

# **Informal or Formal: Social Structure and Support Networks in Four Chinese Societies\***

FAN Xiaoguang

**Abstract** This study investigates the impact of macro-social structure and social class on urban citizens' support network in mainland China, Hong Kong, Singapore and Taiwan. Drawing on quantitative evidence from the data of 2006 AsiaBarometer Survey, the author finds that urban residents in Chinese societies with different distribution of resource make different choice in formal, the mixed and informal networks. Moreover, the support networks pattern in urban China differs from that in Hong Kong, Singapore and urban Taiwan in terms of the level of education, employment status and the family economic status.

**Key Words** Stratification, Support Networks, Social Structure, Distribution of resources

Support network is one of the important topics of sociology. Most of studies have mainly focused on social networks and social support of human interaction. At the same time, analysis of the relationship between formal networks based on institution and informal networks of social relations is not paid attention to enough. However, formal support network, as a modern product, is playing an increasingly important role in people's daily life.

This paper attempts to bring the relationship between formal and informal support back based on the social structure, and further explore the formation of social support networks. In the background of Confucian culture, the author analyzes how modernization, urbanization, and other macro-social structures and social class influence ego-centered support networks using the data from AsiaBarometer2006 Survey(ABS2006) which has survey data of Mainland China, Hong Kong, Taiwan and Singapore. On the basis of this comparative study, the author hopes to reveal the different mechanisms of support networks within Chinese societies in East Asia.

## **INTRODUCTION**

Sociological studies of social support are mostly concentrated in the networks and social support analysis. Scholars have been on the concept of network structure,

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particularly the networks' size, density, strength, heterogeneity and other dimensions, to discuss various consequences of support networks, and induce what factors affect networks themselves (Lee, Ruan and Lai 2005; Lin, Ye and Ensel 1999; Thoits 1995; Diao 2007). However, these studies of support networks nowadays mostly focus on family, relatives, friends, colleagues and other interpersonal relationships of informal support, but formal support (or the institutional support) supplied by the state or society and the relation between formal and informal support networks have not been highlighted.

Over the past few years, with modernization and urbanization, the East Asian countries and regions have great effects to establish and improve their welfare systems which include pension, health care, social assistance and others (Aspalter 2001; Lin and Wu 2010). These efforts probably cause changes that people seek help not only from informal network but also a diverse support system of formal and informal network. In Chinese society, due to the impact of Confucian culture, the kinship relations always play a very important role in support networks (Lau 1981; Wong and Kuo 1979; Lee, Ruan and Lai 2005; Son, Lin and George 2008). However, in Chinese societies of Mainland China, Hong Kong, Taiwan and Singapore, different levels of economic and social development inevitably give rise to variations in people's support network.

This study compares four Chinese societies, mainland China, Hong Kong, Singapore and Taiwan, with regard to the relationship of formal and informal support in people's social networks. Macro-social structures and stratification are taken into consideration in analyzing urban citizen's choice when they face emergencies. Although Chinese societies share a common heritage of cultural traditions, the macro-structure and class structure are quite different, especially between mainland China and the others. The paper wants to break down 'social relations' to compare four countries in order to assess the impact of social-structure factors on support networks and the relationship between different kinds of social support.

## **SOCIAL STRUCTURE AND SUPPORT NETWORKS: A BRIEF REVIEW**

The research of Social structures and support networks focuses on the impact of the individual scope and form of social interaction from macro-social structure (MSS) and class structure (CS). MSS emphasizes the influence of policy, distribution of social resources on individual social support networks, which include both informal support from social relations and formal support from the state and market system (House, Umberson and Landis 1988; House 1987). CS emphasizes the individual's marital status, socioeconomic status (SES), educational level and occupational status that shape people's support network, which stress social networks based on social interaction (Bian et al. 2005; Lee, Ruan and Lai 2005; Turner and Marino 1994;

Zhang 2006).

