It's Others, Not the Police: Smoking, Reprimand, and Fines among Adults of Korean Descent in California

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Abstract

Objective—This study assesses the association of immediate social and legal reprimand and current smoking status among Californians of Korean descent.

Design—Data were drawn from a population-based probability sample using a telephone survey conducted by bilingual, professional interviewers (N=2085). About 85.0% of eligible respondents completed interviews and 86.3% of participants preferred to be interviewed in Korean.

Main Outcome Measure—Smoking status was measured using CDC criteria, ever smoked 100 cigarettes and currently smoke every day or some days.

Results and Conclusion—Reports of immediate criticism by others in several settings was associated with non-smoking, but likelihood of immediate legal penalties was unrelated. Participants were far less likely to expect legal than social sanction. Results were replicated after controlling for reinforcers of smoking and ecologically relevant variables including models of smoking, primary group social support for smoking, acculturation, gender, acculturation by gender (male) interaction, age, and education. It may be efficacious to target public health interventions encouraging appropriate social sanctions of smoking in public among persons of Korean descent, and to encourage strict enforcement of legal penalties for smoking in public places.

Keywords

smoking; reprimand; citation; Korean; Asian; social; legal

Background

California was one of the earliest states to implement policies designed to restrict tobacco use in public places and it has had a reputation for enforcement of these policies. Although state taxation of tobacco products has fallen behind many other states, laws against smoking in bars and restaurants and other enclosed public places are widely believed to be enforced (Center for Disease Control and Prevention [CDC], 2008). The purpose of this study was to evaluate the theoretically expected impact of immediate social and legal reprimand on smoking behaviors among Californians of Korean descent.

Persons of Korean descent constitute a small but rapidly growing minority in the United States (Yu, Choe & Han, 2002). Male Koreans are characterized by relatively high rates of smoking and female Koreans are characterized by relatively low rates in comparison to Americans (Carr, Beers, Kassebaum, & Chen, 2005; CDC, 1997; CDC, 2001; CDC, 2002; Korean Statistical Information System, 2006; Lee, Sobal, & Frongillo, 2000; Mackay, Jemal, Lee, & Parkin, 2006; Mermelstein, 1999; USDHHS, 1998). Surveys conducted in the language preferred by respondents (predominantly Korean among adults) document higher rates of smoking among Korean males than surveys conducted only in English, no doubt due to differences in acculturation (CDC, 1997; Kim K., et al., 2000; National Asian Women's Health Organization, 1998). Hofstetter and colleagues (2004) reported a CDC defined smoking prevalence ("ever smoked 100 cigarettes" and "are currently smokers") of 31.2% for men and 3.7% for women among Californians of Korean descent. This compares to 25.5% current prevalence among American men and 21.5% current prevalence among American women (CDC, 2003). Data for California in 2001 showed that 13.0 percent of California adults (15.4 percent of males and 10.8 percent of females) were current smokers (Gilpin, et al., 2001). Several studies have also linked smoking and other health risk behaviors to acculturation (Kim, et. al., 2000; Lee, et al., 2000; Lew, et al., 2001). In California, acculturation is negatively related to cigarette smoking among Korean males and positively to cigarette smoking among Korean females (Hofstetter et al., 2004).

The behavioral ecological model (BEM) casts behavior as a function of physiological, physical, and social contingencies of reinforcement, and both summative and synergistic interactions within and across levels of society (Hovell, Wahlgren, & Adams, in press; Hovell, Wahlgren, & Gehrman, 2002). The BEM assumes that the power of contingencies, such as the nearly immediate effect of nicotine on the brain, and local social reinforcement from others, such as social company in the context of tobacco use, provide the most immediate and therefore powerful contingencies of reinforcement. Social contingencies may be especially strong among males in Korea where smoking initiation is attributed to peer pressure in schools and the military, and where smoking maintenance is attributed to social interactions during business dealings (Kim, Son, & Nam, 2005).

The BEM emphasizes the potential role of contingencies at relatively "high" levels of society, such as media and laws, as moderators motivating operations that may alter the effect of contingencies derived from micro-social networks, such as family and close friends (Martin & Pear, 2007). For Korean male immigrants to the U.S., smoking may be used to maintain their identity as Korean males or smoking might be reduced as they acculturate to the social stigma against smoking in California.

