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Geo-Demographic Differences in Knowledge about the
Restaurant Tipping Norm

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ABSTRACT

A national telephone survey indicated that knowledge about the restaurant tipping norm is greater among people who are White, in their 40's to 60's, highly educated, wealthy, living in metropolitan areas, and living in the North East than among their counterparts. These findings support the idea that differential familiarity with tipping norms underlies geo-demographic differences in tipping behavior. An educational campaign promoting the 15 to 20 percent restaurant tipping norm is needed to reduce geo-demographic differences in tipping and to increase the willingness of waiters and waitresses to serve all customers equally.

Geo-Demographic Differences in Knowledge about the Restaurant Tipping Norm

Approximately 95 percent of the adult population in the United States eats out at “family restaurants and steakhouses” every month (Simmons Market Research Bureau, 2000). After completing their meals, 98 percent of these people leave a voluntary sum of money (called a “tip”) for the servers who waited on them (Paul, 2001). These tips, which amount to over \$20 billion a year, are an important source of income for the nation’s two million waiters and waitresses. In fact, tips often represent one hundred percent of servers’ take-home pay because income tax withholding eats up all of their hourly wages (Mason, 2002). Thus, tipping is a pervasive and important social behavior.

Tipping has been the subject of numerous studies in social psychology and other disciplines (see Lynn, 2004a, for a review). Much of this research has examined the effects on tipping of service (Lynn & McCall, 2000) and of specific server behaviors such as smiling at customers (Tidd & Lockard, 1978), touching customers (Crusco & Wetzel, 1984; Lynn, Le & Sherwyn, 1998), giving customers candy (Strohmetz, Rind, Fisher & Lynn, 2002) and writing or drawing on the check (Rind & Bordia, 1995, 1996; Rind & Strohmetz, 1998, 2001). However, other studies have examined the effects on tipping of consumer characteristics that are outside the servers’ control. For example, researchers have found that customers who are White, male, young, educated, wealthy, from big cities, and/or from the northeast tip more on average than do customers who are Black, female, older, less educated, less wealthy, from small towns, and/or from the south or west (Lynn & McCall, 1999; Lynn & Thomas-Haysbert, 2003; McCrohan & Pearl,

1983, 1991). These geo-demographic differences in tipping are important because they affect servers' incomes and reduce servers' willingness to treat all customers equally (see Lynn, 2004b).

Although a customer's geo-demographic characteristics cannot be altered, the effects of those characteristics on tipping may be alterable. Knowledge of the underlying causes of geo-demographic effects on tipping may allow servers, restaurant managers or others in the restaurant industry to reduce those effects. One potential cause of geo-demographic differences in restaurant tipping behavior is geo-demographic differences in knowledge about the restaurant tipping norm. Currently, patrons in full-service, sit-down restaurants in the United States are expected to tip their servers 15 to 20 percent of their bill sizes (Eller, 2002; Fodor'sfyi, 2002; Post, 1997) and the available evidence suggests that most people comply with this expectation (see Lynn, 2004a; Lynn & Thomas-Haysbert, 2003). However, it is possible that some geo-demographic groups are less familiar with this norm than others. If so, this would help to explain geo-demographic differences in tipping behavior and would suggest that a campaign promoting the restaurant tipping norm to selected targets could reduce some of those differences.

Unfortunately, research on consumers' knowledge about the 15 to 20 percent restaurant tipping norm is scarce -- with only two published studies on this topic. Hill and King (1993) reported on a small, exploratory study of knowledge about tipping etiquette among college students, but did not study geo-demographic differences. Lynn (2004b) reported on a national study of Black-White differences in familiarity with the restaurant tipping norm, but he too failed to examine other geo-demographic predictors of this variable. Furthermore, the wording of Lynn's survey was somewhat ambiguous, so

respondents' answers could have referred to a descriptive rather than an injunctive tipping norm. Thus, more research is needed to identify and test geo-demographic differences in knowledge about the injunctive restaurant tipping norm. The study reported below was designed to fill that need.

