Will the Content of Positive Memory Recall Matter for Repairing Sad Mood? The Comparison of Autobiographic vs. Others’ Memory

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Objectives: Recollections of positive autobiographic memory help nondysphoric but not dysphoric individuals to repair sad mood. The content of memory recall could be an effective factor. The objective of this study was through manipulating the content of memory recall to examine the ability of regulating negative mood in dysphoric and nondysphoric individuals. Methods: We examined the questions from a nonclinical sample of 156 college students. After negative mood induction, dysphoric and nondysphoric groups were randomly assigned to positive autobiographic memory or positive others’ memory conditions to write these memories without time limitation. Results: Both nondysphoric and dysphoric participants were benefited from recall of positive autobiographic memories or others’ memories recall. But, positive autobiographic memory recall was more effective to diminish negative mood and to increase happy mood than others’ memory recall. Conclusion: Dysphoric participants may not only repair previously induced negative mood, but also simultaneously overcome the feeling of worsened present self. Thus, it may take longer time for them to repair sad mood. Accordingly, time length could be important in mood regulation.

Key words: autobiographic memory, mood incongruent, mood regulation, positive memories recall


Introduction

Mood regulation is an important perspective for researching mood recovery in depression. Among studies in this line that have adapted the mood-congruency hypothesis [14]. Some investigators found that dysphoria and depression impair the ability to use positive memories to regulate sad mood through mood incongruent process. But Sedikides and associates [23] pointed out that time is the matter for repairing sad mood regardless of congruent or incongruent manner. Similarly, Forgas and Ciarrochi [7] have indicated the importance of temporal sequence in regulating mood. From our clinical experiences, we also noticed the significance of time length and temporal sequence for repairing their sad mood in dysphoric...
ic individuals. Thus, time may play an essential role for individuals with dysphoria or depression to be benefitted from mood incongruent process by recalling positive memories.

Noteworthily, many studies have documented the mood congruent effect in nonclinical [2, 3, 22] and in depressed [8, 9, 11] individuals. Contrarily, mood incongruent effect has also been found in several studies, showing that negative mood states can enhance the retrieval of positive valence materials [16, 23, 25]. Motivated to feel good, people tend to retrieve positive thoughts and memories to lessen their negative moods [14]. Such mood regulatory processes reflect a mood incongruent effect [14]. Mood incongruent recall, i.e., positive memory recall during negative mood, has been proposed to play a powerful role in mood regulation [15, 23]. But individual difference has resulted in diverse effects. For example, mood incongruent effect has been found in healthy but not in depressed individuals [8, 11, 12, 26].

Why might this be the case? Individual’s motivation or ability to retrieve mood incongruent materials has been noted to influence the use of positive memories to regulate negative mood. Teasdale [26] indicated that depressed and nondepressed individuals differ in motivation or ability to repair their mood rather than in the degree to which they may become sad. Therefore, motivation and ability are two important factors that affect the success of mood regulation in depressed individuals.

Joormann and Siemer [14] demonstrated that dysphoria is associated with reduced ability to use mood incongruent recall to repair sad moods. They found that strategy to recall positive autobiographical memories is useful to enhance negative mood for nondysphoric, but not dysphoric individuals. Another study replicated this study with clinical sample, and found that depression is associated with an impaired ability to use positive recall to regulate a sad mood, and that such impairment even continues till consequent recovery [15]. Therefore, Joormann and Siemer suggested that dysphoric participants may lack enough abilities to benefit from the recall of positive memories. They further discussed the most plausible mechanisms [14]: First, when dysphoric participants recall positive memories, the activation of positive thoughts initially triggers positive feelings. But the instructions of recalling positive autobiographical memories simultaneously trigger a negative self-focus rumination in the dysphoric individuals. Due to the ruminative focus, the initial positive feelings are subsequently substituted by their current (depressed) feelings and lead to more negative thoughts and rumination. Thus, recalling positive memories and feeling may influence dysphoric participants’ mood by contrast effect.

