SECTION 2: BEHAVIOR AND PSYCHO-SOCIAL FACTORS



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10. PSYCHO-SOCIAL FACTORS ASSOCIATED WITH SAVINGS BEHAVIOUR OF UNDERGRADUATE STUDENTS, BUSINESS ADMINISTRATION EXTENSION PROGRAM, SRINAKHARINWIROT UNIVERSITY

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Introduction

Saving rate is one of the significant economic indicators for developing the country on the stable growth. Individual, not only country, should realize the necessity of saving for life long living. Small-sized family, high-technology living and globalization stimulate people to carefully make household financial planning through interesting saving instruments. Nonetheless, household's insufficient saving rate have been the problem in Thailand.

Saving is one of the most life-long promising activities in the standard life-cycle model that is both a difficult cognitive problem and a difficult self-control problem. To perform saving behaviour incorporates futuristic, forward-looking, emotional and rational controllability.

Banks, Blundell and Tanner (1998) show, for example, that consumption drops sharply as individuals retire and their incomes drop. They have simply not saved enough for retirement. Indeed, many low to middle income families have essentially no savings whatsoever. The primary cause of this lack of saving appears to be self-control (Mullainathan & Thaler, 2000). O'Donoghue and Rabin (1999) present an explanation based on procrastination and hyperbolic discounting. Individuals typically show very sharp impatience for short horizon decisions, but much more patience at long horizons. If people procrastinate about joining the savings plan, then it should be possible to increase participation rates simply by lowering the psychic costs of joining.

Economic theories describe the way of people should do, normative, not in the way of people really do, descriptive. In order for economists to understand actual household behaviour, people must realize the psychology attached to the behaviour and the theories can be better developed.

A review of the psychological literature uncovered models for the prediction of behavioural intention and behaviour. The theory of Planned Behaviour (TPB) has recently been widely used as a model for the prediction of behavioural intentions and/or behaviour, even almost all health behaviours including economic behaviours such as purchase intention (Caprara, Barranelli & Guido, 1999; 2000).

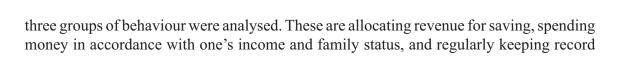
Savings Behaviour

The savings behaviour, which should be defined in terms of Target, Action, Context, and Time, according to the Theory of Planned Behaviour, and in the context of the population, was originated from the pilot study. After the raw data has been summarized,





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Savings Behaviour and Theory of Planned Behaviour

Ajzen's Theory of Planned Behaviour (TPB) is the psycho-social theory to explain the intention and/or behaviour, which was developed from Theory of Reasoned Action (TRA) with extending the volitional control boundary through the addition of a perceived behavioural control (PBC) construct. The TPB is one of the suitable theories for predicting savings behaviour because of the uncertainty of volitional control in many saving decisions.

The Factors of Savings Behaviour according to Economic Theory

In the context of traditional macroeconomic theories, savings behaviour was studied parallel with income and consumption. Modigliani's life-cycle model and Friedman's permanent income theory were suggested that further interest rates, income and age were significant factors to influence savings behaviour. However, the savings behaviour was measured in terms of the amount of money that occurred. Nonetheless, the research, mainly follow the Ajzen's theory.

Objectives of the Study

of earnings and expenses.

- To examine the relationship between the attitude toward savings behaviour, subjective norm relating to savings behaviour, and perception of behavioural control over savings behaviour (direct and indirect measures).
- To identify factors affecting intention to perform savings behaviour.
- To determine variables predicting savings behaviour.

