

**Job Loss-Related Complicated Grief and its Relationship to Positive Cognitions,  
Self-Esteem, and Locus of Control**

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## Abstract

Relatively few studies within the job loss-related complicated grief (CG) literature have focused on the protective factors for developing CG symptoms. Furthermore, little is known about the influencing factors on CG in this relation. This cross-sectional study aimed to examine the positive factors for developing job loss-related CG symptoms. More precisely, the three protective factors examined were self-esteem, positive cognitions, and locus of control. The final sample consisted of 22 mostly Estonian people ( $M = 32.1$ ,  $SD = 12.60$ , range 22-63; 95.5% female) who had lost their jobs involuntarily. The participants completed online questionnaires concerning the study variables. Results rejected all four hypotheses; for the first three, all the correlations were statistically non-significant and negligible. Whereas the last hypothesis indicated that self-esteem had the strongest effect on job loss-related CG, although the result was statistically non-significant. The results can be a good foundation for future studies to elaborate on these variables in association with job loss-related CG. Increasing understanding of this phenomenon could aid in locating at-risk individuals, developing competent preventive measures, and developing potential therapy tools. Furthermore, effective CG treatment may contribute to lower unemployment rates by allowing individuals to engage in job-seeking behavior and other positive activities.

*Keywords:* involuntary job loss, complicated grief, self-esteem, positive cognitions, locus of control

## **Introduction**

### **Job Loss and Psychological Well-Being**

According to the Organization for Economic Cooperation and Development, over 22 million jobs have been lost in advanced economies over the past two years due to Severe Acute Respiratory Syndrome Coronavirus-2 (OECD, 2021). In addition to COVID-19, there are also many other causes for job loss, such as lack of skills, experience, company downsizing, bankruptcy, illness, and others (Salzberg et al., 1988). Losing a job can be troublesome for several reasons; it can disrupt a person's income flow, but also their status, time structure, and relationships (Newman, 1988). Moreover, it can also carry a stigma because of the belief that job performance contributed to the job loss, furthering a person's sense of shame, insecurity, and anxiety (Newman, 1988). Job loss might not have a negative effect on every person (Papa & Maitoza, 2013). Although in some people, it can lead to complicated grief (CG) depending on a person's ability to cope with stressful life events (Papa & Maitoza, 2013). On the other hand, job loss might also have some benefits; depending on a country, the number of years worked and previous income can make a person eligible for unemployment and social benefits, which could result in less distress and psychological well-being following job loss (Asenjo & Pignatti, 2019). However, the increasing number of lost jobs over the past few years is remarkable (OECD, 2021), which makes the topic of protective factors of job loss-related CG relevant. When it is possible to understand the protective factors of job loss in people, it could be beneficial for preventing the symptoms of CG in the future.

### **Job Loss-Related Complicated Grief**

Job loss is considered a major life stressor with secondary loss of resources (e.g., self-esteem, status, and income) that can cause CG symptoms (Hobfoll et al., 2016). CG is a

persistent and pervasive longing for, or preoccupation with, the deceased that lasts at least six months after loss (11th ed.; World Health Organization, 2019). The main characteristics of CG in bereavement are a sense of disbelief about death, anger, intense longing for the deceased, and preoccupation with thoughts of the loved one (Shear & Shair, 2005).

Interestingly, CG only affects about 10-20% of bereaved individuals in a way that is likely to cause problems in everyday life (Bonanno & Kaltman, 2001; Shear & Shair, 2005). It is possible that people who experience this type of CG were already depressed to begin with, which could make them more vulnerable to the occurrence of CG symptoms (Bonanno et al., 2006). CG following job loss can be overwhelming; it is not only about a person being unemployed but also about their psychological, physical, and social well-being (Van Eersel et al., 2019). Van Eersel et al. (2019) noted that job loss can also lead to damaged self-esteem and identity, causing drastic changes in a person's daily routine, habits, connections, and purpose in life. According to Hobfoll et al. (2016), different levels of stress can be produced by the primary loss of employment and secondary loss of resources, depending on how many resources are available to deal with the job loss. Previous research seems to indicate a relationship between job loss and CG, which is necessary to study in order to help people prevent the symptoms of CG in the future.