The mechanism of reducing ability to use positive memories to repair sad mood in dysphoric individuals is still not clear. Joormann and Siemer [14] conducted an intriguing design to understand whether dysphoric participants failed to repair sad mood. In their study, limiting the incongruent memories recall time may be a confounding factor associated with either inability or lack of enough time to process repair. Moreover, because previous studies all only used autobiographical memories, whether such reduced ability to repair sad mood would be limited only in autobiographic memory or it could include others’ memory is still unknown. Therefore, the objectives of the present study were to examine the ability of regulating negative mood in dysphoric and nondysphoric individuals, and to explore the differences between using positive autobiographic and others’ memory recall. Specifically, we predicted (A) that no limited time for incongruent
memories recall, for both self and others’ positive memories, may contribute to reduce the negative mood in both dysphoric and nondysphoric groups; and (B) positive autobiographical memory may be more effective to enhance positive mood than others’ memories recall.

Method

Participants
One hundred fifty-six undergraduates participated in this study. Among all, 61% (n = 95) obtained a small reimbursement for participation and 39% (n = 61) participated in exchange for course credit. This study was approved by the institutional reviews board of Department of Psychology, National Taiwan University (No. 9911017) with requirement of obtaining informed consent form study participants.

Questionnaire
A participants were asked to rate their present mood state on each 9-point Likert scales ranging from 0 (not at all) to 8 (very) in three mood questionnaire at three phases, i.e., before negative mood induction, after negative mood induction, and after positive memory recall task. The questionnaire consisted of the items “sad,” “depressed,” “upset,” and “happy.” Participants also completed the Chinese version of the Beck Depression Inventory-II (BDI-II) [5]. In this study, we used the cutoff score of 13 to assign the participants to the dysphoric or nondysphoric group. BDI-II is a 21 item self report scale to measure the severity of depressive symptoms and has acceptable reliability and validity [1], and so as its Chinese version in Taiwan [19]. Finishing positive memories recall task, we asked the participants to rate that while they recalled (self or others’) past positive experiences, if they would compared the present self with it and whether they would felt the present self has worsened to examine the efficacy of comparison. The questionnaire was 5-point Likert scales ranging from not at never (1) to almost (5). Then, all participants were asked to continue to rate that whether when he or her recalled the past positive experience, he or her imagined and felt if he or her was in the situation on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Mood induction

Pilot study for film clip confirmation
We chose 10-min film clip (Hachiko: A Dog’s Story) depicting a dog having been waiting for 10 years for his master to come back after his death. We preceded a pilot study to examine if the film was effective to induce sad mood. The participants included 56 community volunteers (22 M, 34 F) with mean age 30.79 (SD = 5.03) years. As expected, after watching this film, participants displayed significantly more sadness than before (M = 4.96, SD = 1.63 vs. M = 2.48, SD = 1.65, respectively, t = -11.21, d = 1.51, p < 0.001), and their positive mood were also significantly reduced than before (M = 2.93, SD = 1.32 vs. M = 4.55, SD = 1.32, respectively, t = 6.78, d = 1.23, p < 0.001). Thus, the film clip was confirmed to be effective in mood induction for Taiwanese sample.

Mood induction

Participants were presented with the above-mentioned 10-min film clip and instructed to try their best to attend to the feeling when they were in the same situation.

Positive memory task and evaluations
Following mood induction task, participants were randomly assigned to autobiographic or others’
memory conditions. In autobiographic condition, participants were asked to do their best to write down happy events that happened to them in the past. In others’ memory condition, participants were asked to write down happy events that occurred to their family or friends and shared to him or her. We followed the guidelines of the autobiographical memory test [27] to perform positive memories rating. Memory specificity was defined as the events that occurred at a particular place and time, and lasted less than one day. Memory category refers to a general summary of the recalled events. These memories were later rated by independent raters on its specificity and valence. Each memory were recorded either specificity or category on 1 or 0, respectively. Finally, two raters also rated the valence of happiness of each event on a scale of 0 (not at all happy) to 10 (extremely happy).

