

# A Reassessment of Compact Cities: Time Series Variation of the Impact of Cultural Norms on Housing Choice Behavior

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## Introduction

Recent interest in energy conservation has focused more attention on the potential benefits of compact cities. For compact cities, however, there needs to be a greater willingness of citizens to reside in apartment complexes. The Japanese, however, have preferred detached houses. Hence, research on factors for house type choice could be a significant contribution to this issue.

Although traditional studies consider only physical factors like accessibility to a CBD and land price, Aoki (2010) finds that conformity to majority and cultural norms were influential in house choice. Historical changes attributed to these norms, however, have not been clarified. Hence, this study aims to clarify the time series variation of the factors affecting housing choice behavior.

## Hypotheses

Considering that apartment dwellers are increasing, two hypotheses were set: the impact of conformity that influences living in a detached house is decreasing (H1); and the impact of conformity that influences living in an apartment is increasing (H2). Moreover, considering that environmental awareness has recently increased, two hypotheses were assumed: the cultural norm to live in an apartment has more impact than in the past (H3); and the pressure to live in a detached house resulting from the cultural norm is decreasing (H4).

## Method

1973 questionnaires were distributed by hand; 551 were collected by mail (27.9%). The questionnaire measured the impact of the following factors when making house type choice: conformity, cultural norm, rent, house area, abundance of medical facilities, and education level, using a 6-point scale.

*Tab. 1: Changes in the impact of conformity and norm*

House type	Variables	Resident years		Welch's t-test
		> 15 yrs	< 5 yrs	
Detached	Conformity	4.31	3.39	$t(215) = -6.87, p < .001$
	Norm	4.25	3.51	$t(215) = -4.48, p < .001$
Apartment	Conformity	2.64	3.24	$t(75) = 3.09, p < .001$
	Norm	2.32	2.18	$t(124) = -.72, p = n.s.$

## Results

Respondents were divided into four groups: apartment dwellers residing for less than 5 years; apartment dwellers residing for more than 15 years; detached house residing for less than 5 years; and detached house owners residing for more than 15 years.

The results shown in Tab.1 suggest that the impact of conformity on selecting detached houses is decreasing, but that the impact of conformity of selecting apartments is increasing. Tab.1 also suggests that the impact of cultural norm is decreasing for detached houses, but did not change for apartments. Hence H1, H2 and H4 were supported; H3 was not supported.

A logistic regression analysis was also applied using house type as the dependent variable. The result for owners of more than 15 years showed that conformity, norm and house price were significant for detached house owners; medical facility was significant for apartment dwellers. As for dwellers of less than 5 years, education was significant for detached house owners. These results also suggest validity of the hypotheses, and considering the correlation between conformity and norm ( $r = .48$ ), norm could be an essential psychological factor affecting housing choice. Finally, implications such as some campaign were discussed.

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## References

Aoki & Shirai. (2010). The Feasibility of Compact Cities: The Impact of Psychological Factors on House Type Choice Behavior, *21th International Association People-Environment Studies Conference*.