Activities in Neighborhood Associations in Japan: Discovering the Drivers of Procedural Utility

International Workshop – Comparative Study on Happiness
Session 5
Tue 25 May, 2014

Dr. Tim Tiefenbach
Senior Research Fellow
German Institute for Japanese Studies (DIJ)
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Instead of an introduction (sorry for the cheap plugs):

**Happiness in Japan (first results on 3-11)**

**Gender and Age in Japan**

**The effect of 3-11 on the Germans (SOEP)**

**The effect of 3-11 in Japan**
Previous empirical findings

Tiefenbach and Kohlbacher (2013) report that women in Japan show a negative correlation with happiness when their household belongs to neighborhood associations or self-governing bodies.

Tiefenbach and Kohlbacher (2014) find no positive relation between personal membership in NHAs and SWB.

These are puzzling results for many reasons:

**Participation in the community and political participation** are unequivocally associated with higher levels of subjective well-being. For the latter, the discussion focuses rather on the causal direction as well as on the distinction between indirect and direct participation.

**Social capital** in general is associated with higher levels of SWB.
Activities in Neighborhood Associations in Japan: Discovering the Drivers of Procedural Utility

Research project

Reconfirm relationship between NHA participation/membership and happiness

Study 1:
National Survey on Life Style Preferences 2011

Study 2:
Online sample

Further research:
Discover drivers of procedural utility of people actively engaged in neighborhood associations
The literature

Happiness and life satisfaction are positively correlated with participation in the community and political participation.

Democratic institutions and happiness (right to participate)
Frey and Stutzer (2002)

Active participation and happiness:
Wallace and Pichler (2009): Civic Participation
Pacheco and Lange (2010): Political Participation
Leung et al. (2011): Political Participation

Positive correlation can also be an indicator for reverse causality
Weitz-Shapiro and Winters (2008)
Flavin and Keane (2012)
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Theoretical background

Procedural utility (Benz 2007) (Self-Determination-Theory)

- autonomy
- relatedness
- competence

Institutions → Interactions → Autonomy → Relatedness → Competence → Procedural Utility → Well-being

Broaden-and-build theory (Fredrickson): Happiness as activator

When people reach a certain level of positive affect they open up and are interested in topics and activities of a broader range

Happiness → High activity level (also pol. participation) → Happiness
What are the features of Neighborhood Associations in Japan

(1) Often people do not join NHAs voluntarily, they consider it to be an obligation
   >> This contradicts the “autonomy” part of procedural utility

(2) NHAs activities are not really known for fostering any “skills” and “competences” and neither are they know for helping people to make more autonomous decisions
   >> Interpersonal relationships are the only source of procedural utility in NHAs
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Three possible theories:

T1  Feelings of obligation could have negative happiness effects which might outweigh the positive effects usually associated with community activities

H1:  Involuntary NHA participation does not show a positive correlation with happiness

T2  If interpersonal relationship is the only driver of procedural utility in NHA then controlling for loneliness already filters out all the good effects of NHA participation

H2:  When controlling for subjective loneliness NHA participation will show no positive correlation with happiness
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Three possible theories:

T3: If positive affect and happiness in general lead to a higher level of activity then:

H3: NHA participation will not show a positive correlation with happiness when controlling for other activities
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The approach

Data
National Survey on Lifestyle Preferences (NSLP) 2011

Variables
Dependent: Happiness
Independent: Participation in neighborhood association (*chounaikai*) and/or self-governing body (*jichikai*)

Method
Multiple Regression Analysis
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The data: National Survey on Lifestyle Preferences

Aim: Assess the changes and needs of the Japanese people to improve policy making under economic stagnation.

However: not designed with an academic propose in mind

Period: ('71) '72, '75, '78, '81, since '84 annually in three-year blocks

Actual Data: 2011

Sample size: 5000 respondents (3578 answers, respond rate: 71.5%)

Respondents: 15-80 years old

Length: ca. 37 questions, 12 pages
Variables of Interest: Happiness question

NSLP 2011
Question Nr. 1
Wording: „How happy are you currently?“
[Currently, you are how much happy?]
Scale: 0-10 (very unhappy -> very happy)
Variables of Interest:

Household in NA (0/1):
Are you or someone in your household a member in a neighborhood association or a self-governing body?