Procedures

We asked participants first to fill out the BDI-II and pre-induction mood rating. Then, the study assistant explained the instruction to conduct mood induction to the study participants with a movie. After watching the movie, participants were asked to rate their post-induction mood states.

All participants were randomly assigned to autobiographic or others’ memory conditions to recall positive memories. After finishing up the questionnaire of the positive memory task, participants were asked again to do post-recall mood rating and then to rate, what he or her recalled (self or others’) past positive experiences, whether he or her would compare the present self with it, and whether he or her would felt the present self has worsened. Finally, they were also asked to rate whether he or her recalled the past positive experience, he or her imagined and felt that if he or her in the situation at the end, followed by provision of debriefing and thanks. The total procedure was conducted individually and took about 40 to 50 minutes.

Statistical analysis

We compared the differences between groups with chi-square test and t-test or ANOVA for categorical and continuous variables, respectively. The differences were considered different if p-values were smaller than 0.05. All study data were computed using Statistical Package for Social Science software version 16.0 for Windows (SPSS, Inc., Chicago, Illinois, USA).

Results

Table 1 presents the number of males and females, their mean age, mean scores of mood ratings and related variables.

We designed two three-way ANOVAs: 3 (time: pre-induction, post-induction, and post-recall) × 2 (group: dysphoric and nondysphoric) × 2 (memory task: autobiographic and others) experiment to examine the effects of mood induction (positive and negative mood variation), mood incongruent recall on mood repair as well as to compare the efficacy between autobiographic or others’ memory recall. In the following, grouping confirmation will be first checked using chi-square test and one way ANOVA. It will be followed by two three way ANOVAs to examine various effects on mood repair. In so doing, check on mood induction effect will be included. Finally, three two way ANOVAs: 2 (group: dysphoric and nondysphoric) × 2 (memory task: autobiographic and others) were conducted to examine the comparison effect and the efficacy of imagination.

Grouping confirmation

Table 1 presents demographic information and rating data of the four groups. Gender (χ² =
2.81; d.f. = 3; \( p = 0.42; \) ns), age (\( F_{3,152} = 0.68; \) ns), and duration to write down memory (\( F_{3,152} = 2.01; \) ns) did not differ among the four groups. As expected, BDI-II scores of the dysphoric groups were higher than nondysphoric groups, \( F_{3,152} = 87.63; \) \( p < 0.001, \) while autobiographic and subgroups of others’ memory recall within dysphoric group (\( t_{69} = -0.14; \) ns) and nondysphoric group (\( t_{83} = -0.1; \) ns) did not differ in BDI-II scores.

**Effects of time, group, and memory task**

To analyze the effects on the variation of negative and positive moods, two 3 (time)\( \times 2 \) (group)\( \times 2 \) (memory task) ANOVAs were conducted. In the repeated measure ANOVA, time was treated as a within subjects factor, and group and memory task were between subject factors. Overall, for negative mood state, the results showed significant main effects of time (\( F_{2,304} = 143.67; \) \( p < 0.001, \) \( \eta^2_p = 0.49 \)), group (\( F_{1,152} = 44.95; \) \( p < 0.001; \) \( \eta^2_p = 0.23 \)), and memory task (\( F_{1,152} = 6.93; \) \( p < 0.01; \) \( \eta^2_p = 0.04 \)). It also resulted in significant two way interactions of Time \( \times \) Memory Task (\( F_{2,304} = 3.27; \) \( p < 0.05; \) \( \eta^2_p = 0.02 \)) and Time \( \times \) Group (\( F_{2,304} = 10.58; \) \( p < 0.001; \) \( \eta^2_p = 0.07 \)). For positive mood state, there were significant main effects of time (\( F_{2,304} = 128.51; \) \( p < 0.001, \) \( \eta^2_p = 0.46 \)), and group (\( F_{1,152} = 16.62; \) \( p < 0.001; \) \( \eta^2_p = 0.10 \)). However, memory task did not yield a significant effect on positive mood. The results also showed significant two way interactions of Time \( \times \) Group (\( F_{2,304} = 4.98; \) \( p < 0.05; \) \( \eta^2_p = 0.03 \)) and Time \( \times \) Memory Task (\( F_{2,304} = 7.96; \) \( p < 0.001; \) \( \eta^2_p = 0.05 \)).
To present the examinations and effect sizes, it is noted that the definition and value of partial eta square (partial $\eta^2$) it is noted that the definition and value of partial eta square in distinct from classical eta square ($\eta^2$). However, some researchers mistakenly reported its values as classical eta square values [18, 21]. Pierce [21] thus cautioned researchers on reporting accurate strength of association from multifactor ANOVA designs.

