Tip or Treat: A Study of Factors Affecting Tipping Behavior

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TIP OR TREAT: A STUDY OF FACTORS AFFECTING TIPPING BEHAVIOR

By

Joanne M. May

A Thesis Submitted to the Faculty of the Graduate School of Loyola University of Chicago in Partial Fulfillment of the Requirements for the Degree of Master of Arts

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VITA

The author, Joanne Margaret May, is the eldest child of the six born to Margaret (Fosket) May and Arnold Nicholas May. She was born on August 13, 1949, in Staten Island, New York.

She attended Saint Joseph's Elementary School in Richmond, Illinois, and obtained her secondary education at the Academy of the Sacred Heart, Lake Forest, Illinois, where she graduated in 1967.

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INTRODUCTION

Tipping is more than a well-established social convention, it is a billion dollar exchange that secures an income for over two million employees in service related jobs in the United States alone. However, the impact of tipping is most pronounced within the restaurant industry where dining-out is an increasingly expensive phenomenon. In 1973, Americans spent almost thirty billion dollars at restaurants, and it is likely that over three billion dollars were doled out to waiters and waitresses in the form of tips ("The Tab for Eating Out was $38 Billion in '73," 1974).

In spite of its significant fiscal impact, there is a dearth of empirical evidence that separates the fact from the fiction surrounding tipping behavior. Current information is primarily based upon a curious melange of both folklore and survey research. While the folklore surrounding tipping behavior has its origins in the Middle East where it was practiced for centuries, Samuel Johnson is often credited with originating the tipping custom. It is said that he and his circle of eighteenth century intellectuals were wont to frequent an English pub where they gathered to talk. To secure the attentions of the help, and to insure their welcome, Johnson would often drop a few pence into a box labeled "To Insure Promptness." From this rather inauspicious beginning, tipping behavior has blossomed into an unavoidable social and economic convention ("The Straight Dope," October, 1976).
In contrast to folklore, survey research has relied predominantly on restaurant patrons who are asked to describe their attitudes and habits toward tipping behavior. In general, results indicate that the most oft-quoted norm is that a tip should equal 15% of the dinner check, but that this figure may vary depending on the quality of the service rendered. As diverse as these two sources might appear, both folklore and survey research seem to concur that a tip is at once a gratuity for services rendered, and a statement about the quality of those services.

However, recent advances in social psychological research would indicate that the process whereby an individual evaluates the "quality of service" is a complex matter. Indeed, it is likely that both customer and service variables may have an impact on that attributional process, and that some variables may be more potent than others. The present research is directed toward a twofold goal: (a) to clarify the current state-of-the-art by reviewing the literature regarding tipping behavior from both popular periodicals and professional journals, and (b) to utilize an empirical approach to identify variables that significantly affect tipping behavior beyond that of the social norm that a tip should equal 15% of the bill.

REVIEW OF RELATED LITERATURE

Tipping in Historical Perspective

In the 1969 edition of the American Heritage Dictionary of the English Language, "tip" is defined as a "small sum of money given as an acknowledgement of services rendered" (p. 1347). This definition
may already be dated as the tips given at fine-dining restaurants are by no means small amounts of money. In fact, not long ago, one could buy a good dinner for today's generous tip.

The evolution of this widespread, if at times baffling social custom had its genesis in European history. Etymologically, the word is involved with drinking. The French word for tip, "pourboire," literally means "for drink"; the German "trinkgeld" signifies drink money; in Bavaria, it was "badegeld" which meant bathing money; and in China, "cumshaw" connoted tea money. The custom of tipping has been practiced at least since the Middle Ages. In a letter dated August 26, 1509, craftsman Albrecht Durer wrote his customer Jacob Heller and asked for a trinkgeld (tip) for the apprentice who had worked on his order (Brockhaus, 1898). The underlying message was that a man who had done a creditable job for you should have a drink at your expense (Wechsberg, 1971).

In English the word evolved from eighteenth century taverns and posthouses where the letters T-I-P were written on a slip of paper and handed with a coin to the waiter when one gave the order. Even "want ads" were affected as eighteenth century notices for employment mentioned not only the wages to be paid, but the amount of the gratuities one might expect.

