The Impact of Financial Management Intervention

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General Background

- Increased individual responsibility
- Illiteracy and irrationality are widespread (De Meza, Irlenbusch, & Reyniers, 2008 ; Lusardi & Mitchell, 2007)

Financial intervention - does it works?

- Two meta-analysis:

  1. Interventions to improve financial literacy have very limited effect, the effect decay over time, ineffective for low income participants

     (Fernandes, Lynch, and Netemeyer, 2014)

  2. Financial intervention programs promote financial skills in some areas, though not in all

     (Miller, Reichelstein, Salas, and Zia, 2015)

The Current Study

- PAAMONIM (“Bells”) - leading NGO in the field of financial education
- Investigate the short and long term impact of an intensive intervention

Hypotheses

1. Program will decrease the disparity between income and expenses
2. The program effect will decay over time
3. We will test the impact of demographic and psychological factors

Design/Method

Stage I
Data Analysis

Methodology

- Data analysis of 1947 participants (at least 3 sessions) that completed the intervention at the years 2011 and 2013

Stage Ⅱ
Financial and Psychological Surveys

Recruitment

- Invitations were sent to 940 households by PAAMONIM
- Income based sample was used to reduce problem of selection
- a 15EUR coupon was offered to the participants as a reward

Data Collection

- 121 respondents were contacted by the phone
- Data was collected on-line using QUALTRICS software
- Financial survey (N=92) was followed by a psychological survey (N=87) a week after its completion

Stage I

Data Analysis

Results – Data Analysis

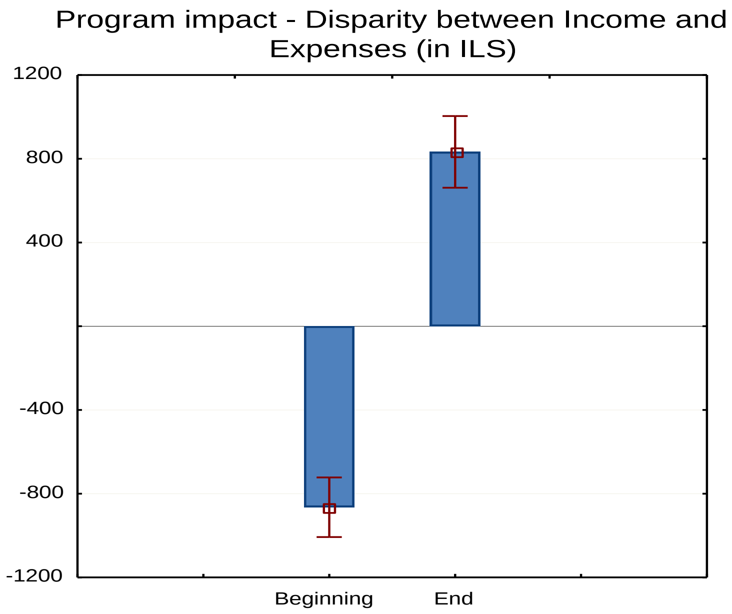
- Descriptive statistics:
  - Average age: 39 years old (range: 18 to 88)
  - Average net income per household similar to general population (CBS Israel)
    - 2011: 12,160 ILS [~2700 €]
    - 2013: 14,118 ILS [~3200 €]

- Income Vs Expenses Net Gap:

  Gap between income and expenses:
    - **Beginning**: M= -865 ILS (SD=3204)
    - **End**: M= 833 ILS (SD=3852)

