

Minding the Intergenerational Gap: The Role of Age on Knowledge Hiding and Constructive/Destructive Behaviors

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Abstract

Given employee's increased time in the workforce and average lifespans, intergenerational workplaces are more prevalent, and many benefits of age-diverse workplaces have been substantiated (e.g., increased creativity, Backes-Gellner et al., 2011; increased decision-making capabilities, Wegge et al., 2008). Knowledge management research has considered knowledge sharing within intergenerational teams, suggesting that age may be an important factor to how employees share knowledge (Fasbender et al., 2021), but not explicitly knowledge hiding. There has yet to be a study to consider the relationship between intergenerational contact and knowledge hiding even as age influences many other workplace processes. Survey data collected through Cloud Research's Connect from 401 working employees were analyzed using path analysis. Older employees were found to engage in more evasive hiding and rationalized hiding. However, when older workers are in environments with intergenerational contact, evasive hiding and rationalized hiding was less likely. Further, employees that engage in rationalized hiding were more likely to consider constructive behaviors like loyalty or considerate voice, while those who play dumb/hide evasively are more likely to utilize destructive behaviors like assertive voice, neglect, and employee exit. Mediations provide further context to how age impacts these behaviors showing how age influences constructive/destructive behaviors through differing facets of knowledge hiding. Theoretically, these relationships could be motivated by lifespan development and social exchange processes, which future research should explore.

**Minding the Intergenerational Gap: The Role of Age on Knowledge Hiding and
Constructive/Destructive Behaviors**

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CHAPTER 1: INTRODUCTION

With an increase in the average lifespan and career length for employees in the United States, multigenerational workplaces are more prevalent (Munnell, 2015). There are more employees aged 55-65 years old as well as those staying past retirement than ever before (65 years and older; Munnell, 2015). Specifically, the presence of these age groups increased from 12% to 22% from 2012 to 2022 (Bureau of Labor Statistics, (BLS) 2022). Beyond the aging workforce, younger workers of 18- to 34-years of age represent 52.4 million United States workers, an estimated 20% of the current workforce (BLS, 2022). With these groups in mind, workplaces will need to adapt to address the needs of both older workers and younger workers as they contribute to increasingly age-diverse teams. This study highlights the importance of addressing the issues that might arise in age-diverse organizations by assessing existing challenges and barriers of interdependent work among various age groups, and in doing so, aims to open the door for more age-diverse teams.

Within this study I have outlined how positive intergenerational contact can address unique problems specific to younger employees and older employees. To this aim, the theoretical framework of Intergroup Contact Theory (ICT) is utilized as it outlines how workplaces that are age diverse can address discrimination and prejudices by being intentional in creating opportunities for different age demographics to work together (Allport, 1954). While the original theory was primarily used to address racial biases, a meta-analysis conducted by Pettigrew and Tropp (2006) showed ICT was found to reduce prejudice in several demographics including geographic background, gender, ethnicity/race, and age. ICT further explains how positive intergenerational workplaces can be produced when certain conditions are met, such as intergroup cooperation, perceptions of equal status, and goals being supported by social and

institutional authorities (Allport, 1954). When these environments are reinforced, positive climates are developed, leading to reduction in ageism, by improving employees' job satisfaction (Taylor et al., 2013) and progress towards retirement goals in older workers in the form of successful aging (Hassell & Perrewé, 1993). Positive intergenerational climates lead to improved knowledge sharing practices and decreases in age biases due to the collaboration of groups representing multiple ages and generations (Iweins et al., 2013). This study explores how perceptions of organizational climates can be improved by illuminating how intergenerational contact impacts knowledge hiding to various age demographics.

In many companies, it is common for senior level professionals to onboard new employees in a process of knowledge exchange, through intergenerational practices such as training or other environments. The exchange of knowledge can often span more than one generation (Mannion, 2016), which can have a negative impact on age diversity climate (Wegge et al., 2008). A lack of positive intergroup contact (Allport, 1954) may limit the effect of the knowledge transfer between senior team members and new team members. As such, senior employees may decide to participate in knowledge hiding, or the intention to not reveal relevant information that could benefit fellow employees or the organization at large (Connelly et al., 2012). This study investigates how barriers to an intergenerational environment can impact an employee's engagement in knowledge hiding, subsequently leading employees to several behavioral outcomes that organizations should pay attention to. Organizational barriers from an individual's perspective do not exist in a vacuum so understanding the relationship between knowledge hiding and intergenerational contact can help illuminate how age impacts knowledge hiding as well as exit, voice, loyalty, and neglect (EVLN).

As teams are growing diverse with more younger employees and older employees working together (Sammarrà et al., 2017), it is important for organizations to see how they can adjust to support intergenerational teams. To accomplish this, it is important to acknowledge what issues affect intergenerational workplaces, which not only harm individuals within specific age groups, but also hinder the success of the organization. By understanding these differences, this study has the potential to share findings to shape how intergenerational workplaces are understood and mitigate problems that are unique to older workers including barriers to successful aging (Zacher & Rudolph, 2017; Truxillo et al., 2015) and ageism (Burnes et al., 2019; Taylor et al., 2013).

This study also addresses barriers for younger workers struggling with anxiety towards aging (Donizzetti 2019) and interacting with older team members (Bousfield & Hutchison, 2010). By building awareness of these issues within intergenerational workplaces, organizational leadership will be more positioned to address intergenerational conflict and recognize barriers that are unique to younger employees and older employees. This way, specific improvements that are needed for team members based on their age can be addressed rather than viewing all employee barriers as homogenous. North and Fiske (2012) share how younger employees may experience stereotyping like older employees and encourage further research into how all age groups can be examined to understand ageism and intergenerational tensions, which empowers this study to take aim at these issues. Without this attention, several groups in different stages of development of their employee life cycle may suffer from retaliation in the form of knowledge hiding.

Within the scope of this study, intergenerational contact was evaluated as a moderator between age and knowledge hiding (see Figure 1 for conceptual model). While studies are

limited on the effects of knowledge hiding through individual differences such as age, effects of age and gender on knowledge hiding have begun to be explored within a Chinese context (Zhang et al., 2022) finding that differently aged workers engaged in knowledge hiding in unique ways. Zhang et al. (2022) evaluated these relationships in a longitudinal fashion while this study looks at employees cross-sectionally as the Zhang et al. (2022) study did not show adequate within person variation to warrant a longitudinal design. Further, I add to the existing literature by highlighting the role of other key variables not previously considered (e.g., intergenerational contact). By addressing age and intergenerational contact in this manner, attention can be focused on age differences and how organizations can improve workplace conditions to benefit younger and older workers rather than treating all workers as one homogenous age group.

CHAPTER 2: LITERATURE REVIEW

Organizations use knowledge management as a framework to permit the creation of additional knowledge that can be used at the individual or team level (Nonaka, 1994; Lytras & Pouloudi, 2006). Within knowledge management literature, differentiations have been made between knowledge hiding and knowledge sharing. Knowledge hiding occurs when an individual makes an intentional attempt to withhold or conceal information from their colleagues (Connelly et al., 2012) or the purposeful failure to deny essential knowledge to other employees (Zhao et al., 2019). Conversely, knowledge sharing refers to the process where explicit or tacit knowledge is communicated between individuals (Becerra-Fernandez & Sabherwal, 2010). Put more broadly, it is how employees exchange information, ideas, and even skills or expertise (Davenport & Prusak, 1998). As knowledge sharing has been much more widely investigated (e.g., Connelly et al., 2012), the focus of the current study is on knowledge hiding.

Knowledge hiding is not the opposite of knowledge sharing but rather it is a separate construct within the constellation of knowledge management behaviors. When an employee is solicited for knowledge from a coworker or supervisor, they may have several motivations to decide to share or hide information. For example, knowledge hiding can occur following interactions between coworkers due to past rejections of knowledge exchange (Connelly & Zweig, 2015), job dissatisfaction (Offergelt et al., 2019), low motivation (Brock et al., 2005), and even managerial abuse (Khalid et al., 2018). Knowledge hiding also can be pursued due to group cultural dynamics (Bogilovic et al., 2017) including negative co-worker relationship (Nowlin et al., 2015) and lack of group trust (Connelly & Zweig, 2015). In some cases, individuals may not be aware that others are needing or requesting knowledge or have reasons to explicitly hide information (Connelly et al., 2012). To establish a knowledge management culture, efforts

should not stop at promoting knowledge sharing, but also understanding how knowledge hiding occurs.

Knowledge hiding contains three dimensions: evasive hiding, playing dumb, and rationalized hiding. Evasive hiding occurs when an individual conceals knowledge by complying to a request for knowledge with the intention to not complete a task, rather than denying a knowledge request outright (Webster et al., 2008). This could exist in situations where employees are pushing off responsibilities using the excuse of deadlines or stating they will complete a task by the end of the day with no intention to do so. Playing dumb occurs when individuals act as if they do not know about a topic or pretend to have limited expertise to provide a quality response or product (Webster et al., 2008). Lastly, rationalized hiding occurs when an individual offers justification for why they must hide knowledge such as organizational norms or policies as a logical counter to dismiss a request for information (Anand et al., 2020; Connelly et al., 2019).

Within any of these types of knowledge hiding it is important to note that individuals may not always intend to hide knowledge for their own gain. Instead, employees could conform to norms of the workplace or within the power structure. For example, rationalized hiding may occur when knowledge is labeled as confidential or other rationale is provided to prevent knowledge from being shared (Webster et al., 2008). An important consideration for this study is how rationalized hiding is different than playing dumb and evasive hiding. As employees may use playing dumb and evasive hiding techniques when they feel the need to be deceitful, rationalized hiding occurs differently within a culture because an individual can rely on their perceived duties or identities to reinforce why they are hiding information instead of using deception (Connelly et al., 2019). For example, playing dumb and evasive hiding had a negative

relationship with employee voice behaviors (Chen, 2020), turnover intentions, and job satisfaction (Connelly et al., 2019), while rationalized hiding did not have a significant relationship with any of these variables. As such, this study considered how each knowledge hiding dimension may exist differently among age groups, in intergenerational workplaces, and to EVLN factors.

The Role of Age

Age has multiple dimensions for how it is conceptualized within the workplace (De Lange et al., 2021), but this study will focus on how age is understood at a chronological level and helps form social groups. Specifically, age groups are social categories that individuals belong to (North & Fiske, 2012) but are fluid in the sense that individuals can move across groups over time (Drury et al., 2016). This is different than other demographic groups such as race or gender where individuals typically are part of one group throughout their lives. This recognizes the importance of age-diversity in organizations because all employees experience age differences as they age.

Several studies that have focused on knowledge hiding have used age as a control variable (Connelly et al., 2012; Webster et al., 2008), but focus specifically on why age may affect knowledge hiding is limited. The only study to my knowledge that addresses age differences in knowledge hiding was conducted by Zhang et al. (2022), which investigated how individual differences such as age could lead to knowledge hiding behavior and found an effect of age on evasive hiding and playing dumb. Specifically, older employees were more likely to choose rationalized hiding over playing dumb and evasive hiding (Zhang et al., 2022). The Zhang et al. (2022) study, which considered categorical groups for age, may not represent the

identity to which employees use to describe themselves (e.g., assuming someone aged 51 is an older worker; Beier et al., 2022) while this study however considers age on a continuum.

Theoretically, socioemotional selectivity theory (SST) can provide context to why being a different age may impact knowledge hiding in contrasting ways. SST considers changes over lifespans to address social goals (Carstensen, 1993) where those who are older have experienced losses associated with aging and are selective when using cognitive resources (Carstensen, 2021). SST has been used as a framework to address age differences (Birditt et al, 2005; Blanchard-Fields et al., 2004) including one study that focused on how workplace conflicts can be understood by age differences. Davis et al. (2009) found that older adults are less likely to engage in disruptive responses and chose to employ nonconfrontational strategies to address conflict. Specifically, older adults are significantly more avoidant to conflict, aiming to address problems in less confrontational ways. As older people aim to avoid conflict, this may shed light onto why rationalized hiding would be used over other knowledge hiding methods, as it may assist older workers in their attempt to avoid conflict.

Additionally, different approaches to understand the role age may play in knowledge hiding can be understood by differences of motivation and resources. The motivational theory of lifespan development (MTLD) states how individuals will behave differently as they age due to what motivations and resources are available (Heckhausen & Schulz, 1995). As such, employees of various ages may have different resources at their disposal and would pursue certain types of knowledge hiding. Types of motivation (e.g., intrinsic, generativity) increase across life spans while others (e.g., extrinsic motivations for training) will decrease as people age (Truxillo et al., 2015). Thus, MTLD suggests that knowledge hiding may occur as a result of differential resources of different aged workers.

A study investigating mediating roles of workplace age discrimination and work-related outcomes encouraged further research into how younger workers may also experience the need to act differently because of perceived discrimination (Yeung et al., 2021). This study views that younger people have less resources at their disposal and will consider knowledge hiding behaviors such as evasive hiding and playing dumb as they do not have the resources that older workers must utilize rationalized hiding. An example of this assertion is that younger workers report less social support compared to older workers (Yeung et al., 2021). In contrast, older employees have more resources and agency within the workplace and can rely on rationalized hiding more frequently to facilitate workplace interactions.

However, older employees may have barriers such as age discrimination, limiting their ability to knowledge hide in certain ways compared to younger employees. Whereas if an employee was mid-career or did not appear to be young or old, they would experience less age bias and have the most resources to knowledge hide. Older employees often report age metastereotypes, suggesting they believe other age groups view them as more experienced and resourceful (Finkelstein et al., 2013). Because of this, this might limit their ability to engage in certain knowledge hiding behaviors, like playing dumb. Additionally, evasive hiding and playing dumb have a deceptive nature (Connelly et al., 2019) and could worsen employee relationships (Rai & Agarwal, 2018) which goes against older employee's desire to avoid future conflicts. Instead, older employees would enact rationalized hiding and effectively avoid workplace conflicts (Venz & Nesher Shoshan, 2021) and minimize damage to their relationships and resources (Zhang, et al., 2022; Bari et al., 2020).

In contrast, younger employees do not have plentiful resources and may have to rely on their newness and inexperience to play dumb when asked to complete a task or share

information. This could be explained by how younger workers often expect to be stereotyped as “inexperienced” (Finkelstein et al., 2013). Further, Andreeva and Zappa (2023) showed how knowledge had to be protected as a resource (Guo et al., 2022) as gendered dynamics led to increases in knowledge hiding from female employees who were in male-dominated industries. Younger employees may be in a similar situation when on teams or in organizations without coworkers their own age, which may motivate them to protect their resources.

Finally, young employees may feel the need to hide information from superiors or older employees as a sense of security as sharing knowledge may lead to a decrease in their status or power if it is not congruent with organizational or older employee’s beliefs (Connelly et al., 2014). In turn, sharing knowledge could be seen as a waste of invested time and effort (Szulanski et al., 2004) if employees do not have trust in their superiors listening to their perspectives. Without a sense of security in their workplace, young employees may feel voiceless in being able to share their developing expertise and turn instead to counterproductive work behaviors (CWBs). From this perspective, this study infers that those younger in age will have limited resources and would have to knowledge hide by playing dumb and evasive hiding, while older employees have abundant resources and can use rationalized hiding more frequently when they choose to knowledge hide.

Hypothesis 1a: Age will be associated with rationalized hiding such that older participants engage in more rationalized hiding.

Hypothesis 1b: Age will be associated with playing dumb such that younger participants engage in more playing dumb.

Hypothesis 1c: Age will be associated with evasive hiding such that younger participants engage in more evasive hiding.

