

Residential Satisfaction And Intraurban Mobility

Louis M. Rea

The purpose of this paper is to report the findings of research which investigates factors associated with residential satisfaction among residents of San Diego County. An attempt is made to synthesize two major avenues of research which have been pursued in the literature. One avenue of research deals with the influence of the stage in the family's life cycle on their choice of residential location. The other area of research concerns the factors of "push" and "pull" in analyzing reasons why people move. The "push" emphasizes reasons why people move away from their housing and/or location and the "pull" stresses why they select the particular new housing and/or location instead of alternatives.

In his classic pioneering study, Peter Rossi related family characteristics to residential mobility. (Rossi, 1955) He provided statistical documentation concerning the influence of the

Louis M. Rea is an Assistant Professor in the Master of City Planning Program, School of Public Administration and Urban Studies, San Diego State University, San Diego, California 92182.

The author wishes to thank the San Diego Gas and Electric Company and the San Diego State University Foundation for their valuable contributions in support of this research.

stage of the family's life cycle as well as the internal space and storage capacities of dwellings as factors precipitating moves. Rossi found that the younger the head of the household and the larger the household, the higher its inclination toward mobility. It is argued that both of the variables are indicators of family life cycle stages. The family life cycle, then, is interpreted as a strong determinant of the housing needs of a household. Rossi further contends that mobility is perceived as a process in which housing requirements of a household are gradually brought into congruence with its needs and those socioeconomic factors which change or modify the housing requirements of a household are the primary determinants of mobility.

Maisel and others extended the Rossi study by considering the importance of other characteristics of the movers as a means of explaining what motivates residential movement. Besides age and household size, Maisel maintains that income is also an important determinant of mobility. (Maisel, 1966)

Michelson refined the life cycle approach by developing a framework which hypothesizes three general stages of the family life cycle:

baseline, incremental change, and approximation of the ideal. (Michelson, 1977) The baseline is the first stage either of the formation of a family or in the family's arrival within a given metropolitan area. At this stage, the family is concerned with nonexperiential factors in their residential search. Such factors include primarily convenience of location relative to shopping and social activities but this does not rule out other considerations in their choice. During the incremental stage, people make a considerable number of moves over long or short periods of time with serious and pragmatic intentions but without the necessity that the moves bear directly on things the people deem most important in housing. People may hold to their ideal house in an ideal location while making changes which incrementally satisfy pragmatic problems and interests which have arisen. Stage 3, approximation of the ideal, may never be attained for some families, but its possibility is important.

Achieving some approximation of one's ideal permits relative satisfaction within the various iterations of Stage 2, even though absolute satisfaction will not be attained. This would imply that some factors contributing to housing choice at Stages 1 and 2 will be compromised if necessary in order to achieve an approximation of the ideal in Stage 3. For example, travel time, which can be a major factor in Stages 1 and 2, may be traded off for neighborhood quality when a family is able to afford a house during Stage 3.

The family life cycle provides some clue to the reasons why families change residences within their metropolitan areas, but social scientists have generally analyzed intraurban mobility and residential satisfaction in terms of two forces — push and pull. The research investigating the factors of push and pull as motivators of residential movement varies considerably.

Some studies have found that push and pull factors are highly correlated. For example, Rossi found that the desire for more housing space implies the lack of adequate space in the previous residence (Rossi, 1955). Similarly, Bell argues

that the move from central city to suburb, for example, is sparked by both a desire to escape from increasing numbers of neighbors of a dissimilar social character and to gain a larger percentage of peers as neighbors (Bell, 1968). More recent studies have shown that some criteria attracting people to a new setting are largely unrelated to problems encountered in the previous residence. For example, Michelson found that the environmental setting of the new residence seems to involve a number of positive expectations apart from the resolution of problems (Michelson, 1977).

Some authors conclude that the push factor is the most influential motivating force underlying residential movement; others make a strong case for the dominance of the pull factor. Boyce contends, for example, that residential change appears to be highly voluntary and to be triggered by discontent with the present neighborhood or house. He states that the basic force seems to be "push" rather than "pull," although upward housing mobility is almost always involved in any move (Boyce, 1969).

