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## **Abstract**

This master thesis has investigated the relationship between workplace ostracism and both quantitative and qualitative job insecurity, and examined the mediating effect of state self-efficacy on this relationship. With a longitudinal research design and a quantitative self-reported survey, we found significant correlation that (1) workplace ostracism is associated with elevated levels of qualitative job insecurity, (2) workplace ostracism affects state self-efficacy, and (3) state self-efficacy affects qualitative job insecurity. Contrary to our predictions, the indirect effect of state self-efficacy yielded no support. However, due to small margins in the mediation analysis, it is too early to conclude that state self-efficacy is not an explanatory mechanism on the relationship between workplace ostracism and qualitative job insecurity. Moreover, we found no support that (1) workplace ostracism is associated with elevated levels of quantitative job insecurity, and (2) state self-efficacy affects quantitative job insecurity. Thus, our different findings of quantitative and qualitative job insecurity indicate that people are more concerned about losing valued job features and quality in the employment relationship, rather than losing the job itself due to workplace ostracism. Our findings therefore illuminate that loss of resources as a result of workplace ostracism may lead individuals to believe they are unable to perform their jobs properly, resulting in qualitative job insecurity. This thesis implicates the necessity of good workplace ostracism management. We therefore suggest that organizations encourage the development of a healthy work environment defined by mutual support and respect between employees, and that managers ensure that employees' current positions in the team are not jeopardized due to workplace ostracism.

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## **1.0 Introduction**

Workplace mistreatment has been examined over the past decades (Harvey, Treadway, & Heames, 2007; Houshmand, O'Reilly, Robinson, & Wolff, 2012; Tepper, 2000; Wu, Yim, Kwan, & Zhang, 2012), but one form of workplace mistreatment that has not been given as much attention is workplace ostracism. Workplace ostracism is when “an individual or group omits to take actions that engage another organizational member when it is socially appropriate to do so” (Robinson, O'Reilly, & Wang, 2013). Ostracism is more widespread than commonly realized (Williams, 2001), and has been recognized as a serious problem within organizations (Gamian-Wilk & Madeja-Bien, 2021).

Previous research has found that ostracism can be painful and has been linked to both psychological and physical pain (Eisenberger, 2012; Eisenberger, Lieberman, & Williams, 2003; Riva, Wirth, & Williams, 2011; Zadro, Williams, & Richardson, 2004). Ostracism has been found to threaten four basic psychological needs of human beings: belonging, control, self-esteem, and meaningful existence (Williams, 2001). Scholars have proven workplace ostracism to be powerful in predicting important negative work-related outcomes, such as reduced job satisfaction, affective commitment, as well as reduced well-being, and productivity (Ferris, Brown, Berry, & Lian, 2008; Penhaligon, Louis, & Restubog, 2009). In addition, ostracism has been found to increase the victims' aggressive and antisocial behavior (Leary, Kowalski, Smith, & Phillips, 2003; Rajchert & Winiewski, 2016; Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007; Twenge, Baumeister, Tice, & Stucke, 2001; Yan, Zhou, Long, & Ji, 2014), as well as adversely affect interpersonal behavior and harm job performance (Ferris et al., 2008; Hitlan, Kelly, Schepman, Schneider, & Zárate, 2006).

The notion of ostracism has been investigated in various social science fields (Williams, 1997, 2006), but the concept has been less explored in organizational psychology. Most of human's psychological needs are fulfilled through social interactions at work, a place where people seek to form friendships, social connections, and inclusion with others (Robinson et al., 2013; Williams, 2006). The impact of workplace ostracism is therefore severe and ubiquitous. As workplace ostracism has been proven to lead to several negative work-related outcomes (Ferris et al., 2008; Penhaligon et al., 2009), and because interpersonal factors have been suggested to enhance perceptions of job insecurity (Glambek,

Matthiesen, Hetland, & Einarsen, 2014; Shoss, 2017), we aim to investigate if workplace ostracism is associated with elevated levels of job insecurity.

There is a significant prevalence of job insecurity in today's workplaces (Shoss, 2017), and the outbreak of COVID-19 pandemic has led to increased job insecurity among employees (Basyouni, Keshky, & El Sayed, 2021). The pandemic has generated a deep economic crisis and led global unemployment to increase by 33 million in 2020, with the unemployment rate rising by 1.1 percentage points to 6.5 percent (ILO, 2021a). As the pandemic has aggregated objective threats to job insecurity, we aim to examine if interpersonal factors enhance job insecurity even when the fear of job insecurity is pre-existent due to the pandemic.

The majority of research has emphasized the detrimental effects of quantitative job insecurity (De Witte, De Cuyper, Vander Elst, Vanbelle, & Niesen, 2012), and the focus on national unemployment rates have in addition increased during the COVID-19 pandemic (ILO, 2021a; Smith, Edwards, & Duong, 2021). Nevertheless, since the increasingly changeable landscape of organizations can lead to unknown and unpredictable changes in employees' working conditions and career opportunities, the threat of qualitative job insecurity should not be underestimated (Niesen, Van Hootehem, Handaja, Batistelli, & De Witte, 2018). This study therefore distinguishes between the different dimensions of job insecurity, and aims to investigate workplace ostracism as an antecedent to both quantitative and qualitative job insecurity.

The limited research on the causes of job insecurity has primarily focused on macro-economic, organizational, and personal characteristics, but has largely disregarded the social dimensions of the workplace (Shoss, 2017; Wang, Le Blanc, Demerouti, Lu, & Jiang, 2019). As such, focusing on workplace ostracism as an antecedent of job insecurity responds to Shoss' (2017) call for more research on the links between interpersonal relationships and job insecurity. Identifying potential sources of job insecurity, rather than focusing on the consequences of job insecurity, is also highly advised by stress intervention scholars (Cooper & Cartwright, 1997).

Research has found that workplace ostracism relates negatively to job performance, and that high levels of self-efficacy weaken this relationship (De Clercq, Haq, & Azeem, 2018). Further, self-efficacy has been categorized as a personal resource (Hobfoll, 1989), and Hobfoll (2001) argues that when

employees have access to personal resources that compensate for the loss of resources, the negative impact of resource-intensive work conditions on productive employee behavior is reduced. As personal resources have a crucial role in the context of work environment (Bayraktar & Jiménez, 2020), we aim to identify if state self-efficacy serves as a resource that mediates the relationship between workplace ostracism and both dimensions of job insecurity.

Hence, the study may provide several contributions. First, our research may add to the job insecurity literature by developing knowledge into the antecedents of job insecurity, and hopefully target triggers of job insecurity in order to manage and prevent it, rather than deal with it after it occurs. In addition, we are investigating a relatively unexplored field within the antecedents of job insecurity (Shoss, 2017), and hence respond to Shoss' (2017) call for more research on the links between interpersonal relationships and job insecurity. Moreover, as our study distinguishes between both dimensions of job insecurity, we contribute to investigate whether workplace ostracism is associated with different outcomes regarding quantitative and qualitative job insecurity. Second, the study also extends the workplace ostracism literature as a recent meta-analysis on workplace ostracism has not considered job insecurity as an outcome (Howard, Cogswell, & Smith, 2020). Deep understandings of workplace ostracism are important for organizations and individuals due to its powerful prediction on critical employee outcomes (Ferris et al., 2008; Ferris, Yan, Lim, Chen, & Fatimah, 2016; Penhaligon et al., 2009). Thus, this investigation may provide empirical evidence of workplace ostracism outcomes, hence broadening our view of the negative implications of workplace ostracism. Third, as the study examines workplace ostracism's effect on quantitative and qualitative job insecurity, both directly and through the mediating role of state self-efficacy, we investigate, to our knowledge, unexplored mechanisms on the effect of workplace ostracism on perceived job insecurity. Lastly, the longitudinal research on the consequences of workplace ostracism enables us to assess the direction of the association between workplace ostracism and job insecurity.

### **1.1 Research question**

Previous research states that ostracism leads to loss of resources (Williams, 2001), and the personal resource of state self-efficacy may therefore work as a mediator on the relationship between workplace ostracism and job insecurity. Thus, and to



respond to Shoss' (2017) call for more research on the topic, we will through Conservation of Resources theory investigate: *"Is workplace ostracism associated with elevated levels of quantitative and qualitative job insecurity, and does state self-efficacy mediate this relationship?"*

## **2.0 Theoretical framework**

To form a basis for the analysis, theory relevant to our research question will be presented. We will review Hobfoll's Conservation of Resources (COR) theory, which is the main theoretical framework for this thesis. Further, more specific theories regarding our research variables will be presented.

### **2.1 Conservation of Resources theory**

In light of Hobfoll's (1989) COR theory, the relationship between workplace ostracism and job insecurity, as well as the personal resource of self-efficacy can be explained. The theory is a framework for how to understand the processes involved in experiencing, coping with, and becoming resilient to chronic and traumatic stress (Cooper & Quick, 2017). According to COR theory, stress occurs when there is a loss of resources, a perceived threat of loss, or a lack of resource gain following a resource investment (Hobfoll, 1989, 1998). As a result, people try to conserve resources in order to deal with potentially threatening situations and avoid negative consequences (Leung, Wu, Chen, & Young, 2011).

The basic tenet of COR theory is that people "strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources" (Hobfoll, 1989, p. 516). When people are faced with (1) the threat of resource loss, (2) actual resource loss, or (3) a lack of resource gain after resource investment, stress reactions ensue (König, Debus, Häusler, Lendenmann, & Kleinmann, 2010). The stress response will then be to comprise an attempt primarily to limit losses, and secondarily to maximize gains, with the loss aspect of the equation being disproportionately dominant (Cooper & Quick, 2017). Behaviors that appear in stressful contexts can vary considerably in form, but still serve the common function of resource conservation. COR theory therefore emphasizes the objective nature of stress and stress reaction, not the individual assessment process (Cooper & Quick, 2017). The theory focuses on shared cultural dimensions of stress and resources, and takes into account that

although most resources are universally valued, there is a high probability that their relative value will vary across cultures (Cooper & Quick, 2017).

### **2.1.1 Resources**

Resources in COR theory are defined as “objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies” (Hobfoll, 1989, p. 516). One assumption in COR theory is that human behavior and culture are organized around conserving valuable resources. Some resources are essential for survival and are inherently reinforcing across humans, while others are shaped through cultural and personal experiences, as well as between and within individuals (Cooper & Quick, 2017). These resources can be categorized as object resources (house, car), condition resources (employment, marriage), personal resources (key skills, personal traits), and energy resources (knowledge, money) (Hobfoll, 2011). These resources are key as they provide the energy and motivation to seek and maintain external resources, such as stable employment and supportive relationships, and the value of a resource can be explained by the necessity for survival, as well as protection of the individual and their status (Cooper & Quick, 2017). Moreover, Cooper & Quick (2017) differ among the necessity of resources. Primary resources are directly related to survival and are valued cross-culturally, like food, health, and housing. Secondary resources gain their reinforcing value through their associations with primary resources, such as employment and social support. Finally, tertiary resources are culturally constructed and provide access to primary and secondary resources, such as accomplishment and financial credit (Cooper & Quick, 2017).

According to Hobfoll (1989), employment is a valued resource by individuals; thus, if a person's job is threatened, he or she is likely to develop strain symptoms. People may perceive job insecurity as a threat to their highly valued resource of employment and hence retreat from activities that place additional demands on their resources (König et al., 2010). However, if employees have access to personal resources that compensate for the loss of other resources, the negative impact may be reduced (Hobfoll, 2011). According to research, both personal resources (self-efficacy) and professional resources (coworker support) facilitate employees' effectiveness in the workplace (Wright & Hobfoll, 2004). Personal resources provide emotional resilience in the face of adversity and a

sense of control over one's environment (Hobfoll, 1989; Hobfoll, Johnson, Ennis, & Jackson, 2003), whereas job resources are the physical, psychological, and social components of one's employment (Hakanen, Schaufeli, & Ahola, 2008). Employees can deal more effectively with work demands when organizations build environments that enable them to preserve and safeguard resources, which will prevent undesirable outcomes (Wright & Hobfoll, 2004).