An Intergenerational Contact Lens to Knowledge Hiding

Intergenerational workplaces contain multiple age groups contributing to an organization's climate with unique challenges as employees learn to work together despite generational barriers (Iweins et al., 2013). The age diversity within those organizations can lead to different social identities being represented more than others (Boehm et al., 2010), leading to certain groups facing more barriers or benefits based on their social identities (Tajfel & Turner, 2003; Tajfel et al., 1979). Within those workplaces exist interactions between members of clearly defined and distinguishable groups (Pettigrew, 1998). Intergenerational contact can be understood as interactions that happen between groups labeled by age rather than other in or out groups (Henry et al., 2015). Age diversity climates can lead to positive intergroup relations at work, including higher quantity and quality of age-based intergroup contacts which leads to decreased anxiety around aging (Pettigrew & Tropp, 2006, Allan et al., 2014) and increased decision-making capabilities of age-diverse teams (Wegge et al., 2008). Additionally, intergenerational contact relates to decreases in ageism (Allan & Johnson, 2008; Iweins et al. 2013) and increases positive views of older adults (Harwood et al., 2005). Moreover, increases in generativity in older leaders, being the desire of those to guide future generations, were found to occur when older members of the organization were seen as successful leaders (Zacher et al., 2011). This contributes to a successful intergenerational workplace through thoughtful actions tied to mentorship and relationships.

Younger employees within a company benefit from intergenerational contact through mentorship (Zacher et al., 2011), whereas older workers gain motivation from generativity (Kanfer & Ackerman, 2004). However, this cannot be achieved if younger employees do not perceive their environment as supportive. Employees may worry that interactions with outgroup

members will lead to rejection, embarrassment, or misunderstanding, leading to potential developments of prejudice (Plant & Devine, 2003; Stephan & Stephan, 1985). While these prejudices mainly affect older employees, younger employees can experience intergroup anxiety, which prevents them from collaborating and sharing knowledge with others age groups due to undesirable outcomes including avoidance of outgroup members and negative outgroup attitudes (Esses & Dovidio, 2002; Stephan et al., 2000). These prejudices can contribute to how young employees may fear appearing ignorant when seeking knowledge (Levin et al, 2006) and instead seek information on their own. When asked to report to older members, they could be afraid to appear foolish, and decide to engage in playing dumb due to their fear of perceptions of older members (Schmidt et al., 2022). In contrast, when organizations focus on age-based inclusion and intergenerational contacts, attitude towards older workers are more positive and younger workers decrease their intentions to quit (Iweins et al., 2013). It is not only the age of the worker that matters, but the age of the workers around them that does as well.

This study considers the benefits and consequences of intergenerational workplaces and how the presence of intergenerational contact may alter how employees knowledge hide. Through intergroup contact theory, the presence of intergenerational contact can be understood as a stimulus that encourages employees to knowledge hide differently than if age was not considered a factor to knowledge hiding behavior. Because this study is already considering how groups are more or less likely to knowledge hide based on their own age, the amount of contact that workers receive from other employees in different age groups could also influence knowledge hiding behavior.

One study looking at relationships between older adults and college students found that positive behavioral intentions towards older adults were found when good quality contact was

first met (Bousfield & Hutchison, 2010). This increased college students' intentions to spend more time with older adults, work with them, and even make donations to charities for older people. Positive quality contacts with older adults can reduce young people's concerns about intergenerational encounters, which in turn improved their attitudes towards older adults (Bousfield & Hutchison, 2010). There is a plethora of studies that investigate intergenerational knowledge transfer including a focus on the value of knowledge shared by age-diverse teams (Gerpott et al., 2017) and examples of how intergenerational knowledge sharing improves age-diverse teams in job-efficiency (Starks, 2013), creativity and innovation (O'Flaherty & Heavin, 2015), and building competences in knowledge retention (Ropes, 2011). Considering the foundation these studies established on why knowledge management relates so heavily to age-diverse teams, this study will contribute to existing literature by providing results that show that intergenerational workplaces will impact the effect of knowledge hiding similar to knowledge sharing.

Tang and Martins (2021) reference the need for literature to address knowledge management between age-diverse workers to reduce intergenerational friction in organizations so this study will investigate how knowledge hiding can be observed and reduce some of those frictions. Using intergroup contact theory (ICT) as a framework, one study examined knowledge sharing and its effects between age groups and within age-diverse workplaces (Lagacé, 2019) so considering a similar framework for knowledge hiding is appropriate. By expanding on ICT, the current study can further reveal the importance of a work culture that supports effective knowledge management between young workers and older workers to foster positive attitudes about aging in the workplace (Lagacé et al., 2022). Additionally, using SST, Henry et al. (2015)

suggested that young people seek knowledge-related goals rather than emotional ones, while older people prefer close social partners who show positive emotions (Carstensen et al., 1999).

Zhang et al. (2022), which found age to have a relationship with rationalized hiding across multiple time points in a Chinese context, signifying that older employees are more likely to rationally hide after a situation changes. Zhang et al. (2022) encouraged future research to understand what ways organizations and knowledge management processes are impacted by knowledge hiding. As their study focused on age, intergenerational contact became a natural next step to explore how age relations within the workplace could be impacted by knowledge hiding. If this relationship is observed, the impact of intergenerational contact can be understood to help develop strategies and interventions to address knowledge hiding and how it uniquely occurs for age demographics in an organization. Intergenerational contact has been observed to have a moderating relationship between grandparent-grandchild relationships (Harwood et al., 2005) as well as indirect effects from intergenerational contact between generativity and age bias (Henry et al., 2015). Henry et al. (2015) also encouraged future studies to investigate the consequences of intergenerational contact.

Using context of past studies that found differences in knowledge hiding dimensions and age (Zhang et al., 2022), this study expects intergenerational contact to moderate these relationships. As rationalized hiding decisions occurs from a place of security and not wanting to lose resources, this study considers that intergenerational contact will decrease employees' need to knowledge hide and instead acknowledge resources and benefits of less knowledge hiding when intergenerational contact occurs (e.g., mentorship, Kanfer & Ackerman, 2004; generativity, Zacher et al., 2011). Meaning, the more intergenerational contact present, the relationship between age and rationalized hiding will be weaker. Similar effects are expected for evasive

hiding and playing dumb, where viewing coworkers as more positive is evident (Harwood et al., 2005) and increased intergenerational contact limits ageism (Iweins et al., 2013). Through these effects, young employees feel more trusting of their coworkers and feel less of a need to be evasive or play dumb, thus the relationship between age and evasive hiding/playing dumb will be weaker when intergenerational contact mediates the relationship between these variables.

Hypothesis 2a: The relationship between chronological age and rationalized hiding will be moderated by intergenerational contact such that intergenerational contact weakens the relationship between chronological age and rationalized hiding.

Hypothesis 2b: The relationship between chronological age and evasive hiding will be moderated by intergenerational contact such that intergenerational contact weakens the relationship between chronological age and evasive hiding.

Hypothesis 2c: The relationship between chronological age and playing dumb will be moderated by intergenerational contact such that intergenerational contact weakens the relationship between chronological age and playing dumb.

The Impact of Knowledge Hiding on Workplace Outcomes: Exit, Voice, Loyalty, and Neglect

Knowledge hiding has the potential to impact employee's workplace behaviors including the constructs of exit, voice, loyalty, and neglect (EVLN). Originally proposed by Hirschman (1970), EVLN can be characterized as potential reactions individuals have in a workplace context to dissatisfaction (Rusbult et al., 1988). Within EVLN research, several models have been created to categorize and understand positive and negative outcomes separately (Rusbult et al., 1982; Hirschman, 1970). These types of reactions can be understood with two dimensions: constructive/destructive and passive/active. When faced with declining job satisfaction,

employees tend to act deliberately and intentionally (Sabino et al., 2018), leading to either destructive or constructive EVLN behaviors. Constructive behaviors are more pro-social behaviors that instill cooperation within an organization, while destructive behaviors come at the cost of the relationship between employees and the organization (Liljegren, et al., 2008). Active behaviors of exit or voice are categorized as such as they imply action, while passive behaviors require less action. Exit is to be understood as an active and destructive reaction, while neglect is passive and destructive, loyalty is passive and constructive, and finally voice is active and constructive (Rusbult et al., 1982). An employee's decision to exit occurs when an employee ends the working relationship with their organization or reconsider participation in specific teams and job projects (Leck & Saunders, 1992). Neglect refers to what level an employee is willing to shirk their job duties or allow conditions to worsen in the workplace (Hirschman, 1970). Employee's voice relates to concerns or the decision to speak up regarding concerns within a team or company (Liljegren et al., 2008). Lastly, employees may also express loyalty, specifically when employees passively but optimistically wait for conditions of the workplace to change (Rusbult et al., 1988).

In a study by Hagedoorn et al. (1999), aggressive and considerate voice were differentiated as two separate factors, rather than one single construct. Aggressive voice can be understood as not trying to vocally solve the problem but instead speaking to personal interests exclusively, while considerate voice has employees addressing the concerns of coworkers, supervisors, or the organization at large (Hagedoorn et al., 1999; Rusbult et al., 1988). Several studies have already found use in separating voice. In one study, researchers observed employees' destructive behavioral intentions to be positively related to perceived injustice (VanYperen et al., 2000). Using social exchange theory, another study considers how

organizational justice can be used as a moderator to promote considerate voice behavior, finding those who perceived lower procedural fairness are likely to voice concerns when they are motivated and empowered (Wei et al., 2020).

With each EVLN component falling under the active/passive and constructive/destructive dimensions, these constructs can be understood further under psychological contract breaches (PCBs), which is how one individual (either an employee or the employer) believes the other party failed to complete their obligations regarding expectations or beliefs integral to the professional relationship (Robinson & Morrison, 2000). This can be understood further through social exchange theory where a worker's mutual expectation to exchange information or favors to complete tasks (Blau, 1964). EVLN relates to this specifically when destructive reactions occur more frequently when psychological contracts are breached, while constructive or passive actions would occur more frequently or the same amount when psychological contracts are not violated.

While this study did not measure PCB, it can be used as a theoretical framework to understand how knowledge hiding and EVLN factors relate. Scholars have connected PCB to knowledge hiding through studies on abusive supervision (Ghani et al., 2020) and to behaviors such as intentions to stay with the organization (Suazo & Stone-Romero, 2011). With these relationships from past studies in mind, this study investigates how each dimension of knowledge hiding acts as an antecedent to EVLN constructs. One study on knowledge hiding and incivility considers PCBs as a mediator (Wen et al., 2022). Wen et al. (2022) also considered how social exchange theory helps frame how knowledge hiding through worker's mutual expectation to exchange information or favors to complete tasks and violations to this social exchange leads to more incivility. When knowledge hiding occurs, it leaves room for negative

emotions and reactions to occur (Iqbal et al., 2022), leading to an increase in destructive EVLN reactions. As EVLN has clear indicators of constructive/destructive and passive/active actions occurring in the workplace, practitioners can be urged to address concerns around knowledge management by connecting these dimensions to knowledge hiding behaviors.

At this time, published research has not connected knowledge hiding behaviors to neglect, loyalty, or exit within the EVLN framework directly. Instead, studies have been developed to understand the relationship between knowledge hiding and similar variables, such as voluntary turnover intentions (Serenko & Bontis, 2016) and organizational citizenship behaviors (Kaur & Kang, 2023). Both studies found that knowledge hiding may be a psychological mechanism to cope with difficulties and address workplace issues, but in turn leads to other reactions such as lessened organizational commitment (Suazo & Stone-Romero, 2011) and as I propose, would also impact EVLN reactions.

Each of the dimensions within EVLN provide unique outcomes of knowledge hiding. Exit can be considered very similarly to intentions to stay in the organization (Suazo & Stone-Romero, 2011) as organizational commitment was found to be a significant predictor of exit by employees (Withey & Cooper, 1989). Additionally, neglect and loyalty are similar to organizational citizenship behaviors (Kaur & Kang, 2023).

In their review of knowledge hiding in organizations, Connelly et al. (2019) shared a need to consider both positive and negative consequences of knowledge hiding. While knowledge hiding traditionally exists as a CWB, or a predictor for CWBs, the differences between evasive hiding and playing dumb compared to rationalized hiding positions the current study to consider the subfactors differently in terms of what outcomes could be considered negative or positive. Bari et al. (2019) encouraged future researchers to consider rationalized

hiding as a different factor as it acted more heterogeneously compared to knowledge hiding's other subfactors on team creativity. Rationalized hiding has been shown to exist differently than playing dumb and evasive hiding in multiple studies including the relationship between feedback and voice behaviors (Chen, 2020) where rationalized hiding did not have an effect on voice behaviors (which were detailed as voicing concerns).

Additionally, Connelly and Zweig (2015) argued that rationalized hiding can strengthen interpersonal relationships between those requesting knowledge and those who hide it, while Connelly et al. (2012) shared how knowledge hiding can be not harmful when it is influenced due to prosocial motivations. As such, EVLN factors may be an avenue to explain how rationalized hiding may predict more positive outcomes such as loyalty, while playing dumb and evasive hiding may have more impact towards exit and neglect. Team effectiveness has been shown to promote employees' rationalized hiding (Yuan et al., 2020) and employees' behaviors can often be explained through rationalized hiding (Connelly et al., 2012) for the purpose of avoiding workplace conflicts (Venz & Nesher Shoshan, 2021) and minimizing damages to relationships with employees (Bari et al., 2020). From these outcomes from past studies, this study expects employees that consider rationalized hiding are loyal to their company even if they may exhibit other CWBs.

Hypothesis 3a: Rationalized hiding will be associated with loyalty. Specifically, higher rationalized hiding will be associated with higher amounts of loyalty in employees.

On the other hand, employees who are engaging in knowledge hiding behaviors aside from rationalized hiding may be reacting in such a way that leads to neglecting their job duties. Connelly et al. (2019) addressed how increases in turnover intentions and reduced job satisfaction were associated with playing dumb and evasive hiding, while also not being evident

within rationalized hiding. As such in this study it is expected that exit and neglect outcomes will behave similarly to the study produced by Connelly et al (2019).

Hypothesis 3b: Evasive hiding/playing dumb will be associated with neglect. Specifically, higher evasive hiding will be associated with higher amount of neglect.

Hypothesis 3c: Evasive hiding/playing dumb will be associated with employee exit. Specifically, higher Evasive hiding/playing dumb will be positively associated with employee's decision to exit.

Knowledge hiding research has focused on voice including a study on how perceived leaders' evasive hiding and playing dumb had a negative effect on voice behavior (Chen, 2020). Other studies consider the relationship of defensive voice on CWB with knowledge hiding as the mediator, which had a positive effect leading to more CWBs (Qi & Ramayah, 2022). Additionally, a study on leader knowledge hiding on employee change-oriented voice found knowledge hiding to negatively impact and lead to less change-oriented voice (Hameed et al., 2023). Each of these studies used social exchange theory as part of their theoretical foundation to understand why more knowledge hiding would lead to increases in negative voice behaviors, supporting the aims of this study in relating knowledge hiding to voice within EVLN. From these studies, I predict that defensive hiding acts similarly to aggressive voice, where employees who are engaging in playing dumb or evasive hiding are more likely to use aggressive voice due to a sense that their psychological contracts were breached and leading to aggressive voice as a CWB. In contrast, employees engaging in rationalized hiding are more likely to engage in considerate voice as despite engaging in knowledge hiding behaviors, they see the ability to mend PCBs through social exchange and would not engage in CWBs such as aggressive voice.

Hypothesis 3d: Evasive hiding/playing dumb will be associated with aggressive voice.

Specifically, higher Evasive hiding/playing dumb will be positively associated with employee's decision to use aggressive voice.

Hypothesis 3e: Rationalized hiding will be associated with considerate voice.

Specifically, higher rationalized hiding will be positively associated with employee's decision to use considerate voice.

Knowledge hiding could also act as a mechanism between age and EVLN behaviors.

