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# media GIZI & KELUARGA



JURUSAN GIZI MASYARAKAT DAN SUMBERDAYA KELUARGA
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## FAMILY AND HOUSING: AN ANALYSIS OF THE EFFECT OF TENURE STATUS ON PROPENSITY TO MOVE

(Keluarga dan Perumahan : Suatu Analisis Pengaruh Status Pemilikanpada Kecenderungan untuk Berpindah)

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ABSTRAK. Rumah adalah salah satu sumberdaya keluarga yang sangat penting. Rumah bukan saja memberikan perlindungan fisik bagi anggota keluarga, tetapi juga merupakan sumberdaya utama yang dibutuhkan keluarga untuk tempat menumbuhkan dan mengembangkan anggota-anggota keluarga. Demikian pentingnya rumah bagi keluarga, maka setiap keluarga mendambakan untuk memiliki rumah. Perpindahan keluarga dari satu rumah ke rumah lain merupakan langkah yang dilakukan keluarga untuk memiliki rumah atau karena ketidakpuasan terhadap rumah lama yang dihuninya. Penelitian ini bertujuan untuk menganalisis hubungan antara umur, status pemilikan rumah, kepuasan terhadap rumah, dan keinginan untuk berpindah rumah. Analisis tabulasi silang dan regresi dilakukan untuk menguji pengaruh spurius dan pengaruh variabel antara. Hasil analisis menunjukkan bahwa status pemilikan rumah berhubungan nyata dengan keinginan berpindah rumah. Umur dan kepuasan terhadap rumah mempengaruhi hubungan antara status pemilikan rumah dan keinginan berpindah rumah.

#### INTRODUCTION

The purpose of this paper is to test the relationship between tenure status and propensity to move. In addition, the third variable (Age of Householder) will be introduced into the analysis for testing the model whether or not the relationship between tenure status and propensity to move is spurious or whether or not because the relationship is due to age. Finally, testing for intervening variable will be done, to see whether or not the effect of tenure status on propensity to move is due to housing satisfaction which intervenes between the two variables (tenure status as independent and propensity to move as dependent variable).

Morris and Winter (1978) developed the model of housing adjustment behaviour. In this model, the demographic and socioeconomic characteristics are seen as constraint variables which influence the housing condition. Family will evaluate its housing conditions by using its own norms and cultural norms. Family will be dissatisfied with its dwelling that does not meet either its own norms or cultural norms. The dissatisfaction will motivate family to adjust its housing condition by moving or altering.

Speare (1974) studied the residential mobility in which residential satisfaction acts as an intervening variable between selected household and housing characteristics. He found that age of head, duration of residence, tenure status and room crowding affected the propensity to move through their effect on residential satisfaction. Only tenure status had direct effect on propensity to move.

A recent study (Morris and Jacubczak, 1988) found that deficit variable intervened between the constraint variables and housing satisfaction. The constraint variables included sex, education, age, household size and household income, and housing satisfaction

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had a strong direct effect on the propensity to move. Satisfaction was found to intervene between tenure-structure deficit and propensity to move. However, the effect of tenurestructure deficit is not only indirect through satisfaction but also directly related to propensity to move. tenure status and propensity to move. This variable is introduced to the model for testing spuriousness in the model, to see whether or not there is an inherent relationship between tenure status and propensity to move or whether the relationship of tenure status and propensity to move is due to age.

#### MODEL AND HYPOTHESES

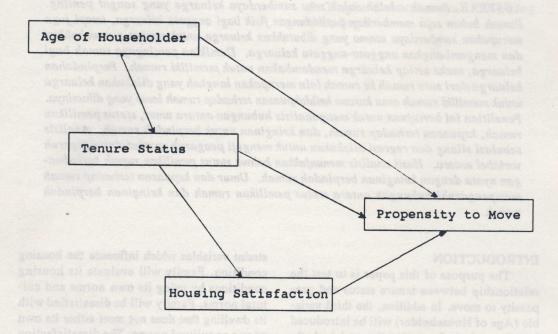


Figure 1. Theoretical Model

The model described in this paper consists of two main variables: tenure status as independent variable and propensity to move as dependent variable. Tenure status will influence the propensity to move. Housing satisfaction plays a role as intervening variable between tenure status and propensity to move. Tenure status will affect housing satisfaction and finally housing satisfaction will affect propensity to move. In other words, tenure status will affect propensity to move through its effect on housing satisfaction. Age of householder will influence the

