



ORIGINAL ARTICLE

Restoration-focused coping reduces complicated grief among older adults: A randomized controlled study



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Abstract

Background and objectives: The death of a loved one leaves a sizable minority of bereaved individuals at increased risk for complicated grief (CG), which can lead to adverse health outcomes. There has been increased interest in developing intervention options for CG based on the dual-process model of coping with bereavement, which addresses both loss- and restoration-focused coping methods. Many loss-focused approaches have been employed in clinical settings, but the development of restoration-focused intervention method has received insufficient attention.

Methods: This study examines the effectiveness of a restoration-focused intervention method called self-care in bereavement (SCB) and the mediating effects of changes in self-efficacy and personal growth on the relationship between the intervention method and CG. A total of 168 Korean older adults experiencing bereavement from the loss of a loved one were randomly assigned to the SCB group or the comparison group, which received only psychoeducation on CG.

Results: The SCB group demonstrated a significant reduction in CG in comparison to the comparison group. Changes in self-efficacy and a sense of personal growth had significant mediating effects on the relationship between the intervention method and CG.

Conclusion: These results suggest that SCB is a promising intervention method for CG and that the intervention effect may be mediated by positive changes in self-efficacy and a sense of personal growth.

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Introduction

Complicated grief (CG) is an intense and prolonged type of psychological reaction to the loss of a loved one and

consists separation distress as well as cognitive, emotional, and behavioral symptoms.^{1,2} Unlike reactions in normal grief, which most people experience following the death of a loved one, those in CG can often lead to adverse health outcomes such as sleep disturbance, cancer, heart problems, and suicidal ideation.^{3–5} CG, included in the 5th Edition of the Diagnostic and Statistical Manual,⁶ is referred

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to as a persistent complex bereavement-related disorder including emotional and cognitive symptoms related to some loss, reactive distress to death, and social/identity disruption, although some have questioned these criteria.⁷ CG is observed in about 5–10% of all bereaved individuals in the general population regardless of the measure or sample.^{8–10}

The dual-process model (DPM) of Stroebe and Schut¹¹ draws attention to the maladaptive coping process in bereavement and postulates that a bereaved individual goes through not only painful emotional coping with loss-oriented factors (e.g., dealing with painful emotions and loss acceptance) but also practical coping with restoration-oriented factors (e.g., dealing with work, legal, and financial issues and taking on new roles). A bereaved individual repeats the confrontation and avoidance process between loss-oriented coping and restoration-oriented coping and finally arrives at a normal state of grief. By contrast, an individual who tends to be preoccupied with the loss or manages only practical issues after the loss as if nothing happened (stuck in only one type of coping and not oscillating between the two types of coping) is more likely to experience CG than normal grief.

Based on the salient theoretical explanation of the DPM, intervention methods for CG have been developed and verified to have promising effects.¹² However, there is a gap in the literature in that existing intervention programs focus mainly on loss-oriented coping. That is, bereaved individuals may be reluctant to participate in an intervention program focusing on loss-oriented stress because of their unwillingness to express emotions or because of the aftermath of extremely stressful ongoing problems. Some intervention methods have been developed to deal with ongoing problems after bereavement and address limitations of mainstream approaches and have been widely examined.^{13,14} For example, Caserta et al.¹³ implemented an 11-week group based on a restoration-targeted intervention method called “Pathfinders” by using a sample 84 bereaved adults and found significant improvements over time for a variety of coping skills, including healthcare participation, household management, and home safety. This intervention program has been found to be effective for improving coping skills, particularly for dealing with practical matters following bereavement. Lund et al.¹⁴ delivered a 14-week group intervention program for 298 bereaved individuals by targeting mainly restoration-oriented coping and focusing on improvements in self-care with respect to nutrition, healthcare practices, meal planning and preparation, household maintenance, and finance management and provided support for the proposed intervention method. More specifically, both the treatment group (restoration-focused coping + loss-focused coping) and the comparison group (loss-focused coping only) reported similar levels of improvement in loss-oriented coping, restoration-oriented coping, and the balance between these two types of coping. However, it remains unclear whether such intervention programs are effective for CG because of these two intervention studies’ focus on coping itself instead of on CG. Therefore, there is a need for a controlled comparative study to test the effectiveness of restoration-focused coping intervention methods on CG. In addition, the findings suggesting restoration-oriented coping intervention programs’ little to modest effect are questionable because of the following two limitations of the aforementioned studies:

First, as discussed in Lund et al.,¹⁴ the sample might have been composed mainly of normally grieving individuals. The authors pointed out that many bereaved individuals are quite resilient and require no professional care. According to a meta-analysis, intervention programs for bereavement may prevent a normal grieving process.^{15,16} Therefore, intervention methods should target those individuals require special care. Second, some participants pointed out that their specific needs were not addressed because of scheduled group settings. This suggests that the group modality might not have been suitable for the bereavement intervention program because of stigmatizing characteristics of life stressors such as extreme financial difficulty. Instead, an individual setting may be more appropriate for providing an intervention program tailored to the individuals’ needs.

Previous studies have not fully explained why restoration-focused coping improves adaptive coping in bereavement. Studies have identified two factors that can promote healthy grieving and be improved by restoration-focused coping, although no empirical verification has been provided. Low self-efficacy has often been reported as a consequence of insufficient skills and the inability to cope with life problems following bereavement. If the coping process is effective, then self-efficacy can facilitate increased energy to manage subsequent life problems.^{13,14} Another important factor is a sense of personal growth that can be achieved when a bereaved individual learns to independently manage his or her daily responsibilities and achieves some success in developing new skills during the bereavement process.¹⁴

Against this background, this study tests the effectiveness of a four-week intervention program focusing on restoration-related coping for those experiencing CG while going through bereavement. In addition, given the lack of theoretical support for mechanisms underlying the relationship between restoration-focused work and adaptive coping in bereavement, the study investigates the mechanisms underlying the relationship between the restoration-focused intervention method and CG by using two important mediators highlighted in previous research.^{13,14}

Methods

The program and participants

A brief restoration-focused intervention program called self-care in bereavement (SCB) was developed theoretically based on the DPM to treat CG in older adults. SCB took a life care planning education approach tailored to needs of a bereaved individual and sought to facilitate the management of life issues common in bereavement (e.g., financial difficulty, moving, meal preparation, and home maintenance) by educating the individual about ways to solve life problems or connecting community services with the individual. The intervention program consisted of one session a week for four weeks, and each session was composed of approximately an hour of brief education and consultation programs in problem solving and seeking community resources available to foster independence. SCB started with an introduction session, followed by an hour-long consultation session. The introduction session included a description of intervention components, methods of service

Table 1 Mean scores for study outcomes for bereaved individuals receiving self-care through a bereavement program and psychoeducation on CG and differences between pre- and post-intervention effect sizes.^a

Study outcomes	Self-care in bereavement						Psychoeducation						Cohen's <i>d</i>
	Pre		Post		Follow-up		Pre		Post		Follow-up		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
ICG	28.17	5.63	22.29	5.41	20.52	4.33	29.88	5.52	26.33	4.34	25.47	2.76	0.66
BSES	16.57	4.95	18.36	4.72	29.27	5.60	17.89	6.97	17.87	6.33	12.99	5.96	−1.28
PGI	27.54	5.03	27.79	4.43	36.04	6.40	29.00	7.69	24.89	6.53	26.13	6.07	−1.06

ICG: Inventory of Complicated Grief; BSES: Brief Self-Efficacy Scale; PGI: Posttraumatic Growth Inventory.