From a social exchange perspective, certain knowledge hiding behaviors could act as a precursor to constructive and destructive behaviors. In conjunction with prior hypotheses, EVLN behaviors could be more common to younger or older employees and be systematically influenced by knowledge hiding behaviors. Specifically, pro-social behaviors such as loyalty and considerate voice occur following rationalized hiding from older employees. As Connelly et al. (2012) shared how prosocial motivations could influence non-harmful knowledge hiding and if age effects are present on rationalized hiding, then a mediated relationship could occur with rationalized hiding as the mediator between increasing age and constructive EVLN behaviors. This relationship would be expected as rationalized hiding occurs as an attempt to maintain trust in the organization (higher senses of loyalty) and considerate voice behaviors would be an extended organizational citizenship behavior despite an employee's decision to hide knowledge in a rational manner. This same relationship would be expected between deceptive hiding methods and destructive EVLN behaviors would be expected if age has a negative relationship with evasive hiding and playing dumb.

Hypothesis 4a: Rationalized hiding will mediate the relationship between age and constructive behaviors of loyalty and considerate voice. Specifically, as age increases,

there will be higher amounts of loyalty and considerate voice by employees when rationalized hiding occurs.

Hypothesis 4b: Evasive hiding will mediate the relationship between age and destructive behaviors of exit, aggressive voice, and neglect. Specifically, as age decreases, there will be higher amounts of exit, aggressive voice, and neglect by employees when evasive hiding occurs.

Hypothesis 4c: Playing dumb will mediate the relationship between age and destructive behaviors of exit, aggressive voice, and neglect. Specifically, as age decreases, there will be higher amounts of exit, aggressive voice, and neglect by employees when playing dumb occurs.

CHAPTER 3: METHODS

Participants

Data collection for this study was conducted through an online survey through Cloud Research's Connect platform (formerly known as TurkPrime.com). Online crowdsourcing platforms have become commonplace in organizational psychology research (Cheung et al., 2016). Further, several articles have used Connect for participant recruitment (Litman et al., 2017) on studies related to organizational and occupational health studies (Michel et al., 2018), employee perceptions of other employees (Aladesuru, 2020), and individual differences relating to gender (Litman et al., 2020).

To be considered for the survey, participants had to be full-time workers (e.g., working at least 30 hours a week) from the United States. To ensure generalizability, a specific industry was not selected with the goal of having a variety of industries and job levels represented in the sample. Additionally, this study considered past studies that investigated age effects on knowledge hiding to best estimate the needed sample size to ensure quality data. Multiple studies (Rubbab et al., 2022; Khan et al., 2022; Singh et al., 2019) have illustrated a small to medium effect of knowledge hiding in knowledge management literature. As such, an a priori G*Power 3.1 analysis indicated that an adequate sample size for Linear Multiple Regression (*Fixed Model, R² increase*) would be 263 participants to detect a significant small-to-medium effect size ($f^2 = 0.07$) at the $p < 0.05$ level, with an alpha of 0.80 and five predictors. To account for nonresponse bias and data quality issues, at least 315 participants were needed.

Participants were collected through CloudResearch's Connect platform. All participants were monetarily compensated \$4.13 for their participation. Following a prescreen, 531 participants were in the original sample. Next, there have been concerns drawn on collecting

quality data from crowdsourcing platforms. Several precautions were taken to ensure quality data. Additionally, I.P. addresses were evaluated to ensure there were no duplicates as well as attention checks to ensure participants read each item. Finally, statistical checks through the *careless* package in R (Yentes & Wilhelm, 2023) were evaluated (e.g., Mahalanobis distance) on the knowledge hiding measure (the key focal measure). Therefore, from this sample, six participants were removed due to providing invalid Connect IDs, 10 were removed due to having duplicate IP addresses and Connect IDs, and 12 participants were removed for failing more than half of the eight attention checks. Additionally, three participants were removed for providing the same responses as other participants which appeared to be either created by bots or copied from a website to a qualitative response question in the demographics section. Following the use of *careless* (Yentes & Wilhelm, 2023), a total of 99 participants were removed based on Mahalanobis distance, leaving the final sample of 401 participants. Long string patterns were also evaluated but did not lead to the removal of any participants because of the large number of participants that it would remove ($n = 218$), which would only lead to even further concerns related to low base rate behavior. Completion time was also reviewed, having no issues regarding participants taking too long or completing the questionnaire too swiftly.

Participants' ages ranged from 21 to 77 years old ($M = 46.84$, $SD = 12.83$). Overall, 45.88% of participants were female ($n = 184$) and 51.87% were male ($n = 208$). Additionally, three participants identified as transgender or non-binary (0.75%) while six participants did not record their gender (1.5%). Regarding participants' race/ethnicity, 75.81% of the sample are non-Hispanic white/Euro-American and the second largest group was 28 participants who were East Asian/Asian American (6.98%). There were also 24 black/African American participants (5.98%), seventeen Latinx/Hispanic American participants (4.24%), four Native

Americans/Alaska Natives (less than 1%), and two South Asian/Indian American participants (less than 0.5%). Additionally, fourteen participants were bi-racial/mixed race (3.49%), six participants did not report their race (1.49%), and one preferred not to answer.

Participants were asked to confirm if they were full-time employees to be able to participate in the study. When asked, all participants stated they were full-time, one specified they were self-employed, and six are active military. While participants ranged in answers of working a total of 8 to 76 total hours within the past week. Average hours worked in this sample was 41.74 ($SD = 5.69$) hours per week. When asked how long participants have been at their current role, answers ranged from 0.5 to 50 years ($M = 9.18$ years, $SD = 8.13$ years). Regarding specific industry, 9.73% represented education, training and library, 8.48% technology, 6.98% management, 6.73% business and financial operations, 6.48% computer and mechanical, 5.49% arts, design, entertainment, or media based careers, 4.24% service industry, 4% healthcare practitioners, 4% manufacturing, 3.74% engineering, 3.74% office and administrative roles, 3.49% healthcare support, 3% marketing/sales, 2.74% construction, 2.49% legal, 2.49% transportation, and the remaining percentage representing other industries.

Procedure

The survey was made available on CloudResearch's Connect for participants on the platform. A brief overview regarding the purpose of the study (See Appendix A) and an option to electronically consent (See Appendix B) to data being collected was provided. Identity remained anonymous for participants and their identification was not linked to their responses. Participants were first screened for robot behaviors, employment, and attention and then were asked to complete a battery of measures that asks questions related to intergenerational contact (King & Bryant, 2017), knowledge hiding (Connelly et al., 2012), knowledge sharing (Swift & Virick,

(2013), and EVLN (Rusbult, 1988). Additional measures were collected in the survey not specific to the current study's research questions such as organizational justice (Colquitt, 2001), age group identification (North, 2022; Dimock, 2019), and anxiety around aging (Drury et al., 2016). Demographic information (e.g., age, gender, race) was also collected (See Appendix C for surveys). A list of all variables collected can be found in Appendix D. Validity checks were included throughout the survey, prompting participants to respond to various items with prescribed responses. For example, a validity check might ask participants to respond "Disagree" to an item (Meade & Craig, 2012).

Measures

Knowledge Hiding. All three facets of knowledge hiding (i.e., evasive hiding, playing dumb, and rationalized hiding) were adopted from Connelly et al., (2012). These measures each use a 5-point Likert scale, ranging from (1) *strongly disagree* to (5) *strongly agree*, and have a total of 12 items (four items for each factor of evasive hiding, playing dumb, and rationalized hiding). An example item of evasive hiding is "Agreed to help them but never really intended to" while for playing dumb an item is "Pretended that I did not know the information." Lastly, an example of rationalized hiding is "Explained that I would like to tell them but was not supposed to." Higher scores for each of these measures show that participants are more likely to use the specific knowledge hiding behavior. The Cronbach's alpha value has been found to be reliable in the original scale with values all above .70 (Connelly et al., 2012) as well as above .88 in more recent studies (Wen et al., 2022). In this study each facet of knowledge hiding was also shown to be reliable including rationalized hiding ($\alpha = .94$; $\omega = .96$), evasive hiding ($\alpha = .94$; $\omega = .95$) and playing dumb ($\alpha = .94$; $\omega = .96$).

Intergenerational Contact. Intergenerational contact is measured within the Workplace Intergenerational Climate Scale (WICS; King & Bryant, 2017). his scale was adapted to focus on age group instead of generation. Intergenerational contact consists of three items. Higher scores on this scale suggest a perception of more contact between age groups in the workplace. Sample items of the measure include “How often do you have conversations with co-workers outside your age group?” Participants respond to these statements on a Likert scale ranging from (1) *never* to (5) *very often*. The Cronbach’s alpha value has been found to be reliable in the original scale ($\alpha = .85$; King & Bryant, 2017) and additional studies ($\alpha = .86$; Lagacé et al., 2019). In this study intergenerational contact was also shown to be reliable ($\alpha = .87$; $\omega = .89$).

Exit, Voice, Loyalty, and Neglect. Exit, considerate voice, assertive voice, loyalty, and neglect measures were each pulled from the Hagedoorn et al. (1999) study with each measure using a 5-point Likert scale, ranging from (1) *strongly disagree* to (5) *strongly agree*. Exit consists of five items (e.g., “I want to switch to an alternative job”), loyalty consists of six items (e.g., “I will quietly stick with my assigned job through good and bad times”), and neglect consists of seven items (e.g., “I will begin to take a lot of breaks and do less work”). Considerate voice consists of 11-items (e.g., “I will try to work out an ideal solution in collaboration with my supervisor”) and aggressive voice consists of seven items (e.g., “I will be persistent with my supervisor in order to get what I want”). The Cronbach’s alpha value has been acceptable for considerate voice ($\alpha = .88$), aggressive voice ($\alpha = .83$), exit ($\alpha = .92$), loyalty ($\alpha = .79$), and neglect ($\alpha = .69$) respectively in the original scale (Hagedoorn et al., 1999). Additional studies have also provided alpha reliability at or above .75 (Lee & Varon, 2020). In this study considerate voice ($\alpha = .92$; $\omega = .95$), aggressive voice ($\alpha = .81$; $\omega = .86$), exit ($\alpha = .94$; $\omega = .97$), loyalty ($\alpha = .87$; $\omega = .91$), and neglect ($\alpha = .89$; $\omega = .92$) were also shown to be reliable.

Knowledge Sharing Frequency. Knowledge sharing was measured through a five-item scale developed from Swift and Virick (2013) who reviewed knowledge sharing frequency in relation to perceived support. While knowledge sharing is not directly specified in any of the hypotheses, it was collected to observe correlations given knowledge sharing's relationship with knowledge hiding (Connelly et al., 2012). Higher scores on this scale suggest more frequent use of knowledge sharing behaviors. Sample item of the measure include "When asked, I share knowledge with my coworkers." This measure uses a 5-point Likert scale, ranging from (1) *never* to (5) *very often*. The Cronbach's alpha value was acceptable in the original scale ($\alpha = .85$, Swift & Virick, 2013) and another study ($\alpha = .91$, Gagné et al., 2017) study. In this study knowledge sharing frequency was also acceptable ($\alpha = .86$; $\omega = .89$).

CHAPTER 4: RESULTS

All analyses were conducted in *R* version 4.2.1 (R Core Team, 2021). To ensure that outliers would not influence the normality of the collected sample, assumptions were checked and no abnormalities that would affect the quality of the data were found. For the sample, a total of four missing data points were found. One participant did not respond to the turnover item, and another missed an item for one of the knowledge hiding facets. As such, listwise deletion was used as the default in *R* given the small amount of missing data obtained. Considering this, tests that included turnover in the analysis have 400 participants, while all other analyses have a total of 401 participants. Additionally, two participants did not complete the adapted intergenerational contact measure. As such, analyses conducted include intergenerational contact use data from 399 participants.

A confirmatory factor analysis (CFA) was conducted to test the validity of the adapted workplace intergenerational climate scale (WICS) as well as the specific measure for adapted intergenerational contact. No items had to be dropped when using Maximum Likelihood specifications on the total sample size ($N = 399$) to evaluate whether a single factor solution for the 4-item intergenerational contact scale fit the data. Model fit was assessed ($\chi^2(6) = 1025.99, p < .001$), finding good fit for CFI (0.99), good fit for TLI (0.98), mediocre fit for RMSEA (0.11, 90% CI [.06, .17]), and acceptable fit for SRMR (0.02). Further, the RMSEA value in the comparison exceeded the commonly accepted threshold of below 0.07 (Steiger, 2007), indicating poor model fit for the null model. Since this test displayed mediocre or better fits, additional models were not tested, and the current model was used for analysis.

Descriptive Statistics

Correlation among variables were tested using *R* (R Studio Team, 2020). Knowledge hiding facets are strongly correlated with one another, including evasive hiding and rationalized hiding ($r(399) = .72, p < .001, 95\% \text{ CI } [0.67, 0.77]$), rationalized hiding and playing dumb ($r(399) = .73, p < .001, 95\% \text{ CI } [0.68, 0.77]$), and evasive hiding and playing dumb ($r(399) = .74, p < .001, 95\% \text{ CI } [0.69, 0.78]$). In contrast, knowledge sharing frequency is weakly correlated with each facet at the same value ($r(397) = -.36, p < .001, 95\% \text{ CI } [-0.44, -0.27]$). As knowledge sharing and hiding motivations are considered different (Gagné et al., 2017), knowledge sharing frequency will not be considered a control in this study's analyses. Additionally, intergenerational contact has a negative correlation with each of the knowledge hiding facets including playing dumb ($r(397) = -.13, p = .010, 95\% \text{ CI } [-0.22, -0.03]$), rationalized hiding ($r(397) = -.12, p = .002, 95\% \text{ CI } [-0.21, -0.02]$), and evasive hiding ($r(397) = -.14, p = .006, 95\% \text{ CI } [-0.23, -0.04]$). Other considerable correlations include a negative, weak relationship between playing dumb and considerate voice ($r(399) = -.36, p < .001, 95\% \text{ CI } [-0.44, -0.27]$) as well as a positive, weak relationship between playing dumb and aggressive voice ($r(399) = -.36, p < .001, 95\% \text{ CI } [-0.44, -0.27]$). Similar direction and significant correlations exist between other EVLN factors and knowledge hiding factors, but the strength of these correlations differ, justifying each knowledge hiding facet to be considered separately for this study. Descriptive statistics can be found in Table 1 and correlations between study variables are presented in Table 2.

Hypothesis Testing

All hypotheses were tested by a series of regression analyses through the *lavaan* package in *R* (Rosseel et al., 2018). Bootstrapping analyses were used to ensure significance of all effects

with the *semtools* package (Pornprasertmanit et al., 2014) in *R*, with 5000 resamples. Hypothesis 1a-c suggested that each facet of knowledge hiding will have a relationship with age. Age was found to be related to rationalized hiding ($\beta = 0.03$, $SE = 0.01$, $p = .002$, 95% CI [0.01, 0.05]). This implies that as age increases, employees are more likely to report knowledge hiding via rationalized hiding. Hypothesis 1a expected a positive relationship between age and rationalized hiding, thus support was found for H1a (see Table 3). Related to the knowledge hiding facet of playing dumb, age was not found to have a relationship with playing dumb ($\beta = 0.00$, $SE = 0.01$, $p = .833$, 95% CI [-0.02, 0.03]), However, the correlation between age and playing dumb has a weak, negative relationship ($r(399) = -.15$, $p = .003$, 95% CI [-.24, -.05]), providing support for Hypothesis 1b. This implies that when age decreases employees are more likely to knowledge hide by playing dumb. Lastly, age was found to be related to evasive hiding ($\beta = 0.03$, $SE = 0.01$, $p = .006$, 95% CI [0.01, 0.05]). This implies that when employees' age increases, they are more likely to knowledge hide by evasive hiding. The original hypothesis predicted a negative relationship between age and evasive hiding; thus support was not found for Hypothesis 1c (see Table 3).