METHOD

Source of Data

The data in this study came from a commercial, omnibus (multi-customer), national, telephone survey conducted by Taylor Nelson Sofres (TNS) Intersearch. The survey was conducted using Genesys random-digit-dial sampling with up to three contact attempts per number.¹ This sampling method allows researchers to sample people with unlisted phone numbers as well as people with listed numbers. The refusal rate was 73 percent. One thousand twenty eight interviews were completed, but missing values for some variables mean that the number of observations varies from one analysis to another.

Dependent Variable

Respondents were asked: "Thinking about restaurant tipping norms, how much are people in the United States expected to tip waiters and waitresses?" Responses to this open-ended question were categorized by the interviewers as:

- less than 15 percent,
- 15 to 20 percent,
- more than 20 percent,

¹ More information about this sampling method can be found online at <www.genesys-sampling.com>.

- gave a dollar response,
- don't know response,
- other response.

Respondents whose answers fell in the 15 to 20 percent category were later coded as knowing the restaurant tipping norm while respondents giving other answers were coded as not knowing the restaurant tipping norm.

Independent Variables

The interviewers also obtained and recorded the following geo-demographic information:

- race of respondent (1=White, 2 = Black, 3 = Hispanic, 4 = Other),
- sex of respondent (1= male, 2 = female),
- age of respondent (in years),
- education of respondent (on a 7 point ordinal scale ranging from 1 = “8th grade or less” to 7 = “post-graduate”),
- income of respondent (on an 10 point ordinal scale ranging from “less than \$12,000” to “\$100,000 or more;” the mid point of each category range was used to represent that category in the analyses reported below, except for the top category, which was represented by its minimum value),
- metro status of respondent (1 = lives in metro area, 2 = lives in non-metro area),
- region of country where respondent lived (1 = North East, 2 = Mid-West, 3 = South, 4 = West).

RESULTS

Race

Knowledge of the restaurant tipping norm varied with race ($X^2(3) = 70.85, p < .001$). Seventy-two percent of Whites and 68 percent of others but only 33 percent of Blacks and Hispanics knew the correct norm (see Table 1). A binomial logistic regression of norm knowledge (Y/N) on dummy variables for Blacks, Hispanics, and others indicated that Blacks' ($B = -1.65, Wald(1) = 39.25, p < .0001, n = 2002$) and Hispanics' knowledge of the norm ($B = -1.65, Wald(1) = 27.01, p < .0001, n = 2002$) differed significantly from that of Whites. The norm knowledge of those in the "other" category did not differ from that of Whites ($B = -.19, Wald(1) = .74, p > .38, n = 2002$). These effects remained significant even after statistically controlling for sex, age, age-squared, education, income, metro status, and region – Black ($B = -2.05, Wald(1) = 19.46, p < .0001, n = 421$), Hispanic ($B = -2.07, Wald(1) = 13.82, p < .0001, n = 421$), other ($B = .02, Wald(1) = .00, p > .96, n = 421$).

Insert Table 1 about here

Sex

Knowledge of the restaurant tipping norm did not vary with sex ($X^2(1) = .00, p > .99$). Sixty-seven percent of both men and women knew the correct norm (see Table 1). Assuming that older, less educated and rural people accept more traditional sex roles and

that traditional sex roles would be associated with greater sex differences in knowledge of tipping norms, a binomial logistic regression of knowledge on sex, age, education, metro status, and the product of sex with each of these other variables was conducted. None of the product (or interaction) terms was statistically significant – sex by age ($B = .01$, Wald (1) = .86, $p > .85$, $n = 606$), sex by education ($B = .01$, Wald (1) = .01, $p > .90$, $n = 606$), and sex by metro ($B = .16$, Wald (1) = .16, $p > .69$, $n = 606$). On the other hand, a binomial logistic regression of norm knowledge (Y/N) on race, sex, age, age-squared, education, income, metro status, and region produced a significant effect for sex ($B = .53$, Wald (1) = 4.21, $p < .05$, $n = 421$). After controlling for the other variables, women had a greater knowledge of the restaurant tipping norm than did men.

