Published in final edited form as:
Omega (Westport). 2009 ; 60(4): 365–382.

ATTITUDES TOWARD SUICIDE: THE EFFECT OF SUICIDE DEATH IN THE FAMILY*

Jie Zhang, Ph.D. and
Central University of Finance and Economics, School of Social Development, China and SUNY College at Buffalo

Cun-Xian Jia, Ph.D.
Shandong University School of Public Health and the Postdoc Program of the School of Economics, China

Abstract

There have been few reports on the effect of suicide death on family members' attitudes toward suicide. In order to estimate the extent to which suicide death affects attitudes toward suicide among family members of suicides, data of 264 informants from a case-control psychological autopsy study were analyzed. The results showed that there were no significant differences in attitudes toward suicide, measured by the General Social Survey's (GSS) four questions, between informants of suicides and informants of living controls, between family members of suicides and family members of living controls, or between family members of suicides and non-family members of suicides. Our findings did not support the hypothesis that suicide death affects the attitudes toward suicide in suicides' family members. However, some factors were found to be related to the pro-suicide attitudes measured by the four questions included in the GSS.

INTRODUCTION

A recent study shows Chinese suicide rates are 15.05/10,000 annually from 2002 to 2006 according to the data of the Ministry of Health vital registration (MOH-VR) system, and suicide is the second leading injury cause of death in China (Wang, Li, Chi, Xiao, Ozanne-Smith, Stevenson, et al., 2008). There are different suicide patterns in China where suicide rates in the female are about the same as in the male, and the rural rates are from two-fold to three-fold greater than the urban rates (Phillips, Li, & Zhang, 2002; Qin & Mortensen, 2001; Wang et al., 2008). Another important difference between China and Western countries is that there are about 50% of suicides with mental illnesses in China while more than 90% of all suicides in Western countries can be diagnosed with mental illnesses (Phillips, Li, & Zhang, 2002). Socioeconomic and culture factors are the dominant elements in most suicides occurring in China (Phillips, Liu, & Zhang, 1999; Zhang, Conwell, Zhou, & Jiang, 2004). Impulsivity personality, easy access to farming suicide, and lack of medical care and facilities in most Chinese rural areas are important factors related to rural Chinese suicide risks (Phillips, Yang, Zhang, Wang, Ji,& Zhou, 2002; Zhang et al., 2004). With 21% of the world's population, China has been estimated to account for 30% to 44% of global suicides

*The study was supported by the NIMH grant (R03 MH60828).

Direct reprint requests to: Cun-Xian Jia, Ph.D., Institute of Epidemiology and Health Statistics, School of Public Health, The Postdoc Program of the School of Economics, Shandong University, 44 Wenhuaxi Road, Jinan, Shandong, China 250012, jiacunxian@sdu.edu.cn.

(Beautrais, 2006; Murray & Lopez, 1996a, 1996b). So, suicide in China is an important public health problem.

Attitudes toward suicide are the view or cognition about suicide behavior in the population. Although the extent to which attitudes toward suicide are related to actual behaviors is complex and a matter of extensive, as yet unresolved, debate (Cleary & Brannik, 2007; Joe, Romer, & Jameson, 2007; Lee, Tsang, Li, Phillips, Kieinman, 2007; Renberg & Jacobsson, 2003), large studies demonstrated positive correlation between pro-suicide attitude and suicidality (Domino, Su, & Johnson, 2001–2002; Eshun, 2003; Joe et al., 2007; Lee et al., 2007; Renberg & Jacobsson, 2003; Stein, Brom, Elizur, & Witztum, 1998).

In the past few decades, researchers in China have tried to measure the attitudes toward suicide among Chinese populations. The available instruments include the scales developed by Yu and Ye (1996), Xiao et al. (1999; Questionnaire on Suicide Attitudes, QSA), and Li and Phillips (2007). In Hong Kong, Lee et al. (2007) have developed a Hong Kong version of the Chinese Attitudes toward suicide Questionnaire (CASQ-HK) which assesses attitudes toward suicide, suicidal inclination under 12 hypothetical scenarios, and prior suicidal experience.