  Overall difference: 1698 ILS

  $t(1946)=-16.54$, $p<0.000001$

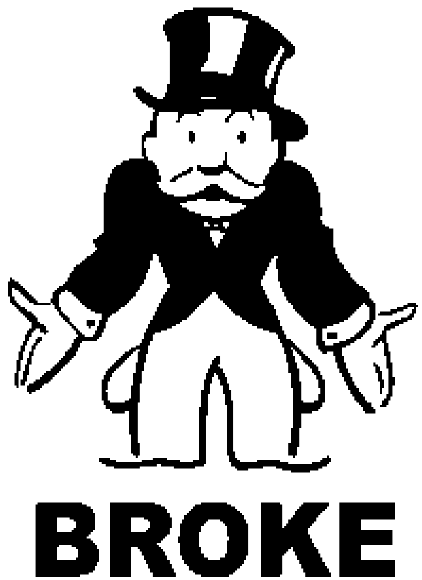


Results – Data Analysis

67% of the participants had significant debt; M=91,910 ILS, SD= 125769 ILS [~21,000€] (5.1 times monthly income)

Income had a tremendous impact on participants condition:

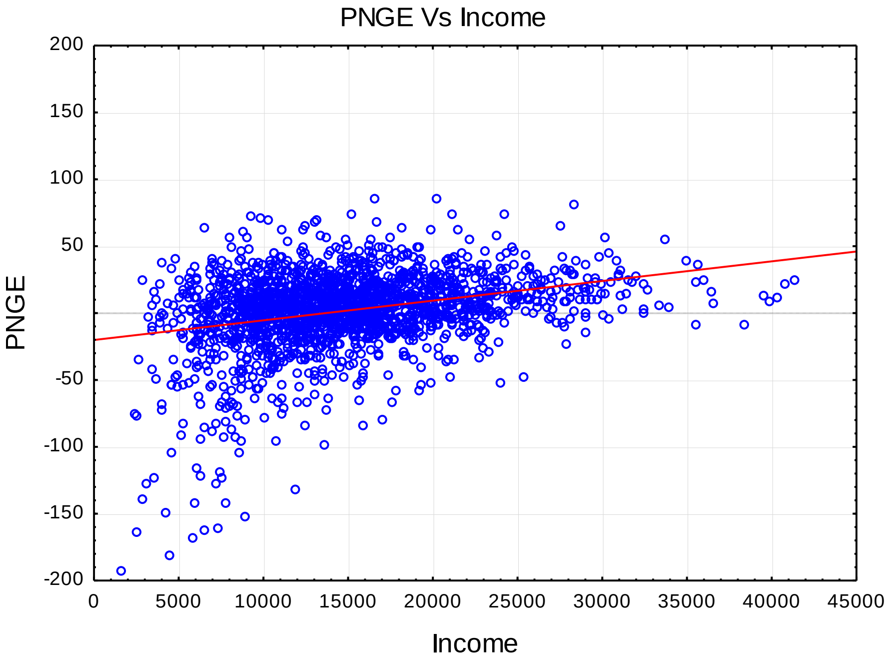
- Low-income participants' faced proportionally higher debts (6.5 time their monthly income), $F(3, 1943)=8.9457$, $p=.00001$
- Low income participants over spend 30% of their earning
- At the end of the program, low income were less likely to balance their account $F(3, 1943)=3.7120$, $p<0.05$



Demographic variables

- A multiple linear regression used Proportional Net Gap End (PNGE) as a DV. Significant regression was found ($F(1554,2)=5.93$, $p<0.01$), yet R^2 was very small ($R^2=0.007$)