The purpose of this study is to test hypotheses derived directly from the behavioral ecological model. Over and above the influence of general social reinforcers that have consistently predicted smoking status among Koreans (Hofstetter et al., 2004; 2007; Ji et al., 2005), we will test the more proximal and specific variable, reported likelihood of immediate social sanctions associated with smoking status.

Method

The Sample

The sampling was designed to represent the adult population of Californians of Korean descent. Study procedures were approved by the Institutional Review Board at San Diego State University. Figure 1 depicts the disposition of the sample. From this listing of telephone numbers, 45,445 persons were called and 2,085 completed the survey, 367 refused, 18,469 were ineligible to participate (because no Koreans were in the household or the number belonged to a business), and 24,524 were not surveyed for other reasons (disconnected telephone number, answering machines, call backs, continually busy telephone line, unkept appointments, and automatic hang ups without an audible response prior to the survey introduction).

Telephone interviews were conducted with a probability sample of adults (18 years or over) of Korean descent who resided in households that had residential telephones in California during 2005-2006 (N=2085). The sample was drawn randomly from telephone numbers associated with persons with the 300 most common Korean surnames. The electronic list was purchased from a commercial firm, and was originally derived from listed numbers and from a variety of other sources (e.g., membership lists, subscriptions, and warrantee information). All potential respondents were then filtered to ensure that they were of Korean descent during the introduction to the survey.

Stratified by gender, respondents of Korean descent were then selected randomly in each household by using the most recent birthday procedure (Frey, 1989). Up to eight follow-up attempts were made to contact potential respondents. Of the eligible respondents contacted, 85.0% completed interviews and 86.3% preferred to be interviewed in the Korean language.

The current sample approximates the population of adults of Korean descent in California when compared to the 2000 U.S. Census on age and gender, although older persons of both genders (over 54) were slightly overrepresented and younger males (18-54) were slightly underrepresented, as were younger females (18-34). No conclusions were changed when analyses were weighted to the census figures for California and weighted results are reported below.

Language

The survey instrument was constructed initially in English and translated into Korean by bilingual staff and co-investigators. Precise wording was formulated based on feedback from two focus groups of Korean-Americans living in the San Diego, CA area. The instrument was back-translated, modified, and re-translated several times with the aid of study co-investigators who are faculty members at Myongji and Seoul National Universities in Korea. All interviewers and their supervisor were bilingual in English and Korean. Since a high proportion of Koreans have recently immigrated to the U.S., initial contact was made in the Korean language and interviewers were instructed to shift to English if that was the respondent's preference.

Measures

Current Smokers—Current smoking was measured by: (1) "Have you smoked 100 cigarettes during your lifetime?" and (2) "Do you now smoke cigarettes every day, some days, or not at all?" (USDHHS, 1996). Current smokers were defined as those who reported smoking every day or some days and who had smoked at least 100 cigarettes in their lifetimes.

Reprimand—Reports concerning the likelihood of receiving a reprimand from various sources for smoking in public places were measured by responses to the following 10 questions:

"What percentage of smokers in California do you think will be...reprimanded by a stranger, reprimanded by their boss, asked to leave a restaurant or bar, reprimanded by a fellow friend, looked down on by strangers, reprimanded by a family member, asked not to smoke in friend's house, asked not to smoke in front of relatives, asked not to smoke around children, given a ticket by a policeman." Item means, standard deviations, and sample sizes are reported in Table 2 below. A composite reprimand scale was formed by computing the mean for item scores that permitted three values to be missing. The "ticketed by a policeman" item was deleted from the scale since it was not associated with other items. The reprimand scale mean, 59.97, SD=20.49, indicates that expectations were high that some form of reprimand would follow smoking in a public place. An α=.82 indicates reliability for the scale.

Social Support for Non-Smoking—A social support for non-smoking scale (discouragement of smoking) was formed by counting the number of persons in different relationship categories (spouse, parents, siblings, friends, children, grandparents, aunts/uncles, teachers, and other persons) who "...discourage you from smoking." Responses were summed to produce a score ranging from 0 to 9 (Mean= 2.63, SD=0.39, Cronbach's α=.96). A high score indicated high discouragement from smoking.

Models of Smoking—A scale of models for smoking was computed by counting the number of persons in different relationship categories (spouse, parents, siblings, children, grandparents, aunts/uncles, teachers, children's friends, and other persons) whom respondents reported "...regularly smok(ing) cigarettes." Responses ranged from 0 to 6 (Mean=1.21, SD=1.20, Cronbach's α=.52). A high score indicated more people smoking in the immediate environment.