**Mood induction check**

Mood manipulation was effective to increase negative mood and reduce positive mood. For negative mood, the simple main effect of time was significant for both dysphoric and nondysphoric groups, with significant increase from pre-induction ($T_1$) to post-induction ($T_2$) in dysphoric group, $M_{T1} - M_{T2} = -0.86; p < 0.001; \eta_p^2 = 0.20$; nondysphoric group $M_{T1} - M_{T2} = -1.86; p < 0.001; \eta_p^2 = 0.65$. Similar results were found for positive mood. The simple main effect of time was significant decrease from pre-induction ($T_1$) to post-induction ($T_2$), in dysphoric group, $M_{T1} - M_{T2} = 0.78; p < 0.001; \eta_p^2 = 0.22$; non-dysphoric group $M_{T1} - M_{T2} = 1.47; p < 0.001; \eta_p^2 = 0.35$.

**Mood rating before and after the positive memories recall**

We predicted both dysphoric participants and nondysphoric participants would benefit from mood incongruent recall regardless of using autobiographic or others’ memory as shown in Figure 1. However, autobiographical memories would be more effective than others’ memories.

![Figure 1](image_url)

**Figure 1.** Negative mood state at three stages: Pre-mood induction, post mood induction and post positive memory recall. (A) Dysphoria autobiographic: The dysphoric participants that random assign to recall positive themself memories. (B) Dysphoria others: The dysphoric participants that random assign to recall positive others’ memories. (C) Nondysphoria autobiographic: The nondysphoric participants that random assign to recall positive themself memories. (D) Nondysphoria others: The nondysphoric participants that random assign to recall positive others’ memories.
As expected, after positive memories recall, negative mood of both groups were notably decreased and positive mood were significantly raised. Nondysphoric participants improved negative mood \( (M_{\text{negative,T3}} - M_{\text{negative,T2}} = -1.99; \ p < 0.001; \ \eta_p^2 = 0.25) \), also raised happy mood \( (M_{\text{positive,T3}} - M_{\text{positive,T2}} = 1.92; \ p < 0.001; \ \eta_p^2 = 0.10) \). Similarly, dysphoric participants significantly reduced negative mood \( (M_{\text{negative,T3}} - M_{\text{negative,T2}} = -1.51; \ p < 0.001; \ \eta_p^2 = 0.61) \), and improved happy mood \( (M_{\text{positive,T3}} - \text{Mpositive,T2} = 1.58; \ p < 0.001; \ \eta_p^2 = 0.10) \). Although both positive memories recall tasks were helpful to regulate sad mood, positive autobiographical memories recall \( (M_{\text{negative,T3}} - M_{\text{negative,T1}} = -0.63; \ p < 0.001; \ \eta_p^2 = 0.13) \) were more effective to reduce negative mood as compared to positive others’ memories recall \( (M_{\text{negative,T3}} - M_{\text{negative,T1}} = -0.12; \ ns) \). Similarly, in term of raising happy mood, positive autobiographical memories recall \( (M_{\text{positive,T3}} - M_{\text{positive,T1}} = 1.0; \ p < 0.001; \ \eta_p^2 = 0.02) \) was more effective than positive others’ memories recall \( (M_{\text{positive,T3}} - M_{\text{positive,T1}} = 0.23; \ ns) \). As mentioned above, the different efficacy was a result of the content of positive memory recall, but not the group difference between the dysphoria or nondysphoria.