Suicide attitude measurement has been a long-time endeavor in the West and has resulted in many sophisticated instruments. The Suicide Opinion Questionnaire (SOQ; Domino, Gibson, Poling, & Westlake, 1980; Domino, Moore, Westlake, & Gibson, 1982) has 100 items with the high test-retest reliabilities (all above 0.68). Respondents to the SOQ are instructed to give their honest opinion to each of the items on a 5-point response scale of strongly agree, general agree, undecided, general disagree, and strongly disagree. The SOQ has been broadly used in different populations and different countries. Some of the studies using SOQ involved Chinese populations in the United States (Domino & Su, 1994–95) and Singapore (Domino, Niles, & Raj, 1993–94), as well as in China including Taiwan (Domino, Domino, & Su, 2001–2002; Domino, Shen, & Su, 1999–2000). These studies show that SOQ has cross-cultural applicability and construct validity. Influenced and partly based on SOQ and the suicide attitude questionnaire (SUIATT; Diekstra & Kerkhof, 1989), Renberg and Jacobsson (2003) have developed the attitudes toward suicide (ATTS) questionnaire which has a fairly good internal consistency (Cronbach's alpha was 0.60) and 10 factors can explain 62% of the variance. Renberg, Hjelmeland, and Koposov (2008) have built different models for the relationship between attitudes toward suicide and suicidal behavior based on data from general population surveys in Sweden, Norway, and Russia.

Another popularly used scale for attitudes toward suicide is the GSS 4. This is a scale of four questions on suicidal attitudes from the National Opinion Research Center (NORC) General Social Survey (GSS; Davis & Smith, 1993; NORC, 1983, 1985). The items ask respondents if suicide is justifiable in each of the four life crises, including incurable disease, bankruptcy, dishonored his/her family, and being tired of living.

Loss of a loved one is a difficult psychological trauma which needs a relatively long time to recover (Farberow, Gallagher-Thompson, Gilewski, & Thompson, 1992a). Compared with family members of natural death, those family members of suicide death received significantly less emotional support for their depression feelings and grief. While compared with non-bereaved controls, they showed no confidence in the persons in their network any more (Farberow, Gallagher-Thompson, Gilewski, & Thompson, 1992b). Some researchers thought that persons who were close to the deceased were at heightened risk for complicated grief or other psychosocial consequences (Mitchell, Kim, Prigerson, & Mortimer-Stephens, 2004; Prigerson, Bierhals, Kasl, Reynolds, Shear, Day, et al., 1997; Scocco, Frasson, Costacurta, & Pavan, 2006), and the familial transmission of suicidal behavior had been

demonstrated (Brent, Oquendo, Birmaher, Greenhill, Kolko, Stanley, et al., 2002; Melhem, Brebt, Ziegler, Iyengar, Kolko, Oquendo, et al., 2007). In this study, we want to know whether there are differences in attitudes toward suicide between the informants of suicides and the informants of living controls, between the family members of suicides and the family members of non-suicides, and between the family members of suicides and non-family members of suicides. Our hypothesis is that suicide death affects the attitudes toward suicide among suicides' family members, and the suicide death increases the rates of family member's pro-suicide attitudes.

