

A stylized, colorful illustration of a landscape. It features rolling green hills in the foreground and background. On the left, there is a green tree, a purple flower, and an orange flower. A small red bird is flying in the sky. The sky is composed of horizontal bands of blue and white. The title text is overlaid on the upper right portion of the image.

# The Effects of Self-determined Short-term Emergency Savings Accounts of Young Workers in South Korea

**Dong-Ho Jang**  
Namseoul University

**Intae Yoon**  
North Carolina State University

# Goals

- **Introduction of self-determined short-term emergency savings accounts of young workers in a Korean city, entitled “Young Workers’ Short-term and Emergency Savings Account” (Y SESA).**
- **Program evaluation results of Y SESA**
- **Implications to other IDAs**

# Young Workers' Short-term and Emergency Savings Account (Y SESA) – Background 1

- The employment rate of South Korean young adults aged between 15 to 29 is 43.7%, only about 4 out of 10 of them working as of August, 2019 (Korea National Statistical Office [KNSO], 2019a).
- The percentage of young adults whose first employment was less-than-a-year temporary jobs was 8.7% in 2006 (KNSO, 2019b). The percentage jumped to 24.7% for all employments among the young adults in 2019.

# Young Workers' Short-term and Emergency Savings Account (Y SESA) – Background 2

- About **18.4% of the same age cohort in Korea did not get even the minimum wage** of the country as of August 2018 (Kim, 2019)
- Due to the lack of adequate jobs, young workers sometimes have to work even when they are sick. To not lose their jobs, the young cohort tends to sacrifice their health, emotional stability, and social relations (Cheon, 2016).



# Young Workers' Short-term and Emergency Savings Account (Y SESA) – A Solution

- Benchmarking the idea of the Individual Development Accounts (IDAs) in the US
- Seoul Metropolitan City created the country's first matched savings program for young workers in 2015. It offered 1:1 matched savings for its participants.
- As the program became very popular in the country, other provincial or metropolitan governments emulated the program across the country.

# Young Workers' Short-term and Emergency Savings Account (Y SESA)

- Gwangju Metropolitan City is one of those to offer an IDA for the young workers in the city. The city, with a relatively small size of 1.5 million residents, began its IDA program, entitled **“Young Workers' Matched Short-term and Emergency Savings Account” (Y SESA)** in August 2018.

# A Needs Assessment in 2017

- Almost one third of the 500 respondents to the study owed an average **debt** of about \$21,100 (Jang & Beck, 2017).
- Almost a half of all respondents (45.2%) did **not have savings of \$850 or more.**

# Young Workers' Short-term and Emergency Savings Account (Y SESA)

- Y SESA offered 200 participants from low income families a monthly **1:1 matched savings up to \$85 per month for 10 months** along with a voluntary **1- or 2-month long online financial mentoring service.**
- Since its inception, Y SESA has had 1,130 cumulative participants by the end of 2019.



# Eligibility

- **Low-income young workers living in the City**
- Aged between **19 and 39**.
- They were required to have jobs, though types of jobs or employment settings were not considered as an eligibility criterion.
- Therefore, part- or full-time workers were eligible.
- Prospective participants' pre-tax income was to be between **\$510 and \$1,410 per month**.
- To avoid duplications of services, participants using other matched savings programs were ineligible for Y SESA.

# Random Selection

- In June 2018, Y SESA started as a pilot program with **200 participants**.
- A random selection app was used to choose the 200 participants among **2,589 applications**.
- The applicants filed their applications **online**.
- Perceived as a **fair** method
- Expected to **shorten a waiting period** between application and selection and to be cost efficient.

# Y SESA – Matched Savings

- The 1:1 matched savings program provided \$85 per month for 10 months if a participant saved \$85.
- Each participant could have \$1,700 emergency funding by the end of this program.
- One unique feature of Y SESA was that there was no restriction on the saved money.