### **Job Loss-Related Complicated Grief and Self-esteem**

Several studies have found a link between self-esteem and the experienced level of CG (Boelen et al., 2006; Currier et al., 2009; Ott et al., 2007). According to Van Eersel et al. (2020), low self-esteem affects the level of job loss-related CG symptoms, implying that the variable is a risk factor for the development and maintenance of CG after job loss. Moreover, loss events can have an impact on one's self-perception, especially if the loss is related to a central domain of the individual's sense of self (Papa & Lancaster, 2016), which is likely to play a role in the increased occurrence of CG symptoms (Bonanno et al., 2006). Studies on

unemployment have discovered that having a positive self-image is a protective factor when faced with job loss (Creed et al., 2009; McKee-Ryan et al., 2005; Taris, 2002). According to Shamir (2014), unemployment is associated with a loss of self-esteem or damaged ego, loss of self-confidence, and feelings of inferiority because of the stigma about job loss being related to one's poor performance at work. These prior findings seem to confirm the association between job loss-related CG and self-esteem, which makes the variable important to examine further. It is necessary to find out whether self-esteem can act as a protective factor for developing CG symptoms following job loss.

Self-esteem is defined as one's positive or negative attitude toward oneself, as well as one's overall evaluation of one's thoughts and feelings (Rosenberg, 1965). Lower self-esteem has been associated with aggression, weaker endurance, and decreased well-being in adolescence (Stavropoulos et al., 2015). It can also lead to the symptoms of depression because of losing the day-to-day structure that a person was used to (Alvaro et al., 2018). To illustrate, Sung et al. (2011) reported higher CG rates among depressed people. On the other hand, higher self-esteem is likely to keep people from mental stress and enables them to cope effectively with complex tasks or stressful life situations (Baumeister et al., 2003; Hosogi et al., 2012). Since higher self-esteem has been linked to coping flexibility (Chapman & Mullis, 1999), and people with coping flexibility have shown lower rates of CG (Burton et al., 2011), higher self-esteem could act as a protective factor for developing CG symptoms. Overall, the evidence seems to suggest that there is an association between self-esteem and CG.

### **Job Loss-Related Complicated Grief and Positive Cognitions**

There is not much data on a relationship between positive cognitions and job loss-related CG. However, an important link between positive cognitions and coping with stressful life events has been found (Gloria & Steinhardt, 2014), which could be relevant in a CG context. More specifically, positive cognitions are found to play an important role in how

effectively people cope with stressful life events (Gloria & Steinhardt, 2014), which in turn has shown to affect the experienced rate of CG (Caparros & Masferrer, 2021). On the other hand, a lack of positive cognitions has been associated with a symptom of CG, which suggests an overall lower satisfaction with life (Mayo Clinic, n.d.; Strobel et al., 2017). Similarly, negative cognitions can indicate more severe symptoms of CG following job loss (Van Eersel et al., 2021). CG of any kind can exert a direct physiological impact on brain health, which could affect the outcome of coping with major life events (Vance et al., 2016). Since job loss is considered a major life event, positive cognitions could have an effect on the development of CG following job loss.

Positive cognitions in psychology refer to positive thinking that includes hope, self-efficacy, self-esteem, and optimism (Caprara & Steca, 2005). These factors have been also linked to an overall increase in psychological well-being (D'Souza, 2020). According to Luthans et al. (2007), hope, resilience, self-efficacy and optimism work well together in measuring positive cognitions. That also explains why in the current study positive cognitions are measured with all of the four independent scales as a compound scale. According to Bekhet and Zauszniewski (2013), some of the skills related to positive cognitions are transforming negative thoughts into positive thoughts, highlighting positive aspects of the situation, and interrupting pessimistic thoughts by using relaxation techniques. Since positive cognitions have been linked to positive thoughts, and people with positive thoughts have shown lower rates of CG, positive cognitions could act as a protective factor for developing CG symptoms (Caprara & Steca, 2005; Maercker et al., 1998). The previous evidence seems to suggest an association between positive cognitions, job loss, and CG.