Hypothesis 2a-c suggested that intergenerational contact will moderate the relationship between age and each facet of knowledge hiding. Path analysis was used to test these relationships. Intergenerational contact was found to moderate the relationship between rationalized hiding and age ($\beta = -0.02$ $SE = 0.01$, $p < .001$, 95% CI [-0.02, -0.01]) that as there is less intergenerational contact, the relationship between age and rationalized hiding weakens. To further understand these effects within the sample, a simple slopes analysis was conducted to examine how intergenerational contact affects the relationship of rationalized hiding as age increases. To complete this test the *interactions* package (Long, 2019) was used in *R* (R Studio

Team, 2020). Simple slopes were defined in our sample at levels of intergenerational contact 1 SD above, below, and at the mean ($M = 3.27$, $SD = 0.87$). From the simple slope analysis (see Figure 2), it was found that, at higher levels of intergenerational contact ($\beta = -0.01$, $SE = .01$, $p = .010$) the relationship between rationalized hiding use and age would weaken, meaning that as there's more intergenerational contact the relationship between age and rationalized hiding strengthens. Effects for average levels ($\beta = -0.00$, $SE = .01$, $p = .320$) and lower levels ($\beta = 0.00$, $SE = .01$, $p = .190$) of intergenerational contact were not significant in this analysis. As such, hypothesis 2a is partially supported.

For evasive hiding, intergenerational contact moderates the relationship between age and evasive hiding ($\beta = -0.01$, $SE = 0.01$, $p < .001$, 95% CI [-0.02, -0.01]). Simple slopes were again considered to find how evasive hiding and age's relationship is specifically impacted by intergenerational contact (see Figure 3). Effects for average levels ($\beta = -0.01$, $SE = .01$, $p < .001$) and higher levels of intergenerational contact were significant ($\beta = -0.02$, $SE = .01$, $p < .001$), whereas low levels were not ($\beta = -0.00$, $SE = .01$, $p = .520$). Meaning, at average or higher levels, intergenerational contact weakens the relationship between age and evasive hiding. As such, support for hypothesis 2b can be confirmed.

The specific relationship between playing dumb and age with intergenerational contact as a moderator was not met ($\beta = -0.01$, $SE = 0.01$, $p = .169$, 95% CI [-0.01, 0.01]). Additional relationships between variables can be found in Table 3.

Hypothesis 3a investigated how loyalty relates to rationalized hiding. Loyalty has a significant relationship with rationalized hiding ($\beta = 0.14$, $SE = 0.05$, $p = .003$, 95% CI [0.04, 0.23]), offering support for hypothesis 3a. Specifically, employees who are engaging in rationalized hiding are more likely to display loyalty to their organization. Hypothesis 3b

considers how neglect relates to evasive hiding and playing dumb. Evasive hiding ($\beta = 0.16$, $SE = 0.07$, $p = .013$, 95% CI [0.04, 0.30]) and playing dumb ($\beta = 0.38$, $SE = 0.07$, $p < .001$, 95% CI [0.24, 0.52]) both were found to have a positive, significant relationship with neglect, providing support for hypothesis 3b (as seen in Table 4). Specifically, employees who engage in evasive hiding or playing dumb are more likely to show neglect in their job duties.

Hypothesis 3c investigates how exit relates to evasive hiding and playing dumb. Exit does not have a significant relationship with playing dumb ($\beta = 0.09$, $SE = 0.09$, $p = .303$, 95% CI [-0.07, 0.26]) but does have a positive relationship with evasive hiding ($\beta = 0.24$, $SE = 0.08$, $p = .004$, 95% CI [0.07, 0.40]). As such, hypothesis 3c is partially supported. These relationships between exit and knowledge hiding variables can be found in Table 4.

Next, hypothesis 3d considers aggressive voice in relation to evasive hiding and playing dumb. This model found that aggressive voice has a significant, positive relationship with evasive hiding ($\beta = 0.31$, $SE = 0.06$, $p < .001$, 95% CI [0.20, 0.42]), and playing dumb ($\beta = 0.21$, $SE = 0.06$, $p < .001$, 95% CI [0.10, 0.31]) giving support for hypothesis 3d (see Table 5). Meaning, that as more evasive hiding or playing dumb is present, employees are more likely to aggressively voice their concerns.

Lastly, hypothesis 3e evaluates if considerate voice has a relationship with rationalized hiding. Rationalized hiding was found to have a negative, significant relationship with considerate voice ($\beta = -0.10$, $SE = 0.03$, $p = .005$, 95% CI [-0.17, 0.03]). This shows that as employees engage in more rationalized hiding, employees are less likely to use considerate voice. Despite this, support for hypothesis 3e is not found through this test (see Table 6).

Hypothesis 4a-c were also tested, using path analysis which assessed direct and indirect effects of knowledge hiding facets between age and EVLN behaviors. In line with hypothesis 4a,

positive indirect effects were found between age and loyalty when rationalized hiding was present ($\beta = 0.01$, $SE = 0.01$, $p = .066$, 95% CI [0.01, 0.01]). Further, direct effects were not present between loyalty and age ($\beta = -0.03$, $SE = 0.01$, $p = .398$, 95% CI [-0.01, 0.01]). This suggests that as age increases, so does loyalty but only when rationalized hiding is present. Negative indirect effects were found between age and considerate voice ($\beta = -0.01$, $SE = 0.01$, $p = .037$, 95% CI [-0.01, -0.01]). Direct effects were present between age and considerate voice ($\beta = 0.01$, $SE = 0.01$, $p = .687$, 95% CI [-0.01, 0.01]), so considerate voice use decreases with age but only does not require rationalized hiding to be present for this relationship to be present.

Hypothesis 4b was also partially confirmed as positive indirect effects were found between age and aggressive voice ($\beta = 0.01$, $SE = 0.01$, $p = .017$, 95% CI [0.01, 0.02]) and neglect ($\beta = 0.01$, $SE = 0.01$, $p = .067$, 95% CI [0.01, 0.01]) when evasive hiding was present. Additionally, no direct effects were found between age and aggressive voice ($\beta = -0.00$, $SE = 0.01$, $p = .618$, 95% CI [-0.01, 0.00]), meaning that as age increases there is more of a likelihood for aggressive voice to be used when evasive hiding is present. However, age does have a direct, negative effect on neglect ($\beta = -0.01$, $SE = 0.01$, $p = .001$, 95% CI [-0.01, -0.00]) suggesting that neglect is more likely in employees that are younger whether evasive hiding is present or not. Additionally, negative indirect effects were found between exit and age ($\beta = -0.02$, $SE = 0.01$, $p = .051$, 95% CI [0.01, 0.01]) when evasive hiding was present. Since direct effects were found between age and exit ($\beta = -0.02$, $SE = 0.01$, $p < .001$, 95% CI [-0.02, -0.01]) as well, these results suggest that the younger the employee the more likely they are to exhibit stronger desires to exit their job whether evasive hiding was present on not.

Lastly, hypothesis 4c was also partially confirmed as positive indirect effects were found between age and aggressive voice ($\beta = 0.01$, $SE = 0.01$, $p = .027$, 95% CI [0.00, 0.01]) and

neglect ($\beta = 0.01$, $SE = 0.010$, $p = .018$, 95% CI [0.00, 0.02]) when playing dumb was present.

As there were no direct relationships between age and aggressive voice, this suggests that as age increases there is more of a likelihood for aggressive voice to be used as workers increase in age when playing dumb is present. Further, age and neglect do have a direct relationship, so neglect is more likely to occur by employees who are younger whether playing dumb is present or not.

Meanwhile, no mediated relationship was found between age and exit ($\beta = 0.00$, $SE = 0.01$, $p = .372$, 95% CI [-0.00, 0.01]) when playing dumb was present, despite age having a negative relationship with exit ($\beta = -0.02$, $SE = 0.01$, $p < .001$, 95% CI [-0.02, -0.01]).

Supplemental Analyses

While not originally the aim of this study, the adapted intergenerational contact measure also had significant relationships with some of the facets of knowledge hiding. Specifically, intergenerational contact was found to have a significant, positive relationship with evasive hiding ($\beta = 0.62$, $SE = 0.17$, $p < .001$ 95% CI [0.29, 0.96]). This states that as intergenerational contact increases so does evasive hiding. Additionally, rationalized hiding also had a significant, positive relationship with intergenerational contact ($\beta = 0.75$, $SE = 0.16$, $p < .001$ 95% CI [0.44, 1.08]), meaning that as more intergenerational contact is present, there will also be more rationalized hiding. This relationship was not present with playing dumb and intergenerational contact (see table 3).

CHAPTER 5: DISCUSSION

Given that age diversity has become increasingly important (Sammarra et al., 2017), the current study investigated how age differences may affect knowledge hiding and EVLN behaviors. Further, organizational factors like intergenerational contact were also evaluated in how they may impact age and knowledge hiding's relationship. This paper contributes to the literature on age differences by reaffirming age not only contributes to knowledge hiding, but that intergenerational contact shows age-related influences, which has not been captured in prior studies. By conceptualizing influences on knowledge hiding at an environmental level like intergenerational contact, this study brings additional clarity to how different aged employees workplace behaviors are shaped through knowledge hiding.

Age and Knowledge Hiding

The current study supports that older employees are more likely to use evasive hiding and rationalized hiding. This likely occurred for older workers as they tend to be perceived as more established in their careers (Chen, 2011) and would be more in need to protect their reputation and professional identity through knowledge hiding. Compared to younger employees who often have less resources and agency (Yeung et al., 2021), older employees have the agency to use rationalized hiding or evasive hiding without their credibility in question.

It is possible that older employees are seen to possess more resources (Löckenhoff, 2012) and have higher expectations from the organization to share knowledge (Tang & Martens, 2021), but then would need to rely on knowledge hiding more frequently and focus on their primary work tasks. This can be understood from a selection, optimization, and compensation (SOC) framework, where older employees need to conserve their resources and do so by being selective with what challenges they take on to optimize their work environment (Baltes & Baltes, 1990).

Additionally, older workers have different motivations like the need to maintain control of their time at work, which evasive hiding and rationalized hiding would allow them to accomplish. This is congruent with socioemotional selectivity theory (SST; Carstensen, 2021) where older employees shift their motivations to be cognizant of their limited time at work before retirement, so efforts beyond these motivations could be met with more knowledge hiding compared to younger employees. Further, it could be that with greater experience, older employees are more confident in their abilities to deflect or rationalize knowledge hiding through impression management (Abraham & Hansson, 1995). With their experience, older employees can leverage interpersonal skills better than younger workers and use them as a resource (Blanchard-Fields, 2007). Further, colleagues could see through an attempt to play dumb, and older employees would want to maintain the impression of being knowledgeable, as a prior study found that perceived age discrimination may impair older employees' knowledge sharing tendencies towards younger employees (Fasbender & Gerpott, 2021). Older employees would not undermine themselves when requested for knowledge and would be selective in how they knowledge hide to avoid negative age stereotypes as they seek to minimize damage to their relationships and resources (Zhang, et al., 2022; Bari et al., 2020).

Despite age differences in rationalized hiding and evasive hiding tendencies, these differences did not emerge for playing dumb. It is possible that the relationship may not have been found due to the low-base rate of playing dumb in the present study. While the current sample had an older age represented compared to similar studies, earlier knowledge hiding studies had higher base rates (Connelly et al., 2012; Zhang et al. 2022) so effects may not be present as the current sample focuses more on an older representation of workers. As this study hypothesized that younger employees would be more likely to engage in playing dumb, a

younger sample, especially the youngest of the younger workers, may be necessary. Specifically, researchers should consider how younger employees relate to their age group as other work in aging (e.g., Finkelstein et al., 2015) suggests that negative age metastereotypes towards younger employees are stronger when the relative comparison is towards being the youngest in the age group rather than relative to all workers. Thus, the younger employees may be likely to select certain knowledge hiding techniques, like playing dumb, given their newness to the organization. Schmidt et al. (2022) share how younger employees may have set expectations that influence their social roles within a workplace, but if employees do not label themselves as young, these behaviors would be hard to label and examine further effects. By being younger in a company, negative-oriented behaviors such as knowledge hiding would then occur when younger employees have a relative positioning as the youngest within one's age group rather than being a behavior that occurs across age groups.

It is also plausible that playing dumb is a universally adopted behavior that is utilized when it suits an employee's needs rather than being associated with specific age groups. Specifically, past studies detail other individual differences to relate to playing dumb such as those with higher extraversion will play dumb more frequently or those higher in neuroticism tend to play dumb less towards co-workers in academic settings (Demirkasimoğlu, 2016). Additionally, workers higher in Machiavellianism (Pan et al., 2018) tended to play dumb more while rationalized hiding did not have a significant relationship. Further, situational factors such as team dynamics like territoriality and task performance (Singh, 2019) also contribute knowledge hiding behaviors differently, while original publications within knowledge hiding also highlight the importance of organizational context to why these behaviors occur (Connelly et al., 2012). While playing dumb and age do not have a relationship in this study, unique

relationships between age and this knowledge hiding facet could instead be found if observed with these various factors.

Intergenerational Contact's Role on Knowledge Hiding Behaviors

One major intention of this study is to understand how situational factors, such as how much intergenerational contact is present at the organizational level, can help explain unique issues of age-diverse workplaces. This study was successful in determining that intergenerational contact is an important situational factor for age differences in both evasive hiding and rationalized hiding. When intergenerational contact is present, there is a decreased use of evasive hiding and rationalized hiding for older employees. Intergroup contact theory supports this, as the presence of intergenerational contact encourages employees to refrain from knowledge hiding and promotes more positive knowledge management behaviors. Specifically, intergroup contact can lead to shifts to positive employee behaviors (Bousfield & Hutchison, 2010), prioritization of mentorship (Kanfer & Ackerman, 2004), as well as generativity (Zacher et al., 2011). Through more prevalent intergenerational contact, behaviors such as knowledge hiding occur less, making way for these positive outcomes of age-diverse workplace.

This outcome could also be understood as to why younger employees are knowledge hiding more when there is less intergenerational contact. Specifically, due to lack of contact with those outside their age group, younger employees may experience more intergenerational anxiety and would be more likely to knowledge hide in these environments. Future research should then consider intergenerational anxiety as a potential mechanism that impacts knowledge hiding and perhaps highlight unique behavior for younger employees. This is congruent with the Yeung et al. (2021) study that younger employees feel they do not have as much knowledge or resources to share and will engage in evasive hiding or rationalized hiding to avoid providing knowledge to

older coworkers they have not built connections with. Future research should evaluate how intergenerational anxiety acts in relation to knowledge hiding behaviors and other age-related factors. This is a helpful insight to consider as contact can provide natural connections for workers of various age groups to interact with one another, but higher quantity of contact between age groups is not enough. Instead, higher quality may be needed in intergroup contacts to decrease anxiety between groups, preventing knowledge hiding in younger populations (Pettigrew & Tropp, 2006), and developing more collaborative age-diverse workplaces.