### **2.1.2 Principles and corollaries**

COR theory states four key principles and four corresponding corollaries that make for specific, complex, and multifaceted predictions. They lend themselves to build complex strategies required to counteract major stressful conditions at the individual or organizational level (Hobfoll, Halbesleben, Neveu, & Westman, 2018). These principles and corollaries have been supported in several studies of stress and trauma (Hobfoll, 1988, 1989; Hobfoll & Lilly, 1993). As workplace ostracism leads to a depletion of resources, and with regard to time constraints, this thesis will not address COR principles and corollaries that solely regards resource gain.

Principle one asserts that “resources loss is disproportionately more salient than resource gain in both degree and speed of impact” (Cooper & Quick, 2017), meaning that loss of a given resource will have a greater psychological impact than gain of the same resource. Previous research supports this principle by demonstrating that stress responses are most consistently generated by major life events involving significant loss and not by those involving gain (Hobfoll, 1988, 1989), and that resource loss predicted psychological discomfort, while resource gain was only important in predicting psychological distress in the setting of resource loss (Hobfoll & Lilly, 1993). Recent studies on immunological neglect also provide evidence that the effects of loss have a profound cognitive foundation (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998). According to learning theory, people should gradually adjust to the idea that they can usually overcome unfavorable life situations (Hobfoll, 2001). However, people don't usually learn this, as they frequently overestimate the depth and duration of their affective responses to traumatic, loss-inducing experiences. They do not take into account how strong their psychological immune system is (Hobfoll, 2001). This has great significance for predicting behavior because people's actions are mostly derived from their predictions concerning the emotional consequences of events they are

likely to, and do in fact, encounter (Hobfoll, 2001). This can be understood in the context of ostracism, which might appear to be an overwhelmingly negative situation that is difficult to overcome.

The second principle states that people must invest in resources to guard against resource loss, recover from losses, and obtain resources (Hobfoll, 2011). This comprises both direct resource replacement, such as using savings to replace lost income, and indirect resource investment, such as improving employee abilities to prepare for a challenging business environment (Hobfoll et al., 2018). Resources have value because they are desired goal objects, like love, money, and a home, and because they are necessary for acquiring or maintaining other desired resources (Hobfoll, 2001). Self-efficacy and social support are two examples of resources that may be both significant in their own right and important because they help to maintain strong resource reservoirs (Hobfoll, 2001). Numerous studies have demonstrated the effectiveness of investing in personal, social, and financial resources to promote stress resistance. For instance, this has been established for individual resources including self-efficacy, optimism, and self-esteem (Bandura, 1997; Scheier & Carver, 1985). In stressful situations, optimism and the availability of social support are likely to be linked to having a sense of self-efficacy, whereas poor social support, low self-esteem, and inadequate coping mechanisms are likely to be linked to low self-efficacy (Kobasa & Puccetti, 1983; Thoits, 1994).

These two principles of COR theory regarding loss primacy and investment of resources, further leads to corollaries concerning resource loss and gain spirals (Hobfoll, 1988, 1998). First, corollary one states that those with more resources are less likely to lose them and more capable of gaining them. On the other hand, individuals and organizations with limited resources are more vulnerable to resource loss and less capable of resource gain (Hobfoll et al., 2018). Second, corollary two claims that because resource loss is more powerful than resource gain, and stress occurs when resources are lost, individuals and organizations have fewer resources to counterbalance resource loss at each iteration of the stress spiral, and these loss spirals gain in pace as well as scale (Hobfoll et al., 2018). This phenomenon is called resource loss spirals, because losses increase in both impact and momentum (Hobfoll et al., 2018). Lastly, corollary three states that resource gain also has a spiraling nature (Hobfoll et al., 2018). However, resource gain spirals are weak and develop slowly because

resource gain is both smaller and slower than resource loss. Nevertheless, resource gain spirals must be pursued by individuals and organizations to mitigate loss and increase engagement (Hobfoll et al., 2018).

## **2.2 Stressors from the COR perspective**

This part of the thesis will go more in depth regarding our main variables under investigation: workplace ostracism, quantitative job insecurity, qualitative job insecurity, and state self-efficacy. We will first distinguish between the different dimensions of job insecurity and look into the context of the COVID-19 pandemic. Further, we will elaborate on workplace ostracism, and look at this as an antecedent to job insecurity through COR theory. Moreover, we will introduce state self-efficacy as a personal resource that mediates the relationship between workplace ostracism and both quantitative and qualitative job insecurity.

### **2.2.1 Workplace ostracism**

Ostracism refers to the act of being ignored, rejected or excluded, and often occurs without excessive explanation or explicit negative attention (Williams, 2006; Williams & Zadro, 2001). Individuals who are subjected to ostracism experience stress, which can contribute to cognitive and functional impairment in severe situations (Williams, 1997). Ostracism has been suggested to be prevalent in a variety of important social contexts, including workplaces (Balliet & Ferris, 2013; Fox & Stallworth, 2005). Drawing from research on social ostracism (Williams, 2001, 2006), workplace ostracism is defined as “the extent to which a person perceives that he or she is ignored or excluded by others in the workplace” (Ferris et al., 2008), and is described as when people at work omit actions to include other organizational members when it is socially appropriate to include (Robinson et al., 2013). For instance, workplace ostracism can be perceived by colleagues isolating or disconnecting others from social interaction at work by avoiding eye contact, leaving the room when an individual enters, moving an individual to an isolated location, or fail to respond to coworkers' greetings (Ferris et al., 2008; Fox & Stallworth, 2005; Robinson et al., 2013; Xu, Huang, & Robinson, 2017).

Workplace ostracism can also be perceived through home office, which became widespread at the beginning of COVID-19. This led to reduced physical interactions in the office, and increased interaction through the internet. Although the internet can provide individuals with opportunities for fulfilling social experiences and more opportunities for inclusion in online social interactions, it

may also create new problems in terms of how individuals interact with one another and lead to more occasions for being ignored and excluded (Cummings, Sproull, & Kiesler, 2002; Kraut, Patterson, Lundmark, Kiesler, Mukophadhyay, & Scherlis, 1998). This form of ostracism may include not returning texts or email messages, ignore social media invites, or exclude individuals from online meetings.

The intentions behind ostracism can be difficult to detect or understand, and ostracism may not always be intentional or punitive. For instance, individuals sometimes ignore others when they are too engaged with their own work, which can lead to unintentionally ignoring people and their responses (Williams, 2001). The motive behind ostracism can therefore range from non-purposeful to purposeful and malicious intent (Robinson et al., 2013). Non-purposeful ostracism is rather common since people are not always aware of their own inactions (Sommer, Williams, Ciarocco, & Baumeister, 2001), and can for instance occur if individuals forget to add another colleague's email address when sending a group email, thinking that the address was already included (Chung & Yang, 2017). On the other hand, ostracism can be purposeful when individuals are aware that their inactions to socially engage another individual would result in hurting the target or assist in the process of exclusion (Chung & Yang, 2017). A passive-aggressive tactic such as the silent treatment can be used to intentionally punish, retaliate, or hurt the target, while also avoiding conflict, social awkwardness, or unpleasant emotions (Robinson et al., 2013). Considering these aspects, ostracism generally tends to be highly detrimental regardless of whether there is a purposeful or non-purposeful intent (Williams, 1997).

According to Williams (2001, 2006) ostracism is an interpersonal stressor likely to threaten its victims' fundamental needs:

1. ***Belonging*** – the need to have pleasant interactions with others
2. ***Self-esteem*** – the need to believe others view us as worth
3. ***Control*** – the need to have influence over our social environment
4. ***Meaningful existence*** – the need to avoid our fear of death by making an impact on the world

Furthermore, Williams (2009) developed the temporal need-threat model to help describe and predict the processes, responses, and reactions to ostracism and how

it leads to distress. The model focuses on the sequential order from when an event of ostracism is detected, to when it may lead to ultimate resignation. This process posits three main stages: reflexive, reflective, and resignation (Waldeck, Tyndall, & Chmiel, 2015). During the reflexive stage, an ostracized target's immediate distress response is described as being painful and threatening to fundamental needs, as well as experiencing increased levels of sadness and anger (Williams, 2009). The reflective stage refers to when the individuals' attention reflects the motives, meaning, and relevance of the ostracism episode, leading to employ coping and recovery strategies that serve to fortify the threatened needs (Williams, 2009). Research indicates that ostracized individuals tend to cope by either becoming more compliant and socially attractive (Böckler, Hömke, & Sebanz, 2014; Carter-Sowell, Chen, & Williams, 2008) or by reacting with anger and retaliate (Warburton, Williams, & Cairns, 2006). Lastly, the resignation stage occurs after long-term ostracism whereby the individual has accepted that one's resources will become depleted. Such chronic ostracism is posited to lead to feelings of alienation, depression, helplessness, and unworthiness (Williams, 2009).

The need-threat model of ostracism is consistent with the COR explanation for the effects of workplace ostracism (Leung et al., 2011), stating that circumstances that threaten or deplete resources are objectively stressful (Cooper & Quick, 2017). According to COR theory, resources play a crucial role in predicting work-related outcomes, and Hobfoll et al. (2018) states that negative work events will harm individuals' resources. Similarly, Williams (2009) argue that continued exposure to ostracism might diminish the resources needed to motivate people, and other scholars believe ostracism can adversely affect interpersonal behavior and harm job performance due to the devastatingly negative impacts on the emotional and psychological well-being of individuals (Ferris et al., 2008; Hitlan et al., 2006). Several studies found that being subjected to ostracism negatively affected the fundamental needs of belonging and self-esteem, led to reduced feelings of control, and challenged their sense of meaningful existence (Leary, Tambor, Terdal, & Downs, 1995; Smith & Williams, 2004; Sommer et al., 2001; Williams, Cheung, & Choi, 2000; Williams, Shore, & Grahe, 1998; Zadro et al., 2004). In sum, these studies provide ample evidence that ostracism increases self-reported distress, and in connection with

this, former research has found that loss of these resources can lead to job insecurity (Barling & Kelloway, 1996; Shoss, 2017).

### **2.2.2 Job insecurity**

Job insecurity refers to the perceived powerlessness to maintain the desired continuity in a threatened job situation (Greenhalgh & Rosenblatt, 1984) and is defined as “a perceived threat to the continuity and stability of employment as it is currently experienced” (Shoss, 2017). Job insecurity depends on an individual’s *perception* of whether the continuity and stability of their jobs are threatened (Shoss, 2017), and is a subjective experience (De Witte, 1999). These threats can be manifested either by losing the job itself or by losing important job features (Greenhalgh & Rosenblatt, 1984). While most studies focus on job insecurity as a global and broader construct, some researchers distinguish between different dimensions of the construct, separating quantitative and qualitative job insecurity (Hellgren, Sverke, & Isaksson, 1999). Quantitative job insecurity refers to the fear of losing the job itself and is situated between employment and unemployment (De Witte, 2005; Greenhalgh & Rosenblatt, 1984; Sverke, Hellgren, & Näswall, 2002), whereas qualitative job insecurity refers to the fear of potential loss of quality in the employment relationship or by losing important job features. These features can be losing status in a team, losing community, deterioration of working conditions, lack of career opportunities, decreasing salary development, and concerns about person-organization fit in the future (De Witte, De Cuyper, Handaja, Sverke, Näswall, & Hellgren, 2010; Greenhalgh & Rosenblatt, 1984; Sverke, Hellgren, & Näswall, 2006).

Extensive research has been conducted documenting the negative consequences of job insecurity for both individuals and organizations, such as negative impact on employees’ personal and work-related well-being (De Witte, 2005), turnover (Richter, Vander Elst, & De Witte, 2020), job satisfaction and organizational commitment (Cheng & Chan, 2008). Most studies have focused on the effects of employees’ concerns regarding quantitative job insecurity, portraying this as a stressor that leads to strain and, hence, to poor job-related well-being (Greenhalgh & Rosenblatt, 1984). Comparatively, little research has examined perceived threats to qualitative job insecurity, but drawing on the obvious parallels between both dimensions of job insecurity, it is also plausible to assume a relationship between qualitative job insecurity and poor well-being (De



Witte et al., 2010). This assumption finds support in some studies regarding job dissatisfaction (Ashford, Lee, & Bobko, 1989; Hellgren et al., 1999; Nelson, Cooper, & Jackson, 1995) and more general indicators of poor well-being (Kuhnert, Sims, & Lahey, 1989).