METHODS

Data Source and Subjects

Data for this study came from psychological autopsy interviews in two rural counties in Dalian, Liaoning Province, China, between 2001 and 2002 (Zhang, Wieczorek, Jiang, Zhou, Jia, Sun, et al., 2002). A total of 66 completed suicides were consecutively selected in Jinzhou and two townships in Zhuanghe, and 66 community living controls were randomly selected in the same village or neighborhood that matched the suicide in gender and age. For each suicide case or living control, there were two informants who were either next of kin or the best friend or neighbor of him/her. The response rate was 100% in the suicide case sample. Only two cases of 66 controls declined the interview, and replacements were made immediately. The higher response rates of participants can be accounted for by the Chinese culture that values conformity and respects authority (Zhang et al., 2004). Each interview began with the reading and signing the consent form, and the average interview time was 2.5 hours. For detailed information on the psychological autopsy interviews and the data collection procedures, please refer to the authors' earlier publications (Zhang, Conwell, Wieczorek, Jiang, Jia, & Zhou, 2003; Zhang et al., 2002, 2004).

Altogether there were 264 informants in the study, with 132 respondents providing information for 66 suicides and 132 respondents providing information for 66 living controls. The age of the 264 respondents ranged from 16 to 80 years with its mean and standard deviance (*SD*) being 46.43 and 13.21. There were 87 (33.0%) males and 177 (67.0%) females. About 221 (83.7%) respondents were married and living together and 43 (16.3%) never married, remarried, divorced, or widowed. About 26 (9.8%) respondents lived in urban areas and 238 (90.2%) in rural areas. The relationships of informants to suicides or controls were as follows: spouse, 59 (22.3%); parent, 26 (9.9%); mother-in-law, 3 (1.1%); stepmother, 1 (0.4%); brother or sister, 17 (6.5%); son or daughter, 18 (6.8%); grandfather or grandmother, 2 (0.7%); other relatives, 61 (23.1%); friend, 20 (7.6%); neighbor, 30 (11.4%); medical personnel, 24 (9.1%); other records including public security office data, 3 (1.1%). There were 126 (47.7%) family members of the suicides and living controls.

Instruments—The instruments included informants' demographic data, such as age, gender (male = 1, female = 2), education level (no school = 1, elementary school = 2, middle school = 3, high school = 4, college and above = 5), marriage status (married and living together = 0, others = 1), family size (3 and lower = 0, 4 and above = 1), family annual income (lower than 10, 000 = 0, 10,000 and above = 1), residence location (urban = 1, rural = 2). Religion and religiosity (none = 0, others including Buddhism, Daoism, Islam, Protestant, Catholicism, etc. = 1), believing in God (no = 0, yes = 1), believing in after life (no = 0, yes = 1), depression measured by the Chinese version (Lin, 1989) of the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) were all validated in Chinese populations (Zhang & Norvilitis, 2002). The coding of the CES-D for the current study was: no depression symptom (0 = lower than 16 of the total score of CES-D), possible

depression symptom (1 = from 16 to 19 of the total score of CES-D), and depression symptom (2 = 20 and above of the total score of CES-D). The dependent variables of the study were the four items on attitudes toward suicide in the GSS study (Davis & Smith, 1993; NORC, 1983, 1985). The four GSS questions are whether you approve a person has a right to commit suicide (no = 0, yes = 1) when s/he faces an incurable disease, when s/he is bankrupt, when s/he has dishonored his/her family, and when s/he is tired of living.

Translation and back translation of the scales were conducted multiple times to ensure the accuracy of each item in the interview. Recognizing that translations cannot always be perfect because of the differences in culture (Zhang & Thomas, 1994), the bilinguals on the research team met frequently for the disputed items in the translation until consensus was reached.

Data Analysis—Statistical Package for the Social Sciences (SPSS, version 11.5) was used to analyze the data. Chi-square tests were used to show whether there were significant differences between categorical data. *T*-tests were used to test significant differences between two continual data. Multivariate logistic regression models were also used to analyze the factors related to the approval attitudes toward suicide for GSS 4 questions.

RESULTS

Table 1 illustrated the sample characteristics of the informants of suicides and informants of living controls. There were significant differences in age, gender, depression status, and residence location between informants of suicides and informants of living controls. However, the differences were not significant in being family member or not, annual income, marital status, family size, educational level, religion, believing in God, believing in after life between the two groups.