EVLN Related Outcomes

From this study, multiple relationships towards understanding counterproductive and pro-social components of knowledge hiding and EVLN behaviors were found including further CWBs like neglect and aggressive voice, as well as more pro-social behaviors like considerate voice and loyalty. Results showed not only that more rationalized hiding leads to increased amounts of loyalty, but that older employees displayed higher amounts of loyalty only when rationalized hiding is present. This informs us that rationalized hiding may lead to positive outcomes rather than being purely a CWB. As such, viewing knowledge hiding as an explicitly negative behavior may be misinformed, when instead it could be a byproduct of employees attempting to be loyal to their organization. Specifically, this may occur when employees prioritize protecting confidential information from coworkers, which technically is rationalized hiding. From a SST lens, older employees may recognize their time within an organization as valuable not only to their own goals, but also for the success of their organization. As such, when older employees are requested for knowledge, they may decide to address this with rationalized hiding not only to protect their own time left within the organization, but also as a means to remain loyal to their organization. Older employees would then continue to use rational

justifications to hide information and not taking on additional job tasks when requested from co-workers to maintain loyalty to their organization. This could be further explored in additional studies where knowledge hiding is considered in conjunction with interpersonal organizational citizenship behaviors which may not be prioritized by employees loyal to their organization, whereas organizational-oriented citizenship behaviors are given more importance by knowledge hiders.

In contrast, when employees engage in rationalized hiding, they engage in less considerate voice, which includes behaviors like trying to collaborate or compromise with co-workers/supervisors to find solutions to organizational issues (Hagedoorn et al., 1999). Knowledge hiding in this case could be viewed as a psychological contract breach (PCB), where exhibiting CWBs like rationalized hiding reinforces the expectation that there has been a breach of the contract from the sender, so employees would limit their positive interactions with co-workers they believed to have broken the contract with. This is further supported by prior research, such as one study where knowledge hiding led to less change-oriented voice (Hameed et al., 2023).

Further, age and considerate voice do not typically have a relationship but in the presence of rationalized hiding, older employees are less likely to use considerate voice. This could be an occurrence due to SST where rationalized hiding use informs an older employee to avoid contact with other coworkers. Davis et al. (2009) shared that older employees choose to avoid disruptive responses and employ nonconfrontational strategies to address conflict, they may be using what remaining emotional resources they have left to prevent conflict and would want to avoid considerate voice as it leads to more (productive) conflict. Due to rationalized hiding being a more direct form of knowledge hiding that does not use deception, older employees may feel

sharing justification to rationally hide constantly to be a tiring process that uses cognitive resources. As such these same employees may then aim to avoid being considerate in other interactions if they are consistently knowledge hide.

Employees that engage in more evasive hiding and playing dumb were more likely to engage in aggressive voice, which could also be a reaction to PCBs. Specifically, PCBs would occur when deceptive knowledge hiding was used by employees, and they retaliate by engaging in further aggressive voice use. As knowledge hiding leads to destructive EVLN factors such as aggressive voice, this helps continue the narrative that those who engage in more deceptive behaviors will continue CWBs rather than trying to be active in fixing issues they see in the workplace or between other coworkers (Qi & Ramayah, 2022). However, unlike other destructive behaviors in this study, age and aggressive voice did not have a relationship unless evasive hiding or playing dumb were involved. This could be understood through SST as limited resources for older employees would require them to engage in this behavior and is seen as a normalized reaction following constant requests for knowledge. By engaging in more frequent knowledge hiding, older employees could go on to lack cognitive resources from being barraged with knowledge hiding requests, thus normalizing aggressive voice rather than pro-social behaviors.

Similarly to aggressive voice, employees who engaged in more playing dumb and evasive hiding were more likely to neglect their job duties, except younger employees were more likely to engage in neglect. Whereas neglect exists as a more passive and destructive action, it could be through a resource lens that younger employees see neglecting their job duties to be the most realistic response to a PCBs rather than responding with aggressive voice as older participants are likely to do. As neglect is a passive and destructive action, it behaves very similarly to

playing dumb and evasive hiding, so by considering all three as CWBs, it would make sense that these behaviors would co-occur within employees. Meaning, employees who are trying to be deceptive in an aim to avoid sharing knowledge would also neglect their work duties or avoid engaging in organizational citizenship behaviors. This is supported by Kaur & Kang (2023) who found knowledge hiding to negatively impact organizational citizenship behaviors, while higher levels of neglect also indicated less organizational citizenship behavior use.

Lastly, higher intentions to exit was found in participants who reported more evasive hiding, but not playing dumb, which provides support for the notion that despite both being deceptive types of knowledge hiding, the two facets do behave differently. While exit as a behavior is a more active reaction to what occurs within a workplace, an employee's decision to leave or consider leaving the organization is a last-ditch effort decision of an employee who is fed up with conditions in their workplace compared to voicing concerns or neglecting job duties. As such, an employee who is playing dumb may be more likely to neglect their duties, but when employees are no longer engaged with their workplace, they may simply aim to avoid additional work tasks so they can dedicate their resources on obtaining their next role outside the company. Additionally, Connelly et al. (2019) addressed how increases in turnover intentions were associated with evasive hiding, so exit behaviors being significant could be informative to what behaviors employees exhibit before officially leaving their role.

Exit intentions were also found to be more frequently shared by younger employees, which could be a reaction from increased evasive hiding as well. If younger employees do not have the as many resources to be successful in a role compared to older employees, they may enlist in temporary solutions such as evading knowledge requests, but in doing so do not establish trust in other coworkers or develop connection to feel included in their workplace. This

could be another sign of PCBs where employees viewed their workplaces in a more positive light but due to lack of resources, they do not feel empowered to address issues within an organization, especially as they are requested for knowledge and rely on evasive hiding behaviors as a resource.

Theoretical Implications

This study produces valuable outcomes for knowledge management and CWB literature. As past studies framed knowledge hiding as a social exchange process where workers have mutual expectations to complete tasks, this study contributes to this literature by providing further support to that notion. Further, voice behaviors occur when individuals are motivated or empowered (Wei et al., 2020) from their social interactions with others, so as knowledge hiding has a relationship with voice behaviors and neglect, this study contributes to how social exchange processes are understood when EVLN and knowledge hiding behaviors may co-occur.

Through a psychological contract framework, past studies have acknowledged that when knowledge hiding occurs, negative emotions follow, leading to an increase in destructive EVLN reactions (Iqbal et al., 2022). Additionally, prior studies have found playing dumb and evasive hiding to have negative relationships with employee voice behaviors (Chen, 2020) but this study is the first to my knowledge where neglect had a relationship with deceptive types of knowledge hiding. As such, this study contributes to both voice and knowledge management literature by providing context to how EVLN behaviors occur in relationship to knowledge hiding.

Additionally, one of the main aims of this study was to understand age differences in the workplace and acknowledge barriers that occur through a knowledge management framework. Specifically, this study contributes to intergroup contact research, which began as a framework to understand how increased contact addresses racial biases. As Pettigrew and Tropp (2006)

considered other groups besides race that could benefit from increased contact, this study shows that increased contact does lead to less rationalized hiding among older employees in the sample. The rationale for why this occurs comes from SST, which provides that without intergenerational contact, older employees are being selective of what resources they share as a safeguard, but when they do not view sharing resources with others as a threat due to the increase of contact, less rationalized hiding occurs. But when older employees develop contact with younger employees, they could view other employees as less of a threat and instead view knowledge hiding as a strategy that would consume their resources.

Further, this study considers the motivational theory of lifespan development (MTLD) to how employees maintain a sense of control to address developmental challenges through goal-relevant behaviors across life stages (Zacher & Rudolph, 2017; Heckhausen et al., 2010). As employees address challenges primary and secondary control strategies are utilized to adapt to changing environments, one of which could be a knowledge management environment or intergenerational contexts. From the MTLD perspective, motivations to have intergenerational contact look different for younger or older employees as they separately strive to have developmental or generativity goals. As knowledge exchange looks different for workers at different life stages in the amount of useful knowledge, they may be able to share (with more relevant knowledge being privy to more experienced employees; Fasbender et al., 2021), the process is still crucial to each age groups' motivations and goals. As older employees desire generativity opportunities, they would typically seek knowledge sharing opportunities and require other employees to engage in these types of goals. However, if avenues to knowledge share are not met such as norms around knowledge sharing climate not being met or a lack of intergenerational contact, older employees would instead utilize secondary control strategies that

are more self-protective in nature (Wrosch et al., 2007; Rudolph, 2016) which could include knowledge hiding behaviors. According to this study's findings, older employees who engage in more rationalized hiding or evasive hiding do so when there is less intergenerational contact. Therefore, if workplaces do not establish a need for knowledge exchange practices, knowledge hiding and limited intergenerational contact would be the norm, preventing opportunities for mentorship or generativity from occurring.

As employees age and enter different life stages, their motivations to share information from peers' shifts. While older employees would focus on generativity, development goals are more common in younger employees (Gerpott & Fasbender, 2020). While a more novice employee may not contribute to knowledge exchange to give older employees knowledge from a place of expertise, the less developed perspective from novice employees can allow for further knowledge structures to be formed by novel conversations (Darnis & Lafont, 2015). A lack of generativity to promote these conversations is then concerning if a workplace has younger employees engaging in deceptive knowledge hiding to avoid knowledge exchange. This could be in part due to a lack of intergenerational contact.

Practical Implications

This study's findings do show that intergenerational contact decreases evasive hiding and rationalized hiding. Workplaces should be aware that even as the presence of age-diverse workplaces increases, attention to knowledge hiding should still be considered since intergenerational contact alone may not limit knowledge hiding use. Knowledge exchange practices can promote generativity and mentorship opportunities (Fasbender et al., 2021) but these may not be reached as easily if knowledge hiding is occurring between age groups. Intergroup contact can lead to less knowledge hiding among older participants so strategies to

empower older employees to provide support for younger employees should be considered. Fasbender et al. (2021) share how this process still requires involvement from younger employees as well, as dyadic relationships were evaluated in their study to show that striving for development and generativity were important components to reach knowledge exchange and engage both younger and older employees.

Further, the findings regarding intergenerational contact and rationalized hiding are helpful to consider in workplaces that may expect organizational citizenship behaviors of older team members to support younger employees through generativity (Fasbender et al., 2021). As knowledge exchange is a bi-directional relationship (Gerpott et al., 2017), limited intergenerational contact could lead to less knowledge exchange and normalize knowledge hiding. For older employees to develop positive knowledge exchange experiences and assist in younger employees' development, they require positive viewpoints of generativity and development. But without these relationships, interaction between age groups is not produced, and older employees may be more likely to engage in rationalized hiding to avoid contact they do not see any benefit towards their own personal needs. Fasbender et al. (2021) report that motivations to share knowledge comes from seeing the benefits of reciprocation (Gerpott et al., 2020), otherwise they may engage in socioemotional selectivity due to older employee's awareness of having less time at work due to their increasing age and oncoming retirement (Rudolph et al., 2018). While knowledge transfer requests for company knowledge or trainings may be needed from more experienced members of a company, older employees may be engaging in rationalized hiding to justify avoiding organizational citizenship behaviors due to socioemotional selectivity seeing knowledge exchange as a waste of invested time and effort (Szulanski et al., 2004) if not taken seriously by other age groups.

Deceptive types of knowledge hiding do lead to negative outcomes like neglect and aggressive voice, so building awareness around these behaviors is crucial since they could be either predict or co-occurring outcomes. Additionally, many of the relationships between age and EVLN factors had mediating relationships with knowledge hiding, so it is important for workplaces to acknowledge that negative outcomes like increased aggressive voice, neglect, and exit can be explained through additional knowledge hiding. Developing policies regarding proper knowledge exchange practices could be considered (Fowler Davis, 2009) as well as knowledge exchange practices unique to specific industries such as health care (Drachler et al., 2012). Additionally, as evasive hiding has been found to have a positive relationship with exit, employees who are not as confrontational with their knowledge hiding justifications may require more direct interventions to prevent turnover. As exit has a negative relationship with OCBs (Withey & Cooper, 1989), considering interventions that would promote more interconnectedness with employees considering exit could be one way to curb evasive hiding while also addressing concerns of employees exiting organizations or teams.

While limiting knowledge hiding is an important outcome to consider preventing CWBs, it is also important to recognize that increases in loyalty is an outcome of rationalized hiding, especially for older employees. As such, understanding the justifications that employees may have in normalizing knowledge hiding would be important for workplaces to address, that way conversations around the behavior, they could be well-intentioned, does not lead to animosity towards co-workers or the organization at large. This can be supported by how rationalized hiding leads to increased loyalty but less considerate voice, so discussing with coworkers why they may feel support towards the organization but are less privy to share solutions with coworkers would be an important step rather than just setting policy expectations.

Lastly, managers should recognize that even though age does relate to knowledge hiding behaviors uniquely within this study, this does not mean that age groups are always expected to knowledge hide more or in a certain way. Making assumptions of how employees engage in knowledge management based on age could encourage age discrimination and trainings/coaching regarding these concepts should be thoughtful to not label negative behaviors as always existing more in one group over another, but rather be understood as rational actions that employees are more likely to take based on the conditions of their workplace.

Future Research/Limitations

Like all studies, this one is not without limitations. Participants in our sample provided self-report measures, so data could have common method bias, being that inaccuracies or biases could exist in the results since participants were only asked to provide quantitative responses at a single time. While precautions were taken to ensure quality data (i.e., attention checks, removal of duplicate IP addresses), future studies should consider mixed-method data collection methods, giving more contextual understanding to quantitative data collected. As knowledge hiding occurs between a hider and a seeker, considering research methods that can accurately capture the dyadic and interpersonal relationships of these behaviors would help further research in this domain (Anand et al., 2022). Considering the various age-related outcomes this study found, finding if age differences between a hider and seeker influences knowledge hiding outcomes would be worthwhile to explore (i.e., if a worker is younger, are they likely to knowledge hide more towards older coworkers). Additionally, the participants within this study are majority non-Hispanic white and were all from the United States, so generalizability of this study may be limited to similar demographics. Lastly, knowledge hiding had a restricted range in this sample, so effects could be limited to workplaces that exhibit lower knowledge hiding overall. Ideally

studies that look at knowledge hiding should consider samples with higher base rates, and this study, while still having significant results, recognizes the lower base rate of knowledge hiding facets as a limitation. While intergenerational contact did not impact the relationship between age and playing dumb, this could be due to the lower base-rate for evasive hiding and playing dumb respectively. Given the low base rate of employee's knowledge hiding behaviors, future studies may need to consider larger samples of participants to ensure that it captures employees who engage in these behaviors to capture each subfactor's relationship with age and intergenerational contact. Additionally, considering industry specific outcomes for knowledge hiding has been asked within literature (Anand et al., 2022) where knowledge exchange and consequently knowledge hiding may be more prevalent such as healthcare (Zhao & Xia, 2019) and international teams (Xiong et al., 2019).

As this study addresses concerns from prior research, further research can be considered from the outcomes found. First, contact is one of several features within intergenerational climates of an organization. To my knowledge, this is the only study to consider the relationship between intergenerational contact and knowledge hiding. Understanding the relationship between these variables provides context that is helpful for an intergroup contact theory perspective by focusing on the prevalence of contact between different age groups, but other theoretical frameworks should be considered as contact between age groups is not the only facet within WICS. Rather, quality of relationships between age groups could also be evaluated to understand how knowledge hiding or other CWBs could be reduced. As knowledge hiding is thought to occur due to a plethora of individual (i.e., job dissatisfaction, Offergelt et al., 2019; low motivation, Bock et al., 2005) and organizational reasons (i.e., cultural dynamics, Bogilovic et al., 2017) further studies should also consider the comprehensive WICS scale. This would help

scholars and practitioners to understand the impact of age-diverse climates to see if knowledge hiding behavior is something that can be understood as a reaction within individuals, from other groups, as well as organizational pressures. This would reveal why quality of contact between workers may influence knowledge hiding behaviors rather than simply high or low levels of intergenerational contact. While this study measured one sample where intergenerational contact is present, further studies could consider what a comparison between groups with different levels of age-diverse climates to understand if there is more complexity to knowledge hiding use besides contact between age groups.