Acculturation—The acculturation scale used in this study was adapted from the Suinn-Lew Asian self-identity acculturation to U.S. society scale (Suinn, Rickard-Figueroa, Lew & Vigil, 1987, Suinn, Khoo, & Ahuna, 1995). The original scale was designed for paper and pencil administration so some items were reformatted for telephone administration. Items were designed to measure aspects of cultural preferences involving language, music, food, and self-identification including how the self is identified, father's identification, and social linkages including ethnicity of peers and preferred associations. Reported proportions of education and years of living in the U.S. were added to the original scale for this analysis. These were highly correlated with other indicators used in the original scale.

After conversion to a common metric (z-scores), items were analyzed using a principal components procedure. Although two components emerged from the analysis using the customary eigenvalue of 1.0 as a cutoff, a single general dimension explained 80.0 percent of the common and 48.2 percent of the total variance among items, and each item loaded higher on the principal component than on any other component. Exact wording of items, item loadings, communalities, and percentage of total variance explained are available in a methodological appendix from the first author [attached to this manuscript for editorial inspection]. For purposes of analysis, a general acculturation to U.S. society scale was formed by computing the mean of standardized items (Mean=0.00, SD=0.69, Cronbach's α=.87) after permitting up to three scores to be missing in order to minimize the loss of respondents. Analyses demonstrated that the missing data treatment made no significant difference to findings. An interaction term was computed by multiplying gender (coded 1 for male, 0 for female) by the acculturation scale score to estimate the differential effects of acculturation on smoking status by gender revealed in earlier research (Hofstetter et al., 2004).

Demographics—Education, age, and gender were measured by self-report. Education was based on the total number of years of formal education completed in Korea and in the U.S. adjusted so that credit was not given twice for having completed the same year of education in the two countries.

Analysis Plan—The analysis plan was to isolate the influence of reprimand above and beyond a set of variables that have been found to be consistent predictors of smoking status. These consistent predictors included social support for smoking, models of smoking, gender, acculturation, education, age, gender, and gender by acculturation interaction terms. Smoking status was regressed on both the consistent predictors and the total reprimand scale to determine the amount of variance the scale explained independently. Then, current smoking was regressed on the set of consistent predictors and each reprimand item separately to determine the amount of variance each item explained independently. Finally, differences in the predicted probabilities of smoking status were computed when the reprimand variables were set at the 20th and 80th percentiles and other predictors in each equation were set at their means. These statistics were interpreted as the difference for the average person in the probabilities of smoking after controlling for other variables of being at the 20th and 80th percentile on each reprimand measure given the results of the logistic regressions. Analyses were computed using STATA (version 10).

Findings

Demographic Characteristics of the Sample

Most, 90.4%, of the respondents were born in Korea, 98.8% of their parents were born in Korea, and 42.2% were male, as reported in Table 1. The mean age of respondents in the sample was 44.2 years (SD= 17.4), ranging from 18 to 82 years, and 23.8% were single, 67.3% married, 6.8% widowed, 2.1% divorced, and 0.3% other. Mean years of formal education in Korea was 11.2 (SD= 6.1) and 4.2 (SD=6.0) in the U.S. Mean residence in Korea was 26.2 years (SD=16.4) and 17.0 in the U.S. (SD=10.5). Almost half, 48.4%, of the respondents reported working outside the home.

Likelihood of Reprimand for Smoking

Koreans reported the likelihood of reprimand for smokers in a variety of situations. They expected the major sanctions for smoking to come from family and friends, and to be asked not to smoke around children. They rated the likelihood of reprimand by others to be lower, but still common. The expectation of police ticketing for smoking in public places was extremely low among Koreans in California.

Table 2 shows that the overall mean likelihood of reprimand was 60.0% (excluding ticketing by police). The mean likelihood of reprimand by family for smoking was 82.5% and for smoking around children was 90.0%. The mean likelihood of being asked not to smoke in front of relatives or while at a friend's home was 67.6% and 66.4%, respectively.

The mean likelihood of being asked to leave a restaurant or bar if they smoked was 52.6%, and mean likelihood of reprimand by a stranger for smoking was 46.6%. The mean likelihood of reprimand for smoking by one's boss was 43.0% and 43.5% for reprimand by a fellow worker. The mean likelihood of being "looked down on by strangers" for smoking was 41.0%. However, adult Koreans' mean likelihood of being ticketed by a policeman for smoking was only 6.6%.