Nevertheless, both dimensions of job insecurity have been identified as important work stressors (Niesen et al., 2018; Sverke et al., 2006), but there exist contradicting views concerning the relative strength of the separate types of job insecurity. While some researchers argue that they are both equally detrimental (De Cuyper & De Witte, 2006; De Witte et al., 2010), others believe that quantitative job insecurity is most detrimental (Greenhalgh & Rosenblatt, 1984). Lastly, some state that the strength depends on the outcome under investigation (Hellgren et al., 1999). Nevertheless, the increasingly changeable landscape of organizations can lead to unknown and unpredictable changes in employees' working conditions and career opportunities, and the threat of qualitative job insecurity should not be underestimated (Niesen et al., 2018). Following these aspects, we argue that it would be meaningful to make a distinction between quantitative and qualitative job insecurity.

#### **2.2.2.1 Ostracism as an antecedent to job insecurity**

Previous research indicates that individuals' perceptions of job insecurity are usually a response to changes in the business environment (Jiang, Probst, & Sinclair, 2013; Lübke & Erlinghagen, 2014; Roskies & Louis-Guerin, 1990), and further research suggest that interpersonal factors may be of relevance (Glambek et al., 2014; Shoss, 2017). Thus, the general assumption is that environmental conditions cause threats, whereas individual qualities cause increased awareness in the face of these threats (Shoss, 2017). Drawing on these previous findings, we aim to assess linkages between the resources that may become depleted due to workplace ostracism results in job insecurity.

The loss of social engagement that emerges as a result of being ostracized is a significant threat to belonging, and explains much of ostracism's psychological impact (O'Reilly, Robinson, Berdahl, & Banki, 2015; Robinson et al., 2013). Consistent with this, research suggests that employees' behaviors in job insecure contexts are also driven by evaluations about the perceived belongingness to the organization (Piccoli, Callea, Urbini, Chirumbolo, Ingusci, & De Witte, 2017). Furthermore, research indicates that ostracism has a negative

impact on self-esteem (Williams & Nida, 2011), and this fundamental need is considered to be a valuable resource (Rosenberg, 1979), moderating individuals' response to stress (Grandey & Cropanzano, 1999). Self-esteem is associated with maintaining and developing social connections (Williams & Nida, 2011), and low self-esteem individuals are more dependent on the evaluations of others in determining their sense of self-worth (Schneider & Turkat, 1975). Low self-esteem has been linked to job insecurity (Shoss, 2017), and research found that people who strongly identify with their jobs and who base a large part of their self-esteem on work-related achievement respond more negatively to job insecurity (Blom, Richter, Hallsten, & Svedberg, 2018; Probst, 2000). Furthermore, Williams et al. (2000) found that individuals who experienced workplace ostracism reported loss of the fundamental need for control. Aligned with this, previous research indicates that job insecurity is primarily a function of the perception of lack of control (Barling & Kelloway, 1996; Hartley, Jacobson, Klandermans, & Van Vuuren, 1990; Sverke & H. & Goslinga, 2004). Lastly, individuals who have been subjected to workplace ostracism have reported a significant reduction in life as meaningful (Bernstein, Sacco, Brown, Young, & Claypool, 2010; Stillman, Baumeister, Lambert, Crescioni, DeWall, & Fincham, 2009). Despite the lack of studies on the connection between meaningful existence and job insecurity, it is reasonable to believe that individuals who have a decreased perception of one's worth become doubtful of whether the workplace needs them, thus resulting in job insecurity.

In sum, loss of fundamental resources due to exposure of workplace ostracism may result in individuals believing that they cannot successfully perform their job, which in turn may lead to job insecurity. Drawing on COR theory and the contradicting views on the strength of different dimensions of job insecurity, we argue that it would be meaningful to make a distinction between qualitative and quantitative job insecurity, and thus hypothesize:

*H1a: Workplace ostracism is associated with higher levels of quantitative job insecurity over a three-month period*

*H1b: Workplace ostracism is associated with higher levels of qualitative job insecurity over a three-month period*

### 2.2.3 State self-efficacy

Self-efficacy is defined as people's judgment about their ability to perform certain tasks (Bandura, 1989). People's self-efficacy beliefs affect how they feel, think, motivate themselves and act (Bandura & Wessels, 1994). In many ways, a strong sense of effectiveness improves human achievement and personal well-being. People who are confident in their abilities view challenging situations as challenges to overcome rather than threats to avoid (Bandura & Wessels, 1994). In contrast, people who doubt on their capabilities dwell on their personal deficiencies, on the obstacles they will encounter, and all kinds of adverse outcomes rather than concentrate on how to perform successfully (Bandura & Wessels, 1994). Self-efficacy beliefs have been linked to functioning and health in several studies, and Bandura (1997) states that stress control, higher self-esteem, better well-being, better physical condition, and better adaptability and recovery from acute and chronic diseases are linked to high self-efficacy. Individuals with low self-efficacy have been observed to experience distress and unpleasant emotions such as worry, despair, helplessness, and exhaustion (Schwarzer & Hallum, 2008).

There are several ways to classify self-efficacy. Self-efficacy is not viewed as a trait in Bandura's (2006) theory, but rather as context-specific, meaning that some people experience themselves as self-efficacious only in some situations. Furthermore, studies using context-specific self-efficacy measures have demonstrated that they have stronger predictive validity than general self-efficacy measures (Lent, Brown, & Gore Jr, 1997). Because the current study takes place in a work environment, we emphasize state self-efficacy, which is described as a person's temporal judgment about his or her capacity to execute a certain task (Awang-Hashim, O'Neil Jr, & Hocevar, 2002). In addition, research indicates that self-efficacy can alter over time as employees gain new knowledge and experiences (Gist & Mitchell, 1992). Therefore, the respondents' general self-confidence and belief in their own ability will not be taken into account.

Self-efficacy is classified as an internal COR resource since it provides the employee with feelings of competence and enables the acquisition of additional resources (Holmgreen, Tirone, Gerhart, & Hobfoll, 2017). Principle one in COR theory asserts loss of a given resource will have a greater psychological impact than gain of the same resource (Cooper & Quick, 2017). According to learning theory, people should gradually adjust to the idea that they can usually overcome

unfavorable life situations (Hobfoll, 2001). People frequently overestimate the depth and duration of their affective responses to traumatic, loss-inducing experiences (Hobfoll, 2001). This has great significance for predicting behavior because people's actions are mostly derived from their predictions concerning the emotional consequences of events they are likely to, and do in fact, encounter (Hobfoll, 2001). This can be understood in the context of ostracism, which might appear to be an overwhelmingly negative situation that is difficult to overcome. Thus, we assume following:

*H2: Workplace ostracism is negatively associated with state self-efficacy over a three-month period*

In a dynamic work context, where ongoing learning and performance improvement is required, high self-efficacy enables individuals to react less defensively when they receive critical feedback (Heslin & Klehe, 2006). In situations where people's self-efficacy is low, they often see a negative outcome as confirming the perception of their own incompetence (Heslin & Klehe, 2006). In particular, low self-efficacy can quickly result in a feeling of hopelessness and impotence regarding one's ability to learn how to deal more effectively with the difficulties and demands of one's job (Heslin & Klehe, 2006). Employees who are exposed to stressful work situation, are more prone to allocate their resources toward negative activities, like worrying and agonizing, instead of productive behaviors that could contribute to the successful execution of their job tasks (Jamal, 1985; McCarthy, Trougakos, & Cheng, 2016). Further, employees who feel ignored and without social support may often worry about their professional standing within the organization (De Clercq et al., 2018). Based on this, we argue that it is reasonable to assume there exists a negative relationship between state self-efficacy and job insecurity, and propose the following hypotheses:

*H3a: State self-efficacy is negatively associated with quantitative job insecurity over a three-month period*

*H3b: State self-efficacy is negatively associated with qualitative job insecurity over a three-month period*

### 2.2.3.1 State self-efficacy as a mediator

Self-efficacy determines how much effort people will invest and how long they may persist when dealing with obstacles (Bandura, 1977). The same might apply to the threatening situation of job insecurity: people's self-efficacy may strain how they experience when they feel their job is in danger (König et al., 2010). Self-efficacy can influence how people react when they feel that any of their resources are in jeopardy, when they experience resource loss or a lack of resource gain (König et al., 2010). COR theory states that circumstances that threaten or deplete resources are objectively stressful (Cooper & Quick, 2017), and previous research argues that ostracism increases self-reported distress (Leary et al., 1995; Smith & Williams, 2004; Sommer et al., 2001; Williams et al., 2000; Williams et al., 1998; Zadro et al., 2004). Hobfoll et al. (2018) states that negative work events will harm individuals' resources, and COR theory argues that resources play a crucial role in predicting work-related outcomes. Taken these aspects into account, it is reasonable to assume that ostracism will harm people's self-efficacy, and therefore result in quantitative and qualitative job insecurity.

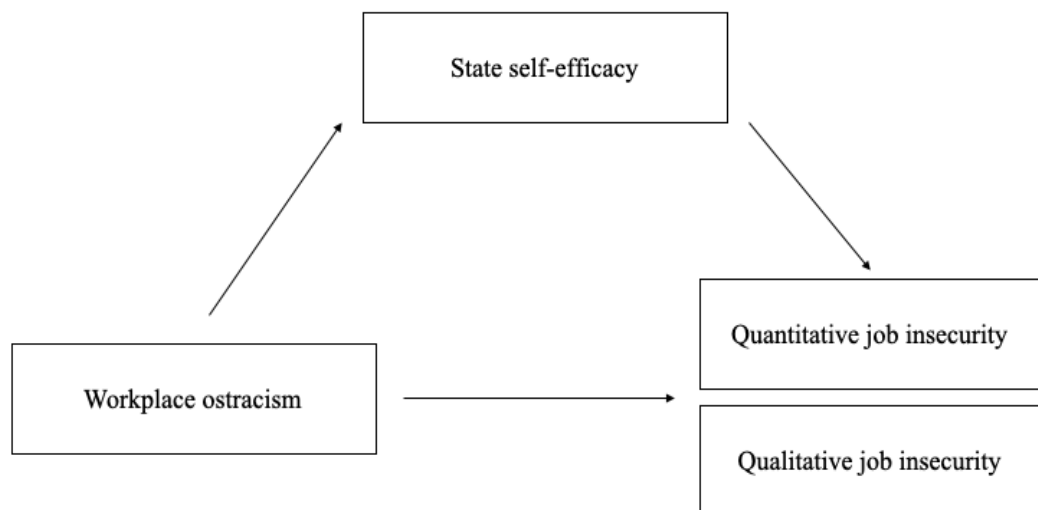
Although, to our knowledge, no previous research has examined self-efficacy as a mediator of the relationship between workplace ostracism and job insecurity, several prior studies have examined the role of self-efficacy as a mediator. For instance, Maciejewski, Prigerson and Mazure (2000) found that self-efficacy mediated the effect of dependent stressful life events and depressive symptoms, while Speier and Frese (1997) discovered that self-efficacy partly mediated the relationship between control and complexity at work and personal initiative. Moreover, researchers argue that self-efficacy worked as a mediating variable between the learning environment and achievement as well as more appropriate behavior (Moriarty, Douglas, Punch, & Hattie, 1995). Despite the limitations of self-efficacy as a mediator in previous studies, notably in terms of workplace conditions, we evaluated the findings of self-efficacy as a mediator in general. Furthermore, relevant linkages between our variables under investigated have been examined in previous studies. Etehadi & Karatepe (2019) found that job insecurity relates negatively to self-efficacy, while De Clercq et al. (2018) revealed that workplace ostracism relates negatively to job performance and that this relationship is weaker at higher levels of self-efficacy. Jawahar, Schreurs and Mohammed (2018) found that occupational self-efficacy mediates the negative relationship between low-quality relationships and counterproductive

performance. These findings, in connection with COR theory, indicate that state self-efficacy, following from exposure of workplace ostracism, affects job insecurity. We thus hypothesize:

*H4a: The relationship between workplace ostracism and quantitative job insecurity is mediated by employees' state self-efficacy*

*H4b: The relationship between workplace ostracism and qualitative job insecurity is mediated by employees' state self-efficacy*

### **Conceptual Model**



### **2.3 Research context**

The outbreak of COVID-19 pandemic has generated a deep economic crisis and increased job insecurity among employees (Basyouni et al., 2021). The International Labor Organization (2021a) states that global unemployment increased by 33 million in 2020, whereas employment losses were highest in America. Moreover, employment loss was higher for young workers than for older workers (ILO, 2021a), and part-time employment declined more sharply than full-time employment in the early stages of the pandemic (Smith et al., 2021). In addition, major differences were also observed between sectors, reflecting the substantial effects of lockdown measures (ILO, 2021b).

