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Pre-Job loss Grief Reactions and Work Attachment among Sick-Listed Employees: Introduction of the Imminent Job Loss Scale

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Abstract

Purpose

With this study, we aimed to explore the emotional experiences of sick-listed employees facing imminent job loss, as this emotional distress may hinder successful job search outcomes. The study had two objectives: (1) to develop and validate the Imminent Job Loss Scale (IJLS) for assessing pre-job loss grief reactions and (2) to examine its relationship to work attachment.

Method

Development of the IJLS was carried out using feedback from an expert panel. The psychometric properties of the IJLS were evaluated, and its association with work attachment was examined using data from 200 sick-listed employees facing imminent job loss.

Results

The IJLS demonstrated strong internal consistency and temporal stability, distinctiveness from depression and anxiety symptoms, and solid convergent validity. Work-centrality and organizational commitment were positively related to pre-job loss grief reactions, while work engagement and calling showed no significant associations.

Conclusion

This study provides valuable insights into pre-job loss grief reactions and shows the potential utility of the IJLS for screening and monitoring purposes. Understanding pre-job loss grief reactions can improve the re-integration and job prospects of sick-listed employees. In future research, explorations of these dynamics should continue to provide better support to sick-listed employees during this challenging period.

Introduction

In the Netherlands, the sick-rate among employees is 5.7% [1]. Employers are responsible for wage contribution and re-integration for their sick-listed employees over a period of 104 weeks [2]. Typically, after one year of absence, sick-listed employees are required to explore external job opportunities alongside their job search within their current company. Balancing the intricate interplay of uncertainties associated with imminent job loss, the internal job search, health problems, recovery prospects, future opportunities, and the imperative of pursuing external job options may lead to severe emotional distress [3]. This type of distress can hinder the quality of their job search [4], resulting in only 7% securing external employment, 26% finding suitable jobs within their current organization, and 67% experiencing

job loss after 104 weeks [2]. With this study, we aimed to address the emotional experiences of sick-listed employees facing imminent job loss, by exploring pre-job loss grief reactions.

Job loss can induce substantial psychological distress [5], with a minority experiencing symptoms of job loss-related grief [6]. Although grieving processes differ between bereavement and non-bereavement losses, there are also some similarities in grief reactions associated with job loss [7], natural disaster [8], climate change [9], and romantic break-ups [10]. Studies among family caregivers of terminally ill patients have shown that individuals can also exhibit anticipatory or pre-loss grief reactions [11]. These reactions are predictive of symptoms of prolonged grief after their loved one's death [12]. It is conceivable that sick-listed employees facing imminent job loss might also experience pre-job loss grief reactions. Mirroring the conceptualization of job loss-related grief [13], pre-job loss grief reactions are likely to involve difficulties in accepting the changed reality, yearning for the state prior to the imminent job loss, preoccupation with the impending job loss, feelings of anger and loneliness, identity disruption and problems with finding purpose. In this study, we examined pre-job loss grief reactions by developing and validating an instrument to assess such reactions. Understanding this phenomenon could enhance reintegration and job prospects for sick-listed employees, as mental health problems may hinder successful re-employment [14].

Several psychological mechanisms may be associated with increased pre-job loss grief. Building upon the concept of job loss-related grief [15], individuals with a stronger work attachment may be more prone to experience pre-job loss grief reactions. An important aspect to consider is the latent nature characterizing the quantification of work attachment, necessitating the integration of foundational elements to assess it. For instance, work-centrality (i.e., the impact of work on one's identity) is associated with higher levels of identity disruption following job loss [7]. Another indicator of work attachment is work engagement, reflecting an individual's positive and fulfilling involvement in their work. Highly engaged employees invest significant effort and personal resources into their work. However, disruption in the equilibrium between giving and taking can lead to emotional distress [16]. Additionally, employees who perceive their work as a calling (i.e., meaningful and prosocial orientated work), yet are unable to live out their calling, may experience distress [17]. Furthermore, concerns about job loss can result in a stronger organizational commitment (i.e., one's psychological attachment to the organization) [18], which is often observed among sick-listed employees [3]. Consequently, the present study employed four fundamental components - namely work-centrality, work engagement, calling, and organization commitment – to assess the intricate concept of work attachment. The rationale for selecting these components as indicators lies in the anticipation that sick-listed employees with a stronger work attachment might be more susceptible to experiencing pre-job loss grief reactions throughout the 104week sick leave period.

