

EVERYDAY COGNITIVE FAILURES AND
MEMORY COMPENSATION EFFORTS:
A SELECTIVE OPTIMIZATION WITH
COMPENSATION (SOC)
ANALYSIS

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Memory

- 70% of people in midlife are worried about memory decline (Ponds, Commissaris, & Jolles, 1997)
- About 40% of middle-aged report high levels of forgetfulness. (Ponds, et al., 1997).
- Onset of *objective* memory decline within the fifth decade of life.

Who Compensates

- Older adults
- Those reporting higher levels of forgetfulness
- Healthy individuals/higher subjective health
- Higher cognitive reserve
- Personality traits – agreeableness & neuroticism

Selective Optimization with Compensation

(SOC Baltes & Baltes, 1990)

Individuals, who select goals (selection) and strive to attain (optimization) and maintain (compensation) those goals are more likely to experience positive developmental outcomes.

Study

- The current study focuses on the occurrence of cognitive failures in the context of the theory of Selective Optimization with Compensation.
- Specific attention is given to the moderating effects that mood may have on the benefits of SOC and on the effects that SOC may have on individual's memory compensation efforts

Hypotheses

1. Higher levels of SOC endorsement will be associated with
 - a. lower reports of cognitive failure
 - b. more effective compensation efforts
2. Beneficial effects of SOC on cognitive failures are moderated (diminished) by low mood.

Procedure

The screenshot shows a Windows Internet Explorer browser window displaying a Facebook profile for Gunnar Scheibner. The browser's address bar shows the URL: [http://www.facebook.com/?sk=ff#!\(profile.php?ref=profile&id=10000883568929](http://www.facebook.com/?sk=ff#!(profile.php?ref=profile&id=10000883568929). The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar contains various icons for search, share, and other browser functions. The Facebook interface is in the background, showing the profile header with the name "Gunnar Scheibner" and navigation tabs for Wall, Info, and a plus sign. Below the header is a yellow banner that says "This is your Publisher. Use it to post content, like photos or links to your wall." The main content area features a "What's on your mind?" text box, an "Attach" button, and a "Share" button. Below this are sections for "RECENT ACTIVITY" with several posts from friends like Caitriona Martyn and John Landers. On the left side, there is a profile picture placeholder, an "Upload a Photo" button, and sections for "Edit My Profile", "Write something about yourself", "Information" (including a birthday of November 19, 1974), and "Friends" (listing 19 friends with small profile pictures). On the right side, there are advertisements for "Try Facebook Ads", "Click here to buy Tickets" (for Blackcaps vs Australia), and "nzherald.co.nz". At the bottom of the page, there is a "Your Profile" section and a "Your Wall" section explaining that the wall is a place for posting content and is visible to visitors. The Windows taskbar at the bottom shows the Start button, several application icons, and the system tray with the time 11:33 a.m.

Participants

- 409 normal functioning individuals from the general population in New Zealand
- (241 females & 168 males)]
- Mean age was 48.10 years of age ($SD = 12.94$, range = 18-85).

Measures

- Selection, Optimization, and Compensation Questionnaire (SOC); Freund, & Baltes, 2002).
- Cognitive Failures Questionnaire (CFQ) (Broadbent, et al., 1982)
- Memory Compensation Questionnaire (MCQ) (Dixon et al, 2001)
- Self Rating of mood

Measures

- Selection, Optimization, and Compensation Questionnaire (SOC); Freund, & Baltes, 2002).
 - Selection
 - Elective
 - Loss Based
 - Optimization
 - Compensation

3 Factors of CFQ

Rast, Zimprich, van Boxtel & Jolles, (2009)

1) Forgetfulness

- tending to forget something known or planned
e.g., intentions, names, appointments

2) Distractibility

- being absentminded or a proneness to losing
focused attention e.g., daydreaming

3) False Triggering

- being prone to interrupted information processing
in sequences of cognitive and/or motor actions
e.g., not knowing why went to part of house

Memory Compensation Questionnaire (MCQ; Dixon et al., 2001)

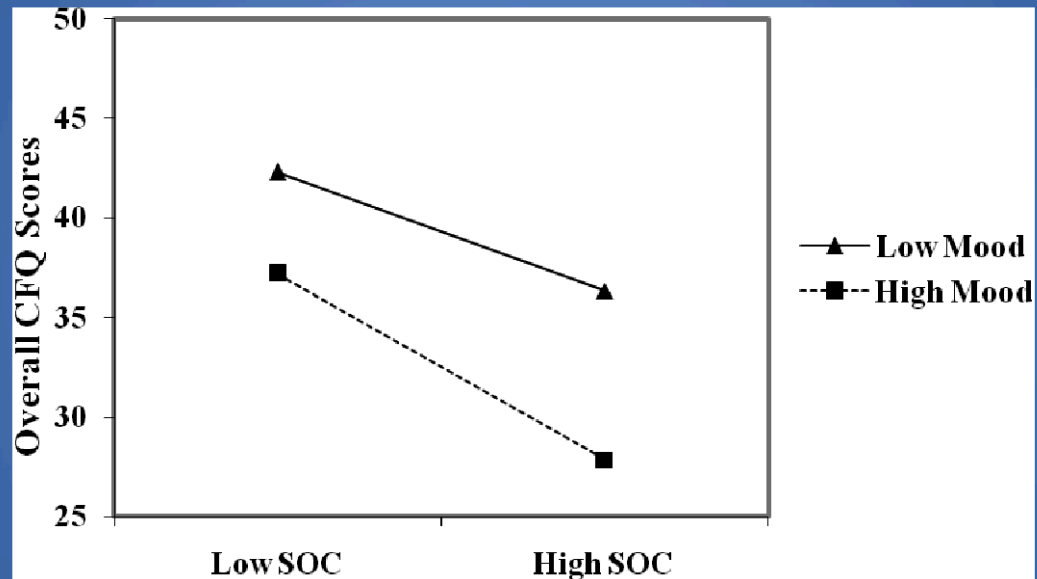
- External
 - Notes & calendars
- Internal
 - Mnemonic strategies
- Time
- Effort
- Reliance on others

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<u>Psychometric</u>		<i>M</i>	<i>SD</i>	α	1	2	3	4	5	6
<u>Scales</u>										
1	CFQ-Forgetfulness	25.24	4.61	.84	-					
2	CFQ-Distractibility	27.01	5.48	.84	.88**	-				
3	CFQ-False Triggering	26.34	5.09	.83	.92**	.86**	-			
4	CFQ-Overall	48.68	9.12	.90	.94**	.97**	.95**	-		
5	MCQ-Strategy	78.06	13.67	.90	.36**	.29**	.35**	.33**	-	
6	SOC	22.66	10.90	.71	-	-	-	-	.11*	-
					.19**	.15**	.15**	.17**		
7	Mood-ratings	2.12	0.75	-	-	-	-	-	-.08	.11*
					.26**	.31**	.26**	.30**		

The effects of SOC endorsement and mood-ratings on frequency of cognitive failures



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