Despite job insecurity being a perceptual phenomenon, researchers argue that *objective* conditions can contribute to job insecurity (De Witte, 2005), and

that individuals' perceptions are usually a response to changes in the business environment (Jiang et al., 2013; Lübke & Erlinghagen, 2014; Roskies & Louis-Guerin, 1990). For instance, research has been conducted in relation to macro and positional variables, indicating that the subjective perception of job insecurity reflects the national percentage of unemployment and economic situation (Anderson & Pontusson, 2007; De Weerd, De Witte, Catellani, & Milesi, 2004; Lübke & Erlinghagen, 2014; Nätti, Happonen, Kinnunen, & Mauno, 2017). Our data has been collected in America one year into the COVID-19 pandemic, and the pandemic has aggregated objective threats to job insecurity. Thus, individuals pre-existing consciousness regarding job insecurity will be an aspect when we examine job insecurity as an outcome, as job insecurity is theoretically easy to trigger in an uncertain time.

### **3.0 Method**

The following chapter will elaborate on the study's methodological choices in terms of approach, design, data collection, and measures, based on the theoretical foundation presented. Furthermore, the methodology will be evaluated regarding its validity, reliability, and ethical considerations.

#### **3.1 Research design**

According to Saunders, Lewis and Thornhill (2019) the research approach chosen is determined by the nature of the study and the quantity of existing theory on the topic. As our research utilizes existing theory to formulate the study goal and objectives, we use a deductive approach. This approach differs from the inductive approach, where one first collects data before exploring it to develop a theory (Saunders et al., 2019).

A typically associated method with a deductive strategy is the quantitative research method, in which hypotheses are deduced and theories are tested by measuring attitudes, views, and behaviors (Bell, Harley, & Bryman, 2019). Although a qualitative approach would to a greater extent provide insight into what kind of viewpoints and arguments are being contested, the quantitative method can indicate how widespread the various positions are in the population and how much weight the different arguments are given by different groups (Grønmo, 2020).

The study has been conducted with a longitudinal design, which is typically used to map change in business and management research. With a longitudinal design, one measures the characteristics of the same individuals on at least two occasions over time, with a purpose to directly address individuals changes (Salkind, 2010). Moreover, in order to understand the mechanisms and processes through which changes are created, Pettigrew (1990) emphasizes the importance of longitudinal research. This approach is usually an extension of survey research based on self-completion questionnaires. Longitudinal design can allow some insight into the time order of variables and therefore may be more able to allow causal inferences to be made (Bell et al., 2019).

As ostracism and job insecurity can be relatively sensitive topics, we believe that choosing a quantitative research method would contribute to secure honest feedback and avoid possible control effects, meaning that the presence of a researcher may influence participants in a certain direction (Larsen, 2017, pp. 29-30). Furthermore, choosing a quantitative method also allows us to employ questionnaires to make more generalized research findings to a certain extent, and the longitudinal design will help to understand the mechanisms and processes that create change (Bell et al., 2019). Debatably, combining the deductive strategy with a quantitative research method enables us to explain and predict relationships between concepts and variables.

### **3.2 Data collection**

The data material used in this thesis represents American full-time workers, and have been collected at the start of 2021, before the rollout of COVID-19 vaccines in America. The study was constructed as a descriptive context-study, where the study was to be performed twice at three-month intervals. A pre-coded questionnaire was used, containing questions measuring uncertainty, work-environment factors, and stress. The online survey provider Qualtrics approached potential respondents to take part in the survey-based research. A compensation of approximately USD 2.5 was given to those who agreed to participate in the survey.

### **3.3 Sample and procedure**

At time 1 (T1), questionnaires were distributed until an agreed sample size, and 1400 participants responded. The data has been screened for quality issues in



several steps, deleting and replacing 26 responses. After a final response was deleted among the substitutes, the final T1 sample comprised  $n = 1397$ . At time 2 (T2), approximately three months later, all who had responded at T1 were invited to participate again. The final cross-lagged data comprised  $n = 561$  respondents. Due to a technical inaccuracy in the online survey design, certain respondents did not answer alle scales in the questionnaire at T1, which potentially yielded some missing data in the longitudinal design. All the questionnaires were coded with unique numbers so the answers from T1 and T2 could be linked later. To ensure anonymity, the identities of the respondents were replaced by these numbers before the answers were entered into the database.

The sample was drawn in a manner that ensured full gender balance at the baseline measurement. The mean age was 58 years ( $SD = 10.98$ ) and the average time participants have worked in their organizations was 17 years ( $SD = 11.17$ ). In addition, 97.4 % of the participants were permanently employed.

**Table 1**

*Sample profile (n = 1397)*

<b>Variables</b>	<b>Frequency</b>	<b>%</b>
<b>Age (years)</b>		
19 - 34	53	3.8
35 - 49	220	15.7
50 - 64	675	48.4
65 and over	449	32.1
<b>Gender</b>		
Female	700	50.1
Male	696	49.8
<b>Tenure (years)</b>		
0 - 5	274	19.6
6 - 15	469	33.6
16 - 25	362	25.9
26 - 35	188	13.6
35 and over	126	7.4
<b>Employment</b>		
Permanent contract	1360	97.4
Temporary contract	37	2.6

### **3.4 Research ethics**

To take part in the study, all participants provided informed consent. The personal data has been confidentially processed in accordance with data protection legislation, specifically the General Data Protection Regulation and Personal Data Act. Qualtrics have encrypted the data, and we have not received any information that may identify the participants. Before the data collection, the research was examined by the Ethical Committee for Medical Research in Eastern Norway, who determined that the data collection could proceed without further approval. In terms of personal data protection, the Norwegian Center for Research Data (NSD) assessed and approved the study.

### **3.5 Measures**

The questionnaire was written in English and contained instructions about the survey, as well as confirmation of anonymity and voluntary participation. We have examined the data using measuring instruments regarding uncertainty, work-environment factors, and stress.

#### *Job insecurity*

Job insecurity was measured using a seven-item questionnaire (Hellgren et al., 1999), where each item is formulated as a statement pertaining to job insecurity. The statements were evaluated by the respondents using a five-point Likert-scale ranging from “1 (Strongly disagree)”, “2 (Disagree)”, “3 (Neither agree nor disagree)”, “4 (Agree)” to “5 (Strongly agree)”. The first three items measured quantitative job insecurity, relating to concerns about subjective fear of imminent job loss (e.g. “I am worried about having to leave my job before I would like to”). The last four items measured qualitative job insecurity, relating to concerns about losing valued job features. These items were positively framed and were thus reversed for the purpose of the analyses (e.g. “My future career opportunities in the organization are favorable”). We used Cronbach’s alpha to provide a measure of the internal consistency of the scales, and hence describe the extent to which all items in the scales measures the same concept or construct (Tavakol & Dennick, 2011). The scale of quantitative job insecurity obtained a Cronbach's alpha of .91 at both measurement times, while the scale of qualitative job insecurity obtained a Cronbach's alpha of respectively .85 and .87 at T1 and T2.

### *Workplace ostracism*

Exposure to workplace ostracism was assessed with a reconstructed seven-items assessment based on the 10 items of the *Workplace Ostracism Scale* (Ferris et al., 2008). Respondents indicated to what degree they had been exposed to workplace ostracism behaviors at their current workplace during the past 3 months, using a five-point Likert-scale ranging from “1 (Never)”, “2 (Once in a while)”, “3 (Sometimes)”, “4 (Fairly often)” to “5 (Very often/constantly)” for each acts listed (e.g. “to what extent have others you work with ignored you; not responded when you tried to get in touch”). Since the data was collected during the COVID-19 pandemic and home office, we wanted to measure the feeling of workplace ostracism regardless of whether one was physically at work or not. The reconstructed scale was therefore suited to fit both physical and digital contact with others at work. A Cronbach’s alpha of .94 was obtained for the instrument at both T1 and T2.

### *Self-efficacy*

Self-efficacy was assessed with a three-items subscale of the standardized 54 items scale of *Comprehensive Inventory of Thriving* (Su, Tay, & Diener, 2014), aiming to measure to which degree the respondents believed they were capable of performing a particular task successfully. A five-point Likert-scale ranging from “1 (Strongly disagree)”, “2 (Disagree)”, “3 (Neither agree nor disagree)”, “4 (Agree)” to “5 (Strongly agree)” was used for each of the acts listed (e.g. “I believe that I am capable in most things”). A Cronbach's alpha of .85 was obtained for the subscale at both measurement times.

### *Control Variables*

Control variables include age, gender, and tenure. We chose these control variables because we believe that the psychological effects of ostracism in organizations can go beyond those extensively documented in the psychology literature, in addition to the fact that these variables have been shown to be antecedents to job insecurity (Shoss, 2017). Gender is chosen based on Williams and Sommer (1997) findings revealing that men and women interpret and respond to social ostracism differently. We controlled for age based on the research where Pharo, Gross, Richardson and Hayne (2011) assessed age-related changes in the effects of ostracism. They found that although ostracism may be a potent

experience for all individuals, adolescents and emerging adults may experience increased sensitivity to ostracism relative to their older counterparts (Pharo et al., 2011). Moreover, research indicates that organization-based factors such as tenure are likely to affect how targets experience exclusion and their behavioral responses as a result (Robinson et al., 2013). Those with more experience, who have developed a sense of their role in the organization's social system and the nature of their interpersonal interactions, will have less need to seek out and analyze how they are treated in their workplace relationships (Robinson et al., 2013). In addition, job insecurity is usually described as a result of individual job-related factors, such as age and length of service (De Witte, 2005).

### **3.6 Data credibility**

To reach our goal of conducting a successful and valuable study, we must focus on data credibility. To assess the quality of the study, we demonstrate the credibility and trustworthiness of the research process by evaluating the use of Online Panels, as well as reliability and validity (Saunders et al., 2019).

#### **3.6.1 Online Panel Data**

The online survey provider Qualtrics reached out to potential respondents on our behalf, and the samples have thus been drawn from a commercial online panel data (OPD). OPD services typically recruit a large pool of respondents who have indicated a willingness to participate in future web-based research studies (Callegaro, Baker, Bethlehem, Göritz, Krosnick, & Lavrakas, 2014). This method is becoming more prevalent in applied psychology research, but remains controversial due to concerns with data quality (Walter, Seibert, Goering, & O'Boyle, 2019).

Issues addressed are whether OPD is appropriate for answering the defined research questions, and decisions about appropriateness should therefore be determined primarily based on the (a) topic and (b) nature of the question (Porter, Outlaw, Gale, & Cho, 2019). As many organizations are reluctant to allow researchers to collect data on “sensitive” topics (racial bias, gender inequality, workplace violence, retaliation, incivility, and abusive supervision), the traditional sampling techniques can provide challenges of a practical nature (Porter et al., 2019). Topics regarding issues organizations may not want to acknowledge or address, such as workplace ostracism and job insecurity, might therefore be well justified using OPD. Additionally, the increased anonymity online panels offer

also makes them ideal for researchers to collect data on topics participants might be reluctant to report or admit experiencing (Smith, Sabat, Martinez, Weaver, & Xu, 2015).

Porter et al. (2019) expresses that rather than objecting to and underestimating the utility of OPD, management scholars are better served by asking when and how OPD can best be exploited to answer research-driven questions. There is evidence that OPD is similar to data collected using traditional samples. In a recent meta-analysis conducted to compare effect sizes of organizational variables collected using OPD to “conventionally sourced” data, the results indicated that these two approaches yield substantially similar effect sizes, which in turn provides greater confidence in both approaches (Walter et al., 2019). In addition, a study examining the validity of Qualtrics Panel Data revealed that Qualtrics samples were comparable to a traditionally recruited community sample (Belliveau, Soucy, & Yakovenko, 2022).