### **Job Loss-Related Complicated Grief and Locus of Control**

There is little to no evidence of a link between locus of control and CG following job loss. Many studies have failed to explain the linkage between locus of control, stressful

events, sense of control, and emotional adjustment (Anderson, 1977; Cromwell et al., 1977; Sandler & Lakey, 1982). On the other hand, a significant relationship between locus of control and depression has been found, which could be relevant since depression is considered one of the symptoms of CG (Khumalo & Plattner, 2019; Mayo Clinic, n.d.). For example, Khumalo and Plattner (2019) reported more severe depressive symptoms among people with an external locus of control because they believed they had no control over the situations that happened to them. Also, a research on grief after loss and locus of control studied how people with an internal or external locus of control deal with the loss of a loved one (Specht et al., 2010). The results indicated that people with an internal locus of control experience a significantly greater decline in satisfaction following a stressful event than those with a low external locus of control (Specht et al., 2010). Previous findings seem to suggest a link between locus of control and CG.

Locus of control is a psychological concept that describes a person's belief about the control they have over the situations and experiences that affect their lives (Rotter, 1966). Two types of locus of control are distinguished: internal and external. People who develop an internal locus of control tend to believe that they are in control of their life and the things that happen to them (Rotter, 1966). People with an external locus of control, on the other hand, may find reasons for their success or failure in external forces such as other people, luck, coincidences, and so on (Rotter, 1966). In Wood and Mallinckrodt's (1990) study, locus of control was used to explore job loss through a job search. What they found was that a high internal locus of control, along with a range of other factors, is a contributor to finding a satisfactory new position after a job loss. On the other hand, an external locus of control in people has been linked to a more common and longer unemployment state after a job loss (Wood & Mallinckrodt, 1990). These results indicate that locus of control plays an important role in how people deal with the loss situations, which is relevant in job loss context.

## **The Present Study**

The aim of the present study was to study job loss-related CG and its protective factors. More precisely, the three protective factors examined were self-esteem, positive cognitions, and locus of control. The research question aims to find out whether there is a correlation between the variables and job loss-related CG. First, it was expected to find a negative relationship between job loss-related CG and self-esteem (Hypothesis 1). Secondly, it was expected to find a negative relationship between job loss-related CG and positive cognitions (hope, resilience, self-efficacy, optimism) (Hypothesis 2). Moreover, it was expected to find a negative relationship between job loss-related CG and locus of control (Hypothesis 3). Finally, self-esteem was expected to have the strongest effect on job loss-related CG compared to the other variables (Hypothesis 4).

It has been found that lower self-esteem can contribute to sadness and depression (Nguyen et al., 2019), which are considered CG indicators (Nakajima, 2018). In addition, positive cognitions have been associated with the ability to enjoy life events (Strobel et al., 2017), the absence of which is a symptom of CG (Mayo Clinic, n.d.). Lastly, the internal locus of control has been associated with the lack of trust in others (Sharan & Romano, 2020), which can also be a symptom of CG (Mayo Clinic, n.d.). Since there is evidence that job loss can lead to the symptoms of CG (Brewington et al., 2004; Papa et al., 2014), and self-esteem, positive cognitions, and locus of control seem to be associated with the symptoms of CG, these variables can be relevant in studying the development of job loss-related CG.