Loneliness index (1-5): Mean score of four domains: (1) Family, (2) Work, (3) Community, (4) School

If household in NA

Obligation (0/1): Because (1) its an obligation (2) a rule where I live (3) I was persuaded (4) other people around me participate too

Personal Participation (0/1) people who are either:
Regular personal participation: Regularly participating
Experienced pers. participation: Participated in the past
Socio-demographic and other control variables

- Gender
- Income
- Age / Age²
- Married
- Employment relation
- Children (number, under 6 years dummy)
- Homeowner
- Prefectures
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The method:
Multiple regression (ordinary least squares)

\[ \text{HAP}_i = \alpha + \sum_j \beta_j \text{PAR}_{j,i} + \sum_k \gamma_k \text{C}_{k,i} + \varepsilon \]

Variables
- HAP = happiness
- PAR = Pol. participation (dummy)
- C = Controls

Coefficients
- \( \alpha \) = intercept
- \( \beta, \gamma \) = marginal effects
- \( \varepsilon \) = error term

Subscripts
- \( i \) = number of individuals (obs.)
- \( j, k \) = number of pol. participation, control variables
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Descriptives: Happiness distribution in the NSLP 2011
## Regression results:

<table>
<thead>
<tr>
<th>NSLP 2011 VARIABLES</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household in NA</td>
<td>-0.226**</td>
<td>-0.342**</td>
<td>-0.158</td>
<td>-0.136</td>
<td>-0.231+</td>
<td>-0.081</td>
</tr>
<tr>
<td>Household not in NA</td>
<td>reference group</td>
<td></td>
<td>reference group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loneliness Index</td>
<td>-0.793***</td>
<td>-0.885***</td>
<td>-0.697***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>2,855</td>
<td>1,446</td>
<td>1,409</td>
<td>2,910</td>
<td>1,474</td>
<td>1,436</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.242</td>
<td>0.248</td>
<td>0.228</td>
<td>0.134</td>
<td>0.112</td>
<td>0.147</td>
</tr>
</tbody>
</table>
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Loneliness as a mediator of participation in the community
(N = 2855)

- Participation in NA
- Covariates
- Happiness

\[ a = -0.079^* \]
\[ b = -0.794^{***} \]
\[ c_{Y'} = -0.229^{***} \]
\[ a \times b = 0.063^* \]
\[ c = -0.166^+ \]
\[ P_M = 37.6\% \]
Participation in NA and Loneliness

- Including loneliness in the controls yields a stronger negative correlation between NA participation and happiness.
- A reason for this effect is the mediating role of loneliness, which can explain to some extent the positive SWB effects of NA participation.
- However, even when loneliness is excluded from the controls, a negative correlation between NA participation and SWB can still be found in the case of women.
### Household participation in NA and feeling of obligation

<table>
<thead>
<tr>
<th>NSLP 2011 VARIABLES</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household in NA &amp; obligation</td>
<td>-0.341**</td>
<td>-0.543**</td>
<td>-0.190</td>
</tr>
<tr>
<td>Household in NA &amp; no obligation</td>
<td>-0.047</td>
<td>-0.099</td>
<td>-0.028</td>
</tr>
<tr>
<td>Household not in NA</td>
<td>reference group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>2,911</td>
<td>1,475</td>
<td>1,436</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.137</td>
<td>0.119</td>
<td>0.148</td>
</tr>
</tbody>
</table>

- Feeling obligated to participate in NA is negatively associated with SWB in the case of women
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### Personal participation frequency

<table>
<thead>
<tr>
<th>NSLP 2011 VARIABLES</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular personal participation</td>
<td>0.267*</td>
<td>0.083</td>
<td>0.434**</td>
</tr>
<tr>
<td>Experienced pers. participation</td>
<td>0.037</td>
<td>-0.096</td>
<td>0.143</td>
</tr>
<tr>
<td>Not participating in NA</td>
<td>reference group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>2,911</td>
<td>1,475</td>
<td>1,436</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.135</td>
<td>0.110</td>
<td>0.152</td>
</tr>
</tbody>
</table>

- The coefficients of household participation and personal participation have different signs (- vs +)
- Participating frequently in NA is positively associated with SWB only in the case of men
The negative effect of household obligation overweighs the positive effect of personal participation in the case of women.
Short summary of the NSLP 2011 findings

- The same survey shows different signs of NA participation depending on whether it is measured at the household or personal level.
- The feeling of obligation that the household has to participate and the actual participation are likely to have different effects.
- The positive effects of personal participation are outweighed by the negative effects of feelings of obligation.
- Feelings of obligation are especially a problem for women.
DIJ Online Survey: Participation in the community

N = 1660

Dependent variable: Happiness

<table>
<thead>
<tr>
<th>Participation in NHA</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>415</td>
<td>415</td>
</tr>
<tr>
<td>NO</td>
<td>415</td>
<td>415</td>
</tr>
</tbody>
</table>

Wording: „How happy are you currently?“
[Currently, you are how much happy?]