### **3.6.2 Reliability**

According to Johnson and Christensen (2019, p. 279) “reliability concerns the consistency, stability or repeatability of the results of a study”. To ensure sufficient reliability, we examined the consistency between the variables using Cronbach's alpha for the various instruments. As presented in the instrument description, all Cronbach's alpha values was within the preferred value greater than .80 (Pallant, 2013). Additionally, to ensure valuable and reliable responses across measures, a five-point Likert-scale ranging from 1 to 5 was used in all measures in this study.

### **3.6.3 Validity**

“Validity concerns the correctness or truthfulness of the inference that is made from results of the study” (Johnson & Christensen, 2019, p. 279). A weakness of using a quantitative approach and standardized forms when collecting data is the lack of human perception and beliefs, as well as no description of depth experiences (Choy, 2014). It can thus be difficult to ensure a good degree of validity through such surveys. However, asking the right questions and assuring that the survey is well prepared and composed of various measuring instruments will help to increase the validity (Larsen, 2017, p. 28). As a result, we employed a previously validated scale to assess job insecurity (Hellgren et al., 1999), and self-efficacy were measured using a subscale of a standardized scale (Su et al., 2014).

The scale measuring workplace ostracism is also based on a validated scale (Ferris et al., 2008), but has been developed to fit a complex COVID-19 situation. Nevertheless, validity in quantitative research is about “measuring what we actually aim to measure” (Larsen, 2017, p. 45). Even though the instrument measuring workplace ostracism is a reconstruction of the standardized scale, the items largely reflect the most essential dimensions of ostracism directly. Thus, we believe the scale measure feelings of workplace ostracism regardless of whether the individual was physically at work or not.

Moreover, since the study has been conducted with a longitudinal design, the research allows some insight into the time order of variables and therefore allows causal inferences to be suggested (Bell, Bryman, & Harley, 2018; Morgan, 2013). This strengthens the internal validity of the study. In addition, since the participants are from a variety of companies and various business groups, positions, and management levels, the study can potentially provide good external validity and the possibility to generalize the findings across industries (Bell et al., 2018).

#### **4.0 Data analysis**

Statistical analyses were carried out using primarily the statistical program IBM SPSS Statistic version 28. Further, the PROCESS macro version 4.0 by Hayes (2018) has been used for mediation analyses. Prior to testing the hypotheses, we ran a confirmatory factor analysis (CFA) using JASP version 0.16.1.

The initial step was to calculate Cronbach's alpha values to assess reliability. Further, frequency analyses were conducted to review our sample profile. Moreover, descriptive analyses were performed to estimate means and standard deviations, as well as to examine for bivariate correlations between all variables by using Pearson's correlation coefficient.

We then examined the factor structure to determine whether hypothesis testing should be conducted. This was performed using JASP's confirmatory factor analysis (CFA), by separating the questions from quantitative job insecurity, qualitative job insecurity, self-efficacy, and workplace ostracism into four different factors. CFA allows us to test that a relationship between the observed variables and their underlying latent constructs exists (Suhr, 2006). The analysis confirmed that the model is acceptable, and the values are within the threshold. We therefore proceeded with hypothesis testing.

To test the main effect hypotheses 1a, 1b, 2, 3a, and 3b, we performed five separate hierarchical regression analyses, evaluating the linear relationship between the independent and dependent variables and accounting for the effect of relevant control variables. The analyses were conducted with a 95% confidence interval. The hypotheses aim to investigate how things change over time, and we were therefore concerned with stability-adjusted job insecurity and stability-adjusted state self-efficacy. Thus, we checked for these variables at the baseline measurement.

H1a was investigated using hierarchical regression analysis in SPSS, examining the relationship between workplace ostracism at T1 and quantitative job insecurity at T2. Control variables of quantitative job insecurity at T1, age, gender, and tenure were entered in step 1, and exposure to workplace ostracism at T1 was entered in step 2. H1b examines the relationship between workplace ostracism at T1 and qualitative job insecurity at T2. We tested this hypothesis using the same approach as in H1a, with the exception that the variables of qualitative job insecurity substituted the variables of quantitative job insecurity. In both hypotheses, workplace ostracism was a predictor of stability-adjusted job insecurity.

Hypothesis 2 aims to assess the relationship between workplace ostracism at T1 and state self-efficacy at T2, and was investigated using hierarchical regression analysis. Control variables of state self-efficacy at T1, age, gender, and tenure were entered in step 1, and exposure to workplace ostracism at T1 was entered in step 2. In H2, workplace ostracism was a predictor of stability-adjusted state self-efficacy.

H3a was tested using hierarchical regression analysis and aims to assess the relationship between state self-efficacy at T1 and quantitative job insecurity at T2. Control variables of quantitative job insecurity at T1, age, gender, and tenure were entered in step 1, and state self-efficacy at T1 was entered in step 2. Further, H3b aims to investigate the relationship between state self-efficacy at T1 and qualitative job insecurity at T2. We tested this hypothesis using the same approach as in H3a, with the exception that the variables of qualitative job insecurity substituted the variables of quantitative job insecurity. In both of these hypotheses, state self-efficacy was a predictor of stability-adjusted job insecurity.

Hayes (2018) states that “one must estimate the constituent components of the indirect effect, although the constituent components of the indirect effect are

not of primary interest in modern mediation analysis”. We therefore examined the effect of workplace ostracism (X) on state self-efficacy (M), as well as the effect of state self-efficacy (M) on both dimensions of job insecurity (Y). Further, we continued with a mediation analysis, which is a statistical method used to explain how a particular causal agent X transmits its effect on Y (Hayes, 2018).

H4a aims to assess the mediating effect of state self-efficacy at T2 on the longitudinal relationship between workplace ostracism at T1 and qualitative job insecurity at T2. To the degree that hypotheses 1a, 2 and 3a were supported, which are conditions for carrying out the mediation analysis, H4a were performed by conducting a simple mediation analysis (model 4) using SPSS with the supplement PROCESS macro (Hayes, 2018). Workplace ostracism at T1 was the independent variable (X), state self-efficacy at T2 was the mediator (M) and quantitative job insecurity at T2 was the dependent variable (Y). Covariates include state self-efficacy at T1 and quantitative job insecurity at T1, as well as age, gender, and tenure. Further, H4b aims to assess the mediating effect of state self-efficacy at T2 on the longitudinal relationship between workplace ostracism at T1 and qualitative job insecurity at T2. To the degree that hypotheses 1b, 2 and 3b were supported, which are conditions for carrying out the mediation analysis, we tested this hypothesis using the same approach as in H4a, with the exception that variables of qualitative job insecurity substituted the variables of quantitative job insecurity. To extract random samples from the data set and imitate the sampling process, we applied the robust mechanism bootstrapping (Field, 2018, p. 266) with a chosen iteration of 5000, and a confidence interval of 95% was chosen. To be robust against violation of homoscedasticity we controlled for the robust standard error mechanisms heteroscedasticity-consistent covariate matrix (HCCM), using HC3. The simplest version HC0 of robust standard error can be biased when  $N \leq 250$ , and result in incorrect inferences in regression models. Thus, when  $N \leq 250$ , the HCCM known as HC3 should be used (Long & Ervin, 2000). HC3 is equivalent to HC0 but has far superior small sample properties relative to HC0 (Long & Ervin, 2000; MacKinnon & White, 1985).



## 5.0 Results

### 5.1 Descriptive statistics

We conducted descriptive analyses to estimate means, standard deviations (SD), and correlations between all variables included in the research model. To test the reliability of each variable, a reliability analysis was performed to determine the Cronbach alpha values.

#### 5.1.1 Correlation analysis

As presented in Table 2, quantitative job insecurity at T2 correlates positively with workplace ostracism at T1 ( $r = .28, p < .01$ ) and negatively with state self-efficacy at T2 ( $r = -.25, p < .01$ ). Qualitative job insecurity at T2 also correlates positively with workplace ostracism at T1 ( $r = .23, p < .01$ ), and negatively with state self-efficacy at T2 ( $r = -.39, p < .01$ ). Furthermore, workplace ostracism at T1 correlates negatively with self-efficacy at T2 ( $r = -.24, p < .01$ ), and state self-efficacy at T1 correlates negatively with both quantitative job insecurity ( $r = -.25, p < .01$ ) and qualitative job insecurity at T2 ( $r = -.41, p < .01$ ).

#### *Control variables*

Additionally, quantitative job insecurity at T1 correlates negatively with age ( $r = -.12, p < .01$ ) and tenure ( $r = -.13, p < .01$ ), while qualitative job insecurity at T1 correlates negatively with gender ( $r = -.09, p < .01$ ). Furthermore, workplace ostracism at T1 correlates negatively with age ( $r = -.20, p < .01$ ) and tenure ( $r = -.07, p < .01$ ). Lastly, state self-efficacy at T1 correlates positively with age ( $r = .08, p < .01$ ), gender ( $r = .07, p < .05$ ), and tenure ( $r = .09, p < .01$ ). Thus, we control for these variables in the hypothesis tests.

**Table 2***Descriptive statistics, Correlations and Reliability Estimates*

	<b>Mean</b>	<b>SD</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>1 Age</b>	58.14	10.96											
<b>2 Gender</b>	16.64	11.17	.12**										
<b>3 Tenure</b>	1.50	0.50	.28**	.07**									
<b>4 Quantitative job insecurity T1</b>	2.14	1.12	-.12**	-.01	-.13**	(.91)							
<b>5 Quantitative job insecurity T2</b>	2.03	1.11	-.03	.01	-.09*	.71**	(.91)						
<b>6 Qualitative job insecurity T1</b>	2.48	0.86	.06	-.09**	-.05	.31**	.30**	(.85)					
<b>7 Qualitative job insecurity T2</b>	2.53	0.93	.04	-.08	-.03	.39**	.39**	.65**	(.87)				
<b>8 Workplace ostracism T1</b>	1.46	0.71	-.20**	-.03	-.07*	.38**	.28**	.25**	.23**	(.94)			
<b>9 Workplace ostracism T2</b>	1.37	0.62	-.05	-.03	-.07	.30**	.37**	.31**	.29**	.67**	(.97)		
<b>10 State self-efficacy T1</b>	4.30	0.61	.08**	.07*	.09**	-.33**	-.25**	-.42**	-.41**	-.24**	-.18**	(.85)	
<b>11 State self-efficacy T2</b>	4.13	0.67	.05	.00	.03	-.26**	-.25**	-.28**	-.39**	-.24**	-.20**	.45**	(.85)

$n = 532$ . \* $p < .05$ , \*\* $p < .01$ . Cronbach's alpha values are reported in the parentheses

## 5.2 Confirmatory factor analysis

To verify the factor structure of our dataset, we used confirmatory factor analysis (CFA), which is typically employed in a deductive approach (Hoyle, 2000). This analysis is a complex and sophisticated set of techniques used to test specific hypotheses concerning the structure among a set of variables (Pallant, 2013, p. 188).

As presented in Table 2, correlations between all variables included in the research model were found. The factor analysis enables us to inquire into if these variables are distinguishable. The Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI) should be above .90, preferably above .95 (JASP, 2022). Our values confirm that the model fit is good, with both TLI .97 and CFI .97. The results of Root mean square error of approximation (RMSEA) (.05) and Standardized root mean square residual (SRMR) (.03) is also within the threshold which is below .08 (JASP, 2022).

**Table 3**

*Confirmatory factor analysis*

Model	$\chi^2$	df	NFI	CFI	RMSEA
A: Four-intelligences model	318.28***	113	.96	.97	.05

Structural equation modeling was used for the analysis. NFI = normed fit index; CFI = comparative fit index; RMSEA = root-mean-square error of approximation.

In model A, all 17 items of workplace ostracism, quantitative job insecurity, qualitative job insecurity and state self-efficacy were loaded onto one factor. \*\*\* $p < .001$

## 5.3 Hypothesis tests

### 5.3.1 Job insecurity hypotheses

Hypothesis 1a suggests that workplace ostracism is associated with higher levels of quantitative job insecurity over a three-month period. We conducted a hierarchical regression analysis to examine this hypothesis. As presented in Table 4.1, the relationship between workplace ostracism and quantitative job insecurity is not statistically significant ( $\beta = .02, p > .05$ ), yielding no support for hypothesis 1a.