#### Hypotheses

#### Preliminary

1. Tenure Status has significant negative effect on propensity to move -------Gamma < 0

#### Precondition for Spuriousness

Precondition for intervening

#### THE DATA AND THE VARIABLES

#### The Data

The data for this paper were taken from data gathered under North Central Regional Research Project NC-178, "The Economic, Social, Psychological and Health Consequences of Housing Decisions of Rural Families". The data were gathered in the Fall of 1985. The sample consists of 506 households selected through cluster sampling methods to represent communities with populations of less than 20,000 and open country residents in the six state areas, USA.

#### The Variables

- 1. Tenure Status consists of two categories: Owner was coded "1" and Non-owner (renter and rent free) was coded "0". The majority of samples are homeowners, about 81 percent of respondents are owners.
- 2. <u>Propensity to Move</u> is thinking about future mobility. The scale is constructed from several questions about:

		Value
a.	Never thought about moving	(0)
b.	Thought about moving	(1)
c.	Want to move in 3 years	(2)
d.	Want to move in 12 months	(3)
e.	Expect to move in 12 months	(4)
f.	Definite plans to move	(5)

Missing cases was recoded to the median value. The mode is .00 which indicates that the majority of samples never thought about moving (47 percent). The mean of the variable is 1.16, the standard deviation of 1.49 indicates that the variable

has a large variance. The median 1.0 means 50 percent of samples have value below and above 1.0. For the crosstabulation analysis, this variable is recoded into two categories: the response, "Never thought about moving", received "0" and all other responses received a "1". After recoding into these categories, about 47 percent of sample are "Never thought about moving" and 53 percent is categorized as "Thought about moving".

- 3. Age of Householder is the age in years of the household head. The mean age of 51 is relatively old. The standard deviation is 19. The median of 51 indicates that 50 percent of samples fall below and above 51 years. The age of respondent is widely range from 18 years to 99 years. For crosstabs analysis, this variable is recoded into three categories: young is coded "1" (18 thru 39 years); Middle is coded "2" (40 thru 59 years) and Old is coded "3" (60 thru 99 years). About 37 percent of the samples are categorized as young, 26 percent as middle and 37 percent as old.
- 4. Housing Satisfaction (HSAT) is measured with five specific aspects of the dwelling:
- a. Satisfaction with number of bedroom
- b. Satisfaction with condition of interior
- c. Satisfaction with location of home
- Satisfaction with feeling security from intruders
- e. Satisfaction with structure type

Each item is scaled on a seven-point scale from:

		Value
a.	Extremely dissatisfied	(1)
b.	Dissatisfied	(2)
c.	Somewhat dissatisfied	(3)
d.	Mixed	(4)
e.	Somewhat satisfied	(5)
f.	Satisfied	(6)
g.	Extremely Satisfied	(7)

The five satisfaction items are summed to form a single variable "Housing Satisfaction" which now has more variation in the scores from 5 (extremely dissatisfied) to 35 (extremely satisfied). The housing satisfaction items used in this analysis have been computed to be highly correlated with the reliability value (alpha) of .60. Thus, this variable is reliable to be used for furthur analysis. The average satisfaction scores are 28 (between somewhat satisfied and satisfied). The standard deviation is 3.8. The majority of respondents are satisfied with their dwellings, about 22 percent of respondents has the satisfaction scores of 30 (The mode value). The Median satisfaction scores of 29 indicates that 50 percent of samples has above satisfied level (>29) and below satisfied level (<29). For crosstabs analysis, housing satisfaction variable is recoded into two categories: Less Satisfied is coded "1" (5 thru 28) and More Satisfied is coded "2" (28 thru 35). About 59 percent of samples have high level satisfaction (More Satisfied) and 41 percent have low level satisfaction (less Satisfied).