Throughout the years, there have been sporadic attempts to kick the tipping habit. In 1896, an official of the Barbers' Union condemned tipping as "degrading and humiliating" (Bass, 1961, p. 38). There were even efforts to control tipping by those personally affected by the tipping custom. When the New York City Railroad hired redcaps
in the 1890s to aid passengers with their luggage, the management went to great lengths to inform the public that the redcaps were salaried employees and were not to be tipped. However, the American public went right on tipping and to date, nothing has changed except that the expected gratuity has escalated to fifty cents per bag (Kelly, Note 1).

The attempts by state legislatures during the early 1900s to abolish tipping were the harbingers of the currently raging controversy over the "tip credit" (the mechanism whereby employers are able to pay service employees less than the minimum wage). However, early efforts to outlaw tipping were quashed when the Iowa Supreme Court ruled such a law to be unconstitutional (Wechsberg, 1971).

In 1947, the Chesapeake and Ohio Railroad introduced a no-tipping rule in the dining car which was abandoned only three years later since it was entirely ineffective. The contemporary counterpart to the dilemma faced by the Chesapeake and Ohio Railroad is the food chain Chock-full-o-nuts that recently restored a no-tipping policy that had been initiated and maintained for forty years until 1967 when the policy was changed. The reason behind the current change of heart seems to be concern that meal prices are high enough and that the added gratuity often put eating-out, out of the reach of many New York City residents (Metropolitan Briefs, 1974). Concurrently, the Holland America transatlantic steamship line also changed its tipping policy. The line abolished tipping on its transatlantic and cruise service liners. Fares went up as much as seven percent to cover the increases in salary. But the increase is a veritable bargain for those grappling with the traditional rule that tips should equal at least ten percent of the
fate. Spokesmen said that the move was made to eliminate passengers' confusion about tipping procedures ("Dutch Finger against the Dike," 1967; "Guidelines on Tipping at Home and Abroad," 1968).

**Tipping Etiquette**

In spite of these attempts to dispense with it, tipping behavior is obviously here to stay. Consequently, authorities in the art of propriety have sagely tried to guide consumers in the finer points of tipping behavior. Emily Post has alluded to tipping as an "undesirable and undignified system, but it happens to be in force, so we may as well learn to do it with as much grace as possible" (1950, p. 100). Having expressed her reservation, she then tersely advised her readers in Etiquette, that one never tips "less than twenty-five cents in a restaurant with tablecloths" (p. 138).

During this same era, Americans, usually generous people, were roundly criticized for over-tipping throughout post-war Europe. Concerned about this "vulgar" American habit, Mrs. Eleanor Roosevelt wrote:

> A fair tip, or one a little on the generous side, will leave a pleasant feeling and respect for you in the one who received it. A too lavish one will create a secret disrespect and add to the reputation Americans have for trying to buy their way into everything (1962, p. 220).

Curiously, the concept that Americans are not refined in the ways of tipping remains an issue today. Evidently, Americans who travel abroad still have the reputation not only of tipping indiscriminately, but of tipping in excess of local standards (How to tip just enough, 1965; New York Times, January 13, 1974).

This may be in part a response to popular counsel proffered by experts, and published in popular media, which sanction overtipping.
For example, "When in doubt, it's always better to overtip ever so slightly, you are paying only a few extra pennies for peace of mind.... Always tip in local currency, for two reasons. First, if you use American money, you are bound to greatly overtip" (Koltun, 1967, p. 203).

More recently, Amy Vanderbilt has proffered guidelines for tipping behavior that include the suggestion that one "leave a fifty cent tip under the pillow of the bed for the chambermaid" (1967, p. 121), and that "15% is a good standard tip for restaurants except in a luxury restaurant where the tip can be 20 or even 25% depending on the elaborateness of the order and the kind of service given" (1971, p. 48). Ms. Vanderbilt's counsel also provides a clear illustration that there is no custom so confused or confusing as tipping.

If one frequents a certain restaurant, it is not necessary for him to tip the headwaiter on each occasion, unless he has had special consideration--worked out the menu in advance with the headwaiter, had his table changed, or ordered some spectacular dish such as crepes suzette, the completion of which has been presided over by this factotum. The tip is given on the way out. When the headwaiter is also an owner of the place, he receives no tip but is thanked on the way out if he shows out his guests.

Such a tip is quietly slipped into the waiting palm in an unobvious manner, but if the room headwaiter is not at his post, he is not sought out by the patron. The tendered tip in an expensive place is usually two to five dollars. In a less elaborate establishment it is certainly never silver--always at least a dollar.