**Table 4.1**

*Hierarchical Regression Analysis for the relationship between workplace ostracism and quantitative job insecurity*

*Dependent variable: Quantitative job insecurity T2*

Variable	Quantitative job insecurity T2	
	Step 1	Step 2
<i>Model variables entered</i>	$\beta$	$\beta$
Age	.06*	.07
Gender	.01	.01
Tenure	-.02	-.02
Quantitative job insecurity T1	.72***	.71***
Workplace ostracism T1		.02
Total R <sup>2</sup>	.51	.51

*n* = 532, \**p* < .05, \*\*\**p* < .001

Except for R<sup>2</sup>, entries are standardized regression coefficients

Final model statistics:  $F(5, 411) = 85.09, p < .001$

Hypothesis 1b suggests that workplace ostracism is associated with higher levels of qualitative job insecurity over a three-month period. We used a hierarchical regression analysis to test this hypothesis. As tolerance (.89) is within the suggested values greater than .10, and VIF (1.12) is within the suggested value less than 10 (Pallant, 2013, p. 164), multicollinearity should not be a problem. Further, model 1 explains 42.1% of the variance in perceived qualitative job insecurity at T2 [ $F(4, 412) = 74.77, p < .001$ ]. When the effect of stability-adjusted qualitative job insecurity at T1, age, gender and tenure are statistically controlled for, the total variance explained by the final model is 42.7% [ $F(5, 411) = 61.24, p < .001$ ]. This indicates that exposure to workplace ostracism at T1 significantly contributed to the changes in perceived qualitative job insecurity at T2, R square change = 0.6%,  $F$  change (1, 411) = 4.54,  $p < .05$ . Moreover, table 4.2 indicates that exposure to workplace ostracism is associated with higher levels of perceived qualitative job insecurity after three months ( $\beta = .08, p < .05$ ), yielding support for hypothesis 1b.

**Table 4.2**

*Hierarchical Regression Analysis for the relationship between workplace ostracism and qualitative job insecurity*

*Dependent variable: Qualitative job insecurity T2*

Variable	Qualitative Job Insecurity T2	
	Step 1	Step 2
<i>Model variables entered</i>	$\beta$	$\beta$
Age	.01	.03
Gender	-.02	-.02
Tenure	.00	.00
Qualitative Job Insecurity T1	.65***	.62***
Workplace Ostracism T1		.08*
Total R <sup>2</sup>	.42	.43

*n* = 532, \**p* <.05, \*\*\**p* <.001

Except for R<sup>2</sup>, entries are standardized regression coefficients

Final model statistics:  $F(5, 411) = 61.24, p <.001$

### 5.3.2 Self-efficacy hypotheses

Hypothesis 2 suggests that workplace ostracism is negatively associated with state self-efficacy over a three-month period. We used a hierarchical regression analysis to examine this hypothesis. As tolerance (.91) and VIF (1.10) are within the suggested values (Pallant, 2013), multicollinearity should not be a problem.

Model 1 explains 20.1% of the variance in state self-efficacy at T2 [ $F(4, 393) = 24.79, p <.001$ ]. When the effect of stability-adjusted state self-efficacy at T1, age, gender and tenure are statistically controlled for, the total variance explained by the final model is 22.1% [ $F(5, 392) = 22.29, p <.001$ ]. This indicates that exposure to workplace ostracism at T1 significantly contributed to the changes in state self-efficacy at T2, R square change = 2.0%,  $F$  change (1, 392) = 10.01,  $p <.01$ .

Moreover, table 5.1 indicates that exposure to workplace ostracism is negatively associated with state self-efficacy after three months ( $\beta = -.15, p <.01$ ), yielding support hypothesis 2.

**Table 5.1**

*Hierarchical Regression Analysis for the relationship between workplace ostracism and state self-efficacy*

*Dependent variable: State self-efficacy T2*

Variable	State Self-Efficacy T2	
	Step 1	Step 2
<i>Model variables entered</i>	$\beta$	$\beta$
Age	.02	-.01
Gender	-.03	-.03
Tenure	-.01	-.01
State Self-Efficacy T1	.45***	.42***
Workplace Ostracism T1		-.15**
Total R <sup>2</sup>	.20	.22

*n = 532, \*\*p <.01, \*\*\*p <.001*

Except for R<sup>2</sup>, entries are standardized regression coefficients

Final model statistics:  $F(5, 392) = 22.29, p <.001$

Hypothesis 3a suggests that state self-efficacy is negatively associated with quantitative job insecurity over a three-month period. To test this hypothesis, we used a hierarchical regression analysis. As presented in Table 5.2, the relationship between state self-efficacy and quantitative job insecurity is not statistically significant ( $\beta = -.02, p >.05$ ), indicating that hypothesis 3a is not supported.

**Table 5.2**

*Hierarchical Regression Analysis for the relationship between state self-efficacy and quantitative job insecurity*

*Dependent variable: Quantitative job insecurity T2*

Variable	Quantitative Job Insecurity T2	
	Step 1	Step 2
<i>Model variables entered</i>	$\beta$	$\beta$
Age	.06*	.06*
Gender	.01	.01
Tenure	-.02	-.02
Quantitative Job Insecurity T1	.72***	.71***
State Self-Efficacy T1		-.02
Total R <sup>2</sup>	.51	.51

*n* = 532, \**p* < .05, \*\*\**p* < .001

Except for R<sup>2</sup>, entries are standardized regression coefficients

Final model statistics:  $F(5, 392) = 81.14, p < .001$

Hypothesis 3b suggests that state self-efficacy is negatively associated with qualitative job insecurity over a three-month period. We used a hierarchical regression analysis to examine this hypothesis. As tolerance (.89) and VIF (1.13) are within the suggested values (Pallant, 2013), multicollinearity should not be a problem. Model 1 explains 42.1% of the variance in perceived qualitative job insecurity at T2 [ $F(4, 392) = 71.32, p < .001$ ]. When the effect of stability-adjusted qualitative job insecurity at T1, age, gender and tenure are statistically controlled for, the total variance explained by the final model is 44.3% [ $F(5, 392) = 62.47, p < .001$ ]. This indicates that state self-efficacy at T1 significantly contributed to the changes in qualitative job insecurity at T2, R square change = 2.3%,  $F$  change (1, 392) = 16.10,  $p < .001$ . Moreover, Table 5.3 indicates that state self-efficacy negatively affects individuals perceived qualitative job insecurity after three months ( $\beta = -.17, p < .001$ ), yielding support for hypothesis 3b.

**Table 5.3**

*Hierarchical Regression Analysis for the relationship between state self-efficacy and qualitative job insecurity*

*Dependent variable: Qualitative job insecurity T2*

Variable	Qualitative Job Insecurity T2	
	Step 1	Step 2
<i>Model variables entered</i>	$\beta$	$\beta$
Age	.01	.03
Gender	-.02	-.02
Tenure	.00	.01
Qualitative Job Insecurity T1	.65***	.58***
State Self-Efficacy T1		-.17***
Total R <sup>2</sup>	.42	.44

*n* = 532, \*\*\**p* < .001

Except for R<sup>2</sup>, entries are standardized regression coefficients

Final model statistics:  $F(5, 392) = 62.47, p < .001$

### 5.3.3 Mediation hypotheses

Hypothesis 4a suggests that the relationship between workplace ostracism and quantitative job insecurity is mediated by employee's state self-efficacy. As presented in Table 4.1 and 5.3, we found no support for the direct effect between workplace ostracism at T1 and quantitative job insecurity at T2 (H1a), nor state self-efficacy at T1 and quantitative job insecurity at T2 (H3a). As a result, it will not be applicable to proceed with hypothesis 4a, as there will be no significant findings.

Hypothesis 4b suggested that the relationship between workplace ostracism and qualitative job insecurity is mediated by employee's state self-efficacy. The variance explained by the final model was 50.68% [ $F(7, 228) = 37.19, p < .001$ ]. Findings regarding hypothesis 4b indicate that path a, the influence workplace ostracism has on state self-efficacy were not significant ( $\beta = -.18, SE = .11, p > .05$ ), while results of path b were negative and significant ( $\beta = -.28, SE = .08, p < .001$ ), indicating that state self-efficacy influences qualitative job insecurity. However, the bootstrapping results presented in Table 7.1 indicate that the indirect



effect of workplace ostracism on qualitative job insecurity through state self-efficacy was not significant ( $B = .08$ ,  $SE = .05$ ), as suggested by the confidence interval which included zero [95% CI =  $-.0013$ ,  $.1792$ ]. Thus, hypothesis 4b is not supported.

**Table 6***OLS Regression Coefficients with Confidence Intervals**Estimating Workplace Ostracism, State Self-Efficacy and Qualitative Job Insecurity*

	State Self-Efficacy T2					Qualitative Job Insecurity T2				
	<i>B</i>	<i>SE</i>	95% <i>CI</i>	$\beta$	<i>p</i>	<i>B</i>	<i>SE</i>	95% <i>CI</i>	$\beta$	<i>p</i>
Age	.00	.00	[-.01, .01]	.01	.79	.00	.01	[-.01, .01]	.03	.56
Gender	-.09	.09	[-.26, .07]	-.07	.27	-.02	.09	[-.19, .16]	-.01	.86
Tenure	.00	.00	[-.01, .01]	.01	.86	-.00	.00	[-.01, .01]	-.00	.93
Qualitative Job Insecurity T1	-.11	.09	[-.27, .06]	-.13	.22	.61***	.07	[.48, .74]	.56	.00
State Self-Efficacy T1	.36***	.10	[.16, .55]	.32	.00	-.02	.08	[-.18, .15]	-.01	.85
Workplace Ostracism T1	<i>a</i> -.21	.113	[-.43, .01]	-.18	.07	<i>c'</i> .03	.08	[-.12, .18]	.02	.72
State Self-Efficacy T2						<i>b</i> -.38***	.08	[-.53, -.23]	-.28	.00
			$R^2 = .24$					$R^2 = .51$		
			F(6, 299) = 14.52, $p < .001$					F(7, 228) = 37.19, $p < .001$		
Mediating effect						Indirect effect				
Workplace Ostracism → State Self-Efficacy → Qualitative Job Insecurity						.08	.05	[.00, .18]		

 $n = 236$ , \*\*\* $p < .001$ B = Unstandardized regression coefficients;  $\beta$  = Standardized regression coefficients; SE = Standard error; CI = Confidence Interval

This table shows 95% confidence interval for B. 5000 bootstrap sample

**Table 7.1***Bias-Corrected Bootstrap CI*

				<b>95% CI</b>
<b>Hypothesized mediating relationship</b>	<i>Indirect effect</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>
Workplace Ostracism → State Self-Efficacy → Qualitative Job Insecurity	.08	.05	-.0013	.1792

CI = Confidence interval; LLCI = Lower limit confidence interval; ULCI = Upper limit confidence interval; SE = Standard error. 5000 bootstrap samples

This table shows 95% confidence interval for unstandardized regression coefficients

**5.3.3.1 Post hoc analysis**

The analysis conducted on the mediation hypothesis 4b revealed that the margins for being statistically significant were small with a 95% confidence interval. We thus repeated the procedure and performed a new test with a 90% confidence interval to examine whether the indirect effect was borderline significant. As shown in Table 7.2, the 90% CI analysis indicates that the indirect effect of workplace ostracism on qualitative job insecurity through state self-efficacy is borderline significant ( $B = .08$ ,  $SE = .05$ ), as suggested by the confidence interval which excluded zero [90% CI = .0085, .1617].

**Table 7.2***Bias-Corrected Bootstrap CI*

				<b>90% CI</b>
<b>Hypothesized mediating relationship</b>	<i>Indirect effect</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>
Workplace Ostracism → State Self-Efficacy → Qualitative Job Insecurity	0.8	.05	.0085	.1617

CI = Confidence interval; LLCI = Lower limit confidence interval; ULCI = Upper limit confidence interval; SE = Standard error. 5000 bootstrap samples

This table shows 90% confidence interval for unstandardized regression coefficients

## **6.0 Discussion**

Several studies have looked into the relationships between general workplace mistreatment and job insecurity (Li, Jiang, & Xu, 2020; Shin & Hur, 2020; Song, 2021). As this study examines the underlying concept of workplace ostracism as an antecedent to both dimensions of job insecurity, as well as the possible mediating effect of state self-efficacy, the results will help to expand the management literature. Based on predictions from COR theory, we will in the following chapter discuss these findings and attempt to link and compare them with existing and previously presented theory and research.