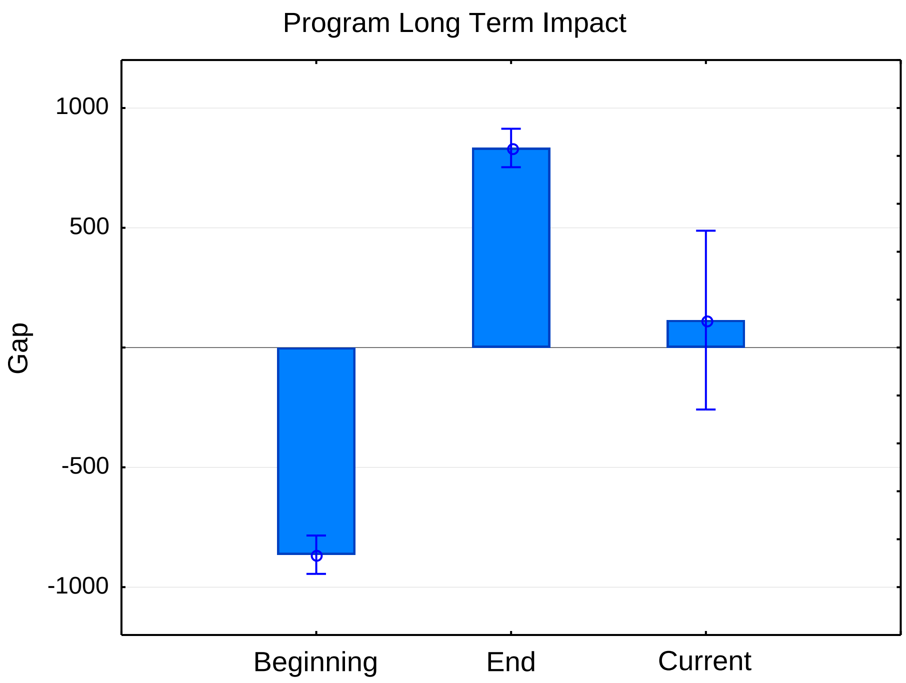
	β	Sig.
Region	-0.01	0.83
Marital status	0.04	0.10
Num of children	-0.06	0.04*
Age	-0.05	0.06
Income level	0.08	0.00**



Stage Ⅱ
Survey Analysis

Results – Survey Analysis

- Gap= 114ILS (SD=3389)
- One-way ANOVA reveal decrease at net gap, $F(2,3867)=111.06$, $p<0.00001$
- Post hoc comparisons reveal that all three conditions differ from each other
- Decrease seems reasonable – similar to an extremely strict diet



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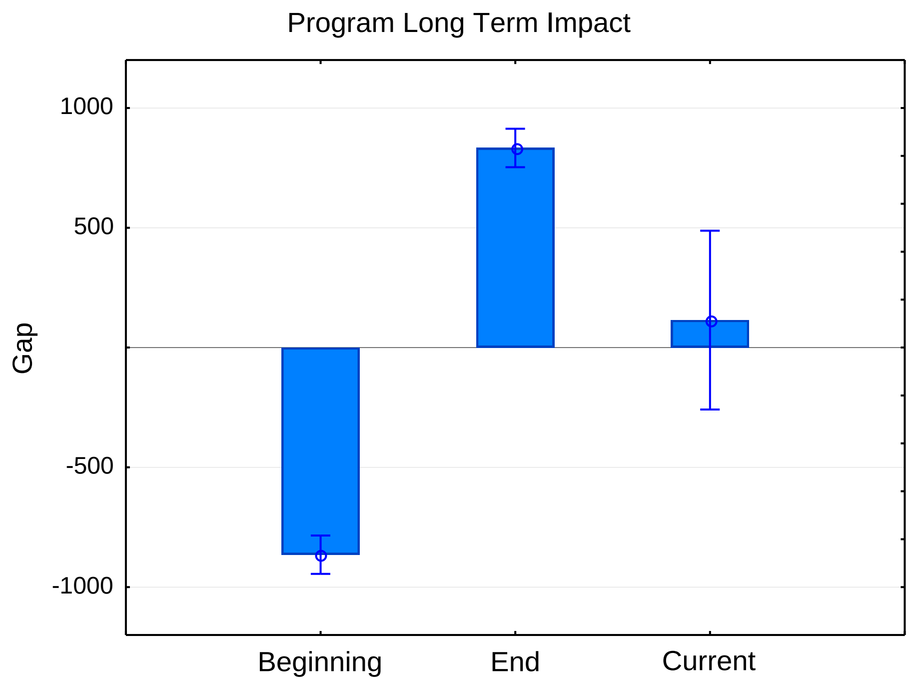
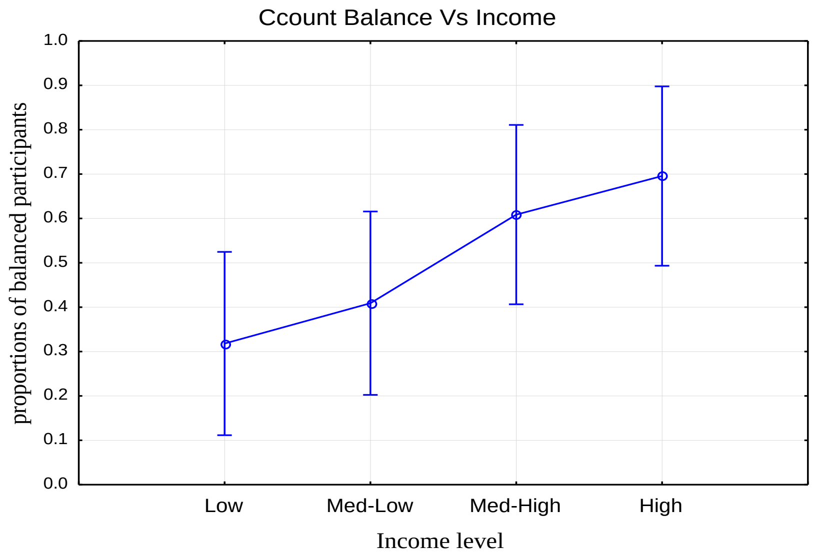