#### RESULTS

## Testing the Original Hypotheses: Tenure Status and Propensity to Move

Table 1 presents the crosstabulation between tenure status as independent variable and propensity to move as dependent variable. Non-owners are more likely to want to move than owners. About 73 percent of nonowners are thinking about moving; in contrast, only 48 percent of owners thought about moving. The value of chi-square of 18 with significant level of .00 indicates a significant relation between tenure status and propensity to move, they are statistically dependent. The gamma value of -. 48 indicates a strong negative association between two variables. The zero-order correlation of tenure status and propensity to move is -. 33. It means that tenure status has a strong negative correlation with propensity to move. Therefore, hypotheses 1 is not rejected. Nonowners are more likely to want to move because they are more likely to be renters. Renters are more likely to want to move because they want to achieve ownership. Renters are more likely to live in the dwelling which does not meet their preferences or norms so they are more likely to want to move to find a desirable dwelling.

Table 1. Propensity to Move by Tenure Status

ed Health Conscisions of Ruc alkered in the Fe	Non-owners n=95 &	Owners n=411 %
Thought	72.6	47.9
Never thought	27.4	52.1

#### Testing for Spurious Effect by Crosstabs

To introduce a third variable (Age of Householders) as extraneous variable to the model of relationship between tenure status and propensity to move, two precondition of relationships are required: (1) the relationship between age of householder (as independent) and tenure status (as dependent); (2) the relationship between age of householder (as independent) and propensity to move (as dependent). Both relationships must not equal to zero (the gamma value does not equal zero).

## 1. Precondition: Age of Householder and Tenure Status

Table 2. Tenure Status by Age of Householder

	Young	Middle	Old
	n=186	n=132	n=188
iba dalah ( ayas allas	x	X	*
Non-owners	67.7	84.1	92.6
Owners	32.3	15.9	7.4

Table 2 presents the crosstabulation between age of householder as independent variable and tenure status as dependent variable. Old householders are more likely to be homeowners than are young householders. About 93 percent of old householders are owners while young householders were only 68 percent. The chi-square value of 39 with significant level of .00 indicates a significant relation between age of householder and tenure status. They are statistically dependent. The gamma value of .55 indicates a strong positive association between two variables. The zero-order correlation of age of householder and tenure status is also strong (.32), this indicates a strong positive correlation between two variables. The older the householders, the more likely they have psychic security, family security, ego satisfaction, living pattern goals, status and prestige goals; so they are more likely to own their dwellings.

Table 3 presents the crosstabulation between age of householder as independent variable and propensity to move as dependent variable. Young householders are more likely to want to move than are old householders. About 79 percent of young householders are thinking about moving compared with only 30 percent of old householders. The chisquare value of 90 with significant level of .00 indicates a significant relation between age of householder and propensity to move, they are statistically dependent. The gamma value of -.62 indicates a strong negative association between two variables. The zeroorder correlation of age of householder and propensity to move is -. 37, this indicates a strong negative correlation between two variables. Therefore, hypotheses 3 is not rejected. Younger householders are more likely to maintain small household, when their households are getting bigger they are more likely to find a new dwelling. Younger householders are more likely to want to move because they are more likely to find a new job, a new experience to increase their income.

## 2. Precondition: Age of householder and Propensity to Move

Table 3. Propensity to Move by Age of Householder

	Young	Middle	Old
	n=186	n=132	n=188
# 27.43 # 27.43	*	*	*
Thought	78.5	48.5	29.8
Never-thought	21.5	51.5	70.2

Table 4 shows the relationship between tenure status and propensity to move among young householders (low thru 39 years). Non-owners are more likely to want to move than are owners. About 90 percent of non-owners are thinking about moving whereas owners have the percentages of 73. The value of conditional gamma of -.53 indicates tenure status has strong negative association with propensity to move with the significant level of .01. The zero order gamma of -.48 indicates the the conditional relationship is stronger than its original relationship.