The sample within this study also revealed age effects for older participants, while middle aged and younger employees did not have found relationships with intergenerational contact. This could be due to the average age of participants in this study being older so while effects for how intergenerational contact helps support older employees can be understood from this study, understanding how knowledge hiding occur in younger employees may need to be investigated further in another study with a broader sample that includes a wider age range of participants. Further, MTLTD could add perspective to why different-aged workers strive to have intergenerational contact, a future study that considers age groups' relationships with intergenerational contact would be helpful to understand how the amount of contact impacts knowledge hiding behaviors. However, another consideration for these age effects is a non-linear relationship with age and knowledge hiding types where knowledge hiding facets are stronger for younger and older participants but less so for those who are middle aged. By observing a curvilinear relationship, future studies could address how factors such as intergenerational climate or age discrimination affect those most vulnerable to stereotyping.

While this study is instrumental in understanding that knowledge hiding facets appear differently between age groups, more research considering rationalized hiding separately than evasive hiding and playing dumb is needed. As the three subfactors have high correlations between one another, many studies do consider knowledge hiding as one measurement to understand other workplace behaviors such as being an outcome of negative workplace gossip (Yao et al, 2020), having a negative association with project team performance (Zhang & Min, 2018) as well as when knowledge hiding occurs in socioeconomic settings (Caputo et al., 2021). This seems most common in research where individual differences such as age or gender remain control variables rather than observed within the analysis. This could occur as knowledge hiding is considered a CWB towards the organization, but studies should also consider knowledge hiding between age groups as age differences between employees have been shown to be a factor that informs in-group and out-group conflicts (Davis et al., 2009) or team related processes such as creativity (Bari et al., 2019). As such, this study encourages researchers to use knowledge hiding facets separately when it is relevant to individual differences such as gender (Andreeva & Zappa, 2023) or individual factors like personality and psychological ownership (Chawla & Gupta, 2019).

Additionally, studies that consider longitudinal models to understand the relationship between knowledge hiding and other CWBs would be helpful to understand if these elements co-occur with one another or if an employee who is high in knowledge hiding may react by neglecting their job duties. This study used that rationale, but this cannot be fully supported until data beyond a cross-sectional design provides the necessary results. Understanding if EVLN or knowledge hiding factors occur first would be instrumental to understand individuals' motivation regarding CWBs.

Lastly, other scholars continue to request studies that focus on the positive outcomes of knowledge hiding (Anand et al., 2022). As this study did find rationalized hiding to relate to loyalty and considerate voice, other organizational citizenship behaviors should be considered to understand the relationship to this facet of knowledge hiding. Prior studies have found that rationalized hiding can be done to protect the organization through prioritizing confidentiality or information of the interest of a third party (Xiong et al., 2019), as well as individuals as rationalized hiding use increased personal well-being (Khoreva & Wechtler, 2020), and personal empowerment (Offergelt et al., 2019). Another study found interpersonal OCB to be increased when employees engaged in playing dumb/evasive hiding when mediated by a perceived loss of moral, but that relationship was not found for rationalized hiding (Pan et al., 2023). Under this argument those who knowledge hide deceptively feel the need to make up in OCBs between colleagues but understanding why rationalized hiding has the same relationship with OCBs should be evaluated. Further, studies are encouraged to examine evasive hiding and playing dumb to interpersonal CWBs (i.e., workplace bullying, Yao et al., 2020) and organizational CWBs (i.e., time theft, Fatima et al. 2021). Studies to understand worker's motivation to utilize rationalized hiding and choose to prioritize the interests of their organizations, clients, or themselves should be further evaluated. Further investigation into how age specifically relates to these could also further highlight what benefits exist for this type of knowledge hiding.

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Table 1

Descriptive Statistics

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	Skew	Kurtosis
1. Age	401	46.84	12.83	-0.27	-1.02
2. Playing Dumb	401	1.47	0.58	1.11	0.76
3. Rationalized Hiding	401	1.43	0.58	1.17	0.76
4. Evasive Hiding	401	1.40	0.52	1.36	2.52
5. Aggressive Voice	401	2.07	0.66	0.50	0.30
6. Considerate Voice	401	4.05	0.58	-0.85	1.94
7. Neglect	401	1.82	0.83	0.83	-0.08
8. Exit	401	2.57	1.01	0.09	-1.02
9. Loyalty	401	2.87	0.82	0.07	-0.48
10. Turnover	400	2.14	1.19	0.72	-0.62
11. Knowledge Sharing	401	4.03	0.63	-0.48	0.83
12. Intergenerational Contact	399	3.27	0.87	-0.16	0.16

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. * indicates $p < .05$. ** indicates $p < .01$.

Table 2

Correlations Among Variables with Confidence Intervals

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Age											
2. Playing Dumb	-.15** [-.24, -.05]										
3. Rationalized Hiding	-.12* [-.21, -.02]	.73** [.68, .77]									
4. Evasive Hiding	-.08 [-.17, .02]	.74** [.69, .78]	.72** [.67, .77]								
5. Aggressive Voice	-.09 [-.19, .01]	.33** [.24, .42]	.26** [.16, .35]	.35** [.26, .43]							
6. Considerate Voice	.07 [-.03, .16]	-.31** [-.40, -.22]	-.27** [-.35, -.17]	-.29** [-.38, -.20]	-.06 [-.15, .04]						
7. Neglect	-.23** [-.32, -.13]	.43** [.34, .50]	.32** [.23, .41]	.40** [.31, .47]	.40** [.32, .48]	-.36** [-.44, -.27]					
8. Exit	-.22** [-.31, -.12]	.20** [.10, .29]	.20** [.11, .30]	.17** [.08, .27]	.26** [.17, .35]	-.26** [-.35, -.16]	.43** [.35, .51]				
9. Loyalty	-.02 [-.12, .08]	-.05 [-.15, .05]	-.04 [-.14, .06]	-.06 [-.16, .04]	-.04 [-.13, .06]	.23** [.14, .32]	-.16** [-.25, -.06]	-.12* [-.21, -.02]			
10. Turnover	-.05 [-.15, .05]	.25** [.16, .34]	.25** [.16, .34]	.20** [.10, .29]	.14** [.04, .23]	-.32** [-.41, -.23]	.38** [.30, .47]	.60** [.53, .66]	-.23** [-.32, -.14]		
11. Knowledge Sharing	.14** [.04, .23]	-.36** [-.44, -.27]	-.36** [-.44, -.27]	-.36** [-.44, -.27]	-.08 [-.17, .02]	.35** [.26, .43]	-.32** [-.40, -.23]	-.18** [-.27, -.08]	.04 [-.06, .14]	-.23** [-.32, -.13]	
12. Interagen Contact	.16** [.06, .25]	-.13** [-.22, -.03]	-.12* [-.21, -.02]	-.14** [-.23, -.04]	.02 [-.08, .12]	.30** [.21, .39]	-.17** [-.26, -.07]	-.08 [-.18, .02]	.12* [.02, .22]	-.13** [-.23, -.04]	.48** [.40, .55]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. * indicates $p < .05$. ** indicates $p < .01$.

Table 3

Path Analysis

	Evasive Hiding				Rationalized Hiding				Playing Dumb			
	β	SE	p	β 95% CI [LL, UL]	β	SE	p	β 95% CI [LL, UL]	β	SE	p	β 95% CI [LL, UL]
Age	0.03	0.03	.006	[0.01, 0.05]	0.03	0.01	.002	[0.01, 0.05]	0.002	0.01	.833	[-0.02, 0.03]
Intergenerational Contact (IGC)	0.62	0.62	<.001	[0.29, 0.96]	0.75	0.16	<.001	[0.44, 1.08]	0.17	0.17	.324	[-0.16, 0.51]
Age x IGC	-0.01	-0.01	<.001	[-0.02, -0.01]	-0.02	0.003	<.001	[-0.02, -0.01]	-0.01	0.003	.169	[-0.01, 0.01]

Note. β = Standardized path coefficient; SE = Standard error; p = p-value.

Table 4

Path Analysis

	Aggressive Voice				Neglect				Exit			
	β	SE	p	β 95% CI [LL, UL]	β	SE	p	β 95% CI [LL, UL]	β	SE	p	β 95% CI [LL, UL]
Age	-0.001	0.002	.618	[-0.01, 0.01]	-0.01	0.003	.001	[-0.01, -0.01]	-0.02	0.003	<.001	[-0.02, -0.01]
Evasive Hiding	0.31	0.06	<.001	[0.20, 0.42]	0.16	0.07	.013	[0.04, 0.30]	0.24	0.08	.004	[0.07, 0.40]
Playing Dumb	0.21	0.06	<.001	[0.10, 0.31]	0.38	0.07	<.001	[0.24, 0.52]	0.09	0.09	.303	[-0.07, 0.26]
Age x Evasive Hiding	0.01	0.003	.017	[0.002, 0.02]	0.004	0.002	.067	[0.001, 0.01]	0.01	0.003	.051	[0.001, 0.01]
Age x Playing Dumb	0.01	0.003	.027	[0.001, 0.01]	0.01	0.004	.018	[0.003, 0.02]	0.002	0.003	.372	[-0.002, 0.01]

Note. β = Standardized path coefficient; SE = Standard error; p = p-value.

Table 5

Path Analysis

	Considerate Voice				Loyalty			
	β	SE	p	β 95% CI [LL, UL]	β	SE	p	β 95% CI [LL, UL]
Age	0.001	0.002	.687	[-0.01, 0.01]	-0.003	0.003	.398	[-0.01, 0.01]
Rationalized Hiding	-0.10	0.03	.005	[-0.17, -0.03]	0.14	0.05	.003	[0.04, 0.23]
Age → Rationalized Hiding	-0.003	0.001	.037	[-0.01, -0.001]	0.004	0.002	.066	[0.001, 0.01]

Note. β = Standardized path coefficient; SE = Standard error; p = p-value.

Figure 1

Conceptual Model and Path Diagram

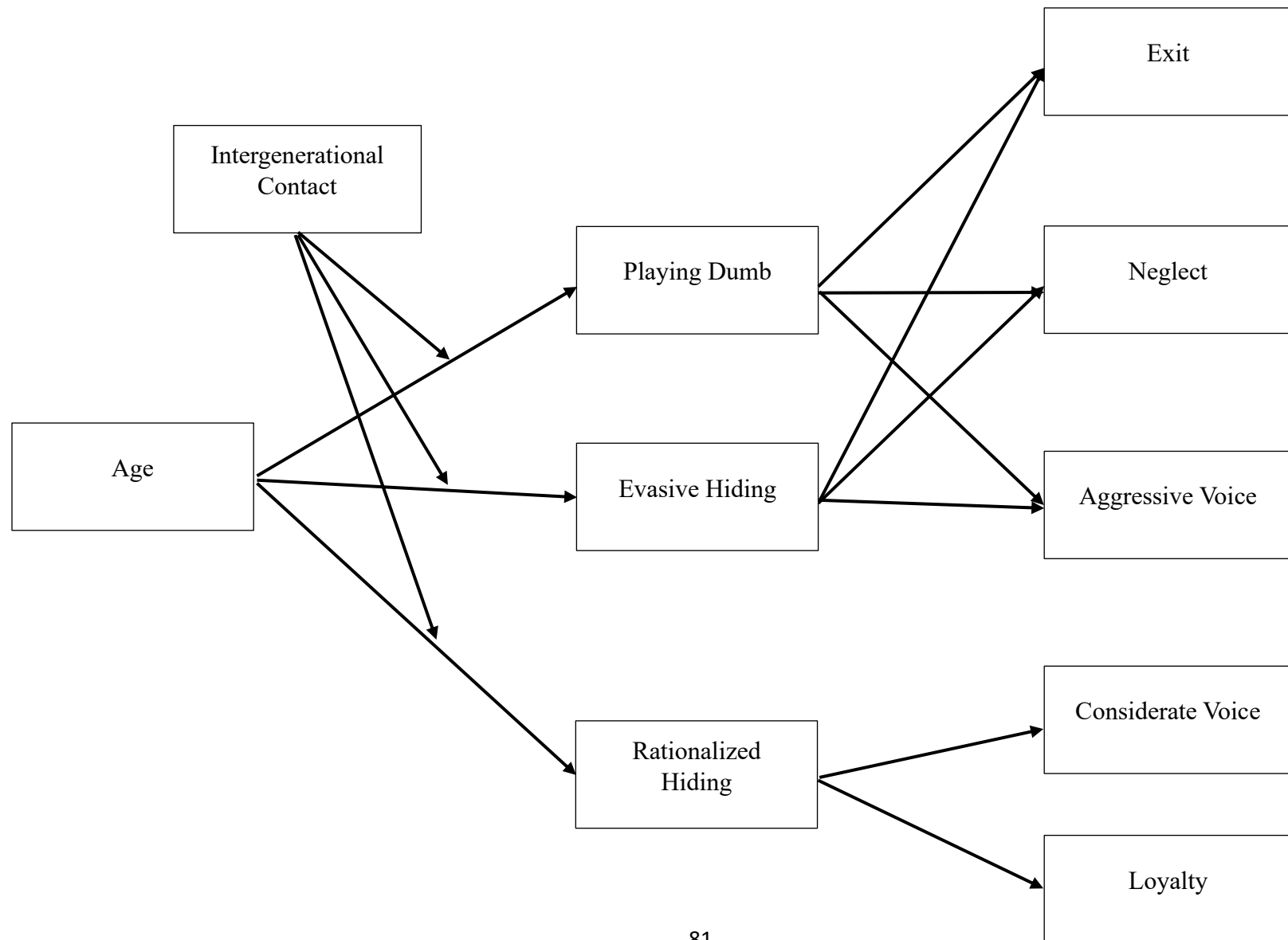


Figure 2

Intergenerational Contact Moderating the Relationship between Age and Rationalized Hiding