**Positive memory ratings**

Two independent raters who were blind to the dysphoric group status rated those positive memories that participants had written down. Given good inter-rater reliability (kappa = 0.86), average of the ratings was taken for further analyses. The overall average of the amounts of recalled memories was 6.65 \( (SD = 4.98) \), and the four groups did not differences, \( F_{3,152} < 1; \ ns \). The average of memory specificity was 15.56%, with no significant differences among groups, \( F_{3,152} < 1; \ ns \). Finally, the period of written memory down was 16.82\( (SD = 8.47) \), \( F_{3,152} = 2.10; \ ns \); there are not significant groups differences. The average of the happiness of these memories (mood valence) was 6.2 \( (SD = 0.84) \), \( F_{3,152} = 3.57; \ p < 0.05 \), Scheff’s method test showed that four groups had no significant differences each other. In sum, the dysphoric participants benefited from recalling positive memories were not due to the amount and specificity of positive memories recalled, or the duration spent to write memories down. Nevertheless, the strategy of incongruent mood recall seems to be effective for both dysphoric and non-dysphoric participants.

**Comparison and imagination effect**

There were five people failed to fill out the questionnaire, so we used one hundred and fifty-one participants included in analysis. In the two way ANOVAs, group and memory task were treated as between subject factors.

The result showed that compared to nondysphoric participants, dysphoric participants significant felt the present self has worsened, and the memory tasks show no difference. The average of dysphoric group was 2.54 \( (SD = 1.44) \) and non dysphoric group was 1.95 \( (SD = 1.17) \); the average of autobiographic task was 2.28 \( (SD = 1.40) \) and others’ memory task was 2.16 \( (SD = 1.26) \). It resulted in significant main effect of group, \( F_{1,147} = 7.85; \ p < 0.01; \ \eta_p^2 = 0.05 \); no significant main effect of memory task, \( F_{1,147} = 0.48; \ ns \); and interaction, \( F_{1,147} = 0.49; \ ns \).

Finally, the participants of autobiographic were more vivid than the participants of others’ memory when they recalled past positive experiences; dysphoric and nondysphoric groups were no difference. The average of dysphoric group was 3.84 \( (SD = 1.03) \) and nondysphoric group was 3.69 \( (SD = 1.17) \); the average of autobiographic task was 4.16 \( (SD = 0.84) \) and others’ memory task was 3.36 \( (SD = 1.19) \). The result showed sig-
significant main effect of memory task, $F(1, 147) = 20.85; p < 0.001; \eta^2_p = 0.12$, and no significant main effect of group, $F(1, 147) = 0.81; \text{ns}$. There was significant interaction of Group $\times$ Memory Task, $F(1, 147) = 3.97; p < 0.05; \eta^2_p = 0.03$. In nondysphoric group, positive autobiographical memories recall were more vivid than positive others’ memories recall, $t_{81} = 4.12; p < 0.05$.

**Discussion**

Mood regulation has been studied for its contribution to mental health, particularly to the development of depression. Investigating the effective mood regulatory strategies has important implications for remedy of depressed mood and symptoms. Mood incongruent effect has been considered as a result of mood regulation. Therefore, mood incongruent memory recall is regarded as a useful strategy to repair negative mood.