^a Time since the loss, sex, age, and the education level were controlled for in all models.

delivery, and some brief psychoeducation on CG (e.g., its definition, prevalence, symptoms, and risk factors). In a series of continuing sessions, each participant was provided with problem-solving skills matched to individual needs such as education on how to prepare meals or connect with meal delivery community services for older adults. The comparison group received only psychoeducation on CG.

In this study, the participants consisted of 168 older adults who recently lost their spouse or partner and required help with practical problem-solving skills after the loss. All lost their loved ones 11–54 months prior to the study. They were recruited from two community centers and one hospice for older adults. Inclusion criteria included individuals experiencing the recent loss of a loved one. Intervention procedures were approved by the Hallym University Institutional Review Board. After providing written consent under the supervision of trained psychologists and/or social workers with doctoral degrees, CG was screened by the psychologists and social workers using the Inventory of Complicated Grief (ICG).¹⁷ Bereaved individuals with a total score higher than 25 in the screening were considered positive for CG and one hundred eighty-one were included in the initial contact list. Among a total of 181 individuals satisfying the inclusion criteria, 172 were recruited (9 discontinued the screening process for life difficulty in arranging required work schedules). Among these 172 individuals, 4 dropped out after the initial session because of their refusal to participate in the study. The remaining 168 were randomly assigned to the treatment and comparison groups. The participants assigned to the treatment group ($N=84$) were provided with SCB in conjunction with psychoeducation on CG. Those assigned to the comparison group ($N=84$) received only psychoeducation during the introductory session, and the assessment was made with no intervention. Among the participants assigned to the intervention group, 9 dropped out after the post-intervention assessment, and 6 missed the follow-up assessment. Among those participants assigned to the comparison group, 12 dropped out after the post-intervention assessment, and 4 missed the follow-up assessment. There were no significant differences between those who completed the program and dropouts in terms of outcome variables.

The average age of participants was 72.07 ± 6.11 years. More than 70% ($N=123$, 73%) were female, and most had low education levels (about 6 years of education). The average time since loss was 587 days ($SD=66.81$), and the range

was 425–741 days. There were no significant differences in demographic variables and study outcomes at the baseline between the intervention and comparison groups.

Measures

All measures were selected by considering the suitability of their length for older adults. The ICG,¹⁷ a 19-item assessment tool for CG, was used to assess the effects of SCB on CG. The internal consistency of the ICG was high (Cronbach's $\alpha=.87$). A 10-item version of the Post-Traumatic Growth Inventory (PGI)¹⁸ was used to assess the participant's sense of personal growth. This tool had high internal consistency (Cronbach's $\alpha=.91$). A 6-item version of the General Self-Efficacy Scale (GSES)¹⁹ was used to assess self-efficacy. This scale was modified to reflect the expected self-efficacy of restoration-related coping in bereavement, including financial difficulty, moving, meal preparation, and home maintenance, and it had high internal consistency (Cronbach's $\alpha=.84$). All scales were administered during pre- and post-intervention sessions and at the two-month follow-up session after the intervention.

Data analysis

Intent-to-treat analyses were conducted with 168 participants. Treatment effects were analyzed using mixed effects models. The main effects of the intervention assignment on the participant's CG, self-efficacy, and sense of personal growth. The analysis employed two methods. First, random intercept and slope models with an autoregressive error within a longitudinal data structure were tested, and confounding demographic effects such as age, sex, the education level, and time since loss were examined.²⁰ In addition, Cohen's *d* was calculated to examine the effects of SCB by subtracting Cohen's *d* before the intervention assignment from that after the assignment.²¹ Second, two indirect effects of the intervention assignment on CG were examined through the slope of the sense of growth and that of self-efficacy by using structural equation techniques and interval estimates for the two indirect paths. These tests were conducted by bootstrapping (2000 iterations) with Mplus Version 7.2.