Present Study

In Part 1, we developed the Imminent Job Loss Scale (IJLS) to measure pre-job loss grief reactions with input from an expert panel. In Part 2, we examined various psychometric properties of the IJLS and its

relation to work attachment, using data from 200 sick-listed employees facing imminent job loss. Our hypotheses were as follows: (1) the IJLS would demonstrate a unidimensional structure; (2) the scale would exhibit good internal consistency and temporal stability; (3) items related to pre-job loss grief, depression, and anxiety would fall into three different symptom clusters [19–20]; and (4) higher levels of pre-job loss grief would be positively associated with depression, anxiety, intolerance of uncertainty, denial, and negatively associated with quality of life, acceptance, and optimism [6–7, 13].

Finally, we hypothesized (5) a positive association between pre-job loss grief reactions and work attachment manifestations, including work centrality, work engagement, calling, and organizational commitment [7, 16–18]. We expected these associations to remain significant after controlling for elapsed time since starting the external job search, reported financial strain, and quality of employee-employer communication [3].

Method

Procedure and Participants

This study is part of a larger project, titled 'Aligning willingness and ability, to set the right course', that aims to study and improve re-integration of sick-listed employees.

For Part 1, a panel of five experts specialized in grief and labour, five professionals specialized in reintegration, and five sick-listed employees facing imminent job loss were recruited from the authors' social network. The panel participated in the development of the IJLS by assessing items related to prejob loss grief. Participants provided informed consent.

For Part 2, sick-listed employees legally required to seek for external job opportunities were recruited between November 2022 and January 2023. Participants were recruited through social media channels (e.g., LinkedIn) and re-integration agencies that informed their clients about the research. Participants signed an informed consent form (N= 232), after which 86% completed the survey. Out of the participants, 194 completed the survey online (Qualtrics) in approximately 15 minutes, while a subset of six preferred to the complete the survey during a 45-minute phone interview with the first author. To evaluate the temporal stability, 167 participants (84%) completed the IJLS twice (T_2), with a test-retest interval ranging from 4 to 18 (M= 7.7; SD= 2.7) days. Ethical approval for Part 1 and Part 2 was obtained from the Ethics Review Board of the Faculty of Social and Behavioural Sciences at [BLINDED] (Part 1, FETC 22–0430; Part 2, FETC 22–0504).

Measures

Data on socio-demographic variables (e.g., age), work-related factors (e.g., duration of employment), and health issues (e.g., perceived limitations) were collected (see Table 1).

Table 1
Characteristics of the participants

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Working externally 24 (12)	Work status			
	Working internally	78 (39)		
Not working 98 (49)	Working externally	24 (12)		
	Not working	98 (49)		

Socio-demographics	N (%)	М	SD
Scale characteristics			
Pre-job loss grief (IJLS)		28.7	7.7
Depression (HADS)		16.1	4.3
Anxiety (HADS)		17.2	4.3
Denial (Brief COPE)		4.5	1.7
Intolerance of uncertainty (IUS-12)		38.0	7.9
Quality of life (ICECAP-A)		12.8	2.3
Acceptance (Brief COPE)		4.7	1.4
Optimism (LOT-R)		19.8	4.1
Financial strain		1.7	0.7

The IJLS was based on the 33-item Job Loss Grief Scale, which taps into job loss-related complicated grief reactions [20]. These items were adapted to refer to pre-job loss grief. For instance, 'I think about the loss of my job all the time', became 'I constantly thought about the impending loss of my job'. In Part 1, an expert panel rated the items on a 5-point Likert scale (1 = poor to 5 = excellent) for comprehensibility ('To what extent is this item comprehensible?'), content validity ('To what extent does this item represent pre-job loss grief') and face validity ('What rating would you give this item?'). In Part 2, participants rated to extent to which they experienced pre-job loss grief reactions in the preceding four weeks on a 5-point scale (1 = never to 5 = always). The IJLS items are presented in Table 2, and the Dutch version is provided in the Appendix.