In the present study, we examined two aspects of positive memory recall strategies, i.e., autobiographic and others’ memories. Consistent with the hypotheses of this study, both were found to be effective in reducing sad mood ($p < 0.001$, also see Figure 1) and enhancing happy mood ($p < 0.001$) in both dysphoric and nondysphoric individuals. The number and specificity of positive memories recalled and the duration to write down the memories were similar among the four groups of dysphoria_autobiographic, dysphoria_others, nondysphoria_autobiographic, and nondysphoria others (Table 1). Based on this finding, we suggest that beneficial effect will be mainly resulted from recollection of positive memories. Although both dysphoric and nondysphoric individuals would compare the present self with former self, while recalling past positive experiences (self or others’), only the two dysphoric groups felt the present self was worsened ($p < 0.01$).

The findings of this study are different from the results of Joormann and Siemer [14], in which a reduced ability to use mood incongruent recall to repair sad moods in dysphoria has been suggested. More closely scrutinizing the differences, time for positive memory recall may have a role. In their study, participants have been allowed eight minutes to finish the positive memory recall task [14]. But in present study, we did not limit the participants any duration to write down their memories. However, dysphoric and nondysphoric groups indeed did not spend different duration to write down their memories.

Why time for recall might be critical? As shown in the study data (Figure 1), those are different from the finding of Joormann and Siemer [14], when asked to recall past positive memories, participants of both dysphoric and nondysphoric groups would compare the present self with previous self. But, in the present study, dysphoric groups felt the present self was significantly worse than that of nondysphoric participants ($p < 0.01$). This finding is consistent with that of Joormann and Siemer [14]. We speculate that dysphoric participants may have tried to repair their bad feelings that have arisen from depressed present self, and that they may consequently need longer time to repair negative mood. In another words, when trying to recall positive memories, the participants may need to shift from incongruent effect stage to another congruent effect stage, i.e., enhanced good mood state by accessing positive information. As a result, to reach the congruent (positive) mood state, dysphoric participants may repair previously induced negative mood, and simultaneously overcome the feeling of worsened present self. Thus, it may take longer time for them to repair sad mood. Accordingly, time length could be important in mood regulation in dysphoric individuals. Thus, the inconsistency in existing stud-
ies may be accounted for by time for mood repair. However, few studies have explored the association between time length and mood regulation. We suggest that to examine the function of time for recalling positive memories to repair sad mood, especially for dysphoric individuals is worthwhile. Despite that length of time, as we suggested, might play a critical rôle to repair sad mood, the effect of mental image may be interesting to be considered. As known, when recalling the past memories, people could often feel vivid as if the events were experienced again, especially those affairs that were more impressive. Conway [6] suggested that mental images have emotional effect through imitating real life perceptual events and thus have the privilege to access the representations of related emotional episodes stored in autobiographical memory. Furthermore, mental images may play a special rôle in representing emotionally charged materials [17] and were often seen as powerful in emotional effects [10]. Positive mental image can also help to increase positive emotion in individuals with dysphoria [21]. Because autobiographical memories are derived from personal experience, we hypothesize that autobiographical memory recall could be more vivid than others’ memory recall, and that the discrepancy of vividness of mental image could then cause different repaired effect in autobiographic and others’ memory groups.

In present study, we found that compared with positive others’ memory recall, positive autobiographic memory recall showed to be more efficacious to decrease negative mood and increased happy mood for both dysphoric and nondysphoric individuals. Specifically, the valence of mean happiness rating for positive autobiographic memory recall was to be significantly higher than that of others’ positive memory recall (dysphoria, \( p < 0.001 \); and nondysphoria, \( p < 0.05 \)). And, the average of vividness were significantly higher in autobiographic groups (\( M = 4.16 \)) than in others’ memory groups (\( M = 3.36 \)). Based on the above-mentioned finding, we suggest that participants in positive autobiographic memory group may hold better mental images than others’ memory group, and that, autobiographic participants can display better mood repaired effect and reported more vivid ratings than others’ memory recall participants.

In this study, the duration to write down the memories showed no difference among the four groups. But we found that autobiographic memory recall in nondysphoric group displayed longest duration and had best negative mood repaired efficacy. This finding is in accordance with mood-congruency hypothesis, i.e., the effect of congruent valance between memory and mood. Thus, longer duration for recall might possibly lead to more positive mood. But the data collected in the present study could not clarify to answer this contention. More future studies are needed.