Multivariate Analysis of Reprimand

The Total Reprimand Scale—Since the BEM asserts that more specific and more immediate and possibly more severe consequences will be more powerful influences on behavior than social contingencies that are weaker, delayed or less specific to the individual and behavior, a severe test of reported likelihood of reprimand for smoking involves controlling for other social reinforcers established in the BEM. Results of regressing the reprimand scale

on each of these variables is reported in Table 3, below. Tests revealed that multicollinearity was not a problem in this and following analyses.

With the exception of the gender by acculturation (female) measure, each of the variables in the model was significantly related to current smoking in the hypothesized direction (P<.003). Persons with greater social support for not smoking, more acculturated males, older, and more highly educated persons were less likely to be current smokers than others. Those persons exposed to smoking models, males, and acculturated females were more likely to be current smokers. Controlling for all of these predictors, those who reported a higher likelihood of encountering reprimand of some form for smoking were less likely to be current smokers than those who report lower likelihood of encountering reprimands (P<.001).

The simulated influence of each variable controlling for the others can be shown by setting other variables to their means and using the logistic equation to predict the probabilities of smoking when the reprimand scale is set to the 20th and 80th percentile values. The differences between the two probabilities is a rough indicator of the "effect" of the variable on smoking with other predictors set to their means given the empirically derived equation (Long & Freese, 2006; King, Tomz, Wittenberg, 2000). Using this procedure, the effect of the reprimand scale in Table 3 is to decrease the probability of a participant smoking by .23. This is nearly as large as the effects of social support and modeling on smoking and larger than the effects of demographic and acculturation variables on smoking.

Bivariate correlations among the predictors showed that general social support as measured by the presence of models for smoking and social support for not smoking are different than more specific and immediate social reinforcement as indicated by social reprimand. Social support and models for smoking were related to current smoking in the predicted direction (P<.001), and to the total reprimand scale (P<.05), although the relationship between current smoking and social support and models for smoking were larger than the relationships between social support and models for smoking and reprimand. Measures of both social support and models occur among primary groups and other close acquaintances, while the measure of social reprimand includes strangers and others in specific situations within and outside homes.

Specific Reprimand Items—In order to test the efficacy of each kind of reprimand measured, the above analysis was replicated by using each specific item in place of the reprimand scale. Results are presented in Table 4, below.

Each of the reprimand items was negatively associated with smoking status even after other BEM items reported in Table 3 were controlled for statistically with two exceptions. Reprimands by strangers, restaurant or bar staff, friends, family members, others in the presence of relatives and children were all associated with decreased likelihood of smoking. For instance, each unit increase in the expectation of reprimand from a stranger was associated with a decrease of 0.92 in the odds of a respondent being a smoker, and each unit increase in the expectation of being looked down on by strangers was associated with a decrease of 0.91 in the odds of being a smoker. Slightly smaller and larger decrements in smoking status were associated with other sources of reprimand. However, associations between likelihood of receiving a ticket by the police or being reprimanded by their boss for smoking in a public place and smoking status were not statistically significant (P>.05).

Discussion

This study was based on the behavioral ecological model (BEM), a comprehensive theory that integrates biology, ecology and social environmental influences on behavior (Hovell, Wahlgren, & Adams, 2009;Hovell, Wahlgren, Gehrman, 2002). Models of such generality

cannot be tested all at once. Indeed, we do not yet know all of the components and mechanisms involved in the BEM as developed to date. This study is one of many needed to test and refine the BEM. In this study, a specific hypothesis from the BEM was tested, that aversive consequences, which are essentially immediate following or during the behavior and which are specific to the individual and the behavior, may be more powerful in extinguishing a response than less specific and less immediate consequences. The degree to which specific and immediate aversive consequences may be more powerful than possible police ticketing was also tested based on the assumption that such ticketing was less reliable and probably more delayed even if possibly more severe than social sanction. Confirmation of these hypotheses, even though from a cross-sectional design with self reported measures, supports the validity of the BEM and increases its specificity.

Based on a large representative survey of adults in California of Korean descent, this study demonstrated that after controlling for education, gender, acculturation, gender by acculturation interactions, and modeling, general social contingencies for not smoking in the form of reprimands improved predictions of smoking status among Americans of Korean descent. These findings replicated the general pattern of previous studies (Hofstetter *et al.*, 2004; Ji, *et al.*, 2005; Hofstetter *et al.*, 2007). Other studies (Martinez *et al.*, 2008), also suggested the generalizability of social contingencies for influencing tobacco use in other cultures and situations.