A nationwide mobility study conducted by Butler and others shows not only that certain push and pull factors are not correlated but that the pull factors seem to far outweigh the push factors in motivating residential movement (Butler, et. al., 1969). Apparently families move not because they are very dissatisfied in their present residence but because they can achieve greater satisfaction in a new residence.

In an effort to specify push and pull factors, some researchers have attempted to determine the relative importance of certain residential characteristics as motivators of movement. Much study has focused upon two distinct characteristics: neighborhood quality and the quality of the housing unit. Butler found that the primary pull factor is neighborhood quality including neighbors of high and rising socioeconomic status, quality schools, and appropriate urban services and facilities. Housing quality in terms of construction and size was not found to be a very

important factor.

According to Lansing and Mueller, concern about "nice people," social status, and physical characteristics of the neighborhood undoubtedly are forces which pull the population toward outlying locations. That is, the prevailing preference for open space, enhancement of status, and non-congestion are quite powerful in their potential to spur residential movement (Lansing and Mueller, 1966).

A study conducted by the Urban Land Institute pursued a more thorough investigation of the relative satisfaction associated with housing quality and neighborhood quality (Norcross, 1966). This study considered the characteristics of satisfaction with housing quality and neighborhood quality while controlling for family income and age of the household head. It was reported that in lower income households and among younger residents, the house comes first and the community a very poor second.

The issue of residential tenure as a motivating force in the quest for residential satisfaction is the final question addressed by researchers. Rossi concluded that the desire for home ownership is a prime motive for moving. Michelson feels that the desire for home ownership is a long-range goal and that many interim moves are made for other, shorter range reasons. The Butler study is more conclusive by stating that the motivation to move from rental to ownership status is an important factor which helps to explain residential satisfaction.

Method of Research

In the present research, push factors are analyzed separately from pull factors and each is controlled by three life cycle variables — income, household size, and the age of the household head. Although the literature shows that push and pull factors interact in a complex fashion as motivating influences that stimulate residential movement, the method employed in this study permits the comparatively most salient push and pull factors to be identified.

Data for this study was collected by means of a

survey of a sample of households that moved to residential locations within San Diego County from other locations within San Diego County during the month of February, 1977. Since the primary research consideration is an investigation of why people move, a somewhat mobile population was selected as the universe. February was selected because students are least likely to move during this month, and the intent was to minimize the bias which would result from large numbers of students moving to and from university areas.

The San Diego Gas and Electric Company provided a listing of those residents who moved during the study month. The residents were identified by means of the new gas and/or electric services that were installed. After commercial and industrial establishments were excluded from the universe, the total residential population numbered 6,290. A stratified, systematic random sampling procedure was implemented. To insure geographic representativeness, the population was first stratified by zip code and a systematic random sample was selected from each zip code. A sample of 406 valid interviews was ultimately obtained from a pool of 490 potential respondents.¹

Each potential respondent was initially contacted by mail and asked to participate in the study. They were told about the nature of the study and its sponsorship. They were also informed that a member of our staff would contact them within two weeks by telephone to arrange a personal interview. After a pretest of the questionnaire, interviewing took place during March and April of 1977. Where it was not possible to identify one person as the household head, interviewers utilized a random procedure to select the respondent.

Method of Data Analysis

Respondents were asked several questions about their present residence as well as their previous San Diego County residence. Interviewers recorded the most important reason for leaving a previous residence as well as the reason which most attracted the respondent to the new residen-

tial location. The reason for leaving a residential location is interpreted as a “push” factor and the factor of attraction is regarded as the “pull.” The open-ended responses were categorized for use in the analysis and a summary of the categorization along with the coding procedure is presented in Table 1. Three categories of neighborhood quality and one category pertaining to the characteristics of the housing unit were established. Respondents were also asked to assess their various residential locations on a more general scale of excellent, good, fair, poor, and bad. These ratings are assigned scores of 1 through 5 (excellent = 1; bad = 5).