Age

Knowledge of the restaurant tipping norm was higher among people in their forties, fifties, and sixties than among both younger and older people (see Table 1). Although a Chi-square test in which age was categorized by decade proved only marginally significant ($X^2(6) = 11.57$, $p < .08$), a binomial logistic regression of norm knowledge (Y/N) on age and age squared produced a significant effect for age squared ($B = -.0006$, Wald (1) = 9.02, $p < .003$, $n = 972$). After controlling for race, sex, age, education, income, metro status, and region, however, this effect became statistically non-significant ($B = .0003$, Wald (1) = .81, $p > .36$, $n = 421$).

Education

Knowledge of the restaurant tipping norm also varied with education ($X^2(6) = 77.55, p < .001$). The likelihood of knowing the norm increased consistently as education levels increased from “8th grade or less” to “post-graduate” (see Table 1). This linear effect was statistically significant in a binomial logistic regression ($B = .42, Wald(1) = 86.09, p < .0001, n = 976$) and it remained significant after controlling for race, sex, age, age squared, income, metro status, and region ($B = .39, Wald(1) = 21.58, p < .0001, n = 421$).

Income

Knowledge of the restaurant tipping norm also varied with income ($X^2(9) = 77.55, p < .001$). The likelihood of knowing the norm increased as income increased – especially with increases from less than \$12,000 to more than \$12,000 and again with increases from less than \$50,000 to more than \$50,000 (see Table 1). The linear effect of income was significant in a binomial logistic regression ($B = 2.32E-05, Wald(1) = 59.89, p < .0001, n = 656$) and remained significant after controlling for race, sex, age, age squared, education, metro status, and region ($B = 1.84E-05, Wald(1) = 15.42, p < .0001, n = 421$).

Metro Status

Knowledge of the restaurant tipping norm increased marginally with residence in a metropolitan area ($X^2(1) = 3.79, p < .06$). However, this effect became statistically non-significant in a binomial logistic regression of norm knowledge (Y/N) on race, sex,

age, age squared, education, income, metro status, and region ($B = -.30$, Wald (1) = 1.16, $p > .28$, $n = 421$).

Region

Finally, knowledge of the restaurant tipping norm varied from one region of the country to another ($X^2(3) = 11.77$, $p > .008$). A binomial logistic regression of norm knowledge (Y/N) on dummy variables for the Mid-West, South, and West indicated that knowledge of the norm was lower in all three of these regions than in the North East -- Mid-West vs North East ($B = -.52$, Wald (1) = 5.55, $p < .02$, $n = 1002$), South vs North East ($B = -.68$, Wald (1) = 11.34, $p < .0009$, $n = 1002$), and West vs North East ($B = -.57$, Wald (1) = 6.41, $p < .02$, $n = 1002$). However, only the South vs North East comparison remained significant after controlling for race, sex, age, age squared, education, income, and metro status ($B = -.80$, Wald (1) = 3.85, $p < .05$, $n = 421$). The Mid-West vs North East comparison ($B = -.39$, Wald (1) = .79, $p > .37$, $n = 421$) and the West vs North East comparison ($B = -.68$, Wald (1) = 2.46, $p > .11$, $n = 421$) became statistically non-significant after controlling for other geo-demographic variables.

Discussion

The results of this study indicated that knowledge about the restaurant tipping norm is greater among people who are White, in their 40's to 60's, highly educated, wealthy, living in metropolitan areas, and living in the North East than among their counterparts. These geo-demographic differences parallel similar differences in tipping behavior (see Lynn & McCall, 1999; Lynn & Thomas-Haysbert, 2003; McCrohan &

Pearl, 1983, 1991) and they support the idea that differential familiarity with tipping norms underlies those differences in tipping behavior. For example, Lynn and Thomas-Haysbert (2003) found that Blacks tipped less than Whites and suggested that this race difference might be caused by differences in the two groups' familiarity with the 15 to 20 percent restaurant tipping norm. The results of this study support that explanation by demonstrating that Blacks' and Whites' familiarities with this norm do differ. The current data did not permit a test of the mediating effects of norm familiarity on geo-demographic differences in tipping behavior, but the available evidence indicates that the 15 to 20 percent tipping norm powerfully affects people's tipping behavior (see Lynn, 2004a; Lynn & Thomas-Haysbert, 2003) and there can be little doubt that awareness of this norm is a necessary precondition for its effect on behavior. Thus, the results of this study provide persuasive (though not definitive) evidence that differential familiarity with the restaurant tipping norm at least partially explains previously documented geo-demographic differences in restaurant tipping behavior.