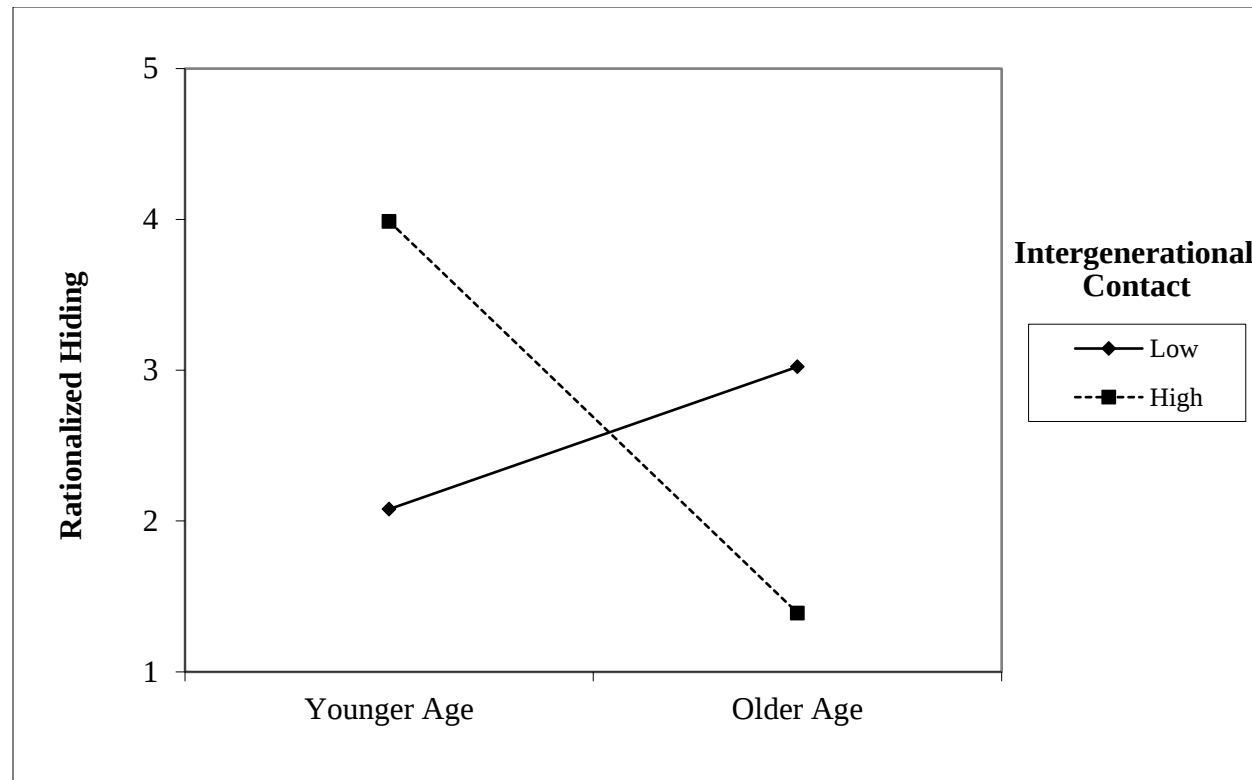
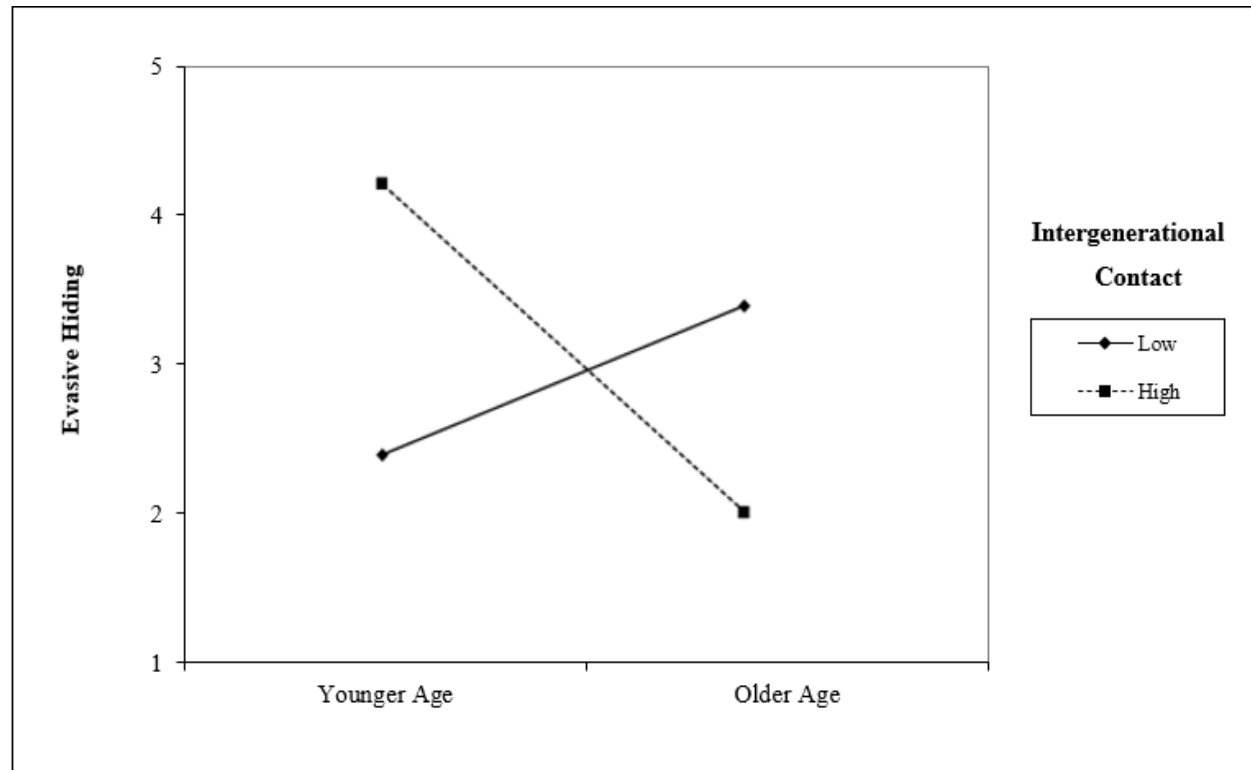


Figure 3

Intergenerational Contact Moderating the Relationship between Age and Evasive Hiding



Appendix A

A Study of Workplace Processes

Recruitment Statement: This 20-minute online research study asks you to respond to a variety of measures regarding your workplace experiences and provide demographic information. This voluntary study evaluates how your background and experiences with other employees impacts your interactions with your colleagues and workplace outcomes.

Qualified Participants: Only individuals 18 years old and older and employed will be eligible for this study. You also must be comfortable reading and writing in English to be eligible for this study. Finally, you also need to be currently working as a full-time employee (an average of 30 hours or more a week).

Time Commitment: If you decide to provide us with your consent to participate, you can access the survey link below. This survey should take no more than 20-30 minutes.

Anonymity: This study is strictly anonymous meaning that no identifying information is being collected in connection with the research data. Once you have received credit for your participation in this study, Cloud Research Connect IDs will be removed from the electronic file. All information collected will be kept in a password protected file and all electronic information will be secured on a password protected computer. Cloud Research Connect IDs are not considered identifying information as Connect IDs are randomly generated number and letter sequences that are assigned to workers through Connect. The ID itself doesn't possess any personally identifiable information and as per Cloud Research's requester use policy, requesters aren't permitted to collect other potentially identifying information (e.g., email addresses, phone numbers, etc.) to protect the workers we're gathering information from. Also, through the use of an external site to house the survey (Qualtrics in this case) this is a protective mechanism to protect the participant's identity as no one has access to the responses beyond the research team.

Participation: Participation in this study is voluntary. You may withdraw from the study at any point in time without any penalty.

Compensation: Compensation will be provided for your time in completing this survey of \$2.50. Compensation will only be granted if you have met the following conditions: 1) you qualify as a participant for this study, 2) you pass attention check questions throughout the survey, 3) you provide your Cloud Research's Connect ID when prompted, and 4) you provide the accurate HIT completion code provided to you at the end of the survey.

Contact us: Interested participants are invited to contact us with any questions. If you have no questions, please proceed to the study link provided via this site.

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Appendix B Informed Consent Form

A Study of Workplace Processes

You are invited to participate in a study that evaluates how your background and experiences with other employees impacts your interactions with your colleagues and workplace outcomes.

Key Information

- This **voluntary** study evaluates how your background and experiences with other employees impacts your interactions with your colleagues and workplace outcomes.
- This study should **take approximately 20 minutes** and you will be asked a series of workplace behavior questions and personality questions.
- The benefits of this study for you will be to see the research process. However, for the I/O psychology field, this study will allow researchers to see the influence of situation characteristics on workplace perceptions and behaviors.
- There are no reasonably foreseeable risks.

Eligibility

Only individuals 18 years old and older and employed full-time (at least 30 hours a week) will be eligible for this study. You must be comfortable reading and writing in English to be eligible.

Description of Study

This 20-minute online study asks you to answer a variety of measures relating to your current workplace experiences and provide demographic information.

Risks and Benefits

There are no reasonably foreseeable risks associated with this study. Participation is also completely voluntary and thus you may choose not to continue at any point. The results of this study may be published in scientific research journals and presented at professional conferences. However, your record will remain anonymous. Your data will be used as part of a larger data set with no identifying information. The data set, once de-identified, could potentially be posted to a scholarly, public online medium.

Anonymity

This study is strictly anonymous meaning that no identifying information is being collected in connection with the research data. Once you have received credit for your participation in this study, Cloud Research Connect IDs will be removed from the electronic file. All information collected will be kept in a password protected file and all electronic information will be secured on a password protected computer. Cloud Research Connect IDs are not considered identifying information as Connect IDs are randomly generated number and letter sequences that are assigned to workers through Connect. The ID itself doesn't possess any personally identifiable information and as per Cloud Research's requester use policy, requesters aren't permitted to collect other potentially identifying information (e.g., email addresses, phone numbers, etc.) to protect the workers we're gathering information from. Also, by an external site to house the

survey (Qualtrics in this case) this is a protective mechanism to protect the participant's identity as no one has access to the responses beyond the research team.

Future Use of the Research Data

The results of this study may be published in scientific research journals and presented at professional conferences. However, your record will remain confidential. Your data will be used as part of a larger data set with no identifying information. The data set, once de-identified, could potentially be posted to a scholarly, public online medium (e.g., Open Science Framework).

Compensation: Compensation will be provided for your time in completing this survey of \$2.50. Compensation will only be granted if you have met the following conditions: 1) you qualify as a participant for this study, 2) you pass attention check questions throughout the survey, 3) you provide your Cloud Research's Connect ID when prompted, and 4) you provide the accurate completion code provided to you at the end of the survey.

Right to Refuse or Withdraw: You may refuse to participate by choosing "No, Exit Survey" below. Participation is also completely voluntary and thus you may choose not to continue at any point. You may change your mind about being in the study and quit after the survey has started. You may skip any questions you do not feel comfortable answering.

Questions: If you have any questions about your rights as a research participant, please contact the East Carolina University ORIC office (<https://rede.ecu.edu/oric/>; 252-744-4140). This research has been approved by the institutional review board of East Carolina University. If you have questions about this research study, you can contact the investigators below:

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We are interested in your response to each survey question. We assure you that you will find none of these questions threatening or harmful to you. We will tell you more about those exact details after the study is over, but we would very much appreciate your full participation without knowing those details, or why they are included in the study, up front. Your informed consent acknowledges the fact that there are a few things about these questions we have not told you about, and that you consent to participate in the study even though we are withholding this knowledge until after the debriefing.

By selecting "Continue to Survey", you are acknowledging that you have decided to volunteer as a research participant for this study and that you have read and understand the information provided above. **It is advised that you save or print a copy of this form for your own records.**

I understand the above and grant my consent to participate:

- Yes, Continue with the Study
- No, Exit the Study

Appendix C

Survey Materials

Screener Questions

1. First question will be a captcha verification.
2. Are you 18 years of age?
 - a. Yes
 - b. No

If answer no, they will exit the survey.

3. Please select your employment status.
 - a. Full-time
 - b. Part-time
 - c. Not employed
 - d. Retired
 - e. Self-employed

If answer not employed, they will exit the survey.

4. It is really important to the research team that you are paying attention when responding to questions. Otherwise, we won't be sure if we can rely on the results we obtained. It is extremely important that you disregard the question and select "Green" as your response. Thank you for taking the time to read this question.

What color is the sky?

- Orange
- Blue
- Green
- Yellow
- Other (fill-in blank)

If participants fail the attention check question, they will exit the survey.

Workplace Intergenerational Climate Scale (WICS; King & Bryant, 2017)

Directions: Below are several questions that ask the frequency you have engaged in each behavior. Using the response scale below, indicate the frequency with which you engage in that behavior by selecting the appropriate option.

Scale Anchors:

Never	Rarely	Some	Often	Very Often
1	2	3	4	5

Items:

Intergenerational Contact (IC)

1. How often do you have conversations with co-workers outside your generation?
2. How often do you have conversations with co-workers outside your generation relating to things other than work?
3. How often do you talk with co-workers outside your generation about your personal lives?
4. How often do you eat meals with co-workers outside your generation during the workday?

Scale Anchors:

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Directions: Below are several statements about you with which you may agree or disagree. Using the response scale below, indicate your agreement or disagreement with each item by selecting the appropriate option.

Lack of Generational Stereotypes (LGS)

1. Co-workers outside my generation are not interested in making friends outside their generation.*
2. Co-workers outside my generation complain more than co-workers my age do.*
3. Co-workers outside my generation usually talk about things that don't interest me*
4. Co-workers outside my generation tend to work differently than co-workers my age do*

Positive Intergenerational Affect (PIA)

1. I feel comfortable when co-workers outside my generation try to make conversation with me.
2. I enjoy interacting with co-workers of different generations.

3. My co-workers outside my generation are interesting and unique individuals.
4. People work best when they work with others their same age*

Workplace Generational Inclusiveness (WGI)

1. I believe that my work environment is a healthy one for people of all ages.
2. Workers of all ages are respected in my workplace.
3. I am able to communicate effectively with workers of different generations.
4. Working with co-workers of different ages enhances the quality of my work life.

Workplace Intergenerational Retention (WIR)

1. My co-workers make older workers feel they should retire.*
2. I feel pressure from younger workers to step down.*
3. I feel pressure from older workers to step down.*
4. In my workplace, qualified younger workers tend to be overlooked for promotions.*

Scoring:

Items marked with * are reverse scored.

Adapted Workplace Intergenerational Climate Scale (WICS; King & Bryant, 2017) (Age Version)

Directions: Below are several questions that ask the frequency you have engaged in each behavior. Using the response scale below, indicate the frequency with which you engage in that behavior by selecting the appropriate option.

Scale Anchors:

Never	Rarely	Some	Often	Very Often
1	2	3	4	5

Items:

Intergenerational Contact (IC)

1. How often do you have conversations with co-workers outside of your age group?
2. How often do you have conversations with co-workers who are from a different age group relating to things other than work?
3. How often do you talk with co-workers outside your age group about your personal lives?
4. How often do you eat meals with co-workers outside your age group during the workday?

Scale Anchors:

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Directions: Below are several statements about you with which you may agree or disagree. Using the response scale below, indicate your agreement or disagreement with each item by selecting the appropriate option.

Lack of Generational Stereotypes (LGS)

5. Co-workers outside of my age group are not interested in making friends outside of their age group.*
6. Co-workers that are not in my age group complain more than co-workers in my age group.*
7. Co-workers outside of my age group usually talk about things that don't interest me*
8. Co-workers outside of my age group tend to work differently than co-workers in my age group.*

Positive Intergenerational Affect (PIA)

5. I feel comfortable when co-workers that are outside of my age group try to make conversation with me.

6. I enjoy interacting with co-workers of different age groups.
7. My co-workers outside of my age group are interesting and unique individuals.
8. People work best when they work with others their same age*

Workplace Generational Inclusiveness (WGI)

5. I believe that my work environment is a healthy one for people of all ages.
6. Workers of all ages are respected in my workplace.
7. I am able to communicate effectively with workers of different ages.
8. Working with co-workers of different ages enhances the quality of my work life.

Workplace Intergenerational Retention (WIR)

5. My co-workers make older workers feel they should retire.*
6. I feel pressure from younger workers to step down.*
7. I feel pressure from older workers to step down.*
8. In my workplace, qualified younger workers tend to be overlooked for promotions.*

Scoring:

Items marked with * are reverse scored.

Knowledge Hiding (Connelly et al., 2012)

Directions: Below are several statements about you with which you may agree or disagree. Using the response scale below, indicate your agreement or disagreement with each item by selecting the appropriate option.

Think of your interactions at work with colleagues and how you choose to interact with them. Specifically, when your coworkers have a request for you to share information regarding your role. Please respond to the following items:

Scale Anchors:

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Items:

Evasive Hiding

1. I agree to help my colleagues but never really intend to
2. I agree to help my colleagues but instead give them information different from what they wanted
3. I tell them that I would help them out later but stall as much as possible
4. I offer them some other information instead of what they really wanted

Playing Dumb

5. I pretend that I do not know the information
6. I say that I do not know, even though I do
7. I pretend I do not know what they were talking about
8. I say that I am not very knowledgeable about the topic

Rationalized Hiding

9. I explain that I would like to tell them, but am not supposed to
10. I explain that the information is confidential and only available to people on a particular project
11. I tell them that my boss would not let anyone share this knowledge
12. I say that I will not answer his/her questions

EVLN (Hagedoorn et al., 1999)

Directions: 'Everybody occasionally encounters a problem or a problematic event at work. This can be a difference of opinion with your supervisor, frustrations with regard to the behavior of co-workers, or dissatisfaction, for instance, about a schedule or a specific task you are assigned to do. People tend to react differently to these experiences. On the following pages, several descriptions of possible reactions are listed. Would you indicate how likely it is that you would react to problematic events in the described ways?'