The wine steward, if his services have been enlisted, receives 10% of the bill in round figures. Where drinks begun at the bar have been brought with the bar bill to the table later, the bartender receives his 10 percent.

In restaurants that employ headwaiters for sections--men who do no more than take the order and pass it on to table waiters for execution--no tip is expected by the section headwaiter, unless, of course special service has been requested in which he has taken some active part. In that case, his tip is not less than a dollar bill and may be two dollars if the party comprises more than two people.
A waiter receives 15 percent to 20 percent (depending on the place) in round figures (don't leave pennies on the plate unless they add up to an even amount). If the bill has been very small, then he should receive a minimum of ten cents per person; in night clubs, twenty-five cents per person, minimum.

A cigarette girl usually arranges her change to indicate what she'd like to get, but ten or fifteen cents surcharge on a pack of cigarettes is enough and no one need feel like Shylock for picking up the additional change from a dollar bill.

The bus boy is not tipped. In a nightclub or expensive restaurant the attendants in the men's and women's lounges usually put decoy coins on a plate. Unless some service has been asked, the tip need not be for instance, a quarter, but can well be ten cents.

Doormen who perform a service—secure a taxi, summon or bring your parked car—usually receive a quarter. At an inexpensive place, if just a taxi has been summoned in good weather and the job has entailed no more than his blowing his whistle, a dime is sufficient (1967, p. 155).

Popular magazines have long advised travellers in the fine art of tipping both domestically and abroad. The advice proffered is at times contradictory and thus poses a dilemma for the unsuspecting wayfarer. While one magazine outlines a country by country guide to restaurant tipping behavior (Berger, 1965; "Notes for the Corporate Nomad: How Much to Tip," 1971), another suggests that "on a trip abroad, you will be perfectly correct in tipping the equivalent of what you would give for the same service at home ("Tips on What to Tip," 1972, p. 54).

The traditional exception has been that of the Communist countries which have remained adamantly opposed to tipping. To offer a guide a gratuity in the Peoples Republic of China is looked upon as evidence of "left-over bourgeoise rights." The same remained true in Russia where until recently, signs in cloakrooms, restaurants and cabs read
"Don't tip. Don't insult your fellow man." The magazine, Literature and Life, formally decried the practice by noting: "Restaurant employees must be made to realize that they forfeit human dignity by accepting tips which are an insult to those who give and those who take." Furthermore, the Party newspaper, Trud, offered the suggestion "that hands held out for tips be slapped down" (McGraw Hill Department of Economus, Note 2). However, increasingly, the signs have been replaced by little glass dishes conveniently placed to catch the kopeks.

Tipping was granted some semblance of respectability when Moscow's Literary Gazette bestowed a form of official blessing on the practice by suggesting that a tip might improve the nation's notoriously inferior services. But Marxist hardliners immediately retorted, denouncing "chayevl" (tipping) as corrupt, uncommunistic and insulting. In the subsequent issues of the magazine, no less than twenty-eight letters to the editor were written, all expressing disapproval. The party line notwithstanding, tipping still flourishes in the Soviet Union ("Insult Me Comrade!" 1969).

The ever-popular surveys of tipping practices have revealed that most Americans consider tipping to be an optional expense that indicates the customer's degree of satisfaction (Brett & Frerichs Incorporated, 1977; Brooks, 1971; Gallup Organization Incorporated, 1967; Gottlieb, 1974; Ledger, 1974; Mayo, 1976; "Tip Patterns of Restaurant and Resort Hotels in New York State," 1974; "Who to Tip and How Much? Gourmet Offers a Guide," 1976). Survey research has also noted that the 15% gratuity standard is the most preferred criterion after "quality of
service received" used in the decision of whether or not a tip is warranted ("How to tip just enough," 1965).

However, the 15% standard is the gratuity awarded those waiters and waitresses who deliver merely adequate service since surveys and professional food critics are in agreement that particularly attentive service merits a 20% tip (Davis, 1976; Schein, Note 4). Thus while etiquette and common usage may agree on the 15% figure, this is, in our spiraling economy, more often than not, a loose guide rather than an inflexible rule (Brooks, 1971; "Some Tips about Tipping," 1971).