This study revealed the expected relationship between social reprimands and smoking status after control for demographic factors and also more general social contingencies for not smoking. Since collinear relationships with the measure of reprimands and general social contingencies were expected and since we assume that most demographic variables and acculturation processes are also related to social reprimands, the test of the relationship between reprimands and smoking status was particularly severe. Reliable effects were found with an odds ratio of .79 for the general scale of reprimands. When analyses were replicated for each of the nine items making up the reprimand scale, odds ratios ranged from about .86 to .94 for eight of nine items and all but one of the partial associations were statistically significant. Thus, specific reprimands were robustly negatively related to smoking status even after control for theoretically more general determinants of behavior (*e.g.*, general social contingencies) as well as controlling for acculturation and demographic characteristics. These results suggest that specific and more immediate aversive consequences may function in concert with other variables to prevent smoking behavior or to stop smoking that is already established.

This study also included police ticketing as a possible consequence of smoking in public settings in California. The sample reported a mean likelihood of a smoker being ticketed by the police of less than 7%. Moreover, this variable was not related to smoking status. Thus, a consequence that rarely happens and does not happen immediately, even though it might be a more severe punishment than social reprimands, did not predict smoking status. This suggests that specific and essentially immediate reprimands have more impact on smoking than do more powerful, but unreliable and delayed aversive consequences. It enhances the specificity of the BEM and has ramifications for social policy directed at health practices of the public.

This study of Korean smoking has demonstrated that the BEM can provide guidance about important but subtle social influences on smoking behavior among Americans of Korean descent. However, the model provides rich possibilities for interactions and cumulative effects. This study was not intended to show that police ticketing is unimportant. Under different circumstances where such ticketing might be quite reliable and immediate, the model would predict that such consequences for smoking would reliably suppress smoking, at least under the conditions of threat of ticketing. Since there are too few police to cover most public settings where smoking might take place even though prohibited by law, it is not possible for the law

to be enforced except in very special venues, such as sports events. Since police action is both powerful and expensive, many public laws/policies might employ more immediate consequences using newly developing technologies that could deliver consequences more reliably and more immediately, possibly with less expense than police action.

More importantly, however, the BEM presumes that motivating factors may alter the likelihood or power of social contingencies. Laws that prohibit smoking in public buildings and some outdoor venues and that are visibly enforced by threat of civil penalties and police ticketing may not need to be enforced often in order to alter the culture of nonsmokers (and possibly smokers at times when not smoking). It is plausible to assume that the presence of such polices will function as motivating operations and promote sanctions from members of the audience for those who smoke in public. Moreover, a cascade of public reprimand behavior might ensue, where those most upset by smoking in public might initiate reprimands, providing models for others in the audience to imitate. Such reprimands also might evoke praise and positive feedback from audience members who appreciated the effort to curtail smoking in public. The combination could initiate a cascade of reciprocally reinforcing social practices that make reprimands more and more likely in public. Other studies provide evidence of similar modeling effects (Adams et al., in press; Adams et al., 2006; Hovell, Wahlgren, Adams, 2009).

This study does not offer evidence of the effects of laws prohibiting smoking in public and their possible effects on "audience" reprimand practices. This will require comparative studies in states with laws that vary in restrictions on tobacco use. This study employed a representative sample of California of Korean descent. However, it was restricted to a cross-sectional analysis and therefore can only be interpreted as implying a possible causal influence on smoking status, albeit one consistent with theory. Future studies should be conducted with longitudinal models where explicit measures of change in smoking practices and change in reprimands can be obtained along with dynamic changes in other state policies regarding tobacco use.