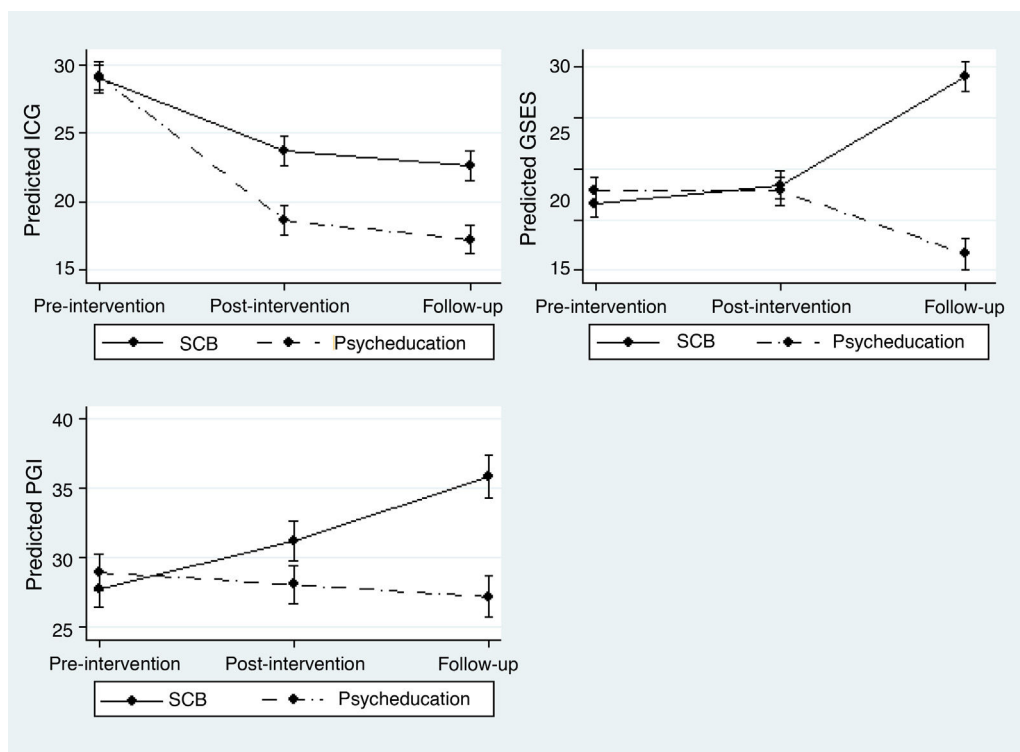


Figure 1 Improvements in bereaved individuals with self-care in bereavement or psychoeducation on bereavement outcomes.

Table 2 Indirect effects of the intervention program on CGBS follow-up scores through mediators.

Path	95% confidential interval	
	Lower	Upper
Intervention → GSES → CGBS	-2.08	-0.23
Intervention → PGI → CGBS	-0.89	-0.05

CGBS: Complicated Grief Brief Scale; BSES: Brief Self-Efficacy Scale; PGI: Posttraumatic Growth Inventory.

Results

Main and interaction effects

The effects of SCB on outcome measures were examined by considering its effect size in terms of ICG, GSES, and PGI scores. Before the intervention, those individuals receiving SCB had much lower pre- and post-intervention values of *d* (Table 1). There were large differences in effects on the three outcome measures, favoring SCB. Table 1 shows the effect sizes for the three outcomes. At the post-intervention assessment, there were significant main effects of SCB on CG ($B = -3.19$, $P < 0.001$), PGI ($B = 2.44$, $P = 0.003$), and GSES ($B = 2.16$, $P = 0.003$) scores (Table 2). These results indicate a negative effect of the intervention on the ICG score and positive effects on PGI and GSES scores. There were significant SCB $\times$ time interaction effects on the three outcomes: $B = -2.46$, $P < 0.001$, for ICG; $B = 5.56$, $P < 0.001$, for PGI; and $B = 8.59$, $P < 0.001$, for GSES (Fig. 1).

