen auf Sie zutreffen.

	Stimme voll zu 1	Stimme zu 2	Stimme eher zu 3	Neutral 4	Stimme eher nicht zu 5	Stimme nicht zu 6	Stimme über-haupt nicht zu 7
Ich mag es, Teil meiner Generation zu sein.	☐	☐	☐	☐	☐	☐	☐
Ich bin stolz darauf, Teil meiner Generation zu sein.	☐	☐	☐	☐	☐	☐	☐
Es ist für mich von zentraler Bedeutung, Teil meiner Generation zu sein.	☐	☐	☐	☐	☐	☐	☐
Ich glaube, es ist ein positives Erlebnis, Teil meiner Generation zu sein.	☐	☐	☐	☐	☐	☐	☐
Ich habe ein klares Verständnis davon, welche Identität meine Generation hat und was diese für mich bedeutet.	☐	☐	☐	☐	☐	☐	☐

Wie schätzen Sie im Allgemeinen den Gesamtstatus der folgenden Altersgruppen ein?

	Niedriger Status 1	Mittlerer Status 2	Höherer Status 3	Hoher Status 4	Sehr hoher Status 5
Junge Erwachsene	☐	☐	☐	☐	☐
Erwachsene im mittleren Alter	☐	☐	☐	☐	☐
Ältere Erwachsene	☐	☐	☐	☐	☐

Vielen Dank für Ihre Teilnahme!