Hypotheses

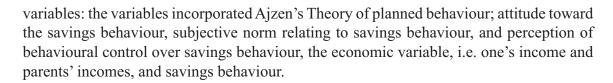
Based on the review of literature three hypotheses were proposed for the research:

- Behavioural beliefs on savings behaviour will be positively correlated with attitude toward savings behaviour; normative beliefs will be positively correlated with subjective norm on savings behaviour; Control beliefs will be positively correlated with perceived behavioural control on savings behaviour.
- Attitude toward savings behaviour, subjective norm on savings behaviour and perceived behavioural control on savings behaviour together will significantly predict intention to perform savings behaviour.
- Intention to perform savings behaviour, perceived behavioural control, and economic variables; personal income and parents' incomes, together will significantly predict savings behaviour.

Method

This research was constructed to study the relationship amongst the following





Participants

The target population for the study was 496 undergraduate junior and senior students of Business Administration Extention Program, Srinakharinwirot University, Bangkok, Thailand. The samples for the study were 264 students, mostly female (84.5%); single marital status (97.3%). The average age of the sample was 23.27 years; ages ranged from 20 to 45 years. The average income of the sample was 8,762.25 baht per month, mainly earned from working. Their parents' average income was 18,101.45 baht per month.

Materials

The method to construct the survey questionnaire started with preliminary phase; thirty two students filled in the preliminary questionnaire for gathering the actions that really directed to savings behaviour; beliefs on savings behaviour, i.e. behavioural beliefs, normative beliefs, and control beliefs; the bipolar adjectives for attitude on savings; the normative referents for savings behaviour; and the control factors on savings behaviour. The constructed questions were selected on the criterion of the 75% accumulated frequency. The two questionnaires were tried out with thirty undergraduate students of Rajamangala University of Technology Phra Nakhon.

Two questionnaires were utilized. The first questionnaire consisted of two parts. The first part addressed demographic and socioeconomic data. The second part composed of the causal variables of the TPB. The second questionnaire focused on three parts of savings behaviour.

The savings behaviour was separately measured in 3 parts: (1) allocating revenue for saving, (2) spending money in accordance with one's income and family status and (3) keeping record of income and expenses. The allocating revenue for saving consists of assigning some portion of the income to be savings in terms of turning revenue into long-term deposit account, set target for the savings amount, limit daily expenses, cumulate amount of money to buy needed things and saving for future expenses. The spending money in accordance with one's income and family status behaviour consists of economically spending, one's affordable spending, sufficiency spending and spending following one's plan. The keeping record of income and expenses consists of grouping and summarizing of income and expenses. The series of questions about allocating revenues and keeping record were rated on a 3-point scale ranging from 0 (none) to 2 (frequently). The series of spending money were rated on 6-point scale ranging from 0 (none) to 5 (always). This part of questionnaire was sent to respondents after the first questionnaire for 4 weeks. All questions were responded in terms of "how often for the last four weeks".

The intention variable was measured by the item "Do you intend to allocate revenue for saving?", "Do you intend to spend money in accordance with your income and family

status?" and "Do you intend to consistently keep record of earnings and expenses?" Responses were rated on a 7-point scale ranging from +3 (definitely) to -3 (definitely not).

Behavioural beliefs were measured in 2 aspects: behavioural belief strengths and outcome evaluations. Behavioural belief strengths directed to present consecutive outcomes with savings behaviour. Responses were rated on a 7-point scale ranging from +3 (extremely likely) to -3 (extremely unlikely). Respondents evaluated the outcomes on a 7-point scale ranging from +3 (good) to -3 (bad). Multiplying the associated behavioural belief strengths and outcome evaluations were conducted to be evidence for those behavioural beliefs.

Attitude was measured for 3 savings behaviours. Attitude toward allocating revenue for saving behaviour was measured in 7 aspects: necessary, economy, admirable, valuable, use money valuably, enthusiastic, and save. Attitude toward spending money in accordance with one's income and family was measured in 6 aspects: admirable, suitable, good, controllable, possible, and acceptable. Attitude toward regularly keeping record of income and expenses was measured in 6 aspects: beneficial, valuable to do, necessary, enthusiastic, valuably use time, and important. These attitudes were selected from preliminary studies. Scores were rated on a 7-point scale.