Table 2 Confirmatory factor loadings

	CFA	<u> </u>	CFA	
	Pre-job loss grief	Pre-job loss grief	Depression	Anxiety
Items of the imminent job loss scale				
1. I longed strongly for how my life was before the impending loss of my job.	.59	.58		
2. I constantly thought about the impending loss of my job	.82	.81		
3. I was angry about the impending loss of my job	.66	.69		
4. I could hardly believe that I am at risk of losing my job	.79	.80		
5. My future seemed meaningless because of the impending loss of my job	.78	.80		
6. I felt emotionally numb due to the impending loss of my job	.87	.85		
7. I did everything I could to avoid thinking about the impending loss of my job	.78	.77		
8. I no longer knew who I was because of the impending job loss	.75	.80		
9. I felt lonely because of my job loss	.66	.78		
Items of the HADS – depression scale				
1. I still enjoy the things I used to enjoy			.72	
2. I can laugh and see the funny side of things			.81	
3. I feel cheerful			.82	
4. I feel as if I am slowed down			.76	
5. I have lost interest in my appearance			.61	
6. I look forward with enjoyment to things			.80	
7. I can enjoy a good book or radio or TV program			.76	
Items of the HADS – anxiety scale				
8. I feel tense or 'wound up'				.85

	CFA	CFA
9. I get a sort of frightened feeling as if something awful is about to happen		.80
10. Worrying thoughts go through my mind		.78
11. I can sit at ease and feel relaxed		.82
12. I get a sort of frightened feeling like 'butterflies' in the stomach		.65
13. I feel restless as I have to be on the move		.77
14. I get sudden feelings of panic		.76

Anxiety (α = .87) and depression (α = .86) symptoms were measured with the 14-item Hospital Anxiety and Depression Scale (HADS) [21], rated on a 4-point scale (e.g., 4 = nearly all the time to 1 = not at all). Coping strategies were assessed with two subscales, denial (α = .74) and acceptance (α = .75), of the Brief COPE [22] rated on a 4-point scale (1 = never or rarely to 4 = very frequently). The Investigating Choice Experiments Capability – Adult (ICECAP-A; α = .75) was used to measure quality of life [23]. The instrument covers five dimensions of life (stability, attachment, autonomy, achievement and enjoyment), each rated by participants on 4-level response scale (1 = no capability to 4 = full capability) to denote their current overall quality of life. Intolerance of uncertainty (α = .88) was assessed with the Intolerance of Uncertainty Scale - Short Form (IUS-12) [24] rated on a 5-point scale (1 = Not at all representative to 5 = Completely representative). Optimism (α = .84) was measured with the 6-item Life Orientation Test-Revised (LOT-R) [25], rated on a 5-point scale (1 = strongly disagree to 5 = strongly agree).

Work centrality (α = .61) was assessed with three statements [26], rated on a 5-point scale (1 = strongly disagree to 5 = strongly agree). Work engagement (α = .94) was tapped into with the 3-item subscale 'dedication' of the Utrecht Work Engagement Scale (UWES-9) [27], rated on a 6-point scale (1 = never to 6 = always). Organizational commitment (α = .91) was assessed with the 3-item affective commitment subscale [28], rated on a 5-point scale (1 = not at all to 5 = absolutely). Calling (α = .91) was measured with the University of Pennsylvania Work-Life questionnaire [29], providing three descriptions of a person with either 'job', 'career', or 'calling' as a work orientation. Participants rated their level of identification on 5-point scale (1 = not at all to 5 = very strong). Quality of employee-employer communication (α = .91) was assessed with two modified items from the leader-member exchange model [30], namely 'The communication with my employer is positive and constructive' and 'I feel valued by my employer', and rated on a 5-point scale (1 = strongly disagree to 5 = strongly agree). Financial strain was assessed with a single item 'How is your financial situation at the end of the month?' and rated on 3-point scale (1 = Usually I have money to spare to 3 = Usually I have not enough money to make ends meet).