The categories of pull were crosstabulated with the numerical scores of general satisfaction regarding the new residence. In the same fashion, the scores of general satisfaction regarding the previous residence were crosstabulated with the categories of push. The crosstabulations were controlled by three life cycle variables — income, household size, and age of household head. Arithmetic means for the various categories of

push and pull were calculated, and are presented along with their respective standard deviations and sample sizes in Tables 2 through 7.

A difference in means test was utilized² to determine where significant differences exist between pairs of means within a given stage of the life cycle for both push and pull categories and are reported below each table. This method is useful for revealing which push and pull factors are relatively more important than others, but it does not negate the strong probability that the motivation to change residential location springs from the interaction of many push and pull factors. High mean scores are associated with strong push factors and reflect low residential satisfaction, while low mean scores are associated with strong pull factors and reflect high residential satisfaction.

Research Findings

Housing Unit and Neighborhood Characteristics

Table 2 presents mean satisfaction scores for pull categories with a control for income level. For each category for the pull factor, a mean

Table 1. Characteristics of Residential Location Used in the Categorization of Pull and Push Factors

Category	Characteristic
A. (Neighborhood location)	proximity school/church proximity shopping facilities proximity park/recreation distance to work proximity to public transportation
B. (Social milieu)	neighbors/people
C. (Neighborhood amenities)	crime rate police/fire protection quiet or noise traffic general appearance
D. (Housing Unit)	housing cost housing quality space in house

satisfaction score is calculated for those respondents above the sample median income and a mean score is calculated for those respondents below the sample median income.³ Comparisons are made among the means within each of the two income categories. Thus, the relatively most important pull categories can be determined while controlling for income level. In Table 3, the same method is applied to the push factors.

As shown in Table 2, significant differences exist between pull categories social milieu and the housing unit, neighborhood amenities and the housing unit, and neighborhood location and the housing unit. For the above median income households, the significantly higher score for the housing unit implies that the characteristics of the housing unit are comparatively less important as an attracting force than are the neighborhood characteristics. For respondents below the median income, the important attracting force is the housing unit — a reversal of the former situation. This is demonstrated by the significant differences that exist between each of the neighborhood associated pull categories and the pull category related to the housing unit.

In Table 3, the comparatively important push factors are shown for both levels of income. For those respondents above the median income, the

factors most likely to motivate a person to leave his place of residence are the neighborhood categories associated with amenities and neighbors. Because significant differences exist between the means of categories social milieu and neighborhood location, as well as neighborhood amenities and neighborhood location, it is concluded that locational characteristics of the previous neighborhood and features of the previous housing unit are less important push factors at the higher income levels. The relatively important push factors for respondents who are below the sample median income are also shown in Table 3. The single most important push factor here is the nature of the housing unit. Specifically, each comparison between the category representing the housing unit and each of the neighborhood categories indicates a significant difference in mean satisfaction scores.

Table 4 presents mean satisfaction scores for pull categories with a control for household size. For each category of pull, a mean satisfaction score is calculated for those respondents who have more than two persons in their household and a mean score is calculated for those respondents who have only one or two persons in their household.⁴ In Table 5, a similar presentation is shown for the push factors.

Table 2. Mean Residential Satisfaction Scores by Income Level — Pull Factors

	Below Median Income					Above Median Income				
	Total	A Location	B Social Milieu	C Neighborhood Amenities	D Housing Unit	Total	A Location	B Social Milieu	C Neighborhood Amenities	D Housing Unit
Mean	2.92	3.10	3.12	3.28	1.36	2.14	1.94	1.91	1.84	3.50
(Standard Deviation)	(.74)	(.45)	(.47)	(.59)	(.48)	(.69)	(.38)	(.45)	(.52)	(.56)
(N)	(203)	(97)	(25)	(54)	(27)	(203)	(81)	(48)	(44)	(30)
	Significant Differences					Significant Differences				
	A and D*					A and D**				
	B and D**					B and D*				
	C and D*					C and D*				

*Significant at .05 level.