'Resource distribution' theory (RDT) notes that the economic resources, political power structure of every society will affect the relationship between individual choice and use of the network (Wellman 1990). The resource-gaining channels are divided into market exchange, institutional resource and kinship-based support, which combine with economic, political and individual life chances together. As a result, if individuals living resources are determined by the work unit (*Danwei*) in some society, then people would develop working relationships in order to ensure he can access to much more resources; if personal living resources are depended on family or household mostly, the individual's social interaction will be biased towards family ties; In a society lacking market and social services, the individual would have to rely on the organization of work and family in order to get the necessary resources (Diao 2007:10-11). RDT has been supported by a lot of empirical data from different nations and areas (Höllinger and Haller 1990; Lai 2001; Lee, Ruan and Lai 2005; Ruan 1993).

'Limited interaction' theory(LIT) is that the social structural constrain people's social relations and interaction. Blau (1977:281) indicates that people's statuses produces the distribution of the structural opportunities and constraints of social interaction; the individual opportunity for interaction between similar positions is much more than people from different locations; Moreover, the individual belonging to high class dominate social interaction. Those people at high position are more likely to and can contact with someone own abundant resources, which constructs a more homogeneous social networks (Blau and Schwartz 1997; Laumann 1973; McPherson, Smith-Lovin and Cook 2001). On the contrary, the individual from lower class cannot mobilize a lot of resources, even with the strong heterogeneity of the social network. Moreover, studies have found that individuals on high social status would gain more opportunities and fewer limitations of social interaction. Since the generation and maintenance of social networks demands a certain amount of resources, those that have advantage of economy, power and prestige can build a good network (Lin 2001; Lin, Vaughn and Ensel 1981), and generate different social network patterns (Bian et al. 2005; Marsden 1987; Ruan 1993; Bian and Li 2001; Zhang 2006).

Needless to say, whether in Chinese society or Western society, both RDT and LIT have strong explanatory power. However, RDT is seen as a determinism that neglects the impact of culture on individual choice (Diao 2007:12). LIT emphasizes the support network formed by social structure of interaction but lacks attention on macro-structure. However, in order to explore the impact of the macro-social structure and class structure on individual support network, especially mutual relations from the formal and informal support network, it is necessary to combine two theoretical perspectives. Therefore, using culture as a control variable, this paper will compare

urban support networks within different countries and regions based on two theories the two theories to test explanatory power of RDT and LIT, and explore one of the internal generated-mechanism.

## **HYPOTHESES**

The research of support networks at Chinese societies, including Taiwan (Son, Lin and George 2008), Singapore (Wong and Kuo 1979), Hong Kong (Lau 1981) and Mainland China (Lai 2001; Lee, Ruan and Lai 2005), indicates that family or close kinship in the social networks play an important role, characterized by obvious instrumental orientation (Zhang and Ruan 1999). These conclusions above are similar with what Western scholars have found (Wellman 1979; Shorter 1975). However, with industrialization and urbanization, it is inevitable that the changes in family size and structure, mode of living, family ties influence the composition of social networks of urban residents and informal support (Fischer 1976).

It was found that these Chinese societies, which share a common Confucian cultural heritage, are similar in many aspects of social support. The supportive roles of spouse or partner are prominent. Other close relatives are more involved in instrumental than emotional support. Non-kin primary ties specialize in emotional support. Neither extended kin support nor institutional support is significant.