Statistical Analyses

Analyses were conducted in Mplus (Version 8.7) [31] and SPSS version 29. Items of IJLS and HADS were marked as categorical. Confirmatory factor analysis (CFA) was used to test Hypothesis 1, evaluating the unidimensional structure of the IJLS. Model fit was evaluated using: χ^2 -value, χ^2 / df ratio, Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). Lower χ^2 and χ^2/df indicate better fit [32]. Acceptable fit was defined as TLI > .90 and RMSEA and SRMR < .08 [33]. Internal consistency of the IJLS was tested with Cronbach's alpha and temporal consistency was tested with Pearson correlation of T2 (Hypothesis 2). Discriminant validity between the IJLS and HADS items was examined through CFA (Hypothesis 3). Correlation analyses were employed to examine Hypothesis 4, which assessed associations between pre-job loss grief reactions and depression, anxiety, denial, quality of life, acceptance, and optimism. Hypothesis 5 was tested by conducting a multiple regression analysis (MRA) to examine the association between various manifestations of work attachment and pre-job loss grief reactions. Additionally, a hierarchical multiple regression analysis (HMRA) was conducted, with pre-job loss grief reactions as dependent variables various manifestations of work attachment as independent variables, controlling for elapsed time since starting the external job search, perceived financial strain, and quality of employee-employer communication.

Results

Development of the IJLS

In Part 1, the expert panel's item mean scores ranged from 3.7 to 5.0 for comprehensibility, 3.2 to 4.8 for content validity, and 3.0 to 4.7 for face validity (see Supplementary File). In order to alleviate participant burden, the item count was reduced by retaining items with the highest scores (those scoring 4.6 or higher on the combined mean score). Moreover, in instances where multiple items addressed the same facet of pre-job loss grief, the item with the most favourable score was selected. As a result, nine items were retained for the IJLS.

Participants Characteristics

Table 1 presents the participants' socio-demographics and work characteristics of Part 2. The participants experienced limitations in one or more areas due to health issues: physical (N= 120), mental (N= 145), energetic (N= 145), and other (N= 19). The IJLS score was analysed in relation to socio-demographics (age, gender, and educational level) and work characteristics (duration of employment and work status). Only age showed a significant positive correlation with the IJLS score (r= .21, p= .003), indicating that higher age was associated with a higher level of pre-job loss grief reactions.

Psychometric Properties of IJLS

Regarding Hypothesis 1, the one-factor model with all items loading on a single latent factor yielded acceptable model fit, χ^2 = 148.01, df = 27; χ^2/df = 5.48; TLI = .94; RMSEA = .09; SRMR = .05. The high RMSEA value appeared to be due to correlations between three pairs of items (items 3 and 4; items 5 and

9; items 8 and 9). Allowing these pairs to correlate substantially improved the model fit: χ^2 = 56.58; df = 24; χ^2/df = 2.36; TLI = .98; RMSEA = .08; SRMR = .03. All factor loadings ranged from .59 to .87 (see Table 2). Hypothesis 2 was supported, with high internal consistency (α = .90) and temporal stability between T₁ and T₂ (r = .81).

For Hypothesis 3, the CFA three-factor model with pre-job loss grief, depression, and anxiety symptoms as distinct latent factors, yielded an acceptable model fit, $\chi^2 = 424.44$, df = 227; $\chi^2/df = 1.87$; TLI = .95; RMSEA = .07; SRMR = .06. The latent factors were correlated: pre-job loss grief with depression (r= .43); pre-job loss grief with anxiety (r= .51); depression with anxiety (r= .79). Hence, the discriminant validity passed the Fornell-Larcker criterion [34]. Factor loadings are presented in Table 2.

Hypothesis 4 was supported, as pre-job loss grief reactions were positively associated with depression (r = .37), anxiety, (r = .44), denial (r = .51), and intolerance of uncertainty (r = .43), and negatively related to quality of life (r = -.33), acceptance (r = -.37), and optimism (r = -.36).