The principles regulating tipping behavior vary with locale, type of establishment and time of day. In metropolitan areas, tips are expected to be higher ("All About Tipping," 1972; "Notes for the Corporate Nomad," 1971). In some geographic localities the prescribed norm is to tip 15% at a midday luncheon and 20% at dinner, however, at smaller restaurants with counters and booths, these percentages should be disregarded. Popular counsel suggests that if a patron spends two hours in a business conference or in a romantic tête-a-tête, the tip is really rent and should be at least $1.00, and more if the restaurant is crowded. Similarly, the 15% standard is not appropriate in the poshest places such as Maxims, Sardis and the Ninety-Fourth where 20% is the expected norm (Brooks, 1971). As Emily Post has advised, "If you patronize luxurious restaurants and wear expensive clothes with valuable accessories, or if you are critical and difficult to please, greater 'compensation' is expected than if your appearance were simpler and your demands less exacting" (1950, p. 105). Thus the guest who tries to squeak by with a $6.00 tip on a $40.00 dinner tab at an
elegant establishment, can be fairly sure of withering looks from ex-

erts in the art of glares that could crack an oyster at fifty paces.

Most guidebooks reinforce the concept that a tip is an optional

expense by cuing readers that if service is not forthcoming, the cus-
tomer should have a perfectly clear conscience about reducing his tip or "stiffing" the service personnel (Brooks, 1971). Others note that

unpleasant service merits nothing more than a complaint to the manage-

ment (Davis, 1976). In times such as these, the customer is well-

advised to remember the tale of the disgruntled diner who after a

series of affronts, testily informed his waiter, "I tip on the basis

of service rendered. By my reckoning, you now owe me $3.75!!"

While leaving a smaller tip than usual or no tip at all is one

way to indicate dissatisfaction, the waiter/waitress does not know

whether the customer is cheap, forgetful, or simply out of cash.

Quality of service and its relationship to tipping behavior has been

assertively addressed by a series of organizations that try to empha-

size that tipping is indeed a gratuity left for services rendered

(Frammilino, 1978; "Who to Tip and How Much??" 1976). Tippers Anonymous

is not opposed to tipping but is "dedicated to improving service and

restoring its reward" ("Guidelines on Tipping at Home and Abroad,"

1968, p. 184). R. S. Farrington, the founder of Tippers Anonymous, can

rely on a membership in excess of eight thousand to herald the philos-

ophy world-wide (Farrington, Note 3). He acknowledges that by far the

largest percentage of members in the organization live in the Greater

New York area and concludes that "this is only natural because . . .

it is there that the big automatic tip lives its most parasitic life"
A similar response that evolved out of a particularly bad encounter with a surly waitress, involved W. Thomas who invented a play money type of certificate with "Zero Dollars" printed in the decorative border. The play money, included as Appendix A, has a message printed on the certificate that reads: "Here's a TIP for you" next to a cartoon of an unattractive waitress slamming a plate of grub down before a customer and snarling, "Eat it!" A small verse next to the cartoon reads: "The service was bad, it was really a gyp, you didn't even smile, so this is your Tip!" (Thomas, Note 3).

In a similar vein, J. Schein notes that he founded Tippers International "To restore tipping to its original concept. We want to give tips for good and prompt service and not because we are embarrassed or feel guilty" (Tippers International, 1974, p. 60). The twenty-seven hundred members of Tippers International are encouraged to carry their membership cards at all times and, if necessary, to advise restaurant managers that they belong to an organization that reaches thousands. Additionally, members receive a generous supply of rating cards whereby they can explain to the service personnel why the tip was large or small, and also a thirteen page guide to tipping and tactics (New York Times, July 7, 1974; Schein, Note 2). Typically members use blue and yellow report cards that the members skewer with a monogrammed Tippers International toothpick and leave with (or instead of) their tip. A blue card compliments food and service. A yellow card contains a checklist of complaints: service, quality of food, cleanliness, prices, courtesy and atmosphere.
According to Schein, this card system, included as Appendix B, provides diners with a "diplomatic, dignified and effective means of letting people know when you're satisfied with their service and when you're not" ("Tippers' Revenge: Tippers International," 1975, p. 61).

Additionally, members' evaluations of hotels and restaurants are mailed in to the Milwaukee headquarters and passed on to the Tippers International ranks in a monthly newsletter. The comments are forwarded to the offending eateries as well because restaurant owners seldom get the benefit of the constructive criticism on the cards that Tippers International members lay on the table. One might speculate that waiters and waitresses surreptitiously pocket the yellow complaints even faster than they pick up tips.