Scale: 0-10 (very unhappy -> very happy)
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DIJ Online Survey: Participation in the community

**NHA participation:** People who participate in NHA activities more than 1x a year

**Loneliness:** How lonely did you feel in the last four weeks?

**Overall activity index:** times a year respondents participate in associations in general (1-52)

**Obligation:** Item asking voluntariness of the participation

“„In case you could freely decide your rate of participation, would you participate at the same rate as now? “

1. Yes  
2. No, I would participate more often  
3. No, I would participate less  
4. No, I wouldn’t participate at all
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Happiness in the DIJ Online Survey
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Frequency of personal participation stratified by gender

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHA Participation</td>
<td>0.297*</td>
<td>0.355*</td>
<td>0.147</td>
</tr>
<tr>
<td>Not participating</td>
<td>Reference group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>1,351</td>
<td>644</td>
<td>707</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.134</td>
<td>0.080</td>
<td>0.157</td>
</tr>
</tbody>
</table>

- Personal participation is positively correlated with SWB, especially for women
### Activities in Neighborhood Associations in Japan: Discovering the Drivers of Procedural Utility

#### Frequency of pers. participation while controlling for other activities

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHA Participation</td>
<td>0.275**</td>
<td>0.309*</td>
<td>0.190</td>
</tr>
<tr>
<td>Not participating Reference group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loneliness</td>
<td>-0.930***</td>
<td>-0.843***</td>
<td>-0.995***</td>
</tr>
<tr>
<td>Observations</td>
<td>1,351</td>
<td>644</td>
<td>707</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.337</td>
<td>0.264</td>
<td>0.374</td>
</tr>
</tbody>
</table>

- Further controlling for loneliness doesn’t change the results
### Frequ. of participation controlling for other activities & loneliness

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHA Participation</td>
<td>0.186</td>
<td>0.271</td>
<td>-0.007</td>
</tr>
<tr>
<td>Not participating</td>
<td></td>
<td>Reference group</td>
<td></td>
</tr>
<tr>
<td>Activity Index</td>
<td>0.011***</td>
<td>0.008+</td>
<td>0.016***</td>
</tr>
<tr>
<td>Observations</td>
<td>1,351</td>
<td>644</td>
<td>707</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.141</td>
<td>0.083</td>
<td>0.170</td>
</tr>
</tbody>
</table>

- When controlling for the overall activity level the positive correlation between NHA participation and happiness disappears
## Frequency of pers. participation while controlling for obligation

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHA participation obligation</td>
<td>0.076</td>
<td>0.089</td>
<td>-0.067</td>
</tr>
<tr>
<td>NHA participation no obligation</td>
<td>0.563***</td>
<td>0.795***</td>
<td>0.349+</td>
</tr>
<tr>
<td>Not participating</td>
<td></td>
<td>Reference group</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>1,351</td>
<td>644</td>
<td>707</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.140</td>
<td>0.092</td>
<td>0.160</td>
</tr>
</tbody>
</table>

- Differentiating between voluntary and involuntary NHA participation shows that only the former shows a positive correlation with happiness.
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Frequ. of participation controlling for obligation & other activities

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHA participation obligation</td>
<td>0.136</td>
<td>0.092</td>
<td>0.126</td>
</tr>
<tr>
<td>NHA participation no obligation</td>
<td>0.442***</td>
<td>0.669**</td>
<td>0.250</td>
</tr>
<tr>
<td>Not participating</td>
<td>Reference group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loneliness</td>
<td>-0.922***</td>
<td>-0.834***</td>
<td>-0.990***</td>
</tr>
<tr>
<td>Observations</td>
<td>1,351</td>
<td>644</td>
<td>707</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.339</td>
<td>0.272</td>
<td>0.374</td>
</tr>
</tbody>
</table>

- Controlling for loneliness has a slightly negative impact on the correlation between NHA participation and happiness, but doesn’t change the overall result.
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Frequ. of participation controlling for obligation & other activities