## **Method**

### **Participants**

Of the 27 participants who completed the initial survey, five (18.5%) were excluded since they had voluntarily resigned from their previous job and did not meet the study criteria

of involuntary job loss (100%). The final sample consisted of 22 mainly Estonian adults aged 22-63 ( $M = 34.1$ ,  $SD = 12.60$ ) who had lost their job involuntarily. Most of the participants had a higher education (86.4%). The average number of years worked at a previous job was five years ( $SD = 6.20$ ); the most years that participants worked at their previous job was 21 years, and the least was half a year. The average time passed since job loss was three years and a month ( $SD = 2.52$ ); the most time passed since job loss was 10 years, and the least was zero years. Two main causes of involuntary job loss were temporary contracts ( $M = 22.7\%$ ) and different (did not do work well enough) ( $M = 27.2\%$ ). The other causes were bankruptcy ( $M = 13.6\%$ ), reorganization ( $M = 13.6\%$ ), labor conflict ( $M = 9.1\%$ ), company economics ( $M = 9.1\%$ ), and health problems ( $M = 4.7\%$ ). Table 1 below shows the socio-demographic data and work characteristics of the participants. This data included age, gender, educational level, marital status, employment, financial satisfaction, years worked and time passed since the job loss.

**Table 1***Socio-Demographic and Work Characteristics of the Participants*

Variable	Male n (%)	Female n (%)	Total n (%)
<b>Age</b>			
22-63 years	1 (4.5)	21 (95.5)	22 (100)
<b>Education</b>			
Primary	0 (0)	0 (0)	0 (0)
Secondary	0 (0)	3 (100)	3 (13.6)
Higher	1 (4.5)	18 (81.8)	19 (86.4)
<b>Marital status</b>			
Married	1 (100)	10 (47.6)	11 (50)
Non-married	0 (0)	11 (52.4)	11 (50)
<b>Current employment</b>			
Unemployed	1 (100)	7 (33.3)	8 (36.4)
Employed	0 (0)	14 (66.6)	14 (63.6)
<b>Years worked</b>			
0-5	0 (0)	16 (76.2)	16 (72.7)
6-10	1 (100)	1 (4.8)	2 (9.1)
>11	0 (0)	4 (19.05)	4 (18.2)
<b>Time passed since job loss (years)</b>			
0-2	0 (0)	15 (71.4)	15 (68.2)
3-5	0 (0)	3 (14.3)	3 (13.6)
>6	1 (100)	3 (14.3)	4 (18.2)
<b>The financial situation following job loss</b>			
Good	0 (0)	6 (28.6)	6 (27.3)
Sufficient	0 (0)	12 (57.1)	12 (54.5)
Poor	1 (100)	3 (14.3)	4 (18.2)

*Note.* Socio-demographic and Work Characteristics of the Participants are displayed in numbers (n) and percentages (%).  $N=22$ .

## **Procedure**

The research was quantitative, with a cross-sectional correlational design and nonprobability sampling methods. The study was approved by the Ethical Review Board of the Faculty of Social and Behavioural Sciences of Utrecht University (GDPR 21-1865). The data was collected between October 2021 and February 2022. The participants were recruited through social media platforms such as Facebook, Instagram, and Reddit. The survey was available both in English and Estonian. The Qualtrics platform was used to create and complete the survey. Before starting the survey, there was a link to an information letter, where potential participants could read a brief explanation of the research topic, this study's goals, and their rights and data protection. After reading the letter, people could decide whether they wanted to participate in the study or not. Not participating in the study had no negative consequences, so people could leave the study at any time. Completing the survey took about 15-20 minutes. Informed consent was obtained from all participants (N = 27). 100% of participants completed the survey after signing the consent form (N = 27).

## **Materials**

### ***Background Information***

At the beginning of the survey, participants were asked to indicate their age, gender, highest degree of education, marital and employment status, whether they were currently employed, and other work characteristics, like the type of work, duration of work, the reason for job loss, etc.