One demographic difference in tipping behavior that cannot be explained by differences in familiarity with the restaurant tipping norm is the finding that men tip more than women (see Lynn & McCall, 1999). In this study, men and women were equally knowledgeable about the restaurant tipping norm. Furthermore, after controlling for other demographic differences, women had greater (not lower) knowledge of the norm than did men. Thus, alternative explanations must be sought for the sex difference in tipping.

Since tips represent the primary incentive for restaurant waiters and waitresses to deliver good service, the existence of geo-demographic differences in tipping is likely to produce inequalities in servers' treatment of different consumer groups. For example,

anecdotal evidence suggests that the Black-White difference in tipping leads many servers to dislike waiting on Black customers and to refuse to work in restaurants with a predominately Black clientele (see Lynn, 2004b). Thus, geo-demographic differences in tipping need to be reduced or eliminated if server discrimination against some groups is to be avoided. The results of this study suggest that one way to do this is to reduce geo-demographic differences in knowledge about the restaurant tipping norm. Restaurant servers, restaurant managers, and restaurant industry associations (like the National Restaurant Association) need to educate consumers about the 15 to 20 percent tipping norm. This educational campaign should be directed at all consumers because familiarity with the tipping norm is low among many different consumer groups and because targeting selected groups of consumers might be perceived as discriminatory. This educational campaign should also increase the social pressure people feel to comply with the restaurant tipping norm by informing them that most others comply with it (see Cialdini, Reno & Kallgren, 1990). If properly conducted, such a campaign has a real chance to reduce geo-demographic differences in familiarity with tipping norms and in tipping behavior, which should encourage servers to deliver good service regardless of their customers' geo-demographic profiles.

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Table 1.

Knowledge of the restaurant tipping norm by levels of geo-demographic variables.

Variable/Levels	n	Percentage w/ Correct	Non-Parametric Test
Knowledge of Tipping Norm			
RACE			$X^2(3) = 70.85, p < .001$
--White	772	72.2%	
--Black	72	33.3%	
--Hispanic	48	33.3%	
--Other	110	68.2%	
SEX			$X^2(1) = .00, p > .99$
--Male	495	67.1%	
--Female	507	67.1%	
AGE			$X^2(6) = 11.57, p < .08$
--teens & twenties	172	59.3%	
-- thirties	159	61.6%	
--forties	208	72.1%	
--fifties	166	71.2%	
--sixties	124	70.1%	
--seventies	96	65.6%	
--eighties & older	47	63.8%	

EDUCATION $X^2 (6) = 97.29, p < .001$

--8 th grade or less	31	35.5%
--some High School	67	35.8%
--graduated High School	289	56.4%
--Trade/Tech school	37	64.9%
--some College	213	73.7%
--graduated College	237	77.6%
--Post-graduate	102	89.2%

INCOME $X^2 (9) = 77.55, p < .001$

-- \$0 - \$12,000	48	37.5%
--\$12,000 - \$14,999	42	50.0%
--\$15,000 - \$19,999	33	57.6%
--\$20,000 - \$24,999	60	53.3%
--\$25,000 – \$29,999	71	53.5%
--\$30,000 - \$34,999	60	56.7%
--\$35,000 – \$49,999	16	43.8%
--\$50,000 – \$74,999	145	80.7%
--\$75,000 - \$99,999	84	85.7%
-- \$100,000 or more	97	81.4%

METRO STATUS $X^2 (1) = 3.79, p < .06$

-- Metro 445 69.9%

--Non-Metro 195 62.1%

REGION $X^2 (3) = 11.77, p < .008$

--North East 192 77.1%

--Mid-West 234 66.7%

--South 367 62.9%

--West 209 65.6%