Pre-Job Loss Grief Reactions and Work Attachment

Regarding Hypothesis 5, the MRA yielded significant results (R^2 = .20, F (4, 195) = 12.29, p < .001). Work-centrality (b = .38; p < .001) demonstrated a significant association with pre-job loss grief reactions, as opposed to work engagement (b = .06; p = .49), organizational commitment (b = .05; p = .50), and calling (b = .05; p = .54). In the HMRA, elapsed time since starting the external job search, reported financial strain, and quality of employee-employer communication explained 9% of the variance of pre-job loss grief reactions. After adding work attachment variables to the model, significant results emerged (R^2 = .28, F (4, 169) = 12.71, p < .001). Elapsed time (b = .13; p = .048), financial strain (b = .18; p = .007), quality of employee-employer communication (b = -.22; p = .002), work-centrality (b = .33; p < .001), and organizational commitment (b = .16; p = .04) were all significantly associated with pre-job loss grief reactions. However, work engagement (b = .07; p = .39) and calling (b = .05; p = .60) showed no significant associations with pre-job loss grief reactions in this model.

Discussion

This study provides valuable insight into the phenomenon of pre-job loss grief reactions. We developed and validated an instrument, the IJLS, for measuring pre-job loss grief reactions and examined its relation to work attachment.

The results concerning the psychometric properties of the IJLS provide preliminary evidence that the IJLS is a reliable and valid scale for measuring pre-job loss grief reactions, confirming Hypotheses 1 to 4. The findings indicate the IJLS formed a unitary construct, demonstrating both high internal consistency and temporal stability. That pre-job loss grief, depression, and anxiety formed distinct symptom clusters confirmed discriminant validity of the IJLS and aligns with earlier studies on job loss-related grief, depression, and anxiety [19–20]. The significant associations of pre-job loss grief reactions with

depression, anxiety, denial, intolerance of uncertainty, quality of life, acceptance, and optimism supported the scale's convergent validity, and are consistent with prior studies on job loss-related grief [6, 13].

Regarding work attachment, the study results partially confirmed Hypothesis 5. Work-centrality was positively associated with pre-job loss grief reactions, consistent with earlier findings on job loss-related grief reactions [7]. Although the initial MRA did not show a significant correlation between organizational commitment and pre-job loss grief reactions, the HMRA revealed a significant positive association after controlling for other variables. This suggests that control variables play an important role in the relationship between work attachment and pre-job loss grief. Specifically, a longer elapsed time in the external job search, increased perceived financial strain, and poorer quality of the employee-employer communication, were associated with higher levels of pre-job loss grief. However, work engagement and calling were not significantly related to pre-job loss grief reactions. This suggests that there may be other factors influencing pre-job loss grief reactions beyond the scope of work attachment.

To gain a deeper understanding of the factors contributing to pre-job loss grief reactions, considering the *psychological contract* between sick-listed employees and their employer could be insightful. This contract involves beliefs and interpretations shaping the mutual agreement, outlining entitlements and fostering feelings of security [35]. Imminent job loss may be perceived as a breach of this contract, where the employer fails to uphold its end [36]. Typically, after one year of absence, sick-listed employees are required to start an external job search, which often coincides with a deterioration in employee-employer communication and a wage reduction to 70%, potentially intensifying financial strain [3]. Consequently, it is conceivable that these circumstances could lead to concerns among sick-listed employees about their future prospects, fostering a sense of urgency, potentially amplifying their emotional distress and organizational commitment [18]. These circumstances may shift the employees' focus away from work-related aspects, such as work engagement and calling (i.e., finding meaning in work), towards concerns related to job insecurity, financial strain, and future prospects [37].

Study Limitations

Several study limitations warrant consideration. First, the cross-sectional design limits the ability to draw directional conclusions on the relationship between pre-job loss grief reactions and other concepts. However, this limitation did not hinder the objective on developing and validating a novel instrument for measuring pre-job loss grief reactions. Nonetheless, longitudinal methods would be beneficial to better understand the predictive value of the IJLS for work attachment, job loss-related grief, depression, and anxiety symptoms. Additionally, examining pre-job loss grief reactions in relation to the quality of job search behaviour could provide valuable insights, given the previous research emphasis on the significant influence of job search behaviour on successful re-employment [4].

Second, we evaluated aspects of work attachment among sick-listed employees without having a baseline measurement under normal conditions. The current situation may have influenced their perceived level of work-centrality, work engagement, organizational commitment, and meaning of work

(i.e., calling). Previous studies indicated that perceived job insecurity was negatively related to work engagement and meaning of work [38], while other research demonstrated that high levels of work commitment combined with a poor organizational climate increased the odds of sickness absence [39]. Exploring the reciprocal relationship between long-term sick leave and work attachment in future studies would provide meaningful perspectives.