Although it is undoubted that informal support based on of blood connection these Chinese societies, which share a common Confucian cultural heritage, still plays an important role in financial support, domestic work and others, individuals may select different support networks resting in the different levels of distribution of resources among these societies. China has experienced the transition from redistribution to market, but the original *Danwei* of individual's social support has not completely disappeared (Lee, Ruan and Lai 2005; Ruan 1993), and a comprehensive social welfare system for all citizens have not been established (Zheng 2011). In contrast, as for Hong Kong, Taiwan and Singapore once known as 'Asian Tigers', they almost have established a high level of social welfare system along with development of economic growth (Aspalter 2001; Peng and Wong 2008). In addition, because of a higher degree of market development, the formal support system in 'Asian Tigers', such as bank trust, social insurance and etc., is relatively abundant. As a result, the following assumptions are made:

***H1** The urban residents' internal structures of social support networks are different among Chinese mainland and Hong Kong, Taiwan and Singapore.*

Just as discussed in the literature review section, the individual's ability to mobilize social support is inevitably restricted by social status. The higher class status is, the stronger social network is (Lin 1999; Zhang 2005). At the same time, people on different location of stratification usually mobilize different support network in the formal system. In China, the social welfare system is divided by many institutions, such as urban-rural and regional differentiations (Li 2002; Zheng 2003). As for individuals with lower social status, their capability of accessing formal support is also disadvantageous. People are more likely to obtain help from informal networks with rational choice. The others who are located on the higher status own much more

opportunities in search of supports from formal systems. In Hong Kong, Taiwan and Singapore, individuals at disadvantageous position have more opportunity to be supported by the formal support system than in mainland China, however, Chinese citizens may resort to informal channels because high barriers to entry, support costs and others. Of course, the ability of upper class to gain formal or informal support should be stronger than low class.

If we measure social status by education level, employment status and economic status of families, and divide social support into formal support, informal support and mixed support, then three pairs of competing hypotheses could be proposed with reference to literature review above and deduction.

*H2.1a In comparison with others, in Mainland Chinese, the urban residents whose education levels are high may tend to choose formal support / mixed support.*

*H2.1b In comparison with Mainland China, in Hong Kong, Taiwan and Singapore, the urban residents whose education levels are high may incline to formal support / mixed support.*

*H2.2a In comparison with others, in Mainland Chinese, the urban residents whose employment statuses are high may incline to formal support / mixed support.*

*H2.2b In comparison with Mainland China, in Hong Kong, Taiwan and Singapore, the urban residents whose employment statuses are high may incline to formal support / mixed support.*

*H2.3a In comparison with others, in Mainland Chinese, the urban residents whose family economic statuses are high may incline to formal support / mixed support.*

*H2.3b In comparison with Mainland China, in Hong Kong, Taiwan and Singapore, the urban residents whose family economic statuses are high may incline to formal support / mixed support.*

## **DATA AND METHODS**

### **(A) Data**

The data that we use in this study comes from an *AsiaBarometer* survey conducted by a team led by Takashi Inoguchi at Tokyo University. The survey covered more than thirty countries across Asia from 2003 to 2008; here we only select data relevant to the theoretical concerns of this paper, which are mainly from four major Chinese societies in East and Southeast Asian: Mainland China, Hong Kong, Singapore, Taiwan and Thailand. We only use the data from the survey in 2006 to investigate the relationship between social structure and support networks. The sample from the four Chinese societies—Hong Kong (N=929), Singapore (N=693), Taiwan (N=958), and Mainland China (996) in the database are applied to fit the following statistical models.

### **(B) Variables and Measuring**

**Dependent Variable** The dependent variable is the personal financial support network. We measure support network by looking at one variable in the *AsiaBarometer* Survey that captures respondents' tendency of earning a living when

respondents' household should die or become unable to work: *"If the main breadwinner of your household should die or become unable to work due to illness, how would your household maintain the household budget? Select up to two of the following measures. (2MA)"* (Q16) This variable takes the value of 1 if respondents only report "Another adult member of the family would become the main breadwinner," "Would send one or more of the children out to work," "Would get support from relatives," "Would get support from neighbors," or "Would get support from members of my religious group", 2 if they only answer "Would get social welfare payments," "Depend on retirement allowance," "Have an insurance policy to cover such a situation," or "Other", and others are valued as 3. Then we label these categories as following: 1-formal support networks, 2-normal social networks, 3-mixed social networks.