**An Enduring Debate--Tip as Gratuity or Wage**

In spite of the seeming importance placed upon the quality of service in determining how much a customer should tip, there is evidence that tips are regarded by some as simply a just compensation for employment. The pragmatic realization that a tip no longer rewards the quality of service as much as it pays for a service no matter how helpful or how ludicrous, is poignantly illustrated by the presence of service personnel in public facilities--do people really need someone to hand them a towel in a washroom?

In 1966, organized labor lobbied successfully to bring employees who receive tips under the minimum wage law. However, the final wording of the agreement stated that wages had to constitute at least half a worker's pay up to the minimum wage. Therefore, while it became
mandatory that waitresses earn at least $1.00 per hour (the minimum wage in 1966), only fifty cents of that had to come in the form of wages, the remainder could come from tips. Recently, labor has continued the struggle and had asked Congress to eliminate the counting of tips as part of the minimum wage ("Congress and the Tip Allowance," 1977; Hyatt, 1977).

The tip credit was established in Section 3(m) of the Fair Labor Standards Act (the federal minimum wage law) and permits an employer to take a tip credit against the wages of a tipped employee in an amount determined by the employer not to exceed 50% of the required minimum wage (NRA Washington Report, June, 1976). The National Restaurant Association declares that the tip credit was established as the most equitable among a variety of alternative proposals that recognize tips as earned wages rather than as gratuities. Crediting tips toward a portion of the minimum wage was termed a "reasonable approach based upon good, sound logic" ("Tip Credit," 1976, p. 22). Currently, service personnel who are paid the minimum of $1.325 per hour must report at least $1.325 per hour in tips in order to bring their pay scale in line with the $2.65 minimum wage. In recognizing that unscrupulous customers do not pay market rates for services rendered, an AFL-CIO spokesman has stated that "an employee should not have to depend on the generosity of customers to earn at least the minimum wage." (Hyatt, 1977, p. 46). In rebuttal, the official National Restaurant Association position is summarized by the following statement:

In the restaurant industry, tips are the product of significant contributions by both the employer and his employee.
However, in the final analysis, the tipped employee's efforts are largely dependent on the employer's efficiency in management. If the employer does not manage well, service rendered by the tipped employee cannot be efficient, prompt, or of high quality. Additionally, the employer's contributions which are entirely out of the control of the tipped employee include the quality of the food served, its presentation to the customer, the general atmosphere of the establishment and the price of the meal. In reality, it is these factors that determine the menu prices of the establishment and thus the amount of tip income. The tip credit approach recognized this joint effort which determines tip income ("Unions Take the Tip Fight to Carter," 1977, p. 33).

The restaurant industry also raised the spectre of inflation as another reason to oppose any reduction in the tax credit. The NRA contends that a precipitous increase in the minimum wage, and/or decrease in the tax credit could immediately speed the rate of inflation, thereby creating more problems for the economy ("Pending Changes in Labor Costs Pose Grave Threat to Operators," 1977; NRA Washington Report, November, 1976).

In accord with the restaurant industry, the Internal Revenue Service has championed the argument whereby a tip is perceived as a part of one's just wage. Although a tip is usually a voluntary payment, Congress says that it is income and subject to income tax and therefore has placed responsibility on the employer to withhold income and employment taxes commensurate with the employee's report of tip income (Groupe, 1976; Wall Street Journal, December 26, 1973, December 11, 1974, July 9, 1975). If tip income were not a part of the employee's wages, that is, a part of his remuneration for the job he does for his employer, it would be inappropriate to require the employer to withhold taxes on it (Berlinski, 1975; Southern California Restaurant Association, Note 4).
The dilemma has been temporarily resolved nationwide as the tip credit will be reduced from 50% to 45% of the minimum wage, effective January 1, 1979 and further reduced to 40% of the minimum wage effective January 1, 1980. Concomitantly, the minimum wage will be increased to $3.10 as of January 1, 1980 and to $3.35 as of January 1, 1981 ("Summary of Major Provisions of New Minimum Wage Amendments," 1977). However, the individual states are free to impose their own regulation. California recently opted to abolish the tip credit and therefore employers in that state must pay their employees a minimum wage of $2.50 regardless of the income generated by tips (Hyatt, 1977; Wall Street Journal, July 26, 1975; Southern California Restaurant Association, Note 4).