Scale Anchors:

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

Items:

Exit

1. Consider possibilities to change jobs
2. Actively look for a job outside the field you are currently working
3. Intend to change employers
4. Actively look for a job elsewhere within your field
5. Look for job advertisements to which you could apply
6. Intend to change your field of work

Considerate Voice

1. Try to come to an understanding with your supervisor
2. In collaboration with your supervisor, try to find a solution that is satisfactory to everybody
3. Try to work out an ideal solution in collaboration with your supervisor
4. Together with your supervisor, explore each other's opinions until the problems are solved
5. Try to compromise with your supervisor
6. Talk with your supervisor about the problem until you reach total agreement
7. Suggest solutions to your supervisor
8. Immediately report the problem to your supervisor
9. Immediately try to find a solution
10. Try to think of different solutions to the problem
11. Ask your supervisor for a compromise

Aggressive Voice

1. Describe the problem as negatively as possible to your supervisor
2. Try to win the case
3. Deliberately make the problem sound more problematic than it really is
4. Being persistent with your supervisor in order to get what you want
5. Starting a 'fight' with your supervisor

6. Try to prove in all possible ways to your supervisor that you are right
7. By definition, blame the organization for the problem

Loyalty

1. Trust the decision-making process of the organization without your interference
2. Trust the organization to solve the problem without your help
3. Have faith that something like this will be taken care of by the organization without you contributing to the problem-solving process
4. Assume that in the end everything will work out
5. Optimistically wait for better times

Neglect

1. Report sick because you do not feel like working
2. Come in late because you do not feel like working
3. Put less effort into your work than may be expected of you
4. Now and then, do not put enough effort into your work
5. Missing out on meetings because you do not feel like attending them

Knowledge Sharing Frequency (Swift & Virick, 2013)

Directions: Please indicate how frequently you shared work-related knowledge with your co-workers in the past year.

Scale Anchors:

Never	Rarely	Some	Often	Very Often
1	2	3	4	5

Items:

1. I share knowledge with my coworkers verbally
2. I provide my coworkers with a lot of my knowledge
3. I share my knowledge with my coworkers by showing them what to do
4. When asked, I share my knowledge with my coworkers
5. I volunteer my knowledge to my coworkers

Demographics

1. What is your age? (in years)
2. What is your gender identity?
 - a. Female
 - b. Male
 - c. Trans woman/trans female
 - d. Trans man/trans male
 - e. Custom (please tell us more!) _____
 - f. Prefer not to answer
3. Which of the following best represents your racial or ethnic heritage? Choose all that apply.
 - a. Non-Hispanic White or Euro-American
 - b. Black, Afro-Caribbean, or African American
 - c. Latinx or Hispanic American
 - d. East Asian or Asian American
 - e. South Asian or Indian American
 - f. Middle Eastern or Arab American
 - g. Native American or Alaskan Native
 - h. Custom (please tell us more!) _____
 - i. Prefer not to answer
4. Please indicate your employment status.
 - a. Full-time
 - b. Part-time
 - c. Not employed
 - d. Retired
 - e. Self-employed
5. On average, how many hours do you work per week at your job?
6. How many days have you been absent in the past 30 days from work?
7. How much of your job is remote?
 - a. Less than 10%
 - b. 10% - 19%
 - c. 20 % - 29%
 - d. 30 – 39%
 - e. 40 – 49%
 - f. 50 – 59%
 - g. 60% - 69%
 - h. 70% - 79%
 - i. 80 – 89%
 - j. 90% or greater
8. Which of the following best describes your occupation?
 - a. Architecture and Engineering
 - b. Arts, Design, Entertainments, Sports, or Media
 - c. Building and Grounds Cleaning and Maintenance
 - d. Business and Financial Operations
 - e. Community and Social Services
 - f. Computer and Mechanical

- g. Construction and Extraction
 - h. Education, Training, and Library
 - i. Farming, Fishing, and Forestry
 - j. Food Preparation and Serving Related
 - k. Healthcare Practitioners and Technical
 - l. Healthcare Support
 - m. Installation, Maintenance, and Repair
 - n. Legal
 - o. Life, Physical, and Social Science
 - p. Management
 - q. Military
 - r. Office and Administrative Support
 - s. Personal Care and Services
 - t. Production
 - u. Protective Services
 - v. Sales and Related
 - w. Transportation and Material Moving
 - x. Other (please specify)
9. What is your job title?
10. How long have you been at your current job?

Attention Check (Meade & Craig, 2012)

Throughout the surveys, items like:

1. Select strongly disagree
2. Select agree
3. Select neither likely nor unlikely

Appendix D

Construct	Name of Scale	Citation	Items	Scale Anchors
Age Salience	Age Salience	Kruse & Schmitt, 2006	5	1 (Strongly Disagree) to 5 (Strongly Agree)
Aging Anxiety	Aging Anxiety Scale	Drury et al., 2016	2	1 (Strongly Disagree) to 5 (Strongly Agree)
Core Self-Evaluations	CSE	Judge et al., 2003	12	1 (Strongly Disagree) to 5 (Strongly Agree)
Evaluation Apprehension	Evaluation Apprehension Scale	Spencer et al., 1999	4	1 (Strongly Disagree) to 5 (Strongly Agree)
Proactive Personality	Proactive Personality	Bateman & Crant, 1993	17	1 (Strongly Disagree) to 5 (Strongly Agree)
Public Self-Consciousness	SCSR	Scheier & Carver, 1985	7	1 (Not Like Me At All) to 5 (A Lot Like Me)
Age Metastereotype Consciousness	Stigma Consciousness Scale	Pinel, 1999 as used in Ryan, King, & Finkelstein, 2015	10	1 (Strongly Disagree) to 5 (Strongly Agree)
Work Locus of Control	Work Locus of Control	Spector, 1988	16	1 (Strongly Disagree) to 5 (Strongly Agree)
Telepressure	Workplace telepressure	Barber & Santuzzi, 2015	6	1 (Strongly Disagree) to 5 (Strongly Agree)
Age Diversity Climate	Age Diversity Climate	Boehm et al (2014)	4	1 (Strongly Disagree) to 5 (Strongly Agree)
Age Group Identification	Age Group Identification	Adapted from Finkelstein et al (2001)	12	1 (Strongly Disagree) to 5 (Strongly Agree)
Age Metastereotype Accessibility	Age metastereotype accessibility	Finkelstein et al (2020)	24	1 (Extremely uncharacteristic) to 5 (Extremely characteristic)
Age-Differentiated Leadership	Age-Differentiated Leadership	Koziel et al., 2021	16	1 (Strongly Disagree) to 5 (Strongly Agree)
Age-Inclusive HR practices	Age-Inclusive HR practices	Boehm et al (2014)	5	1 (Very low intensity) to 5 (very high intensity)
Avoidance	Colleague Reactions	Finkelstein et al (2020)	4	1 (Strongly Disagree) to 5 (Strongly Agree)
Boost			6	1 (Strongly Disagree) to 5 (Strongly Agree)
Challenge			3	1 (Strongly Disagree) to 5 (Strongly Agree)
Conflict			3	1 (Strongly Disagree) to 5 (Strongly Agree)
Engagement			3	1 (Strongly Disagree) to 5 (Strongly Agree)
Threat			11	1 (Strongly Disagree) to 5 (Strongly Agree)
Counterproductive Workplace Behaviors	CWB Checklist	Spector et al. (2010)	10	1 (Never) to 5 (Very Often)
Cyber Incivility	Cyber Incivility	Lim & Teo (2009)	14	1 (Strongly Disagree) to 5 (Strongly Agree)
Coworker Engagement	Engagement	Finkelstien et al (2020)	4	1 (Strongly Disagree) to 5 (Strongly Agree)

Exit	EVLN	Hagedoorn et al., 1999	6	1 (Strongly Disagree) to 5 (Strongly Agree)
Considerate Voice			11	1 (Strongly Disagree) to 5 (Strongly Agree)
Aggressive Voice			7	1 (Strongly Disagree) to 5 (Strongly Agree)
Loyalty			5	1 (Strongly Disagree) to 5 (Strongly Agree)
Neglect			5	1 (Strongly Disagree) to 5 (Strongly Agree)
General Incivility	Incivility	Cortina et al, 2001	7	1 (Strongly Disagree) to 5 (Strongly Agree)
Intergroup Anxiety	Intergroup Anxiety	Stephan & Stephan, 1985	6	1 (Not at all) to 5 (Very)
Task Crafting	Job Crafting Questionnaire	Slemp & Vella-Brodrick, 2013	5	1 (Hardly Ever) to 5 (Very Often)
Cognitive Crafting			5	1 (Hardly Ever) to 5 (Very Often)
Relational Crafting			5	1 (Hardly Ever) to 5 (Very Often)
Job Demands	Job Content Questionnaire	Karesek et al. 1998	8	1 (Strongly Disagree) to 5 (Strongly Agree)
Perceptions of Job Demands and Job Resources	Job Demands-Resources Scale (JDRS)	Jackson & Rothmann, 2005	41	1 (Never) to 5 (Very Often)
Rationalized Hiding	Knowledge Hiding	Connelly et al., 2012	4	1 (Strongly Disagree) to 5 (Strongly Agree)
Playing Dumb			4	1 (Strongly Disagree) to 5 (Strongly Agree)
Evasive Hiding			4	1 (Strongly Disagree) to 5 (Strongly Agree)
Knowledge Sharing Frequency	Knowledge Sharing Frequency	Swift & Virick, 2013	5	1 (Never) to 5 (Very Often)
External Regulation	Knowledge Sharing Motivation	Ryan & Connell, 1989	2	1 (Strongly Disagree) to 5 (Strongly Agree)
Introjected Regulation			2	1 (Strongly Disagree) to 5 (Strongly Agree)
Identified Regulation			2	1 (Strongly Disagree) to 5 (Strongly Agree)
Intrinsic Motivation			2	1 (Strongly Disagree) to 5 (Strongly Agree)
Workaholism	Multidimensional Workaholism Scale	Clark et al 2020	16	1 (Strongly Disagree) to 5 (Strongly Agree)
Burnout	Oldenburg Burnout Inventory	Demerouti et al. 2010	16	1 (Strongly Disagree) to 5 (Strongly Agree)
Organizational Citizenship Behaviors	Organizational Citizenship Behaviors	Swaminathan & Jawahar, 2013	4	1 (Strongly Disagree) to 5 (Strongly Agree)
Procedural Justice	Organizational Justice	Colquitt, 2001	7	1 (to a small extent) to 5 (to a large extent)
Distributive Justice			4	1 (to a small extent) to 5 (to a large extent)
Interpersonal Justice			4	1 (to a small extent) to 5 (to a large extent)

Informational Justice			5	1 (to a small extent) to 5 (to a large extent)
Tenure	Organizational Tenure & Role Tenure	NA	2	open-ended (months for both org and role)
PANAS	Positive and Negative Affect Schedule	Watson et al (1988)	20	1 (Very Slightly or Not at all) to 5 (Extremely)
Social Support	Perceived Social Support	Zimet et al., 1988	24	1 (Strongly Disagree) to 5 (Strongly Agree)
Psychological Stress	Psychological Stress	Pejtersen et al., 2010	8	1 (Not at all) to 5 (All the time)
Psychological Wellbeing	Psychological Wellbeing	Dagenais-Desmarais & Savoie, 2012	25	1 (Strongly Disagree) to 5 (Strongly Agree)
Retirement Intentions	Retirement Intentions	Oakman & Wells, 2013	2	Open-ended
Subjective Wellbeing	SPANE Scale	Diener et al., 2010	20	1 (Very Rarely) to 5 (Very Often or Always)
Subjective Age	Subjective Age	Zacher & Rudolph (2019)	4	1 (Much younger than my actual age) to 5 (Much older than my actual age)
Vitality	Subjective Vitality	Ryan & Fredrick, 1997	7	1 (Strongly Disagree) to 5 (Strongly Agree)
Turnover	Turnover Intentions	Hanish & Hulin, 1991	5	1 (Strongly Disagree) to 5 (Strongly Agree)
Work-family/ family-work conflict	Work-family/ family-work conflict	Matthews et al (2010)	6	1 (Strongly Disagree) to 5 (Strongly Agree)
Perceived Age Discrimination	Workplace age discrimination scale	Marchiondo et al. 2016	9	1 (Never) to 5 (Very Often)
Intergenerational Contact	Workplace Intergenerational Climate Scale	King & Bryant, 2017	4	1 (Strongly Disagree) to 5 (Strongly Agree)
Lack of Generational Stereotypes			4	1 (Strongly Disagree) to 5 (Strongly Agree)
Positive Intergenerational Affect			4	1 (Strongly Disagree) to 5 (Strongly Agree)
Workplace Generational Inclusiveness			4	1 (Strongly Disagree) to 5 (Strongly Agree)
Workplace Intergenerational Retention			4	1 (Strongly Disagree) to 5 (Strongly Agree)

Appendix E

Debriefing

Thank you for completing A Study of Workplace Processes!

The purpose of this study has multiple facets. First, we want to determine if age may impact what ways someone engages in knowledge hiding between their coworkers. More specifically, we want to determine if knowledge hiding might be different for older workers in comparison to younger workers. Further we wanted to understand if having contact between coworkers from different age groups would impact how people knowledge hide. Lastly, we wanted to see if knowledge hiding could predict different workplace outcomes including decision to exit a company, express loyalty, voice concerns, and/or neglect job responsibilities.

If you're interested in information regarding similar topics to how age matters in the workplace and how to improve age-diverse workplaces, see these helpful newsletters on how to manage workers dependent on which age category they are:

- [SHRM Newsletter on Harnessing the Power of a Multigenerational Workplace](#)
- [SHRM Newsletter on Leveraging the Value of an Age-Diverse Workplace](#)

If answering any of the questions in this study raises any issues for you, please use the resources below as a source of support:

Resource	Accessing the Resource
American Psychological Association “Psychologist Locator”	http://locator.apa.org/ or (800) 374-2723
Crisis centers in the United States	1-800-273-TALK (8255)
Crisis centers Worldwide	www.allaboutcounseling.com

We would appreciate it if you would refrain from discussing any parts of this study with other participants.

You are welcome to contact Seth Jones (jonesse22@students.ecu.edu) with any questions regarding this study.

Also, if you have any questions or concerns about your rights as a research participant, you may contact the University & Medical Center Institutional Review Board (UMCIRB) at 252-744-2914.

Appendix F

IRB Approval



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board
Willis Building · Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office 252-744-2914 · Fax 252-744-2284
redc.ecu.edu/umcibr/

Notification of Amendment Approval

From: Social/Behavioral IRB
To: [Courtney Baker](#)
CC:
Date: 1/11/2024
Re: [Ame1 UMCIRB 23-002290](#)
[UMCIRB 23-002290](#)
Evaluations of Workplace Behaviors

Your Amendment has been reviewed and approved using expedited review on 1/11/2024. It was the determination of the UMCIRB Chairperson (or designee) that this revision does not impact the overall risk/benefit ratio of the study and is appropriate for the population and procedures proposed.

Please note that any further changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a Final Report application to the UMCIRB prior to the Expected End Date provided in the IRB application. If the study is not completed by this date, an Amendment will need to be submitted to extend the Expected End Date. The investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Document	Description
Extending the study end date to 12/31/2024.	

For research studies where a waiver or alteration of HIPAA Authorization has been approved, the IRB states that each of the waiver criteria in 45 CFR 164.512(i)(1)(i)(A) and (2)(i) through (v) have been met. Additionally, the elements of PHI to be collected as described in items 1 and 2 of the Application for Waiver of Authorization have been determined to be the minimal necessary for the specified research.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.