### ***Job Loss CG Symptoms***

To measure job loss-related CG symptoms, the Van Eersel et al. (2019) Job Loss Grief Scale (JLGS) was used. The scale comprises 33 questions about job loss-related CG thoughts, cognitions and experiences over the past month. For the present study, the original scale was

also translated into Estonian with the aid of the forward-back translation method (Lee et al., 2018). The forward-back method is an excellent way of detecting inconsistencies, confusing sentences, or errors in the source text (Lee et al., 2018). All answers were selected on a 5-point Likert scale (0 = never, 4 = always) with the possible scoring range between 0-132; lower scores indicated fewer symptoms of job loss-related CG, whereas higher scores indicated more severe symptoms of CG following job loss. Some example statements from the scale were: "The loss of my job feels like a personal disaster. " and "I can't accept the loss of my job.". The Cronbach's alpha for the scale in the present study was 0.96, which made the instrument highly reliable.

### *Self-Esteem*

To measure self-esteem, Rosenberg (1965) Self-Esteem Scale was used. A unidimensional 10-item Likert scale from 1 to 4 (1 = strongly agree, 4 = strongly disagree) measures global self-worth by assessing both positive and negative feelings about oneself (Rosenberg, 1965). The scoring range was between 10-40. Scores between 25 and 35 were within the normal range; scores below 15 suggested lower self-esteem. Some of the statements in this questionnaire included "Generally, I am satisfied with myself. " and "I can do things at least as well as many other people." In the present study, the Cronbach's alpha for the scale was 0.91, which made the scale very reliable.

### *Positive Cognitions*

**Hope.** To measure positive cognitions, the Adult Hope Scale was used. Originally, it is a 12-item scale to measure the respondent's level of hope (Snyder et al., 1991). In the present study, the Adult Hope Scale was used as an 8-item scale combined with the General Self-Efficacy Scale, The Brief Resilience Scale, and the Revised Life Orientation Test (LOT-R) (Luthans et al., 2007). Luthans et al. (2007) reported that these four scales had a

significant positive relationship regarding the compound questionnaire for assessing satisfaction and that the scales work well together in assessing positive cognitions. The participants had to rate their goal-directed energy and their plans to meet the goals on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The scores ranged from 8-40; lower scores indicated lower levels of hope, whereas higher scores indicated higher levels of hope. Some of the sample items were: "I can think of many ways to get out of a jam." and "I meet the goals that I set for myself.". The Cronbach's  $\alpha = 0.93$ , which also applies to all the following positive cognitions measurements since they were measured together.

**Self-Efficacy.** To measure positive cognitions, the General Self-Efficacy Scale was used. It is a 10-item scale designed to assess optimistic self-beliefs in dealing with a variety of difficult life demands (Schwarzer & Jerusalem, 1995). The participants had to rate their perceived self-efficacy in coping with daily hassles as well as adaptation after experiencing various types of stressful life events on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The total score ranged between 10-40, with a higher score indicating more self-efficacy and vice versa. Some examples from the scale were: "I can always manage to solve difficult problems if I try hard enough." and "I can handle whatever comes my way.".

**Resilience.** To measure positive cognitions, the Brief Resilience Scale (BRS) was used. It is a 6-item scale to assess the perceived ability to bounce back or recover from stress (Smith et al., 2008). All the questions were answered on a Likert scale from 1-5 (1 = strongly disagree, 5 = strongly agree). The possible scores on the BRS scale ranged from 6-30, with lower scores indicating less resilience and higher scores indicating more resilience. Some example statements from the scale were: "I tend to bounce back quickly after hard times." and "I tend to take a long time to get over setbacks in my life.".

**Optimism.** To measure positive cognitions, the Revised Life Orientation Test (LOT-R) was used. Originally, it is a 10-item scale designed to assess one's dispositional optimism,

providing useful insight into potential interventions, such as those to address harmful thought patterns (Scheier et al., 1994). In the current study, a 6-item LOTR scale was used. The participants had to rate their optimism on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The possible scoring range was between 6-30, with lower scores indicating less optimism and higher scores indicating more optimism. Some example statements from the scale were: "In uncertain times, I usually expect the best." and "If something can go wrong for me, it will."