Acknowledgments

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Figure 1. Tree Diagram of Disposition of Sample
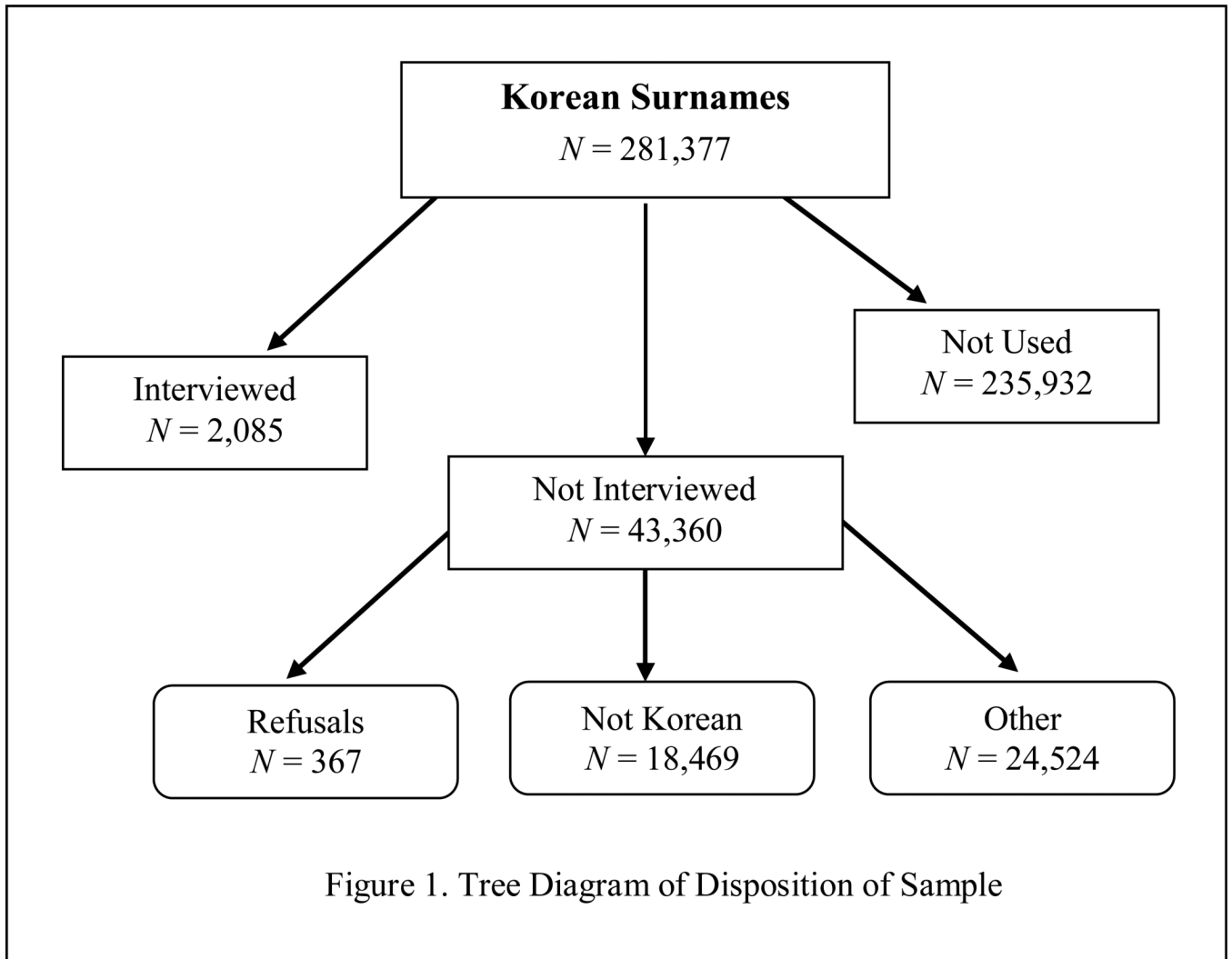
Figure 1.
Tree Diagram of Disposition of Sample

Table 1

Demographic Characteristics of the Sample.

Demographic	Mean	SD	N
Age of respondent	44.2	17.4	2085
Years resident in Korea	26.2	16.4	2079
Years resident in U.S.	17.0	10.5	2079
Years education in Korea	11.2	6.1	2085
Years education in U.S.	4.2	6.0	2085
Household annual income[a]	$53,164	$41,660	719
	Percent		
Male	42.2		2085
Working outside the home	48.4		2075
Born in Korea	90.4		2083
Parents born in Korea	98.8		2085
Interviewed in Korean language	86.4		2081
Marital status:			
Single	23.8		2071
Married	67.3		
Widowed	6.8		
Divorced	2.1		
Other	0.3		

[a]49.9% stated that they "did not know" their household income, and 15.6% refused to answer. Income was not used in the remaining analyses due to missing data.

Table 2

Mean Likelihood of Reprimand among Californians of Korean Descent, 2007.