Results – Survey Analysis

- Income effect participants ability to balance their account: $F(3, 86)=2.4128$, $p<0.05$ (one-tailed)
- Significant increase in debt, $t(1350)=2.201$, $p<0.0001$.
  - End of the program debt: M=91,910 ILS (SD=125,769)
  - Current debt: M=133,298 ILS (SD=177,639)



Subjective Measurements

Very positive view toward the program

- 75% - the program had a positive long term impact over their financial state
- 68% - current state is better than it was before the intervention. 7% - current state is worsen than it was
- Average score for current financial condition is 3.2 on a 1 to 5 Likert scale. 83% marked 3 or above on that question
- Assessment of current condition is strongly correlated to debts (P=-0.46)

Financial Capabilities

- Multilinear regression shows that financial capability dimensions can explain 34% of the variance at subjective assessment of current financial condition ($F(84,5)=8.74$, $p<0.0001$; $R^2=0.34$)

	β	Sig.
Choosing products	-0.014	0.885
Staying informed	0.214	0.024*
Planning ahead	0.559	0.000**
Managing money	-0.105	0.270
Financial literacy	0.002	0.960

- Financial literacy and demographic variables were insignificant
- Planning should get special attention

Economic psychology in a nutshell:

אם הייתי מנהל את
חשבון הבנק שלי כמו
את סוללת הסלולרי שלי,
הייתי עשיר!!