Finally, the present sample showed an overrepresentation highly-educated people (73%) compared to the general population in the Netherlands, where long-term sickness absence is highest among people with a primary education [40]. This could have influenced the findings. However, our results showed no significant associations with pre-job loss grief reactions and socio-demographic factors (except for age), which aligns with earlier results on job loss-related grief reactions [19–20]. It is important to note that this study employed a convenience sample, warranting caution when generalizing these findings. Since this was the first study to examine the psychometric properties of the IJLS, conducting replication studies would be pertinent for future research.

Study Implications

Despite these limitations, these findings indicate that sick-listed employees facing imminent job loss can experience pre-job loss grief reactions. This implies that pre-loss grief reactions, commonly associated with caring for a terminally ill family member [11–12], can also manifest in cases of imminent job loss. Moreover, the IJLS can be a useful tool for professionals supporting sick-listed employees in their reintegration process, enabling early detection and necessary support for those experiencing pre-job loss grief. This can also help to increase awareness among professionals (e.g., re-integration advisors, supervisors, and company physicians) as well as sick-listed employees. Additionally, the IJLS enables scholars to longitudinally examine the impact of pre-job loss grief reactions on psychological well-being and job search behaviour, thus enhancing sick-listed employees' prospects for successful re-employment.

Furthermore, the findings shed light on the situation of sick-listed employees legally obligated to search for jobs outside their current company. Balancing the uncertainty of returning to their employer, the focus on recovery, and necessity of starting an external job search may cause severe emotional distress [2–3]. Our results highlight several potential risk factors associated with pre-job loss grief reactions, including high levels work-centrality and organizational commitment, perceived financial strain, and disrupted employee-employer communication. These factors may become more pronounced as time passes by in the external job search, and the end of 104 sick leave period approaches, possibly linked to a sense of diminishing resources (e.g., time, money, and self-efficacy) [41]. Understanding these dynamics can inform interventions and support systems to better assist sick-listed employees during this challenging period.

In conclusion, understanding and addressing pre-job loss grief reactions can enhance the re-integration and job prospects of sick-listed employees, improving their psychological well-being and chances of successful re-employment. We recommend exploring the dynamics of pre-job loss grief reactions and

their impact on various outcomes to better support employees during their sick-listed period in future research.

Declarations

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Competing interests

The authors have no relevant financial or non-financial interests to disclose.

Author contributions

Janske van Eersel and Paul Boelen contributed to the study conception and design. Material preparation, data collection and analysis were performed by Janske van Eersel. The first draft of the manuscript was written by Janske van Eersel and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

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Data availability statement

The datasets analysed during the current study are available in the DataverseNL repository, https://doi.org/10.34894/FDDFTJ

Ethics approval

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Review Board of the Faculty of Social and Behavioural Sciences at Utrecht University (Part 1 / 15-09-2022 / FETC 22-0430; Part 2 / 01-11-2022 / FETC 22-0504).

Consent to participate

Informed consent was obtained from all individual participants included in the study.

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Appendix

Vragenlijst Dreigend Verlies van Werk [Imminent Job Loss Scale]

- 1. Ik verlangde sterk naar hoe mijn leven was voordat ik mijn baan dreigde kwijt te raken
- 2. Ik dacht voortdurend aan het dreigende verlies van mijn baan
- 3. Ik was boos over het dreigende verlies van mijn baan
- 4. Ik kon nauwelijks geloven dat ik mijn baan dreig kwijt te raken
- 5. Mijn toekomst leek zinloos door het dreigende verlies van mijn baan
- 6. Ik voelde me emotioneel verdoofd door het dreigende verlies van mijn baan
- 7. Ik deed er alles aan om maar niet aan het dreigende verlies van mijn baan te hoeven denken
- 8. Ik wist niet meer goed wie ik was door het dreigende verlies van mijn baan
- 9. Ik voelde me eenzaam door het dreigende verlies van mijn baan

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

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