We then compared the pro-suicide attitudes between informants of suicides and informants of living controls in Table 2. Although the pro-suicide attitude scores of “incurable diseases,” “bankruptcy,” and “dishonored his/her family” were higher for the informants of suicides than for those of living controls, the differences were not significant at the 0.05 probability level. A suicide death might not affect family members’ attitudes toward suicide.

Table 3 compared the pro-suicide attitudes between family members of suicides and family members of living controls. There was no significant difference found in the comparisons between two samples. Although the suicide was a tragic event in the family, it did not affect the family members’ attitudes toward suicide in comparison with the family members of living controls.

We then looked at the differences in pro-suicide attitudes between family members of suicides and non-family members of suicides. We found no significant differences in any of the four attitude items between the two groups of suicide. The results were shown in Table 4.

Of the 264 subjects, 108 (40.9%) approved suicide in the case of “incurable diseases,” 24 (9.1%) approved suicide for “bankruptcy,” 48 (18.2%) for “dishonored his/her family,” and 42 (15.9%) approved suicide for “being tired of living.” As no differences could be found among the respondents differentiated by suicidal events, we looked at the demographic and social characteristics of the respondents for possible correlates with the pro-suicide attitudes. We included all the variables listed in Table 1 and adopted multivariate logistic regression analyses with forward method (likelihood ratio) for each of the four GSS items as dependent variables. The results had shown that depression status and believing in God were both positively related to pro-suicide attitudes in the case of “an incurable disease.” None of the

demographic and social factors were associated with pro-suicide attitudes in the case of "bankruptcy." Age was positively associated with while believing in God was negatively associated with pro-suicide attitudes in the case of "dishonored his/her family." For the case of "being tired of living," only depression status was positively related to the approving attitudes toward suicide. The results are illustrated in Table 5.

DISCUSSION

Attitudes are regarded as important parts of one's personality; they tend to be stable over time and are often predictive of one's behavior (Larsen & Buss, 2002). Many studies have been carried out on studying attitudes toward suicide in the world by different scales in different populations, such as in general populations by GSS (Davis & Smith, 1993; NORC, 1983, 1985; Sawyer & Sobal, 2001), in specific populations such as the 25 years olds by SOQ (Beautrais, Horwood, & Fergusson, 2004), adolescent or college students by SOQ (Domino et al., 1980; Domino, MacGregor, & Hannan, 1989; Zemaitiene & Zaborskis, 2005), in young Muslims and Hindus in the United Kingdom by SOQ (Kamal & Lowenthal, 2002), or in hospital staff by SOQ (Anderson, Standen, Nazir, & Noon, 2000; Crawford, Geraghty, Street, & Simonoff, 2003; Domino & Perrone, 1993; House, Owens, & Storer, 1992). In Chinese culture, most studies on attitudes toward suicide use QSA (Xiao et al., 1999). The participants are most college students (Fu & Li, 2007; Li & Wang, 2008; Liu, Li, Zou, & Fang, 2008; Wang, Ge, Hu, Song, & Dai, 2005; Xu, Ma, Xiao, & Li, 2007; Yang & Li, 2007), medical students (Xu, Ou, & Wu, 2006; Zeng, Liao, & Yang, 2008), middle school students (Chen, Zhou, Wang, & Huang, 2003; Wang, Wu, Sun, Xia, Gong, & Yin, 2006), or technical secondary school students (Huang, Tao, Gao, & Li, 2005; Jia, Xu, & Cheng, 2006; Liu, Gao, & Zhang, 2006; Zhu, Liang, Jiao, Wei, & Tian, 2006), some special populations such as military postgraduates (Liu et al., 2008) or criminals (Li, 2006), or lawyers, Buddhists, and medical staffs (Yang, Xiao, Dong, & Yang, 1999). Susanszky, Hajnal, and Kopp (2008) have studied attitudes toward suicide in the Hungarian general population and in the helping professions. Oncu et al. (2008) have carried out a study on attitudes of medical students, general practitioners, teachers, and police officers toward suicide in a Turkish sample. Some psychology students' attitudes toward suicide are also studied in Ghana, Uganda, and Norway (Hjelmeland, Akotia, Owens, Knizek, Nordvik, Schroder, et al., 2008). These studies show that researching attitudes toward suicide is also an important aspect in studying or preventing suicide behavior in different cultures in the world. However, different populations have different levels of attitudes toward suicide; even the same population also has different levels of different dimension of attitudes toward suicide (Domino, Su, & Johnson, 2001–2002; Huang et al., 2005; Li, 2006; Oncu et al., 2008; Renberg et al., 2008; Wang et al., 2005; Wang & Lu, 2001; Xu et al., 2007; Yang et al., 1999).