Another strong trend to suggest that tipping is a compensation for employment rather than a gratuitous offering is the increasingly popular service charge which is a flat percentage charge of the total bill added to the guest's check and later distributed to service personnel. This custom originated and is practiced widely in Europe. In fact, a current anecdote about one's trip abroad often includes an allusion to the multitude of palms--unfortunately, the reference is not to palm trees but to waving palms of waiters, taxi-drivers, doormen, porters, chambermaids, concierges, ad nauseam. It may be a disdainful observation, but like death and taxes, tipping is very much a fact of life for Americans who travel. Tipping is an especially awkward task abroad where service charges are often included in the bill but additional gratuities are still expected ("Operation Trends," 1976).
Although in the United States, the service charge system is for the most part relegated to banquets and conventions, it could come into widespread use within a few years. The Wall Street Journal has reported that many parts of the United States have experienced a serious decline in tipping to the point where some restaurants have felt compelled to tack a percentage gratuity on the bills of patrons (Hyatt, 1977). In an effort to support service personnel, the new Ohio minimum wage law requires restaurant owners to explain in the menu that employees earn only a portion of the minimum wage and that they depend on tips for the remainder ("Friendly Persuasion? New Ohio Minimum Wage Law Gives Waiters and Waitresses a Break," May, 1976). Even so, this gesture of friendly persuasion merely serves to illustrate why many restaurant managers are reverting to a mandatory service charge (Butz, 1966; "Most Food Service Operators Opt for Service Charge if Tax Credit Repealed," 1976). This, coupled with the reality that the once-standard figure has been preempted by a service charge norm which presently averages 16%, seems to signal an upward trend in the standard gratuity. Even more alarming to consumers, is the fact that it is a union requirement in Illinois and in New York, that the percentage be added to the bill before the tax component has been calculated (Brown, 1975; "Some Tips About Tipping," 1971). While Florida does not require customers to pay tax on the gratuity, a spokesperson for the Hotel Association has pointed out that in "Miami Beach we are up to 17% [service charge]" (Meeting News, 1977, p. 91). Given these parameters, one might expect that as the percentage gratuity climbs, tipping will become less a
function of the quality of service and more a direct subsidy to per­
sonnel wages (Grahmann, 1967).

There is widespread customer concern that where fixed service
charges take away the expectation of reward, promptness and service
may suffer. One would then experience the situation described in an
old Spanish proverb: "musica pagada, no suena bien," which translates
as "prepaid musicians sound dull." Survey research supports the idea
that when given an opportunity to respond and react to being dissatis­
fied with food and/or service, customers will use their tipping behav­
ior to indicate dissatisfaction. One survey reports that three-fourths
of the national sample considers tipping to be an optional expense
that indicates the customer's degree of satisfaction (Brett & Frerichs
Incorporated, 1977). Another survey concluded that the Western United
States tends to respond most favorably to significantly improved ser­
vice techniques; that younger persons also tend to feel that superior
service warrants higher tips, while those over fifty years of age are
less apt to vary their tip than any other age group; and that the
group that is most likely to appreciably lower the percentage gratuity
is from the West or Midwestern United States and tends to be in the
$7,000 to $9,000 income bracket (Gallup Organization Incorporated,
1967). This group appears to be especially budget conscious, or at
least cautious as to how it spends the discretionary portion of its
income. At the same time, a major U.S. Department survey concludes
that waiters and waitresses average more in Northeastern and Southern
restaurants than in those of the North Central and Western regions
(O'Connor, 1971), an observation supported in the popular media ("All

Some surveys have addressed the needs of a particular kind of diner, such as the business traveller. One such study has made some interesting observations about tipping behavior. Tips tend to be higher at restaurants visited previously by the customer, and female business travellers tip a slightly higher percentage than their male counterparts. Interestingly, the tipping behavior of business travellers virtually remains the same whether a meal was a personal expense or whether it was charged as a company business expense. The same survey respondents stated that their tipping behavior varied with the service they received. The quality of service depended on atmosphere, comfort, food quantity and quality, and courtesy. Curiously, however, tipping was not found to vary with the speed with which the patron was served. The business traveller appreciated being served his meal in a reasonable period of time, but even when he/she is not, the tip is not likely to be less than it would have been otherwise. The survey also noted that travelling businesswomen were much more likely than their male counterparts to vary their tips depending on the quality of service received (Mayo, 1976).