# Y SESA – Financial Empowerment

- Y SESA's financial empowerment program consisted of **online financial mentoring by external experts**, spending plan **consultations**, an **essay contest** on saving experiences, and weekly **online financial newsletters**.
- The newsletters provided various practical financial knowledge, skills, and information about available resources in the city and the country.



# Online Mentoring – Two Stages

- Focused on **building practical financial skills and addressing concerns**
- Because all participants had employment, online mentoring was chosen over physical meetings.
- Because 9 participants dropped out after being selected, the online mentoring was offered to the remaining 191 participants.
- Out of 191 participants , 144 completed the first stage of the mentoring and learned about how to **monitor their spending**.
- The second stage was about **budgeting** and 67 participants completed the mentoring stage

# Financial Empowerment

- To increase participants' knowledge about financial resources and skills, **weekly newsletters** were sent to them.
- The **essay contest** was to work as **a self-support group** by letting them share their saving experiences and know-hows among participants.

# Evaluation Methods

- A **one-group pretest-posttest pre-experimental design** was used to measure changes in participants' savings, debts, and financial empowerment.
- A **posttest-only control-group experimental design** was added to the study.

R   O<sub>1</sub>   X   O<sub>2</sub>  
R                      O<sub>3</sub>

# Evaluation Methods

- Nine people relocated to another city and were unable to complete this program. Additionally, 14 participants did not complete the posttest survey. Therefore, **posttest data were collected among 177 experimental group members.**
- Because 2,389 applicants were not selected for Y SESA, the sample size for the control group was too big. To reduce the size to a more manageable one, a systematic random sampling method was used to select 200 **control group members. Out of 200, 53% (n=106)** completed an online survey on the same variables that the experimental group answered.



# Questionnaire

- Increased savings, reduced debt, increased financial knowledge, and positive financial behaviors
- In order to measure the last two variables, this study modified the Financial Strain Scale (FSS) of Aldana and Liljenquist (1998), the Financial Fitness Quiz of O'Neill (2002), and the Financial Behavior Scale (FBS) of Grabbie and Joo (2001).
- Respondents' employment status, unemployment experience, and duration of employment were used to investigate any potential impact of Y SESA on participants' employment status. Because this study was an evaluation of Y SESA as a pilot test, data about participant satisfaction were necessary for a better designed program in the future by identifying problematic areas
- The data were collected via self-administered online surveys

# Participants – Experimental Group

|                       |  |                        |
|-----------------------|--|------------------------|
| <b>Gender</b>         | <b>Male</b>                                    | <b>28.2%</b>           |
|                       | <b>Female</b>                                  | <b>71.8%</b>           |
| <b>Age</b>            | <b>Mean</b>                                    | <b>26.58 years old</b> |
| <b>Education</b>      | <b>High school diploma</b>                     | <b>About 1/4</b>       |
|                       | <b>College degree</b>                          | <b>About 3/4</b>       |
| <b>Marital Status</b> | <b>Single</b>                                  | <b>About 90%</b>       |
|                       | <b>Married</b>                                 | <b>9.6%</b>            |
| <b>Housing</b>        | <b>Living in a house owned by family</b>       | <b>46.9%</b>           |
|                       | <b>Monthly rental</b>                          | <b>20.9%</b>           |
|                       | <b>Living in friends' or relatives' houses</b> | <b>15.8%</b>           |
| <b>Household Size</b> | <b>Mean</b>                                    | <b>3.26</b>            |
|                       | <b>Mode</b>                                    | <b>4 (27.15%)</b>      |
|                       | <b>Living alone</b>                            | <b>13.2%</b>           |

# Participants – Experimental Group

|                         |                          |                     |
|-------------------------|--------------------------|---------------------|
| Employment              | Full Time                | 51.6%               |
|                         | Temporary contacted work | 33.2%               |
|                         | Hourly waged part-time   | 14.7%               |
| Income                  | Mean                     | \$1,132 (after tax) |
| Expenditures            | Mean                     | \$726               |
| Cash Assistance Program | Fully                    | 11.6%               |
|                         | Partially                | 1.1%                |
| Late Debt Payment       | Participants             | 6.3% (n=12)         |
|                         | Other household member   | 10.5%               |