In the current study, we use the four items from the GSS protocol measuring respondents' attitudes toward suicide in four different life event situations (Davis & Smith, 1993; NORC, 1983, 1985). For the respondents as a whole, the highest score of suicide approval is for "an incurable disease" with 40.9% of total subjects. The approving rate for "an incurable disease" in the Chinese sample is lower than those of 45.9% (NORC, 1983) and 46% (NORC 1985) from American populations. Except for the approving rate for "bankruptcy" of family members of suicides, other rates for "bankruptcy" are close to the findings of 8.5% (NORC, 1983) and 8% (NORC, 1985) for American respondents. The approval rates for "dishonored his/her family" (18.2%) and for "being tired of life" (15.9%) are higher than 8.9% and 14.3% (NORC, 1983), and 8% and 13% (NORC, 1985) respectively for American people. Compared with the United States data, the Chinese levels of pro-suicide attitudes are similar with those of Americans for "an incurable disease" and "bankruptcy," but different for "being tired of living" and for "dishonored his/her family." In Chinese culture, having

done something to dishonor the family is a critical, detrimental, and more serious life event than in the West. To some Chinese people, *mianzi*, protection of the face, is equivalent to protection of their life (Zhang et al., 2004).

There have been many reports on factors related to attitudes toward suicide (Beautrais et al., 2004; Huang et al., 2005; Li, 2006; Sawyer & Sobal, 2001; Wang & Lu, 2001; Xu, Ou, & Wu, 2006; Yang et al., 1999; Yang & Li, 2007; Yuan & Sun, 2002). Culture, tradition, religion, and the experience of growth are all major ones (Chiles & Strosahl, 1995). Pro-life beliefs and civil libertarianism are strongly related to persons' attitudes toward suicide and explained at least part of every socio-demographic relationship examined (Sawyer & Sobal, 2001). Attitudes toward suicide are unrelated to gender and knowledge about suicide in young people (Beautrais et al., 2004). However, Lee et al. (2007) have found female and elder and the presence of suicidal ideation are associated with more contemplation of suicide. Renberg, Hjelmeland, and Koposov (2008) also point out that there are possible ways to better understand gender and culture-specific paths between attitudes and suicidal behaviors by different modes. In China, gender, social factors, and psychological status, religion, and suicide ideation are found related to attitudes toward suicide (Ge, Hu, Wang, Song, Yuan, & Xu, 2005; Huang et al., 2005; Li, 2006; Li & Wang, 2008; Liu, Gao, & Zhang, 2006; Wang et al., 2005; Xu et al., 2007; Yang et al., 1999; Zeng et al., 2008).

In the current study, we have found that depression level is positively associated with approving attitudes toward suicide for "an incurable disease" and "being tired of living," age is positively associated with approving attitudes for "dishonored his/her family," believing in God is positively associated with approving attitudes for "incurable disease," and negatively associated with approving attitudes for "dishonored his/her family." Studies about significant association between depression and suicidal behavior have been found in previous studies (Fu & Li, 2007; Hendian, Maltsberger, Haas, Szanto, Rabinowicz, 2004; Jiang, Xu, Chen, & Hu, 2008; Kisch, Leino, & Silverman, 2005; Phillips et al., 2002; Yang & Li, 2007; Zhang et al., 2004). The CES-D scale can be used to measure people's depression status (Radloff, 1977).