"What percentage of smokers in California do you think will:	Mean	SD	N
Be reprimanded by a stranger."	46.6	30.9	1894
Be reprimanded by their boss."	43.0	32.1	1807
Be asked to leave a restaurant or bar."	52.6	38.3	1610
Be reprimanded by a fellow friend."	43.5	30.1	1834
Be looked down on by strangers."	41.0	31.6	1886
Be reprimanded by a family member."	82.5	24.7	1995
Be asked not to smoke in friend's house."	66.4	28.8	1826
Be asked not to smoke in front of relatives."	67.6	26.6	1815
Be asked not to smoke around children."	90.0	28.8	2000
Be given ticket by a policeman."	6.6	17.9	1813
Total reprimand scale	60.0	20.5	1980

[a] Numbers in cells are means, standard deviations, and N's for reprimand items. The *verbatim* wording of reprimand items appears in the table after an introductory stem of: "What percentage of smokers in California do you think will ...."

Table 3

Current Smoker Regressed on Reprimand Scale, Social Support for Smoking, Smoking Models, Education, Gender, Gender by Acculturation Interaction among Californians of Korean Descent, 2007.[a]

Item	OR	95% CI	P<	ΔPR
Social support for not smoking	.36	0.25, 0.51	.001	−.27
Presence of smoking models	1.50	1.34, 1.68	.001	.32
Education	.90	0.85, 0.94	.001	−.18
Male gender	7.53	7.53, 10.51	.001	.17
Male Gender by acculturation	.46	0.29, 0.71	.001	−.10
Acculturation to U.S. (Female acculturation)	1.44	0.97, 2.14	.072	.14
Age	.99	0.98, 1.00	.031	−.06
Reprimand scale score	.80	.75, .87	.000	−.23
$X^2_{(df=7)}$ = 388.074, P = .000, Nagelkerke R^2 = 0.32				

[a]Numbers in cells are adjusted odds ratios with calculated 95% confidence intervals, two-tailed P values, and ΔPR defined as follows. ΔPR is the difference in predicted probabilities of being a current smoker when the 20th and 80th percentile scores are included in computations along with the means of other predictors. The discrepancy represents one estimate of the "effect" of differences in each predictor on smoking likelihood given the empirical estimates of the logistic regression. CDC current smokers were coded 1, and others were coded 0. The reprimand scale score was formed by computing the mean of the reprimand items, permitting up to three missing data points. Reprimand items were rescaled by dividing items by 10 for easier interpretation.

Table 4

Current Smoker Regressed on Source of Reprimand, Social Support for Smoking, Smoking Models, Education, Gender, Gender by Acculturation Interaction among Californians of Korean Descent, 2007.

"What percentage of smokers in California do you think will:	OR	95% CI	P<	ΔPR
Be reprimanded by a stranger."	.92	0.87, 0.96	.001	−.06
Be reprimanded by their boss."	.96	0.92, 1.01	.104	−.03
Be asked to leave a restaurant or bar."	.94	0.90, 0.98	.002	−.04
Be reprimanded by a fellow friend."	.92	0.88, 0.98	.003	−.06
Be looked down on by strangers."	.91	0.86, 0.95	.001	−.07
Be reprimanded by a family member."	.86	0.81, 0.90	.001	−.17
Be asked not to smoke in friend's house."	.87	0.83, 0.97	.001	−.11
Be asked not to smoke in front of relatives."	.86	0.82, 0.91	.001	−.12
Be asked not to smoke around children."	.90	0.84, 0.95	.001	−.11
Be given ticket by a policeman."	.98	0.91, 1.07	.707	−.01

[a] Numbers in cells are adjusted odds ratios with calculated 95% confidence intervals, two tailed P values, and ΔPR defined as follows. ΔPR is the difference in predicted probabilities of being a current smoker when the 20th and 80th percentile scores are included in computations along with the means of other predictors. The discrepancy represents one estimate of the "effect" of differences in each predictor on smoking likelihood given the empirical estimates of the logistic regression. Each item represents a separate multiple logistic regression that included the specific item and the other predictors in table 3 (except for the total reprimand scale). CDC current smokers were coded 1, and others were coded 0. Reprimand items were worded as in table rescaled by dividing each item by 10 in order to facilitate interpretation. Nagelkerke R^2s were between .18 and .19 in the logistic regressions and all models significantly reduced variation, P<.001.