### **6.1 Job insecurity**

Hypotheses 1a and 1b both predicted that individuals who experienced workplace ostracism at the baseline measurement would experience job insecurity three months later. Whereas hypothesis 1a predicted that ostracized individuals would perceive higher levels of quantitative job insecurity, hypothesis 1b predicted that ostracized individuals would experience higher levels of qualitative job insecurity. We expected to find support for both hypotheses, as former research states that workplace ostracism can be a stressor in workplaces and deplete the target's fundamental resources (Williams, 1997, 2001; Wu et al., 2012), and further studies indicates that loss of these fundamental resources can lead to job insecurity (Barling & Kelloway, 1996; Shoss, 2017). However, only hypothesis 1b was supported, indicating that the participants are more concerned about losing important job features, than losing the job itself due to the experience of workplace ostracism. The results of these hypothesis tests provide grounds for discussion.

Previous studies have mostly focused on linkages between workplace mistreatment and the general construct of job insecurity, making it difficult to find research that supports our findings that the specific construct of workplace ostracism is associated with only one dimension of job insecurity. However, several parallels can be drawn between the depletion of an individual's fundamental resources due to workplace ostracism, and that the loss of these resources may result in perceived qualitative job insecurity. For instance, when someone is subjected to ostracism, their internal psychological needs such as the need for belonging and the need for self-esteem are threatened. Similarly, qualitative job insecurity is also concerned with the fear of losing internal

psychological interests such as belonging in the group and development in the organization, whereas quantitative job insecurity is concerned with the fear of physically losing the job. The resources that are depleted when an individual is exposed to workplace ostracism are thus highly connected to the same factors that can result in the experience of qualitative job insecurity. This connection can be found in research by Greenhalgh and Rosenblatt (1984) who reported that "keep the present job but lose job features", referring to qualitative job insecurity, affects *status/self-esteem* and *community*. Thus, this statement supports our finding that fundamental resources that deplete due to workplace ostracism are connected to perceived qualitative job insecurity.

Secondly, Greenhalgh and Rosenblatt (1984) argue that quantitative job insecurity is most detrimental, indicating that the severity of losing the job itself is greater than losing valued job features. This is consistent with COR theory which defines employment as a secondary resource, and accomplishment and social status as a tertiary resource (Cooper & Quick, 2017). It is therefore surprising that our study only found a significant relationship between workplace ostracism and qualitative job insecurity. Nevertheless, one reason why we only found support for hypothesis 1b might be connected to who is ostracizing the individual. Since the study does not establish who the respondents are exposed to ostracism from, we were not able to address differences regarding this subject. Since previous research has examined leadership ostracism (Zhao, Chen, Glambek, & Einarsen, 2019), it is reasonable to believe that ostracism performed by a leader or a peer may be perceived differently. As such, it is plausible to assume that the target's fear regarding both dimensions of job insecurity could differ depending on who is performing the ostracism. For instance, if an individual is being ostracized from their immediate manager, it may impact the individual's fear of losing the job, since the manager may influence the employment relationship. On the other hand, the fear of losing the job may not be as affected if the targets are ostracized by peers, who supposedly have no influence on the target's employment relationship. Moreover, being ostracized by colleagues might have a greater impact on targets' perceived qualitative job insecurity, which affects the individual's fear of losing their status in a team or losing their community in the organization. Nevertheless, we hypothesized that the relationship between workplace ostracism and job insecurity is mediated by a person's self-efficacy. Although being exposed to ostracism from peers or superiors may impact the ostracized individuals'

experiences of quantitative or qualitative job insecurity, we believe who the target is exposed to ostracism from is not solely the reason for our dissimilar findings.

Another reason why we don't find a significant correlation between workplace ostracism and quantitative job insecurity might be due to the time-lag of our study. The study spans over a three-month period, which might be too short of a time-period for individuals to develop a fear of losing their job. As stated earlier, if the individual is in the reflective, rather than the resignation stage in the temporal need-threat model that helps describe the responses and reactions to ostracized individuals, it is not certain that the individual understands the motives, meaning and relevance behind their exclusion (Williams, 2009), and hence has not yet considered all possible outcomes of the ostracism. Three months may therefore be insufficient time for an individual to fear for their employment status, while the experience of exclusion and loss of community in their present organization will be a far more immediate and imminent reaction, which may justify our findings that workplace ostracism is only associated with qualitative job insecurity.

The COVID-19 pandemic has led to an increased rate of unemployment (ILO, 2021a), and it would be plausible to assume that the insecurity experienced during the pandemic would enhance individuals' quantitative job insecurity. Global unemployment increased by 33 million in 2020, whereas unemployment and employment losses were highest in America (ILO, 2021a), taking a tremendous toll on the labor market (Smith et al., 2021). As our data was collected at the start of 2021, and one year into COVID-19, the participants have observed possible consequences of the pandemic in regard to the labor market, and the world entered 2021 still facing an unprecedented crisis in jobs and incomes, as well as heightened levels of uncertainty (ILO, 2021a). On the other hand, poor work environment and work-related stress have been argued to contribute to increase various forms of workplace mistreatment, and Karasek (1979) states that job demands, and the lack of control leads to increased work-related stress and frustration in the workforce. Such frustration may then act as a trigger of conflicts, bad interpersonal relationships at work and to increased aggression in the working environment, which may again escalate into workplace ostracism. Thus, as the COVID-19 pandemic has led to loss of work-related control, and the pandemic has most likely impacted employees' work-related stress, it's possible that participants' level of workplace ostracism was already high at the baseline

measurement. As a result, the participants will not achieve the same predictive strength of quantitative job insecurity. Thus, as the COVID-19 pandemic may be a source of quantitative job insecurity, the starting point for examining a possible increase in job insecurity over another three months is noteworthy.

Despite the fact that our data were collected during the pandemic, we did not find support for hypothesis 1a predicting that workplace ostracism is associated with elevated levels of quantitative job insecurity. There can be several reasons for this. Firstly, previous research indicates that contract type and part-time work are antecedents to job insecurity (Shoss, 2017), and the U.S Bureau of Labor Statistic presented that part-time employment declined more sharply than full-time employment in the early stages of the pandemic (Smith et al., 2021). As the sample consisted of 97.4% full-time employees on a permanent contract, our findings may indicate that the participants felt they had more stable jobs compared to part-time workers and employees with temporary contracts, despite the ongoing pandemic. Second, major differences of unemployment were observed between sectors during the pandemic (ILO, 2021b). Although it is unknown which professions or organizations our Online Panel works in, we may wonder if our sample felt they had secure occupations during the pandemic, and were thus not afraid of losing their jobs. Third, revised quarterly estimates of 2020 revealed how the situation evolved throughout the year, reflecting a stronger-than-expected rebound in working hours (ILO, 2021a). Another point of view may therefore be that the participants' perception of quantitative job insecurity began to level at the time the survey was conducted. In combination with this, it is possible that the population had expectations of a robust recovery given the developments regarding vaccinations. Lastly, the ILO (2021a) report stated that employment losses were higher for young workers than for older workers. Although we controlled for age, the mean age of our sample was 58 years, and can thus be an explanatory factor for the lack of quantitative job insecurity findings. In addition, the older participants with the longest tenure may have felt safe due to the general rule of “first in, first out”, or because a possible loss of employment would be seen as an early retirement.

## **6.2 State self-efficacy**

Hypothesis 2 predicted that workplace ostracism is negatively associated with state self-efficacy over a three-month period. Consistent with this, previous

research states that ostracism can adversely affect interpersonal behavior and harm job performance in the workplace (Ferris et al., 2008; Hitlan et al., 2006), and employees' inability to fulfill their job tasks is often due to the existence of stressful, unpleasant workplace conditions (Abbas, Raja, Darr, & Bouckennooghe, 2014). When an individual is unable to perform their job, one can assume that their self-efficacy will be negatively affected, and these findings support our hypothesis that workplace ostracism is negatively associated with state self-efficacy. Furthermore, state self-efficacy is categorized as a personal resource (Hobfoll, 2011), and our hypothesis is thus consistent with COR theory, stating that negative work events, such as workplace ostracism, will harm individuals' resources (Hobfoll et al., 2018). Moreover, workplace ostracism is distressing because being excluded from the group threatens the individual's fundamental needs, such as self-esteem (Williams, 1997; 2001). Drawing on principle two in COR theory, the availability of social support is likely to be associated with a sense of self-efficacy in stressful situations (Kobasa & Puccetti, 1983; Thoits, 1994). This is also in line with the significant finding between workplace ostracism and state self-efficacy as suggested in hypothesis 2.

Hypotheses 3a and 3b both predicted that state self-efficacy would influence individuals experience of job insecurity over a three-month period. Hypothesis 3a predicted that state self-efficacy would influence quantitative job insecurity, while hypothesis 3b predicted that individuals state self-efficacy would influence qualitative job insecurity. Since hypotheses 3a and 3b looks exclusively on the relationship between state self-efficacy and job insecurity, the possible factor of workplace ostracism is not taken into account. Moreover, only hypothesis 3b was supported, demonstrating that an individual's self-efficacy to a greater extent affects individuals' fear of losing valuable job features than the job itself.

Estimates from the International Labor Organization (2021a) reflected a stronger-than-expected rebound in working hours. Thus, it may be likely that the participants have reached a saturation point of perceived quantitative job insecurity, justifying our non-significant finding of H3a. Nevertheless, if employees have fallen into a negative spiral of thinking, concerns about whether they are able to perform their work tasks, feelings of losing mastery, or losing faith in themselves can arise. Thus, if the interpersonal relations in the organization is not at stake, an individual's state self-efficacy may not make them



fear losing their job, just due to a three-month period of feeling like they are not performing optimally. However, perceived poor performance may lead the individual to fear being deprived of work tasks, lose opportunities for development and lose their place in the group if poor work performance goes at the expense of colleagues. Further, lack of resources may lead employees to begin to question whether they belong in the firm and whether they will be part of it in the future, which can lead to fear of losing job features. This is also consistent with theory of qualitative job security, which states that the fear of losing significant job features such as their status in a team is important, thus supporting our findings that state self-efficacy is only associated with qualitative job insecurity over a three-month period

In addition, looking at constructs of state self-efficacy, we assess a person's ability to perform a certain task in a specific context-dependent situation (Bandura, 1982, 1989). This may be a possible explanation for the dissimilar findings based on the dimensions of job insecurity. If an individual experiences they are unable to perform a specific task in their current position, the fear of losing community in the workplace or lack of career opportunities may occur. On the other hand, state self-efficacy will only affect a situation-specific construct, and the idea that the individual can master work tasks in another context can therefore arise. Despite assumed feelings that they do not master their current work tasks, the construct of state self-efficacy could imply that they may believe they are able to perform their tasks satisfactorily elsewhere, and hence do not fear of losing their current job, referring to quantitative job insecurity.

### **6.3 Mediation model**

As all our hypotheses regarding qualitative job insecurity was supported, we continued with hypothesis 4b predicting that the relationship between workplace ostracism and qualitative job insecurity is mediated by employees' state self-efficacy. Despite our significant findings that workplace ostracism is negatively associated with state self-efficacy (H2) and that state self-efficacy is negatively associated with qualitative job insecurity (H3b), the indirect effect predicted in 4b was not supported.

According to the core concepts of COR theory, employees can utilize self-efficacy as a technique to protect themselves from the negative impacts of workplace ostracism (Sarwar, Abdullah, Sarfraz, & Imran, 2019). This suggests

that self-efficacy mediates employees' stress responses in stressful situations including workplace mistreatment, particularly ostracism. This indicates that job insecurity may result from workplace ostracism because it reduces a person's resources. In addition, self-efficacy has been proven to function as a mediating variable in earlier studies. These arguments, as well as significant findings of H2 and H3b, made it reasonable to anticipate that state self-efficacy mediates the relationship between workplace ostracism and qualitative job insecurity, and the lack of this finding provides basis for further debate.