**Significant at .01 level.

As reported in Table 4, the most important attracting forces of the new residential location for those respondents with more than two persons in the household are the three neighborhood categories. Features of the housing unit are sig-

nificantly less important as a pull factor and this is documented by the appropriate significance tests. The situation is somewhat different for those respondents with one or two persons in their household. Under these circumstances, the single most

Table 3. Mean Residential Satisfaction Scores by Income Level — Push Factors

	Below Median Income					Above Median Income				
	Total	A	B	C	D	Total	A	B	C	D
		Location	Social Milieu	Neighborhood Amenities	Housing Unit		Location	Social Milieu	Neighborhood Amenities	Housing Unit
Mean	2.32	2.14	2.01	2.17	3.78	2.57	1.41	3.31	3.16	1.51
(Standard Deviation)	(.71)	(.63)	(.57)	(.58)	(.42)	(.68)	(.49)	(.67)	(.48)	(.60)
(N)	(203)	(58)	(78)	(39)	(28)	(203)	(38)	(52)	(76)	(37)
	Significant Differences					Significant Differences				
	B and D*					B and D*				
	C and D*					C and D*				
	A and D*					A and B*				
						A and C*				

*Significant at .05 level.

**Significant at .01 level.

Table 4. Mean Residential Satisfaction Scores by Household Size — Pull Factors

	One or Two Persons Per Household					More Than Two Persons Per Household				
	Total	A	B	C	D	Total	A	B	C	D
		Location	Social Milieu	Neighborhood Amenities	Housing Unit		Location	Social Milieu	Neighborhood Amenities	Housing Unit
Mean	3.41	3.88	3.74	3.68	1.58	1.71	1.37	1.60	1.59	3.59
(Standard Deviation)	(.58)	(.32)	(.59)	(.75)	(.62)	(.69)	(.67)	(.61)	(.52)	(.73)
(N)	(196)	(74)	(39)	(50)	(33)	(210)	(104)	(34)	(48)	(24)
	Significant Differences					Significant Differences				
	B and D*					B and D*				
	C and D*					C and D*				
	A and D**					A and D*				

*Significant at .05 level.

**Significant at .01 level.

important pull factor is the housing unit while characteristics of the neighborhood are not significant by comparison.

In Table 5, the push factors are controlled by household size. For respondents with a household size of greater than two, the important push factors reflect the two characteristics of the previous neighborhood that are related to neighbors and neighborhood amenities. Apparently, prior neighborhood location and the previous housing unit are less important as push factors. The relationships are documented by the significant differences between social milieu and the housing unit, neighborhood amenities and the housing unit, and location and neighborhood amenities. Also, in Table 5, the push categories are controlled for a household size of less than two persons. Under this condition, the previous housing unit becomes the significant push factor relative to the neighborhood characteristics.

Table 6 shows the mean satisfaction scores for pull categories with a control for the age of the household head. For each category of the pull factor, a mean satisfaction score is calculated for household heads whose age is greater than the

sample median age and a mean score is also calculated for household heads whose age is less than the sample median age.⁵ In Table 7, a similar categorization is presented for the push factors.

For household heads above the median age, it is shown in Table 6 that the significant attracting factors of the new residence are neighborhood oriented. The significant difference between mean satisfaction scores bear this out. When the control is household head below the median age, the significant pull factor is the new housing unit rather than the characteristics of the new neighborhood.

In Table 7, the push categories show a similar orientation. For older household heads, the dominant push factors are clearly neighborhood oriented rather than the characteristics of the housing unit, but for the younger household heads, the dominant push factor is the housing unit.

Residential Satisfaction and Residential Tenure

Using a similar method to the one implemented above, a test was conducted to determine if change in residential tenure can help to explain

Table 5. Mean Residential Satisfaction Scores by Household Size — Push Factors

	One or Two Persons Per Household					More Than Two Persons Per household				
	Total	A Location	B Social Milieu	C Neighborhood Amenities	D Housing Unit	Total	A Location	B Social Milieu	C Neighborhood Amenities	D Housing Unit
Mean	1.63	1.53	1.32	1.40	3.59	2.45	1.31	3.18	3.42	1.39
(Standard Deviation)	(.72)	(.63)	(.56)	(.57)	(.85)	(.66)	(.62)	(.57)	(.58)	(.53)
(N)	(196)	(48)	(79)	(48)	(21)	(210)	(48)	(51)	(67)	(44)
	Significant Differences					Significant Differences				
	B and D*					B and D*				
	C and D*					C and D**				
	A and D*					A and B*				
						A and C*				

*Significant at .05 level.