Some studies have reported religion to be associated with attitudes toward suicide (Chiles & Strosahl, 1995; Eskin, 2004; Jing, Wang, Yang, Zhao, Li, Kuang, et al., 2008; Yang et al., 1999). In our study, believing in God is positively associated with approving attitudes for "an incurable disease" and negatively associated with "dishonored his/her family." That age is positively associated with approving attitudes for "dishonored his/her family" indicates that the older the people are, the more traditional they are and the more they care about their *mainzi*. "Dishonored his/her family" is regarded as loss of face which is very important and often expressed *diu mianzi* in Chinese language. The sense of self-image and protection of self-image also exist in the Western cultures, but people in very few of these other cultures take loss of face as much serious as Chinese do (Zhang et al., 2004). Compared with the young, older people feel more about that "the face is life," and they are more easily prone to receive approving attitudes for "dishonored his/her family."

In our comparisons of attitudes toward suicide, we have found no differences between:

1. informants of suicides and informants of living controls;
2. family members of suicides and those of living controls; and
3. family members of suicides and non-family members of suicides.

The results suggest that suicide death in the family has no significant effect on people's attitudes toward suicide, which is contrary to our original hypothesis. Reasons might be as follows:

1. One's attitudes toward suicide are more complex, not only affected by the event of suicide in the family, but also affected by his/her socioeconomic, religion, psychology status, etc. For example, in the less religious societies, attitudes toward suicide are mixed (Zhang et al., 2004).
2. Suicide in some areas, especially in rural areas in China, is still taboo; people might not say their real thought about attitudes toward suicide, especially among family members of suicide.
3. Some research methods might be causes. The data used in this study are from a large psychological autopsy study which is not designed for this current study and therefore the sampling might not be as representative as we wish. Our relatively small sample, retrospective data with information bias, etc., might also be causes to the results.

More specially designed studies should be carried out to further explore the Chinese people's attitudes on suicide and the effect of suicide in the family or among friends on their attitudes change.

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Table 1

Comparing Characteristics between Informants of Suicides and Those of Living Controls

Variable	Informants of suicides n = 132 f (%)	Informants of controls n = 132 f (%)	t or χ^2	p
Family member				
Yes	63 (47.7)	63 (47.7)	0.000	1.000
No	69 (52.3)	69 (52.3)		
Gender				
Male	52 (39.4)	35 (26.5)		
Female	80 (60.6)	97 (73.5)	4.956	0.026
Age	132 (m = 50.11, sd = 12.47)	132 (m = 42.76, sd = 12.96)	4.695	0.000
Marital status				
Married	105 (79.5)	116 (87.9)		
Others	27 (20.5)	16 (12.1)	3.361	0.067
Family size				
1~3	88 (66.7)	85 (64.4)		
4 and above	44 (33.3)	47 (35.6)	0.151	0.698
Family annual income				
Lower than 10,000	71 (53.8)	61 (46.2)	1.515	0.218
10,000 and above	61 (46.2)	71 (53.8)		
Depression status				
No	74 (56.1)	93 (70.4)		
Possible	14 (10.6)	17 (12.9)	9.785	0.008
Yes	44 (33.3)	22 (16.7)		
Residence				
Urban	8 (6.1)	18 (13.6)		
Rural	124 (93.9)	114 (86.4)	4.266	0.039
Education level				
No school	8 (6.1)	6 (4.6)		
Elementary	62 (47.0)	47 (35.6)		
Middle school	47 (35.6)	51 (38.6)	7.390	0.117
High school	6 (4.5)	7 (5.3)		
College and above	9 (6.8)	21 (15.9)		
Religion				
Atheism	119 (90.2)	122 (92.4)	0.429	0.513
Others	13 (9.8)	10 (7.6)		
Believing in God				
Yes	16 (12.1)	20 (15.2)	0.515	0.473
No	116 (87.9)	112 (84.8)		
Believing in afterlife				
Yes	11 (8.3)	9 (6.8)	0.216	0.642
No	121 (91.7)	123 (93.2)		