# Results

- The experimental group had a higher amount of savings (\$5,300, excluding \$850 matching incentive) than the control group (\$3,667, n=106) upon completion of Y SESA.
- The total remaining balance of all saving accounts substantially increased by \$1,636 from \$3,664 (pretest) to \$5,300 (posttest) on average at the end of the program
  - When including matched funding, about \$6,150 (\$5,300+\$850) on average
- Participants increased their monthly saving amount to \$315 from \$263 on average, or by about \$52, to their various saving accounts during the program.
- The average saving was less than the required \$85 saving per month. Those who felt a financial burden of saving \$85 monthly for the program might have reduced savings to existing accounts and redirected the money to Y SESA to satisfy the \$85 monthly requirement.



## Results – Satisfaction with the Length

- Participants' satisfaction with the length of Y SESA improved from 4.09 at the beginning of the program to 4.29 after completing the program on a 5-point Likert scale ( $p < .05$ ).

# Results – Late Payment & Financial Behaviors

- The late payment rate within 6 months also significantly decreased from 37.9% to 22% ( $p < .001$ ). Participants' financial knowledge significantly increased from 2.99 to 3.59 on a 5-point Likert Scale ( $p < .001$ )
- Their positive financial behaviors were also improved from 3.61 to 3.87 upon completing Y SESA ( $p < .001$ ).

# Results - Savings

- Both groups answered an online survey at the end of the program about Y SESA's key targeted areas: savings, debt and credit management, financial knowledge, financial behaviors, and employment status.
- In terms of savings, people in the control group saved about \$324 per month on average, while the experimental group saved \$315 without Y SESA's matching.
- Yet, independent samples t-test shows that the \$19 difference was not statistically significant. The remaining saved balance of the control group was \$3,667. That of the experimental group was \$5,300, excluding Y SESA's \$850 matching incentive. The \$1,663 difference appeared to be big, yet was statistically insignificant ( $p=.097$ ).

# Results – Debt Behaviors

- When asked about respondents' late payment experiences in the past 6 months, the control group had a significantly higher late rate than the experimental group (43.4% and 22% respectively).
- There were a higher percentage of young workers who planned to borrow money within 6 months in the control group than in the experimental group by 17.2% (30.2% vs. 13%). Both differences between the two groups were statistically significant ( $p < .001$ ).



## Results – Financial Knowledge

- The experimental group scored 3.59 out of 5 on average on financial knowledge scale, while the control group had 3.18 on average. The 0.41-point difference was statistically significant ( $p < .001$ ). The former group also indicated more positive financial behaviors on a 5-point Likert scale on average than the control group by 0.40 points (4.05 vs. 3.65) ( $p < .001$ ).

# Results - Employment

- Interestingly, **there was a significant difference between the two groups in the length of unemployment.**
- While the control group had 2.02 months of unemployment on average, the experiment group had just 1.06 months on average ( $p=.015$ ). These results suggest that both groups can switch jobs or are likely to be unemployed at similar percentages. But, the participants in Y SESA might have experienced a shorter gap period by almost a half until next employment.

# Implications – Financial Competency

- Along with the savings component, Y SESA's efforts to empower participants' financial competency showed hopeful results.
- Participants' financial knowledge and positive behaviors significantly increased to 3.59 and 4.05 on the 5-point Likert scales. These results were better than those of the control group (3.18 and 3.65). Their late payment rate decreased by 15.9 % from 37.9% to 22.6%. These financial empowerments were made possible through online mentoring, financial literacy information, emergency expenditure planning consulting, and money clinics.
- Therefore, offering financial empowerment components along with IDA or a similar program can be much more beneficial beyond just saved money (Rohe et al., 2005).

# Implications – A Short-Term

- Also, a short-term IDA or similar program could be a good idea rather than a long-term program. Y SESA lasted only 10 months, which was shorter than other IDAs in Korea. Because of this short term, the savings were smaller.
- In spite of the small savings, **almost 96% of the participants completed the program.** As attribution rate of all installment savings accounts in Korea was about **40.8%** in 2016 (You, 2017).