**Independent Variables** Social stratification is measured from the three dimensions: (I) Level of Education. "No formal education" and "Elementary school/junior high school/middle school" is defined as "low", "high school" and "Professional school/technical school" as "middle", "university/graduate school" as "high". Using low category as the reference, the other categories are dummy variables recoded as 0-1, respectively. (II) Employment Status. In the questionnaire, the occupations are divided into 18 species. 1 Following the suggestion of the survey conductors, we use the three categories: (1)-(6) is defined as "self-employed," (7)-(13) as "employee", (14)-(18) is "unemployed". (III) Family Economic Status (FES). Survey developed the criteria for the classification of household income based on the 2006 per capita GDP and income levels of (see Appendix Table 1), all families were divided into high, middle and low categories.

**Control variables** Despite of the social stratification as the key variables in the models, several variables about basic information, such as gender, age and marital status are inputted into the model for the purpose of control. Moreover, the numbers of people who are in respondents' household working and earning an income (F7) and social trust (Q11) are used to control the impact of social context in general. The summary of descriptive statistics, please see Table 1.

### [Table 1 about Here]

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<sup>1</sup> The occupations are 1)Self-employed in agriculture, forestry or fisheries; 2)Business owner in mining or manufacturing industry of an organization with up to 30 employees; 3) Business owner of a retail organization with up to 30 employees; 4)Vendor or street trader; 5)Business owner or manager of an organization with over 30 employees; 6) Self-employed professional (self-employed doctors, lawyers, writers, etc.); 7) Senior manager (company director, no lower in rank than a manager of a company section in a company with 300 or more employees, or a manager of a department in a company with less than 300 employees); 8) Employed professional or specialist (hospital doctors, employed lawyers, engineers, etc.); 9) Clerical worker; 10) Sales; 11) Manual worker (including skilled and semi-skilled) ; 12) Driver; 13) Other worker; 14) Homemaker; 15) Student; 16) Retired; 17) Unemployed; 18) Unemployed other.

### **(C) Statistical Modeling and Analysis Strategy**

In this study, Multinomial Logistic regression model is employed to analyze support networks in Chinese society. Depending on regression, we compare social support networks among urban Mainland Chinese, Hong Kong, Singapore and urban Taiwan. There is limited collinearity because all variance inflation factors (VIF) of independent variables are less than 2. Moreover, the Hausman test of the model demonstrates that the differences of selected items are not caused systematically. To sum up, the model is not against IIA.

## **RESULTS**

Table 2 presents the differences of social support networks among urban Chinese society. Overall, urban citizens under study reported that they prefer their informal networks to formal networks in times of need. In comparison, the probability of mainland China's urban residents' formal support is highest, but mixed support is the lowest. Chi-square tests show that there are significant differences between Singapore, Taiwan and Mainland China. However, the test indicates that Hong Kong and Mainland China are not different from each other significantly for the p-value is 0.081. Therefore, we can assume that Mainland China and Hong Kong, Singapore and Taiwan residents are different in support network (see Appendix Graph 1). As a result, Empirical data can not deny the assumption 1.

### **[Table 2 about Here]**

Table 3 lists the coefficients of logistic regression of social support networks for multi-class structure. Firstly, we examine the relationship between level of education and social support networks. Other things being controlled, the structure of urban china's support network is not as the same as Hong Kong, Singapore and Taiwan. In China, compared with informal support, the middle-educated respondents' possibility of using mixed support is likely higher than low-educated citizens with 60% ( $e^{0.464-1} = 0.59$ ,  $p < 0.05$ ). And their possibility of formal support is 2.5 times as much as the low-educated people ( $e^{0.895} = 2.45$ ,  $p < 0.001$ ). As for high-educated respondents, the corresponding probabilities are 2.25 times ( $p < 0.001$ ) and 2.96 times ( $p < 0.001$ ). By comparison, in Hong Kong, the higher level of education is, the higher possibility of informal networks is. In addition, the degree of probability to choose mixed support is much lower than informal support with 50% ( $p < 0.01$ ). In Singapore, compared to informal support and mixed support, people who are on middle level of education incline to formal support ( $p < 0.01$ ). However, the surprising finding is that Taiwan's urban residents with high-education are more likely to attain help from

official support networks. which is similar to Mainland China. Moreover, in the comparison between formal and mixed support, only Taiwan passes the test of significance ( $p < 0.01$ ). This finding necessitates in-depth study in the future. These results basically support **H2.1a**.