### *Locus of Control*

To measure locus of control, James (1957) Internal-External Locus of Control Scale was used. The scale was borrowed from Robinson and Shaver's (1973) Measures of Social Psychological Attitudes and comprises 11 questions. The scale was chosen for its simplicity and suitability for the study design. The participants had to rate on a 6-point Likert scale the extent they believed they were in charge in certain situations (1 = strongly disagree, 6 = strongly agree). The possible scoring range was 11-66; lower scores indicated more internal type of locus of control, whereas higher scores indicated more external type of locus of control. Some example statements were: "Eventually, in our society, I will get my dues if I just persevere." and "If I do my best, I will always achieve something.". Although the shortened scale has been reported to have split half-reliabilities ranging from 0.84 to 0.96, the reliability of the scale in the present study was only .468. This could be due to the lack of unidimensionality (Tavakol & Dennick, 2011). If the two dimensions are weakly correlated it can lower the Cronbach's Alpha, thus affecting the reliability of the results (Tavakol & Dennick, 2011).

## Statistical Analysis

To determine the appropriate sample size, an a-priori power analysis was conducted using G\*Power to determine the required sample size for this study (Faul et al., 2007). At a power of 0.95 and a significance level of  $\alpha = 0.05$ , the sample size to detect a medium effect size should have been at least 77. Since the study got 22 participants and did not accomplish the number expected by G\*power, it has been taken into account to affect the reliability of the results. According to Cohen (1992), to detect a medium-sized difference between two populations, a sample size of 177 people is required. To detect a small difference, it requires an even larger sample (Cohen, 1992).

All statistical tests were conducted on IBM SPSS Version 25. To test the hypotheses about job loss-related CG and self-esteem, positive cognitions, and locus of control, three correlation analyses and one multiple linear regression analysis were conducted. Preliminary analyses were also done as a first step to check the data and related assumptions. Before conducting the analyses, assumptions of Pearson correlation and multiple linear regression were checked (normality, linearity, homogeneity, and homoscedasticity). In addition, the data was checked for potential outliers. For the first three hypotheses, correlation analyses were conducted separately between JLCCG and all the other variables to determine the relationship between JLCCG and each of the other variables. Pearson's correlations were computed between the predictor and the dependent variables. For the fourth hypothesis, multiple linear regression analysis was used to see which variable had the strongest effect on job loss-related CG. The independent variables were self-esteem, positive cognitions, and locus of control, and the dependent variable was job loss-related CG.

## Results

### Preliminary Results

The data was checked for assumptions and normalities. According to the preliminary results, there was no violation of assumptions (linearity, normality, homoscedasticity, and homogeneity) for the multiple linear regression. Also, no assumptions (interval data and normal distribution) were violated for Pearson's correlation. Therefore, carrying out the main analysis was expected to have no major errors.

### Hypothesis 1

The first hypothesis was that there is a negative relationship between job loss-related CG symptoms and self-esteem. Results showed the p-value as .22, which means the correlation was not significant ( $p > 0.05$ ). The Pearson's  $r = .28$  indicated a low positive correlation. The results also showed that  $R^2 = 0,076$ , which is very low and indicates how much of the variability in job loss CG is shared by self-esteem (7.6%).

### Hypothesis 2

The second hypothesis was that there is a negative relationship between job loss-related CG symptoms and positive cognitions. Results showed the p-value as .28, which means the correlation was not significant ( $p > 0.05$ ). The Pearson's  $r = -.24$  indicated a low negative correlation. The results also showed that  $R^2 = 0,057$ , which is very low and indicates how much of the variability in job loss CG is shared by positive cognitions (5.7%).