If I had managed my bank account like I manage my phone battery, I'd be rich

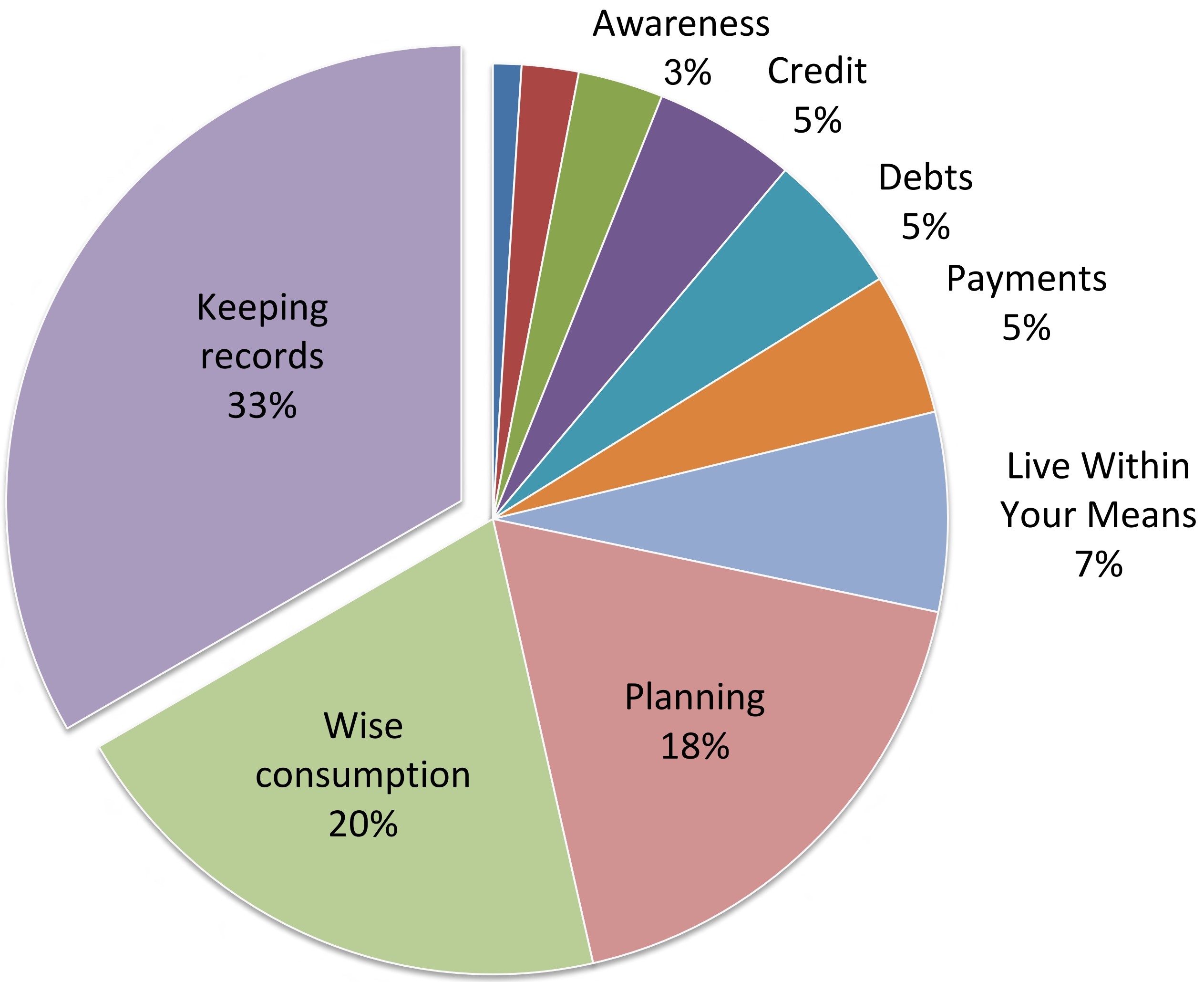
Psychological variables

- Correlation metrics shows that psychological factors are related to several capabilities, in particular self control