Secondly, in the regression model, we also introduce the employment status. In Mainland China, all the regression coefficients that are statistical test failed, but in general, the self-employed and those who are employed are more likely to choose the informal support network for financial support than other people. This feature is significantly different from other Chinese societies. In Hong Kong, compared to those who are not employed, employees' possibility of mixed support is more than the informal support with eight percent ( $p < 0.001$ ), and the possibility of formal support is seven percent ( $p < 0.1$ ); the corresponding probabilities of employees 37% ( $p < 0.1$ ) and 56% ( $p < 0.1$ ). In urban Taiwan, the residents also show some similar features ( $p < 0.05$ ). By comparing the four countries (regions) of the regression coefficients, we find that residents of Mainland China seem to prefer formal support network for help. The results support the **H 2.2b**.

Finally, we discuss the impact of socio-economic status of family on the choice of social support networks. In mainland China, the probability for middle-income family members to choose mixed support is about 68% of informal support ( $p < 0.05$ ), while high-income members are similar (66%). However, although many coefficients are not significant, in other Chinese societies except mainland China, urban residents incline to mixed network to find help and the family still plays an extremely important role in the personal life (Ting and Chiu 2002; Zhang and Ruan 1999). This possible explanation is that the scale of mainland Chinese's families and relatives are larger than other Chinese societies, while formal support system construction is not sufficient. However, these findings cannot well support **H2.3b** and deny the fact that FES of residents cause heterogeneity of social support networks.

[Table 3 about Here]

## CONCLUSION AND DISCUSSION

This article focuses on the impact of social structure on social support networks of Chinese societies in East Asia by analyzing the ABS2006 data. Empirical data supports these assumptions: there are selective differences of social support networks between urban residents of mainland China and other Chinese societies (Hong Kong, Singapore and Taiwan). The main forces behind the different countries (regions) are the overall resource distribution and social stratification.

Most of earlier studies about support network usually discussed the informal, but



not the formal networks from nation, official market or society. Moreover, there are rarely papers which analyze the relationship between the formal and the informal. This paper focuses on the complex relationship among the informal networks, mixed networks and the formal in order to make up for these deficiencies.

We believe that the culture of Chinese societies still plays an important role in personal social support in 21st century. As Fei Xiaotong's notion of "chaxu geju", the household is the center of networks composed of all private contacts (Fei 1998:24-30). Residents in Chinese societies would obtain supports from informal networks including family members, relatives and friends (Lee, Ruan and Lai 2005). However, besides the specific cultural background, people's support networks are also subject to particular resources such as social class distribution patterns and structural elements. The results demonstrate that education, employment status and household economic status have different effects on the internal structure of individual's social support network respectively. Moreover, it is emphasized that, due to the degree of economic and social development, there is heterogeneity of networks among people at similar statuses. This proves that the RDT and LIT also have strong explanatory power in the Chinese community.

However, due to the data limitations, this study cannot control the variables of community which would influence support networks, but simply to discuss with the state variables. It means that the distribution of community resources in all countries (regions) are omitted variables. In other words, there are endogeneity problems. At the same time, due to the limitations of class comparative framework, we chose education, employment and family economic status to measure social stratification. However, it is different from the classical class scheme which is mainly based on occupation (Liu 2007). Meanwhile, the social support network in this paper mainly refers to the economic support but not the emotional support. These deficiencies have to be solved by new research designs and datasets in the future.