One reason for not finding a significant indirect effect may be due to the amount of specificity of our self-efficacy construct. Although state self-efficacy is more specific than general self-efficacy and can effectively mitigate the negative impacts of job demands in general (Schaubroeck, Lam, & Xie, 2000), it may not be specific enough to mitigate the negative consequences of workplace ostracism. Psychologists and statisticians pointed out decades ago that the mediation method is prone to bias (Judd & Kenny, 1981, p. 607; Robins & Greenland, 1992; Rosenbaum, 1984), and scholars have advocated that specific stressors and specific resources should be matched in order to demonstrate mediating effects in the prediction of strain (Bullock & Green, 2021). It can therefore be assumed that cognitive beliefs such as employability, rather than general or state self-efficacy, are more likely to mediate the relationship between ostracism and job insecurity, as employability addresses specific beliefs on how to deal with the threat of losing your job.

Despite the fact that we controlled for age and tenure, it may be argued that these variables have impacted the results, because the entire sample is older and have a higher tenure than average. Thus, even though there will be no direct effect, it is still conceivable that these variables have influenced the results. Research by Pharo et al. (2011) states that young people experience being exposed to ostracism as worse than older people. As the average age of our respondents is 58 years, being subjected to workplace ostracism may not affect them to the same extent. Further, research indicates that organization-based factors such as tenure are likely to influence how targets experience exclusion and their behavioral responses as a result (Robinson et al., 2013). Our respondents have on average been in their current organization for 17 years, and their high tenure may serve as a buffer for negative work events. This assumption is supported by Robinson et al. (2013) arguing that employees with higher tenure, who have developed a sense of

their role in the organization's social system and the nature of their interpersonal interactions, will have less need to seek out and analyze how they are treated in their workplace relationships. Even though we controlled for these variables, it is plausible to assume that age and tenure have an impact on this relationship and have thus influenced the outcome of this hypothesis. The effect age and tenure have on this relationship should therefore be investigated further and determined by future researchers.

Nevertheless, as the bootstrap confidence interval includes zero [95% CI = -.0013, .1792], there was no significant indirect effect of workplace ostracism on qualitative job insecurity through state self-efficacy. Because of the small margins indicating no support for the hypothesis on a 95% confidence interval, we performed a post hoc analysis with a 90% confidence interval, revealing that the hypothesis was borderline significant. We cannot draw reliable conclusion regarding the mediation role of state self-efficacy on a 95% confidence interval, but as our findings are borderline significant, one can assume that there exists some sort of relationship on the indirect effect. Nevertheless, we are at risk of making a type 2 error, which means failing to reject a null hypothesis when it is actually false (Pallant, 2013), and therefore hope that our findings will serve as a model for future studies on the subject.

## **6.4 Implications**

### **6.4.1 Theoretical**

This study contributes to the management literature by examining the relationship between workplace ostracism and job insecurity, and if this relationship is mediated by state self-efficacy. Research has previously found a connection between workplace mistreatment and job insecurity (Li et al., 2020), but a mediating effect of this relationship has not yet been studied. We aim to contribute to the literature by examining a specific form of workplace mistreatment, namely workplace ostracism.

Few studies have separated the dimensions of job insecurity. Previous research focuses on the quantitative dimension of job insecurity, but the threat of qualitative job insecurity should not be underestimated. This is confirmed in our hypotheses, which indicates that individuals may experience qualitative job insecurity, and not quantitative job insecurity based on the same antecedent. Our findings regarding qualitative job insecurity are in line with theory which

indicates that the loss of fundamental resources due to workplace ostracism may drive the individual to believe that they cannot successfully perform their job, which in turn will lead them to fear losing important job features. This study also responds to Shoss' (2017) call for more research on the links between interpersonal relationships and job insecurity, and adds to the existing literature on job insecurity by identifying workplace ostracism as an antecedent to qualitative job insecurity, which sends signals to targets that they are not valued and do not belong (Lind & Tyler, 1988), and creates an uncontrollable and unpredictable work environment (Aquino & Thau, 2009). An important finding in our thesis that contributes to new theory and a better understanding of job insecurity, is the different findings regarding quantitative and qualitative job insecurity. Our non-significant findings of quantitative job insecurity are to some extent debunking theory of general job insecurity. Li et al. (2020) found that several forms of workplace mistreatment are significantly related to general job insecurity, which we aid to disprove by distinguishing between quantitative and qualitative job insecurity.

Through COR theory it became natural to look at state self-efficacy as a personal resource that mediates the relationship between workplace ostracism and quantitative and qualitative job insecurity. Hobfoll et al. (2018) states that negative work events will harm individuals' resources, and COR theory argue that resources play a crucial role in predicting work-related outcomes. Furthermore, Bandura and Wessels (1994) states that people who are confident in their abilities view challenging situations as challenges to overcome rather than threats to avoid. Thus, our non-significant mediation analysis is not in line with this theory.

#### **6.4.2 Practical**

Based on our discussion, the findings offer implications for practice in organizations. The current findings highlight the necessity of good workplace ostracism management, and have significant implications for HR initiatives in firms where employees are exposed to workplace ostracism. As the current study suggests, essential aspects of the target's job may have been endangered during the ostracism process. As a practical implication, managers and HR professionals must stress the prevention of workplace ostracism and ensure that ostracized individuals existing positions are not jeopardized. By providing antecedents to job

insecurity, organizations are able to target triggers of job insecurity in order to prevent it, rather than deal with it after it occurs.

Workplace ostracism may result in a further loss of resources and draining employees' energy. Thus, HR professionals should, for instance, confirm that no unauthorized relocation or change in job tasks has occurred, and that no career prospects, such as potential promotion, have been lost due to exposure of workplace ostracism and potential loss of resources. Moreover, to properly cope with such circumstances, employees must build additional resources (Bakker & Demerouti, 2007; Hobfoll, Shirom, & Golembiewski, 2000).

Another important implication is that organizations should also promote settings where employees can support each other. This creates a safe environment, where ostracism may be less likely to occur.

A third important aspect is that HR personnel should be aware that targeted employees may consider leaving the company at any point during or after an ostracism process. Ostracized employees fear of losing job features such as belonging, promotion and salary prospect in the current workplace, may lead them to consider applying for a position in another organization. While their right to do so should be recognized, the issue should be addressed directly in the dialogue with ostracized employees. This may reduce unwanted results due to ostracism, both saving the organization money on turnover expenses in addition to relieving the ostracized employee of the frustration and defeat that comes with leaving for the wrong reasons (Glambek et al., 2014).

## **6.5 Limitations and future research**

The use of longitudinal design is a favorable approach when the aim is to identify changes in behavior and attitudes over time, enabling a better understating of the casualty in the observed changes (Bell et al., 2019). However, a limitation with this design is the challenge occurring when following individuals over time, as one is highly dependent on the participants' cooperation and keeping track of them, as they cannot be replaced (Bijleveld, Leo, Leo, Mooijaart, Van Der Van Der, Van Der Leeden, & Van Der Burg, 1998). This weakness has to a certain degree been evident in this study, as the number of participants decreased from 1400 at the baseline measurement to 561 at T2. Moreover, due to a technical inaccuracy in the online survey design, certain respondents did not answer alle

scales in the questionnaire at T1, which yielded some missing data in the longitudinal design, resulting in  $n = 236$  in the mediation analyses.

Although the longitudinal design of the study provides an opportunity to examine development over time, it is difficult to determine whether three months is the most appropriate time interval to examine the possible outcomes of workplace ostracism on perceived job insecurity. Williams' (2009) temporal need-threat model represents three phases ostracized individuals go through to process their emotions, and a time span of three months may not address all the reactions that are triggered and changed by individuals who have been exposed to ostracism over time. Future research should therefore carry out the study with other time lags, and investigate whether ostracized individuals experience a different degree or different dimensions of job insecurity depending on the phase the ostracized individual is experiencing.

There are some concerns about generalizability in this study. Firstly, the study has been conducted during the COVID-19 pandemic, where loneliness and isolation have been a strain. The findings indicated that qualitative job insecurity is the highest concern for participants due to exposure to ostracism, and these results may have been affected by the heightened focus on loneliness during the pandemic, as the need for belonging may therefore have been reinforced. On the other hand, the sample may already experience high levels of quantitative job insecurity at the baseline measurement due to the pandemic, and the effects of quantitative job insecurity could thus have been stronger otherwise. In sum, the fact that the data have been collected during COVID-19, may lead to precaution that it can be generalized to a more "normal" everyday life. Secondly, as the study was conducted within one country raises another concern about the generalizability to other nations and cultures. Although this may be one of the caveats of the study, focusing on a specific country eliminates cultural differences and lays a good foundation for further research. Nevertheless, future research is encouraged to validate the findings of this study and broaden the database for further generalizations to be made, by examining this relationship in other countries and cultures, as well as without the influence of the pandemic.

Moreover, we were unfortunately not able to test who the targets are exposed to ostracism from, as the questionnaire does not address this. Workplace ostracism can probably result in different experiences and lead to different outcomes based on whether ostracism is practiced by peers or superiors. Future

research should therefore investigate whether workplace ostracism unfolds differently on both dimensions of job insecurity, based on who the target is exposed to ostracism from.

Lastly, there are some limitations in regard to the construction of the survey. The scale addressing workplace ostracism was a reconstructed version of the original scale. Nevertheless, the scale still addressed the most important dimensions of ostracism and were reconstructed to fit a complex COVID-19 situation, in addition to achieving sufficient internal consistency with Cronbach's alpha of .94 at both measurement times. In addition, because the study relies only on employee self-reports, common method variance is a likely outcome, raising concerns about the study's validity (Chang, Van Witteloostuijn, & Eden, 2010). Similarly, social desirability bias is concerned with the study's reliability and affects people who wish to be perceived positively. As a result, participants may exaggerate positive outcomes while underplaying negative ones (Bell et al., 2018). Nonetheless, to reduce common method variance and social desirability bias, longitudinal surveys are a commonly recommended solution because temporal separation reduces the cognitive accessibility of responses to predictors collected at an earlier time, which in turn reduces the likelihood that these earlier responses will influence subsequent responses to outcome variables (Hawk & Aldag, 1990; Podsakoff & Organ, 1986). In addition, all participants were assured of their confidentiality, hoping to ensure honest feedback.

## **7.0 Conclusion**

This research expands the literature by examining more specific forms of both workplace mistreatment and job insecurity, namely workplace ostracism, and quantitative and qualitative job insecurity. In addition to examine the direct effect between workplace ostracism and both dimensions of job insecurity, the ambition of this study is to determine the role of state self-efficacy as a mediator on this relationship. To our knowledge, this is the first study that examines the direct effect on the relationship between workplace ostracism and job insecurity, as well as the indirect effect through state self-efficacy. Hence, the study provides interpersonal antecedents to job insecurity, and contributes to the job insecurity literature by separating the two dimensions.

Referring to our research question: *“Is workplace ostracism associated with elevated levels of quantitative and qualitative job insecurity, and does state*

*self-efficacy mediate this relationship?*”, we found a significant direct effect between (1) workplace ostracism and qualitative job insecurity, (2) workplace ostracism and state self-efficacy, and (3) state self-efficacy and qualitative job insecurity. This may indicate that loss fundamental resources due to exposure of workplace ostracism may result in individuals to fear losing valued job features and to believe that they cannot successfully perform their job, as well as indicating that individuals state self-efficacy influences perceived qualitative job insecurity. Furthermore, our dissimilar findings regarding quantitative and qualitative job insecurity demonstrate that people are more concerned about losing valued job features and quality in the employment relationship than they are of losing the job itself due to exposure of workplace ostracism. Nevertheless, we found no significant indirect effect in our mediation analysis on a 95% confidence interval, but as our post hoc analysis reveals borderline significant findings, it is too early to conclude that a mediation effect is not present.

In conclusion, our findings implicate the necessity of good workplace ostracism management. While organizations cannot guarantee job security for most circumstances, they can encourage the creation of a safe work environment defined by mutual support and respect between employees in order to promote an organizational environment that prioritizes employee safety. Further, our findings expand previous research by demonstrating that employees can fear losing important job features, even if they do not fear losing the job itself, which implies that managers and HR professionals should ensure that ostracized employees existing positions in the team are not jeopardized.



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