### Hypothesis 3

The third hypothesis was that there is a negative relationship between job loss-related CG symptoms and locus of control. Results showed the p-value as .66, which means the correlation was not significant ( $p > 0.05$ ). The Pearson's  $r = .10$  indicated a low positive

correlation. The results also showed that  $R^2 = 0,01$ , which is extremely low and indicates how much of the variability in job loss CG is shared by the locus of control (1%).

#### Hypothesis 4

The last hypothesis was that self-esteem had the strongest effect on job loss-related CG symptoms compared to other independent variables. Results showed that the Beta for self-esteem was  $B = .251$ , for positive cognitions it was  $B = -.114$ , and for the locus of control, it was  $B = -.028$ . Although the results were insignificant, the standardized beta coefficient for self-esteem was the highest, which means self-esteem indeed had the strongest effect on job loss-related grief symptoms. Table 2 below illustrates the multiple linear regression between the dependent and independent variables.

**Table 2**

*Multiple Linear Regression Between Job Loss-Related CG and Independent Variables*

	B	SE	Beta	t	p-value
Positive cognitions	-.062	.542	-.044	-.114	.911
Self-esteem	1.180	1.954	.251	.604	.554
Locus of control	-.128	1.187	-.028	-.108	.915

*Note.* B = Beta. SE = Standard error. Beta = Unit-free measure of effect size. t = Difference between two samples. p-value = Probability value.  $p < .01$ .

#### Discussion

The current study aimed to examine protective factors for developing CG symptoms following job loss. The three protective factors examined in association with job loss-related CG were self-esteem, positive cognitions, and locus of control. Results indicated that there are

no significant correlations between job loss-related CG and self-esteem, positive cognitions, and locus of control. Moreover, the strongest effect on job loss-related CG was found to be insignificant. Hence, the hypotheses in this study were not supported. The following sections will elaborate on the study's four main findings.

First, the results of the present study implied that there is a non-significant correlation between self-esteem and job loss-related CG. Results indicated a low positive correlation between these variables, which is consistent with a prior study made on self-esteem, communication, and prolonged grief. More specifically, Angelhoff et al. (2021) reported a statistically non-significant association between self-esteem and prolonged grief. Moreover, Lundberg et al. (2018) found that self-esteem in grieving people was normal to high, which could explain the missing correlation between self-esteem and job loss-related CG in the current study. However, the major influencing factors explaining the non-significant results could be the characteristics of the sample population, or a very small sample size which makes the current study underpowered (Hewitt et al., 2008). Hence, it can leave the effect between variables undetected (Cohen, 1992). The last two explanations do also apply to all the following hypotheses.

Second, there was no significant correlation between positive cognitions and job loss-related CG symptoms. Results showed a low negative correlation between these variables. There have been studies of positive traits (like optimism) and bereavement CG (Boelen, 2015), and negative cognitions in linkage to emotional distress following job loss (Van Eersel et al., 2021), but not about positive cognitions and job loss-related CG. Although a study conducted on positive emotion and spouse loss grief reported a negative relationship between these variables (Tweed & Tweed, 2011). Tweed and Tweed (2011) also note that the findings indicate that positive emotion is associated with lower self-reported grief, but not with a specific pattern of grief subscale scores. The prior findings could explain the negative (but

still relatively low) correlation between positive cognitions and job loss-related CG in the current study.

Third, the results indicated a non-significant correlation between locus of control and job loss-related CG symptoms. Results indicated a low positive correlation. As far as is known, no study before has investigated the relationship between locus of control and job loss-related CG. A prior study that focused on the relationship between bereavement and locus of control found a non-significant correlation between these variables, which supports the current finding (Rubinstein, 2004). Similarly, in Haine et al. (2003) study, locus of control did not significantly contribute to mental health problems independent of negative life events. Numerous locus of control studies have failed to explain the relationship between stressful events, sense of control, and emotional adjustment unequivocally (Anderson, 1977; Cromwell et al., 1977; Sandler & Lakey, 1982). The prior findings support the statistically non-significant correlation between locus of control and job loss-related CG in the current study.