Normative beliefs were measured in 2 aspects: normative belief strengths and motivation to comply. Normative belief strengths were asked with respect to reference groups for each savings' behaviours. The reference groups composed of parents, relatives, friends, boy/girlfriend, sellers, and financial institutions. Scores were rated on a 7-point scale ranging from +3 (should) to -3 (should not). Motivation to comply with these reference groups was questioned to present the respondents' inspiration to act the savings behaviours.

Subjective norms were measured by injunctive items; i.e. "Most people who are important to me think that I should/should not allocate revenue for saving." and descriptive items; i.e. "Most people who are important to me allocate revenue for saving." for each savings behaviour. Respondents were scored on a 7-point scale ranging from +3(should) to -3(should not) for injunctive or +3(completely true) to -3(completely false).

Control beliefs were deliberated in 2 aspects: control belief strengths and control belief power. Control belief strengths were measured in terms of the opportunity that accessible control factors arise with scales ranging from +3 (strongly agree) to -3 (strongly disagree). Control belief powers were considered as the difficulty or easiness to do savings behaviour when accessible control factors take place. Score were rated on a 7-point scale ranging from +3 (much easier) to -3 (much more difficult).

The likelihood to performing savings behaviour that captured the respondent's sense of self-efficacy and controllability were constructed for perceived behavioural control variable. Four different questions were asked in each savings' behaviour on a 7-point scale.

Procedure

A survey method was used. Following Ajzen's suggestion to collect the data according to the Theory of Planned Behaviour, the predictor variables, which are on

the first questionnaire, was gathered before savings behaviours, which are in the second questionnaire, for 4 weeks.

The hypothesized relationships were tested by the use of various statistical analyses like Spearman's correlation analyses and multiple regression analysis using SPSS.

Results

Correlation coefficients were calculated between savings behaviour (Bev), one's income (OI), parents' income (PI), behavioural beliefs (BB), attitude toward savings behaviour (Att), normative beliefs (NB), subjective norm (SN), control beliefs (CB), perceived behavioural control (PBC), and intention to saving (Int).

Table 1: Pearson Correlation Coefficients between Variables and Savings Behaviour

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------|---|-------|------|--------|--------|--------|--------|--------|--------|--------|
| 1. Bev | - | .141* | .103 | .322** | .244** | .180** | .122* | .197** | .377** | .147* |
| 2. OI | | - | .009 | .090 | .049 | .009 | .036 | 082 | .054 | 087 |
| 3. PI | | | - | 014 | .009 | 020 | .103 | 042 | .022 | .078 |
| 4. BB | | | | - | .426** | .317** | .338** | .329** | .523** | .270** |
| 5. Att | | | | | - | .511** | .304** | .295** | .476** | .109 |
| 6. NB | | | | | | - | .332** | .309** | .452 | .096 |
| 7. SN | | | | | | | - | .461** | .244** | .275** |
| 8. CB | | | | | | | | - | .284** | .313** |
| 9. PBC | | | | | | | | | - | .207** |
| 10. Int | | | | | | | | | | _ |

^{**} *p* < .01, **p* < .05

As shown in Table 1, theory of planned behaviour variables, one's income and savings behaviour were strongly related to each other. Parents' income was not significantly correlated with any variables. One's income was significantly related to savings behaviour only $(r_s = .141^*, p < .05)$.

Table 2: Spearman Correlation Coefficients between Direct and Indirect Measure Variables of TPB

| Direct Variables and Indirect Variables | $r_{\rm s}$ | |
|---|-------------|--|
| Behavioural beliefs and Attitude toward the behaviour | .51** | |
| Normative beliefs and Subjective norm | .49** | |
| Control beliefs and Perceived behavioural control | .25** | |

^{**} p < 0.1

The correlation results to test the first hypothesized relationship between behavioural beliefs and attitudes toward savings behaviour, found that they had a statistically



significant positive correlation ($r_s = .511, p < .01$). Normative beliefs and subjective norm were statistically significant positive correlation ($r_s = .491, p < .01$). Control beliefs and perceived behavioural control were also statistically significant positive correlation. ($r_s = .491, p < .01$).