Table 4 also shows the relationship between tenure status and propensity to move among middle age householders (40 thru 59 years). Non-owners are more likely to want to move than are owners. About 67 percent of non-owners are thinking about moving compared with 45 percent of owners. The value of conditional gamma of -.41 indicates a strong negative relation between tenure status and propensity to move, with significant level of .06. The conditional relationship is somewhat stronger than its original relationship.

Table 4 also shows the relationship between tenure status and propensity to move among old householders (above 60 years). Owners are more likely to have thought about moving than non-owners. About 32 percent of owners are thinking about moving

indicates a strong positive relation between tenure status and housing satisfaction with significant level of .00. Therefore hypothesis 4 is not rejected. Owners are more likely to live in the dwellings that meet their preferences and cultural norms, thus they are less likely to have housing deficit. Therefore they are more likely to have high level of satisfaction.

The correlation coefficient of Tenure status and propensity to move is -.33, it means that tenure status has a strong negative correlation with propensity to move. Nonowners are more likely to have thought about moving. The correlation of tenure status and housing satisfaction is .16, this indicates a positive correlation between two variables. Among the pairs of correlation, the correlation of housing satisfaction with propensity to move is the strongest (-.38) while the least strong is between tenure status and housing satisfaction (.16).

<u>Precondition: Housing Satisfaction with</u> <u>Propensity to Move</u>

Table 7. Propensity to Move by Housing Satisfaction

Takh seusah wa Walioza are - Walioza are - Walioza -	More satisfied n=209 %	Less satisfied n=297
Thought	67.5	42.1
Never-thought	32.5	57.9

Table 7 presents the relationship between housing satisfaction as independent variable and propensity to move as dependent variable. Householders who have low level of satisfaction (less satisfied) are more likely to have thought about moving than are householders who have high level of satisfaction (more satisfied). About 67 percent of householders who have low level of satisfac-

tion are thinking about moving while householders who have high level of satisfaction have the percentages of 42. The gamma value of -. 48 indicates a strong negative relation between housing satisfaction and propensity to move, with significant level of .00. Householders who are less satisfied may respond to their dwelling to adjust it closer to their preferences. Moving is one of ways to adjust their housing condition closer to their preference and norms. Therefore, less satisfied householders are more likely to have thought about moving. The correlation of housing satisfaction with propensity to move is -. 38, this indicates a strong negative correlation between two variables.

Table 8 shows the relationship between tenure status and propensity to move among householders who have low level of satisfaction. Non-owners are more likely to have thought about moving than are owners. About 86 percent of non-owners are thinking about moving while owners are only 61 percent. The conditional gamma of -.60 indicates a strong negative relation between tenure status and propensity to move. The relationship among less satisfied householders are much stronger than its original relationship (-.60 compared with -.48).

Table 8. Propensity to Move by Tenure Status Controlling for Housing Satisfaction.

	More satisfied		Less satisfied	
	Non- owners	Owners	Non- owners	Owners
Labora edi, mi i et edizmenora	n=52 %	n=157 %	n=43 %	n=254 %
Thought	86.5	61.1	55.8	39.8
Never-thought	13.5	38.9	44.2	60.2

Table 8 also presents the relationship between tenure status and propensity to move

among householders who have high level of satisfaction (More satisfied). Non-owners are more likely to have thought about moving than are owners. About 56 percent of non-owners are thinking about moving compared with 40 percent of owners. The conditional gamma of -.31 indicates a strong negative relation between tenure status and propensity to move, with significant level of .07. The conditional gamma of -.31 which is less than zero-order gamma of -.48, indicates the relationship of two variables among more satisfied householders is less strong than its original relationship.

#### Analysis of Conditional Gamma

Conditional gammas of tenure status and propensity to move controlling for housing satisfaction are presented as:

Less Satisfied	60
More Satisfied	31
Zero-order	48
First order partial -	42

From the two conditional gamma, it is clear that the elaboration model produces partial relationship that differ significantly from each other. The first conditional gamma (-.60) is much stronger than the original relationship (zero-order gamma of -.48). The second conditional gamma of -. 31 is less strong than its original relationship. Rosenberg (1968) pointed out that the process of elaboration involved the introduction of a third variable. By stratifying on the test factor, one can compare the relationship in the contingent associations with the original relationships. The relationship in one of the contingent associations may be strong, whereas in the other it may be weak; in one, the relationship may be positive, in the other, negative. This situation is referred to as Specification. We specify the conditions under which the original relationship is strengthened or weakened, negative or positive. Rosenberg made it clear that the model in this paper after introducing housing satisfaction is not intervening, but there is specification in the model.