Indirect effects

Based on the sizable effects of SCB on PGI and GSES scores over time, the indirect effects of SCB on ICG follow-up scores were examined through slopes of PGI and GSES scores over time (Table 2). There was a significant indirect effect of SCB on the ICG score at the follow-up through increases in PGI and GSES scores. SCB increased PGI and GSES scores, which in turn reduced the ICG score at the follow-up.

Discussion

Bereavement research has theoretically highlighted restoration-focused coping, but little is known about the effectiveness of intervention programs focusing on this type of coping. This study examines the effectiveness of SCB, an intervention program tailored to bereaved individuals, to improve adjustment skills in practical matters in bereavement. To the authors' knowledge, this study is the first to examine the effects of a restoration-focused intervention programs on CG.

The results based on data collected over approximately four months of the proposed intervention program provide broad support for favorable effects on SCB on CG over time in early bereavement. Those individuals with SCB during early stages of bereavement showed substantial cognitive and emotional gains during five months of the intervention, particularly in terms of their CG, self-efficacy, and sense of personal growth. There were improvements over time for cognitive and emotional measures.

Noteworthy is that the results suggest SCB as a promising approach to enhance individuals' self-efficacy and sense

of personal growth during bereavement. In addition, these cognitive gains may substantially reduce CG. These results provide potential support for a theoretical explanation of the mechanism through which restoration-focused coping improves CG, particularly in terms of using the concepts of self-efficacy and a sense of personal growth. Given the significant relationships of self-efficacy and a sense of personal growth to CG, the results suggest that self-efficacy and a sense of personal growth should be targeted in preventing and reducing CG.

It should be noted that the sizable effects of SCB may be due to participant characteristics. Bereavement research has addressed that people are quite resilient and can manage difficult life matters when going through bereavement^{22,23} and that, for normal grieving, intervention programs are not needed but may instead impede this natural resiliency.¹⁵ The participants were recruited based on their emotional and practical needs. The sizable effects of SCB may be related in part to their characteristics. Also noteworthy is that SCB targeted practical issues raised by the participants before intervention sessions, whereas existing restoration-focused coping programs are typically designed by the researcher and delivered to participants. This participant-tailored approach may explain the sizable effects of SCB. In light of effective treatment outcomes for CG evaluated through a meta-analysis that focused mainly on the loss itself,²⁴ SCB had comparable negative effects on CG. Future research should use a more comprehensive research design by focusing on the loss or restoration group or both to examine which components of support can produce those benefits.

The modality of the service delivery setting may explain the effects of SCB on outcomes. Unlike in the case of existing intervention approaches using group settings, this study's intervention program was provided individually. Such an approach may be more appropriate for bereaved individuals with personal life issues. In this regard, future research should consider the service delivery modality of SCB.

Despite the sizable effects and efficacy of SCB in the context of CG, any interpretation of this study's results should be made with caution because of several limitations. First, a majority of the participants were female, and therefore the results may not be generalizable to more diverse samples. Second, the intervention and comparison groups were not matched for the type of individual need, and therefore the results may reflect the effect of targeting specific practical issues on outcomes. Third, the use of a single-blind design generally implies some rater and interventionist bias. Finally, no loss-focused psychological components such as psychotherapy were considered. Instead, the analysis focused only on CG psychoeducation. Although psychoeducation may reduce negative psychological consequences of loss of a loved one,²⁵ it has yet to be tested in the context of CG. To some extent, psychoeducation itself may be effective for CG, and therefore future research should include a group with no intervention (e.g., a waiting-list group) and compare it to a psychoeducation-only group to better address this issue.

SCB is a concise intervention program for CG for older adults in bereavement. The results suggest that the early application of SCB may provide substantial benefits in improving CG and help foster a sense of personal growth and

self-efficacy. Becoming skillful in managing practical issues in daily life may be a vital, yet overlooked, component of treatment programs for early bereavement. Improving these skills should help individuals experiencing bereavement during one of the most difficult times of their lives.

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Conflict of interest

The authors have no conflict of interest to declare.

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