Table 2

Comparing Pro-Suicide Attitudes between Informants of Suicides and Those of Living Controls

	Informants of suicides		Informants of controls		Total informants		$\chi 2$	
GSS	***N***	**%**	***N***	**%**	***N***	**%**	**(*df* = 1)**	***p****
If an incurable disease								
Yes	57	43.2	51	38.6	108	40.9	0.564	0.453
No	75	56.8	81	61.4	156	59.1		
If bankrupt								
Yes	13	9.8	11	8.3	24	9.1	0.183	0.669
No	119	90.2	121	91.7	240	90.9		
If dishonored his/her family								
Yes	25	18.9	23	17.4	48	18.2	0.102	0.750
No	107	81.1	109	82.6	216	81.8		
If tired of living								
Yes	19	14.4	23	17.4	42	15.9	0.453	0.501
No	113	85.6	109	82.6	222	84.1		

* *p* values were the results of comparing the pro-suicide attitudes between informants of suicides and those of living controls.

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Table 3

Comparing Pro-Suicide Attitudes between Family Members of Suicides and Family Members of Living Controls

	Family members of suicide		Family members of living controls		Chi-square	
GSS	***N***	**%**	***N***	**%**	**(*df* = 1)**	***p***
If an incurable disease						
Yes	30	47.6	30	47.6	0.000	1.000
No	33	52.4	33	52.4		
If bankrupt						
Yes	8	12.7	6	9.5	0.321	0.571
No	55	87.3	57	90.5		
If dishonored his/her family						
Yes	10	15.9	16	25.4	1.745	0.187
No	53	84.1	47	74.6		
If tired of living						
Yes	9	14.3	12	19.1	0.514	0.473
No	54	85.7	51	80.9		

Table 4

Comparing Pro-Suicide Attitudes between Family Members of Suicides and Non-Family Members of Suicides

	Family members of suicide		Non-family members of suicides		Chi-square	
GSS	***N***	**%**	***N***	**%**	**(*df* = 1)**	***p***
If an incurable disease						
Yes	30	47.6	27	39.1	1.138	0.286
No	33	52.4	42	60.9		
If bankrupt						
Yes	8	12.7	5	7.2	1.239	0.266
No	55	87.3	64	92.8		
If dishonored his/her family						
Yes	10	15.9	15	21.7	0.661	0.416
No	53	84.1	54	78.1		
If tired of living						
Yes	9	14.3	10	14.5	0.001	0.973
No	54	85.7	59	85.5		

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Table 5

Results of Multivariate Logistic Regression Analyses with Significant Factors Related to Pro-Suicide Attitudes on Each of the Four GSS Questions

	β	S.E.	Wald χ^2	*p*	95%C.I.
If an incurable disease					
Depression status	0.611	0.151	16.385	0.000	1.842 (1.370–2.477)
Believing in God	0.740	0.377	3.841	0.050	2.095 (1.000–4.390)
Constant	−0.718	0.308	5.455	0.020	
If bankrupt*					
If dishonored his/her family					
Age	0.026	0.013	4.155	0.042	1.026 (1.001–1.052)
Believing in God	−1.477	0.750	3.875	0.049	0.228 (0.052–0.994)
Constant	−2.063	0.640	16.553	0.000	
If tired of living					
Depression status	0.534	0.185	8.329	0.004	1.705 (1.187–2.451)
Constant	−2.068	0.238	75.612	0.000	

*None of the factors under study were significantly related to the pro-suicide attitudes in this type of live crisis.