# Implications – Short-term & Phenomenal Completion Rate

- The participants became more satisfied with the 10-month timeframe upon completing Y SESA. **Success builds on success.**
- The completion was a success to the participants, and the success was achieved in only 10 months. Offering a reasonably short-term program can be another empowerment to the financially vulnerable.



# Implications – Self Determination

- Self-determination of the saved money appeared to be another contributing factor to a high level of satisfaction among the participants.
- The aforementioned essay contest among the participants revealed some insight about what motivated the participants to complete Y SESA. It was common for participants to have continuously changing, not a static, “dreams” about how they would spend the savings.

# Implications – Matching Amount

- Gwangju Metropolitan City recently conducted another needs assessment of an installment savings program to 641 potential participants (Jang, 2019).
- The program requires participants to save \$85 each month for 6 months. In return, the program adds about \$25 (or about \$4 per month) to the saved amount as an interest payment (about 4.75%).
- Out of 483 responses, about 98% (n=472) indicated that they would join the saving program. Even though its incentive would be much smaller than the 1:1 matching, the program still appeals to prospective participants. As key interest rates are very low in recent years, such a small incentive is attractive and to be considered.

# Implications – Burden

- Findings of this study also present a benchmark for an appropriate savings requirement for low income young workers in Korea. Surprisingly, there were no significant differences between the control group and the experimental group in their own monthly savings amounts.
- Y SESA's participants were able to increase their monthly savings amount by only about \$52 from \$263 to \$315, instead of being \$348 (\$263+\$85 monthly matching). That means that the \$85 required savings requirement must have been a burden for many of the participants and they must have stopped or reduced saving to their existing accounts.
- Considering their monthly income was around \$850, it was an understandable result. Therefore, **a higher saving requirement is not necessarily desirable for this income bracket.** A high amount of required savings can hurt cash flows of those who can barely save even \$85 per month.

# Future Studies

- Y SESA's primary component was **matched savings** from the city. **Financial empowerment** was supplemental.
- We do not know which one contributed more to its successful outcomes.
- As the participants were provided a wide range of financial empowerment service, the service might have caused the positive change, not the matched savings. Another set of an experimental group and a control group would be necessary to test causality of financial empowerment service.



## Future Studies

- This study needs a **long-term follow up** with the experimental groups to measure how the participants utilize newly gained knowledge and whether they continue positive financial behaviors without financial consultations and mentoring.



# References

- Aldana, S. G., & Liljenquist, W. (1998). Validity and reliability of a financial strain survey. *Financial Counseling and Planning*, 9(2), 11-18.
- Cheon, J. (2016). *Why we get poor as we study*. Cy's Planet.
- Grable, J. E. & Joo, S. (2001). A further examination of financial help-seeking behavior. *Financial Counseling and Planning* 12(1): 55-66.
- Jang, D. (2019). *A research on outcomes and development plan of Gwangju Youth Emergency Account*. Gwangju Metropolitan City.
- Jang, D., & Beck, G. (2017). *A survey on debt among the youth in Gwangju Metropolitan City*. Department of Youth, Gwangju.
- Kim, B. (2019). Characteristics of young workers aged 15-19 under the minimum wage. *Labor Review*, 167: 66-68.
- Korea National Statistical Office. (2019a). *The labor force survey*. September. 2019.
- Korea National Statistical Office. (2019b). *The labor force survey: A special survey on the youth*. May. 2019.
- O'Neill, B. (2002). Preliminary assessment of financial practices: The financial fitness quiz. *Journal of Personal Finance*, 2(1): 22-28.
- Rohe, W. M., Gorham, L. S., & Quercia, R. G. (2005). Individual development accounts: Participants' characteristics and success. *Journal of Urban Affairs*, 27(5), 503-520.
- You, Y. (2017, February 20). One out of three bank deposit and savings subscribers canceled in the last year. *Joongang Ilbo*.