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHA participation obligation</td>
<td>-0.005</td>
<td>0.045</td>
<td>-0.207</td>
</tr>
<tr>
<td>NHA participation no obligation</td>
<td>0.436**</td>
<td>0.702**</td>
<td>0.186</td>
</tr>
<tr>
<td>Not participating</td>
<td></td>
<td>Reference group</td>
<td></td>
</tr>
<tr>
<td>Overall activity index</td>
<td>0.010**</td>
<td>0.006</td>
<td>0.015***</td>
</tr>
<tr>
<td>Observations</td>
<td>1,351</td>
<td>644</td>
<td>707</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.146</td>
<td>0.093</td>
<td>0.173</td>
</tr>
</tbody>
</table>

- Controlling for the overall activity level has a slightly negative impact on the correlation between NHA participation and happiness, but doesn’t change the overall result.
- The overall activity level is only important for men.
Short summary of the findings from the DIJ Online Survey

• Controlling for loneliness is not significantly changing the results

• Men show a positive SWB correlation for any kind of activity

• Women show a positive SWB correlation for voluntary NHA participation in neighborhood associations

• The effects of voluntariness are more prominent in the case of women
### Short summary of *study 1* and *study 2*

<table>
<thead>
<tr>
<th></th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness</td>
<td>○</td>
<td>Δ</td>
</tr>
<tr>
<td>Other activities</td>
<td>n.a.</td>
<td>Δ</td>
</tr>
<tr>
<td>Voluntariness</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Drivers of Procedural Utility

Estimate the SWB of people who are actively participating in NA

Skills
Did you acquire new skills?
Did you get better at skills you already possess?

Friends
Did you get deeper relationships to people you already knew
Did you find new friends?

Opinion
Is it easier to utter your opinion?
Is your opinion better accepted?

Procedural Utility Index: Average mean of each single item
Procedural Utility (PU) stratified by gender

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ALL hap</th>
<th>WOMEN hap</th>
<th>MEN hap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural Utility Index</td>
<td>0.278**</td>
<td>0.238</td>
<td>0.345**</td>
</tr>
<tr>
<td>Observations</td>
<td>696</td>
<td>332</td>
<td>364</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.092</td>
<td>0.045</td>
<td>0.132</td>
</tr>
</tbody>
</table>

- **Procedural Utility** helps to estimate the SWB level of men.
Different forms of PU for monthly participation

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ALL Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hap</td>
</tr>
<tr>
<td>Skills</td>
<td>0.397*</td>
</tr>
<tr>
<td>Friends</td>
<td></td>
</tr>
<tr>
<td>Opinion</td>
<td></td>
</tr>
<tr>
<td>Procedural Utility Index</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>206</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.049</td>
</tr>
</tbody>
</table>

- **Skills** and **opinion** are significantly related to SWB in the case of monthly participation.
### Different forms of PU for monthly participation

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ALL Yearly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hap</td>
</tr>
<tr>
<td>Skills</td>
<td>0.122</td>
</tr>
<tr>
<td>Friends</td>
<td></td>
</tr>
<tr>
<td>Opinion</td>
<td></td>
</tr>
<tr>
<td>Procedural Utility Index</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>490</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.087</td>
</tr>
</tbody>
</table>

- **Friends** are significantly related to SWB in the case of yearly participation.
Friends and SWB stratified by voluntariness and gender

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Obligation</th>
<th>No Obligation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ALL</td>
<td>WOMEN</td>
</tr>
<tr>
<td>friends</td>
<td>hap</td>
<td>hap</td>
</tr>
<tr>
<td></td>
<td>0.247*</td>
<td>0.343*</td>
</tr>
<tr>
<td>Observations</td>
<td>388</td>
<td>209</td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.062</td>
<td>0.077</td>
</tr>
</tbody>
</table>

- Friends are positively associated with SWB for women if they feel obligated and for men if they participate voluntarily.
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Short summary: Drivers of Procedural Utility

• Interpersonal relationships (=friends) are the strongest driver of procedural utility

• Procedural utility helps to predict the SWB level especially of men

• Depending on the frequency of participation different drivers of procedural utility differ

• Voluntariness has a different effect on procedural utility depending on gender
Conclusion: Summary

⇒ The voluntariness of the participation can explain the different findings found in study 1 and study 2

⇒ Despite involuntariness having negative effects, procedural utility still can be gained by NHA activities

Further research is needed to investigate the relationship between voluntary and involuntary participation and different drivers of procedural utility
Thank you for your attention!
Activities in Neighborhood Associations in Japan: Discovering the Drivers of Procedural Utility

Sorry for the cheap plugs (again!):

**Happiness in Japan (first results on 3-11)**

**Gender and Age in Japan**

**The effect of 3-11 on the Germans (SOEP)**

**The effect of 3-11 in Japan**