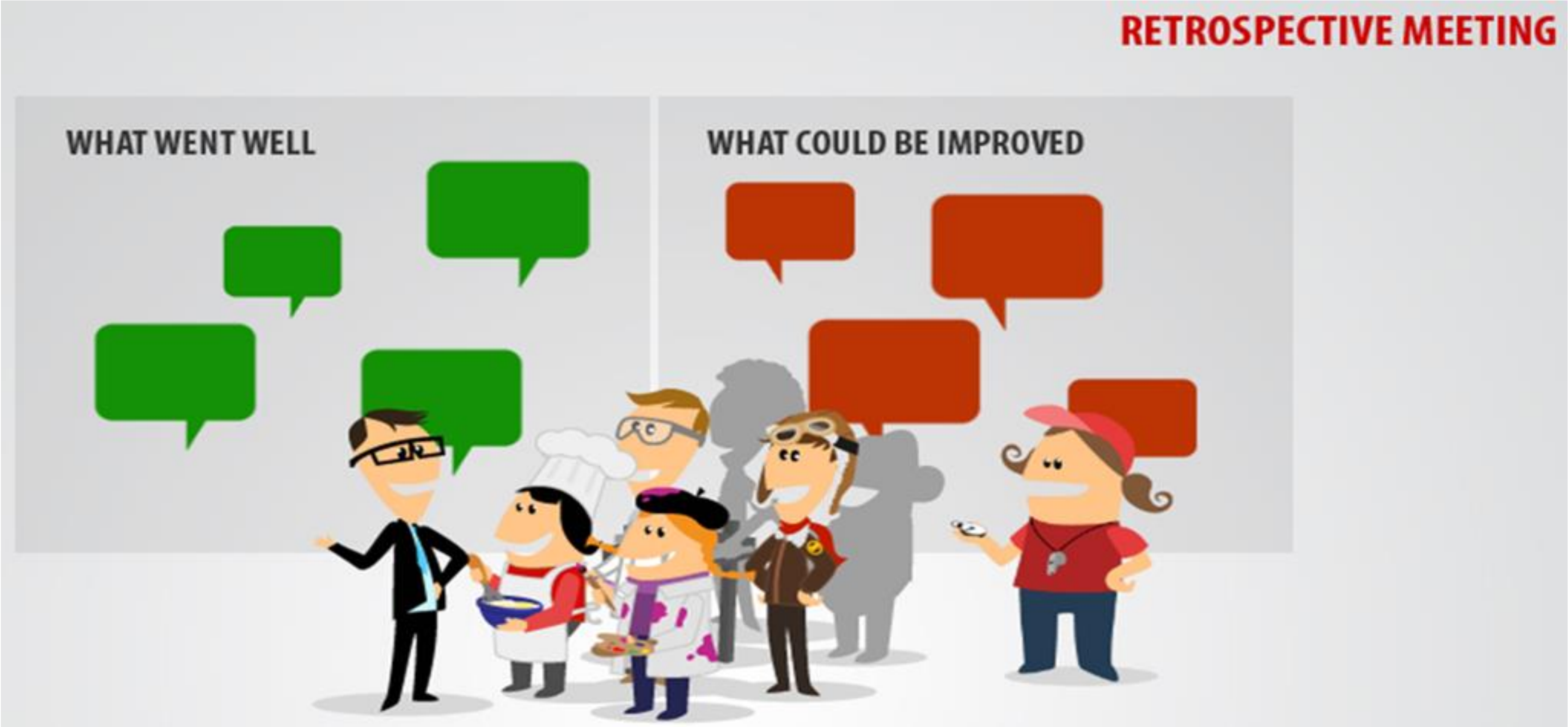
	Choosing products	**Staying inform**	**Planning ahead**	**Managing money**
Self control	0.23*	-0.02	0.31*	0.40*
Procrastination	-0.22*	0.05	-0.13	-0.33*
Extraversion	0.09	0.07	-0.03	0.12
Agreeableness	-0.03	0.05	0.09	-0.01
Contentiousness	0.12	-0.12	0.09	0.38*
Neurotic	-0.12	0.06	-0.28*	0.08
Openness to experience	0.09	-0.04	0.00	0.17

Marked correlations are significant at $p < .05000$

Main principal



To Summarize



Strengths and weaknesses

Strengths:

- Change financial dynamic for the short run
- Positive subjective feeling
- Better ability to balance net gap as compare to their prior condition
- Program impact last for a relatively long duration

Limitations:

- less effective for low income participants
- increase in debts and decrease in net gap comparing to end of the program

Conclusions

- Planning behaviors should receive special attention during the intervention

- The relations between psychology, capability and intervention impact should be further investigated

- Principles very simple: keeping track, smart consumption, planning. Proper financial behavior is easier said than done.. Question is how to help people reinforce positive habits and avoid harmful behaviors?

Thank You for your attention

For future correspondence please contact

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