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**Table 1 Summary of Descriptive Statistics**

Variable	Number of observation	Mainland China	Hong kong	Singapore	Taiwan	Maximum	Minimum	Standard deviation
<b>Dependent variables (%)</b>								
Mixed networks	3581	45.68	49.62	58.25	57.59	1	0	0.499
Formal networks	3581	13.55	10.66	16.81	11.6	1	0	0.34
<b>Control variables</b>								
Male	3581	50.2	48.44	46.14	51.29	1	0	0.5
Age <sup>a</sup>	3581	40.85	40.74	40.97	40.21	69	20	12.32
Married	3581	76.31	62.43	70.35	69.05	1	0	0.46
household work <sup>b</sup>	3581	2.15	1.86	1.85	2.23	6	0	0.97
Social trust	3581	65.76	34.88	31.21	42.12	1	0	0.496
<b>Independent variables</b>								
education (%)								
Middle	3581	28.31	42.3	24.53	40.4	1	0	0.471
High	3581	43.07	15.93	17.95	31.66	1	0	0.444
<b>Employment status (%)</b>								
employee	3581	53.82	61.79	63.47	53.01	1	0	0.493
Self-employed	3581	18.98	3.66	6.16	16.05	1	0	0.313
<b>Family economic status (%)</b>								
Middle	3581	18.67	49.95	38.1	63.9	1	0	0.492
High	3581	24.9	6.69	34.55	18.05	1	0	0.416

**Note:** <sup>a</sup> <sup>b</sup> All values are mean.

**Table 2 Structural differentiation among Chinese Societies**

Support networks	China	Hong Kong	Singapore	Taiwan
	%	%	%	%
informal	40.77	39.72	24.94	30.81
mixed	45.68	49.62	58.25	57.59
formal	13.55	10.66	16.81	11.6
total	996	929	958	698