**Significant at .01 level.

residential satisfaction. Each movement from a previous to a present residence is categorized into two groups. One group includes those who moved from an ownership to a rental situation as well as those who moved from a rental to another rental situation. The other group consists of those who moved from a rental to an ownership status as well as those moving from an ownership situation to

another ownership. These groups were then crosstabulated with the general satisfaction rating reported by the respondents for their present residence (excellent = 1; bad = 5). Mean satisfaction scores were calculated for each group and they are reported in Table 8 along with the appropriate standard deviations and sample sizes.

The mean for Group 1 (ownership to rental,

Table 6. Mean Residential Satisfaction Scores by Age of Household Head — Pull Factors

	Less Than Median Age					More Than Median Age				
	Total	A Location	B Social Milieu	C Neighborhood Amenities	D Housing Unit	Total	A Location	B Social Milieu	C Neighborhood Amenities	D Housing Unit
Mean	3.11	3.50	3.38	3.68	1.29	1.74	1.57	1.17	1.69	3.64
(Standard Deviation)	(.76)	(.81)	(.58)	(.47)	(.51)	(.59)	(.67)	(.38)	(.65)	(.74)
(N)	(203)	(95)	(35)	(36)	(37)	(203)	(83)	(38)	(62)	(20)
	Significant Differences					Significant Differences				
	B and D**					B and D**				
	C and D**					D and D*				
	A and D*					A and D*				

*Significant at .05 level.

**Significant at .01 level.

Table 7. Mean Residential Satisfaction Scores by Age of Household Head — Push Factors

	Less Than Median Age					More Than Median Age				
	Total	A Location	B Social Milieu	C Neighborhood Amenities	D Housing Unit	Total	A Location	B Social Milieu	C Neighborhood Amenities	D Housing Unit
Mean	2.13	1.83	1.68	1.74	3.83	3.31	3.54	3.74	3.47	1.53
(Standard Deviation)	(.69)	(.71)	(.60)	(.54)	(.49)	(.66)	(.67)	(.49)	(.60)	(.72)
(N)	(203)	(52)	(70)	(43)	(38)	(203)	(44)	(60)	(72)	(27)
	Significant Differences					Significant Differences				
	B and D**					B and D*				
	C and D**					C and D*				
	A and D*					A and D*				

*Significant at .05 level.

**Significant at .01 level.

Table 8. Mean Residential Satisfaction Scores by Change in Residential Tenure

	Change in Residential Tenure	
	Group 1 (Own to rent; rent to rent)	Group 2 (Rent to own; own to own)
Mean	3.47	1.36
(Standard Deviation)	(.77)	(.68)
(N)	(299)	(101)

Difference in means significant at .05 level.

rental to rental) is higher than the mean for Group 2 (rental to ownership, ownership to ownership) and the difference is statistically significant. This indicates that a change in residential tenure that culminates in ownership status is a significant indicator of residential satisfaction relative to a movement ending in rental status.

Summary and Conclusions

This paper has investigated the factors associated with residential satisfaction among residents of San Diego County. The relative importance of various push and pull variables are considered in conjunction with variables that portray various stages of the family life cycle. Also, the importance of change in residential tenure is explored as a possible motivator of residential movement.

The findings of this study are clear and they lend themselves to systematic interpretation. Within a given stage of the life cycle, push and pull factors tend to correlate. That is, respondents indicate that the predominant reason for leaving a residence is a problem which they attempt to remedy in their choice of a new residence. Such correlations have been predicted by Rossi and Bell.

The control for life cycle variables has important implications. Specifically, respondents in the relatively more advanced stages of the family life cycle (higher income, larger household size, and older household head) are motivated to change

their residential location primarily through neighborhood qualities related to the proximity of shopping and other facilities, the attitude toward neighbors, and available amenities such as fire and police protection. Respondents in the less advanced stages of the life cycle (lower income, smaller household size, and younger household head)⁶ are motivated to change their residential location primarily in response to various characteristics associated with the housing unit such as cost, physical space, and housing quality. As Michelson suggests, push and pull factors can be identified as motivators of residential movement only within the context of family life cycle. The context of this push/pull association is consistent with the findings of the Urban Land Institute (cited above) that the housing unit is the more basic motivating factor while the neighborhood becomes more important after this factor has been minimally satisfied.