The relationship between tenure status and propensity to move is negatively much stronger among less satisfied householders than among more satisfied householders. This means that the size of the relationship in the contingent association are not similar. This is a specification .Therefore, although the first partial gamma of -.42 is less than the zero-order gamma of -.48, it can not be concluded that housing satisfaction is intervening between tenure status and propensity to move.

Tenure status as constraint variable may have indirect effect on housing satisfaction, tenure status may directly affect the tenure deficit/housing deficit. The householders who have tenure status that match with their perception of tenure norms may be more satisfied than non-owner. Tenure deficit/ housing deficit may be an intervening variable between constraint variables and housing satisfaction. And Housing satisfaction intervenes between tenure deficit/housing deficits and propensity to move. Thus, Housing satisfaction is not intervening between tenure status and propensity to move. Morris and Jacubczak (1988) found that tenure structure deficit intervenes between the constraint variables and housing satisfaction.

#### Testing for Intervening Effect by Regression

Table 5 presents the hierarchical regression of the propensity to move on tenure status, age of householder and housing satisfaction. In the third step, tenure status, age of householder and housing satisfaction have significant negative beta of -.21, -.23 and -.30, respectively. This indicates the three variables have significant effect on propensity to move. With housing satisfaction added in the third step, the beta of tenure status reduced from -.24 to -.21. This very small reduction of tenure status beta indicates that housing satisfaction does not intervene between tenure status and propensity to move. The effect of tenure status on propensity to

move does not reduce when housing satisfaction is entered into the model, this indicates that tenure status has a direct effect on propensity to move. The effect of tenure status on propensity to move is not through housing satisfaction.

The analysis of crosstabulation that has been described supports the conclusion of regression analysis, that the question of intervening in this model is not relevant. This is a specification case. The effect of tenure status on propensity to move is different among satisfaction categories. Its effect is much stronger among less satisfied householders and less strong among more satisfied householders.

#### CONCLUSIONS

The majority of householders are homeowners, under 60 years old, more satisfied with their dwellings and less likely to want to move. Tenure status has a significant negative effect on propensity to move which means non-owners are more likely to have thought about moving than are owners. The elaboration model by introducing age of householder as a test factor indicates a strong specification in the model. The effect of tenure status on propensity to move is different among age groups; negative among householders under 60 years and positive among householders over 60 years. This means that non-owners under 60 years are more likely to want to move than owners, and owners over 60 years are more likely to move than are non-owners.

The elaboration model by introducing housing satisfaction as a test factor for testing

intervening indicates a specification in the model. Housing satisfaction does not intervene between housing satisfaction and propensity to move. The effect of tenure status on propensity to move is different among satisfaction level categories: it is much stronger among less satisfied householders and less strong among more satisfied householders.

In brief, unlike the previous research, in this study when age of householder and housing satisfaction introduced to the model as test factors, the specification occured. Housing satisfaction did not intervene between tenure status and propensity to move. Tenure status, age of householder and housing satisfaction are strong predictors (independent variables) of propensity to move.

#### REFERENCES

- Babbie, Earl. (1986). The Practice of Social Research. Belmont: Wadsworth Publishing, Co.
- Morris, Earl W. and Winter, Mary. (1978).

  <u>Housing, Family and Society.</u> New York: Wiley.
- Morris, Earl W. and Jakubczak, Marianna. (1988). Tenure-Structure Deficit, Housing Satisfaction and the Propensity to Move: A Replication of Housing-Adjustment Model. Housing and Society 15 (1), 41-55.
- Rosernberg, Morris. (1968). The Logic of Survey Analysis. New York: Basic Books, Inc.
- Speare, A., Jr. (1974). Residential Satisfaction as Intervening Variable in Residential Mobility. <u>Demography</u>, 11, 173-188.