$\text{Chi}^2_{\text{Ch-Hk}}=5.02, \text{ df}=2, \text{ p}<0.1$

$\text{Chi}^2_{\text{Ch-Sg}}=55.28, \text{ df}=2, \text{ p}<0.001$

$\text{Chi}^2_{\text{Ch-Tw}}=23.84, \text{ df}=2, \text{ p}<0.001$

Note: Ch-Mainland China, Hk-Hong Kong, Sg-Singapore, Tw-Taiwan

**Table 3 Multinomial Logistic Regression of Stratification and Social Support Networks**

	China			Hong kong			Singapore			Taiwan		
	M vs I	F vs I	F vs M	M vs I	F vs I	F vs M	M vs I	F vs I	F vs M	M vs I	F vs I	F vs M
gender	-0.186 (0.14)	-0.271 (0.21)	-0.0846 (0.21)	-0.0948 (0.16)	0.373 (0.26)	0.468 <sup>+</sup> (0.25)	0.08 (0.17)	0.0338 (0.22)	-0.0462 (0.19)	-0.0417 (0.18)	0.0324 (0.28)	0.0741 (0.26)
age	0.000422 (0.01)	0.0213* (0.01)	0.0208* (0.01)	-0.00686 (0.01)	0.00729 (0.01)	0.0141 (0.01)	-0.0153 <sup>+</sup> (0.01)	0.00854 (0.01)	0.0238** (0.01)	-0.0104 (0.01)	0.0268 <sup>+</sup> (0.02)	0.0372** (0.01)
Marry	0.202 (0.19)	0.107 (0.28)	-0.0956 (0.28)	-0.155 (0.18)	-0.0054 (0.28)	0.15 (0.27)	0.0546 (0.19)	-0.162 (0.25)	-0.217 (0.21)	0.336 (0.23)	0.233 (0.36)	-0.103 (0.34)
working people	0.133 <sup>+</sup> (0.08)	-0.0699 (0.12)	-0.203 <sup>+</sup> (0.12)	-0.559*** (0.09)	-0.633*** (0.16)	-0.0749 (0.15)	-0.155 (0.10)	-0.0592 (0.14)	0.0958 (0.12)	-0.217* (0.10)	-0.0926 (0.16)	0.124 (0.15)
social trust	-0.224 (0.15)	0.29 (0.21)	0.513* (0.21)	0.00631 (0.15)	-0.0193 (0.25)	-0.0256 (0.24)	0.344* (0.17)	0.854*** (0.24)	0.510* (0.22)	0.104 (0.18)	-0.289 (0.27)	-0.393 (0.25)
edu-M	0.464* (0.19)	0.895*** (0.28)	0.431 (0.28)	-0.205 (0.18)	-0.0348 (0.29)	0.17 (0.28)	0.0871 (0.23)	0.767** (0.29)	0.680** (0.24)	0.0584 (0.25)	1.131** (0.42)	1.072** (0.40)
edu-H	0.812*** (0.21)	1.087*** (0.31)	0.275 (0.31)	-0.659** (0.25)	-0.527 (0.42)	0.133 (0.42)	-0.169 (0.26)	-0.0535 (0.37)	0.115 (0.32)	-0.0982 (0.28)	1.246** (0.46)	1.345** (0.43)
employed	-0.112 (0.19)	-0.33 (0.27)	-0.218 (0.26)	0.584*** (0.18)	0.520 <sup>+</sup> (0.29)	-0.0644 (0.29)	0.318 <sup>+</sup> (0.19)	0.442 <sup>+</sup> (0.26)	0.124 (0.23)	0.424* (0.21)	0.359 (0.33)	-0.0646 (0.32)
Self-emoloyed	-0.307 (0.22)	-0.525 (0.33)	-0.218 (0.33)	0.783 <sup>+</sup> (0.41)	0.454 (0.70)	-0.329 (0.66)	0.505 (0.38)	0.158 (0.53)	-0.347 (0.45)	0.559* (0.28)	0.0553 (0.46)	-0.504 (0.44)
house income-M	-0.378* (0.19)	-0.548 <sup>+</sup> (0.30)	-0.17 (0.30)	0.13 (0.18)	-0.337 (0.28)	-0.467 <sup>+</sup> (0.28)	0.122 (0.21)	-0.515 <sup>+</sup> (0.28)	-0.638* (0.25)	0.237 (0.25)	-0.449 (0.37)	-0.686* (0.34)
house income-H	-0.414* (0.18)	-0.0827 (0.25)	0.332 (0.25)	0.0981 (0.29)	0.198 (0.45)	0.1 (0.44)	0.714** (0.26)	0.316 (0.34)	-0.399 (0.29)	0.24 (0.35)	-0.312 (0.52)	-0.552 (0.49)
Constant	-0.356	-2.234***	-1.879***	1.429***	-0.755	-2.185***	0.972*	-1.543*	-2.515***	0.768	-2.658**	-3.426***

	(0.39)	(0.58)	(0.57)	(0.42)	(0.66)	(0.64)	(0.46)	(0.63)	(0.57)	(0.58)	(0.92)	(0.87)
<i>N</i>	996	996	996	929	929	929	958	958	958	698	698	698
Nagelkerke $R^2$	0.061	0.061	0.061	0.1	0.1	0.1	0.069	0.069	0.069	0.06	0.06	0.06

**Note:** Standard errors in parentheses. F-formal support networks, M-mixed support networks, I-informal support networks.

\*\*\*  $p < 0.001$

\*\*  $p < 0.01$ ,

\*  $p < 0.05$

+  $p < 0.1$

## APPENDIX

**Table1 Distinction Criterion of family economic status**

	low	middle	high
China (annul)	<30000	30000-50000	≥50000
Hong Kong (annul)	<150000	150000-350000	≥350000
Singapore(monthly)	<\$2000	\$2000-4000	≥\$4000
Taiwan(monthly)	<nt\$ 50000	nt\$ 50000-100000	≥nt\$ 100000

**Graph 1**