There are two exceptions to these patterns of residential satisfaction that are important to highlight and explain. It is found that for those respondents above the sample median income and for those with household sizes greater than two, locational attributes of the neighborhood are less important as a push factor relative to neighborhood amenities and the quality of the neighbors. This can be interpreted as meaning that at the more advanced stages of the life cycle, the desire to upgrade one's social status and social milieu takes precedence in motivating a move from a

previous residence. This is consistent with Bell and others who have stressed that the enhancement of status is a major motivator of residential relocation.

Finally, the conclusion that a residential movement ending in ownership status is significantly associated with residential satisfaction is consistent with the findings of Rossi, Butler, and others. Such a change in residential tenure (ownership as opposed to rental) can be considered an aspect of status enhancement which, as explained above, is a significant factor in the pursuit of residential satisfaction.

Notes

1. Parameters of the sample were compared with parameters for the entire San Diego County population (statistics for the entire mobile population were not available) and a tolerated error of no more than 5% was detected. The parameters are based upon income, age, race, household size, and automobile availability. This permits reasonable statistical assurance that the sample is representative of the entire county.
2. The difference between two sample means is determined by a two-tailed significance test.
3. The sample median income is \$10,329 (median family income). A more disaggregated breakdown of income levels is considered inappropriate for this statistical analysis because too few observations would appear in each of the crosstabulated categories of pull and push.
4. The median household size for the sample is 2.17. As indicated in Tables 4 and 5, 51.7% of the sample families have more than 2 persons in the household and 48.3% have two or fewer persons.
5. The median age of the household head for the sample population is 28.8 years. The specific age utilized for the purposes of operationalizing the control is 29 years.
6. In the general population, small household size and low income tends to be associated with either young or elderly household heads, but in a sample of movers, there are few households headed by elderly persons.

References

- Bell, W. "The City, Suburb, and a Theory of Social Choice," in *The New Urbanization*, ed. S. Green, et al., New York, St. Martin's Press, 1968.
- Boyce, Ronald R. "Residential Mobility and Its Implications for Urban Spatial Change," *Proceedings of the Association of American Geographers*, Vol. 1, 1969.
- Brown, Laurence A. and Moore, Eric C. "The Intra-urban Migration Process: A Perspective," *General Systems*, Vol. 15, 1970, pp. 109-122.
- Butler, E. *Moving Behavior and Residential Choice: A National Survey*, Washington, National Cooperative Highway Research Program, National Academy of Sciences, 1969.
- Goldstein, S. and Mayer, K. "Migration and the Journey to Work," *Social Forces*, Vol. 42, 1964, pp. 472-481.
- Greenlie, Barrie B. "New House or New Neighborhood? A Survey of Priorities Among Home Owners in Madison, Wisconsin," *Land Economics*, Vol. 45, No. 3, August, 1969, pp. 359-365.
- Lansing, John B. and Mueller, Eva. "Residential Location and Urban Mobility," *Highway Research Record No. 106*, Washington, Highway Research Board, 1966.
- Maisel, Sherman J. "Rates of Ownership, Mobility, and Purchase," in Real Estate Research Program, *Essays in Urban Land Economics*, Los Angeles, University of California, 1966.
- Michelson, William. *Environmental Choice, Human Behavior, and Residential Satisfaction*, New York, Oxford University Press, 1977.
- Morrison, Peter A. *Population Movements and the Shape of Urban Growth: Implications for Public Policy*, Santa Monica, The Rand Corporation, 1972.
- Norcross, Carl. *Open Space Communities in the Market Place . . . A Survey of Public Acceptance*, Washington, Urban Land Institute, 1966.
- Rossi, Peter. *Why Families Move*, Glencoe, University of Illinois Press, 1955.