The readers are cautioned against overinterpreting the study results because this study has three limitations: (A) This study reports that, if given enough time for recall, dysphoric individuals may demonstrate their ability to use positive memory recall strategy to repair their sad mood. (B) Whether those currently or formerly depressed participants may still retain the ability to use positive recall to regulate their sad mood, is still unclear because of lack of clinical samples. (C) The issue whether time for positive memory recall indeed has its unique contribution to mood repayment needs to be explored in future studies.

Acknowledgements

This study was supported by the National Science Council, Taiwan (NSC-96-2413-H-002-
The authors thank F. C. Hung, C. Y. Huang, Y. C. Lee, S. M. Hou and Y. G. Tan for their help in data collection. We also declare that the authors study do not have any potential conflict of interest in doing and reporting this study.

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台灣某精神科專科醫院抗精神病藥物型態的改變
與併用抗巴金森藥物的現況
吳仲萱 黃美鳳 賴俊揚 黃郁惠 張鈺姍

目的：收集 2007 至 2011 年間台灣某一精神科專科醫院精神分裂病住院病人使用抗精神病藥物與抗巴金森藥物的情形，並探討二者之關係。方法：所收集之資料包括住院該年、年齡、性別、住院日數及與研究有關之精神科藥物。結果：這 5 年來呈現使用第一代抗精神病藥物遞減與第二代抗精神病藥物漸增之趨勢，有 38.7% 的病人同時使用二種以上之抗精神病藥物，以第一代與第二代併用最常見，抗巴金森藥物約減少 15% 的使用量，住院日愈長與高於建議劑量之抗精神病藥物皆會增加併用抗巴金森藥物之機率。在第一代抗精神病藥物中，以 haloperidol (p < 0.001)、trifluoperazine (p < 0.05) 有顯著的併併用抗巴金森藥物，chlorpromazine (p < 0.001) 與 sulpiride (p < 0.001) 有顯著的併併用抗巴金森藥物；在第二代抗精神病藥物中，以 amisulpiride (p < 0.001)、risperidone (p < 0.001) 與 zotepine (p < 0.001) 有顯著的並併用抗巴金森藥物。結論：近幾年來使用第二代抗精神病藥物有增加之趨勢，就錐體外副作用而言，第二代抗精神病藥物並非具有同質性，宜注意有些第二代抗精神病藥物仍可能易引起該副作用。

關鍵詞：第一代抗精神病藥物，第二代抗精神病藥物，精神分裂病，抗巴金森藥物
（台灣精神醫學（台北）2013; 27: 306-17）

原著 4

正向回憶內容可影響悲傷情緒之修復嗎？
回想自我或回想他人
邱嘉玲 陳淑惠

目的：研究發現正向自傳式回憶有益於非憂鬱者改善難過情緒，卻無助於憂鬱者，其中回憶內容可能為影響因素。本研究想透過操弄回憶內容來探討憂鬱與非憂鬱者的情緒調節效果。方法：156 名情緒憂鬱或非憂鬱之學生，隨機分派到自傳回憶組和他人相關回憶組，共四組。經負向情緒觸發後，無時間限制地書寫下正向回憶。結果：無論自傳回憶組或他人相關回憶組，回想正向記憶都有助於憂鬱者和非憂鬱者改善負向情緒。但相較於他人相關回憶組，回想正向自傳記憶對於減少負向情緒與提升正向情緒的效果更大。討論：研究發現憂鬱者可能除了要降低先存之負向情緒，還同時需克服負向自我觀感之情緒，導致需要較長時間修復悲傷情緒。以情緒不一致論點來看，回憶時間長度很可能成為情緒調節的關鍵角色。

關鍵詞：自傳式回憶，情緒不一致，情緒調節，正向回憶
（台灣精神醫學（台北）2013; 27: 318-28）