Finally, there was an assumption that self-esteem had the strongest effect on job loss-related CG. Results showed that self-esteem indeed had the strongest effect on job loss-related CG compared to the other independent variables but it was statistically non-significant. Although self-esteem showed the strongest effect on job loss-related CG, it can be a useful knowledge for future research to examine further since prior studies have indicated a significant relationship between self-esteem and CG (Boelen et al., 2006; Currier et al., 2009; Ott et al., 2007, Van Eersel et al., 2019).

### **Limitations and Future Research**

The current study has several strengths and limitations. Beginning with strengths, the study made use of reliable questionnaires, except for the locus of control scale, which had a low reliability score. Moreover, the cross-sectional study allows the findings in the current

study to be analyzed to create new theories, studies, or more in-depth research, which could be relevant for future research (Wang & Cheng, 2020). Since the present study about job loss-related CG and self-esteem, positive cognitions, and locus of control is the first one conducted in Estonia, the study contributes to a still limited research field on the effects of job loss-related CG. In terms of limitations, one of the major influencers of the statistically non-significant outcomes in the present study could have been the small sample size (Cohen, 1992; Hewitt et al., 2008), which required at least 77 participants for this study (Faul et al., 2007). Additionally, the study's sample can be described as rather homogeneous since the majority of participants were highly educated Estonians. Moreover, the reliability of the locus of control scale was considered low, which can put the results of job loss-related CG and locus of control into question (Robinson & Shaver, 1973). Studies in the past have raised concerns about the reliability of locus of control measurements (Haine et al., 2003) since the definition of locus of control is considered broad and has changed over the past few years (Frey, 2018). Lastly, it is worth mentioning that based on the number of years worked and previous income, Estonians are eligible for unemployment and social benefits, which could have resulted in less experienced distress and psychological well-being following job loss, although this might not be the case elsewhere (Asenjo & Pignatti, 2019).

Future research should study the same variables in association with job loss-related CG in a more diverse sample consisting of different nationalities, and considering domains such as socio-economic status. To illustrate, a study made on socio-economic status, education, and experienced grief among widowers showed that grief symptoms were more prevalent among the decreased socioeconomic status population and people with lower education (Chenube & Omumu, 2011). Here, it could be hypothesized that people with lower socioeconomic status may have fewer resources to protect themselves from job loss-related CG, leading to higher rates of CG symptoms.

## **Implications**

The results of the current study provide more insight into the relationship between job loss-related CG and self-esteem, positive cognitions, and locus of control, which can be necessary to understand whether they act as protective factors for the development and maintenance of job loss-related CG symptoms. Hence, improve the methods and interventions to help people with CG symptoms cope more effectively following job loss. Since none of the results were statistically significant, it can raise doubts about the previous associations found between CG and self-esteem, positive cognitions, and locus of control.

These findings on potential protective factors for the development and maintenance of job loss-related CG suggest that job loss-related CG could also occur in Estonia, although the scores on CG in the current study were relatively low. Moreover, self-esteem showed the strongest effect on job loss-related CG, which could be useful to know that there is a possibility for a significant result when investigating a bigger population. That little occurrence of CG can be a good starting point for further examination of job loss-related CG and its protective factors. Related to that, more studies on job loss-related CG need to be conducted to understand the phenomenon and the factors relating to it.

The present study can carry an important societal impact in terms of the awareness about good health and well-being among people who have experienced job loss. When examining further the results from the present study, it can be beneficial to get a better overview of job loss-related CG and its protective factors. Hence, the knowledge of the phenomenon and relating factors could be helpful for the prevention or treatment of CG symptoms following job loss. And finally, if it is possible to help grieving people, the unemployment rate may fall as a result of timely assistance, which may encourage people to engage in job-seeking behavior again.

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