Table 3: Multiple Regression Analyses to test Relationship between Variables and Intention to saving

| Variables | В | SE B | β | |
|-------------------------------|---------|---|------|--|
| constant | 362 | .682 | | |
| Attitude toward the behaviour | .054** | .017 | .183 | |
| Subjective norm | .105*** | .030 | .187 | |
| Perceived behavioural control | .122*** | .018 | .391 | |
| $R^2 = .346 \ (p < .001)$ | *** / | *** <i>p</i> < .001. ** <i>p</i> < .01. | | |

The multiple regression to test the second hypothesized prediction power of intention with attitudes toward saving behaviour, subjective norms and perceived behavioural control, found that attitude, subjective norm and perceived behavioural control together significantly predicted 34.60% of the variance in intention to perform savings behaviour at the .001 significance level with significant standardized coefficient (β) equal to .183 (p < .01), .187 (p < .001), and .391 (p < .001), respectively.

Table 4: Multiple Regression Analyses To Test Relationship Between Variables and Savings Behaviour

| Variables | В | SE B | β |
|-------------------------------|---------|------|------|
| Constant | 1.673 | .861 | |
| One's income | .683* | .330 | .122 |
| Parents' income | .360 | .215 | .098 |
| Intention to saving | .129** | .048 | .189 |
| Perceived behavioural control | .058*** | .014 | .281 |

$$R^2 = .200 \ (p < .001)$$
 *** $p < .001. ** p < .01. * p < .05.$

Further, the last hypothesis for testing the model of the study was tested using the multiple regressions. The prediction power of saving behaviour with intention to saving, perceived behavioural control, one's income and parents' income, found that they all together significantly predicted 20.00% of the variance in intention to perform savings behaviour at the .001 significance level with significant standardized coefficient equal to .189 (p < .01), .281 (p < .001), .122 (p < .05) and .098 (p > .05), respectively.

Discussion

.254, p < .01).

This study extended the theory of planned behaviour by including economic variables in the model to investigate economic behaviour: savings behaviour. Expectations about

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the relationships amongst economic variables, theory of planned behaviour variables and savings behaviour were partly confirmed. All variables except parents' income were directly related to savings behaviour. However, no direct relationship was found between economic variables and intention to saving.

The correlation analysis between direct and indirect measure of TPB independent variables showed that every pairs of those were statistically significant positive related. These findings were in line with the results of studies on several behaviours in Thailand (Sukidpaneenid. (2004); Roungtaweewanit. (1998); Phovan. (2003); Juntachum. (2004)).

The study examined the relationships between attitudes, subjective norms, and perceived behavioural control and intention to saving. The results disclosed, as hypothesized, that a positive attitude, a positive subjective norm, and high perceived behavioural control were related to stronger intentions to saving. This result was consistent with Ajzen's (1985) theory of planned behaviour. These findings were congruence with the studies in Thailand (Sukidpaneenid. (2004); Jantachum. (2004)).

The hypothesized prediction of savings behaviour via TPB model together with economic variables stated that one's income, intention to saving and perceived behavioural control could statistically explain the variation of savings behaviour, but no statistical significant explanation by parents' income. Perceived behavioural control seems to be the important variables that leaded to savings behaviour; both direct effect and indirect effect pass through intention.

Conclusion

The study to find variables that affect savings behaviour which is economic behaviour with Theory of planned behaviour accompanied by economic factors presented that perceived behavioural control was one of the noteworthy factors, as along the lines of the one of behavioural economic viewpoint; self-control.

Further study in causal relationship between perceived behavioural control and savings behaviour should be conducted to clarify the inspiration and obstacle factors affecting perceived behavioural control either in self-efficacy and controllability.

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