Tipping in Social-Psychological Perspective

Authors of survey research have at times made conclusions that seem to belie the presence of psychological processes. One survey researcher (Ledger, 1974) posits that "meal time is usually a more relaxing period for a customer, consequently, he is of a more grateful and generous state of mind" (p. 29). These observations are strikingly
similar to those found by Isen and Levin (1972) who successfully demonstrated that subjects who are under the influence of a temporary "glow of good will" are more likely to evince prosocial behavior and less likely to evince negative behavior. Thus it is not surprising that when survey research indicates that customers will use their tipping behavior to indicate dissatisfaction that the actual behavior may be an imperfect match with one's stated intentions. For example, Gottlieb's survey (1974) reports that 40% of those surveyed would refuse to leave a tip, 51.5% stated that they tip less than usual and only 8% stated that they would tip the same as usual. However, this method of self-report seems somewhat unreliable for in the same survey, 58.2% of the men and 60.7% of the women stated that they were basically percentage tippers; yet when asked later on in the survey, the actual amount of money they would leave when given specific costs for food, beverage and complete dinners, the responses were not consistent.

Thus the validity of survey research is saliently raised as an issue by the fact that surveys have consistently been inconsistent in their findings. Social-psychological research has long-acknowledged that there is no direct relationship between attitudes and subsequent behavior. While theorists offer different views as to why stated attitudes do not reflect one's "true" belief, it is clear that assessing attitudes is a difficult task (Fishbein, 1963), and that measured responses are susceptible to impression management by respondents (Cook & Selltiz, 1964). In addition, verbal behavior of respondents often serves different functions and operates under different reinforcement schedules than does one's motor behavior. There is no
absolute link between the two response systems and therefore it is somewhat naive for survey researchers to expect much consistency between them (Wicker, 1969). However, to date, the data available about tipping behavior has been obtained almost exclusively from survey research.

This is not to say that survey research has not made important contributions; rather it is an acknowledgement that a more balanced mix of survey research and empirical techniques is essential to insure the validity and reliability of the information disseminated to employers, employees, and consumers alike, about tipping behavior.

The same survey results (Ledger, 1974) note that since 22.4% of those surveyed claimed that they would tip regardless of the policy of the establishment, that tipping serves to emphasize differences in status between the server and served. Nowhere is this status differential more apparent than in the titles used during dining interaction episodes. The customer is dutifully addressed as Ma'am or Sir, while many customers refer to their waitress as "the girl." Ledger proposes that tipping is a vehicle by which customers can exercise their need to control, or their need to derive a strong sense of power. Thus customers do not favor a service charge as they resent being told not to tip as an interference with their rights to self-aggrandizement.

This perspective emphasizes the super-subordinate relationship between the waitress and customer. While the waitress is conceived as a subordinate in her occupational relationship with the diner, preoccupation with the subordinate-service image of this occupation serves to overshadow the possibility that a waitress may practice a variety
of manipulative ploys in an effort to master the work's reward structure. While the customer may derive a sense of power from his ability to reward or punish the target person (waitress), the diner's theoretical capacity to produce change is usually restricted by the correspondence of outcomes with the target person, and is restricted by the waitress' alternative relationships to a smaller range of usable power (Thibaut & Kelly, 1959).

Bigus (1972) in a study of the milkman and his customer, identified the concept of "cultivation" whereby a service worker can nurture developing relationships with clientele which result in occupational gain. Cultivation is defined as "courting and wooing activities engaged in by servicers in relations with those whom they service" (p. 131). Bigus' explanation of subordinate control is reminiscent of Whyte's observation that waitresses develop "skill to control behavior" and become adept at "getting the jump" (1948, p. 109), and is also akin to the more colloquial "buttering-up" strategy available to the waitress.

Both Davis (1959) and Karen (1962) focused on the various mechanisms of manipulation available in the cab driving occupation. The latter study reports that offering special services does not evoke a significant increase in tipping frequency. This is in direct contrast to those who promote the "quality of service" as a significant variable in restaurant tipping behavior for these studies would imply that customers tip on the basis of the tab and, therefore, that the tip is not usually influenced by special services. The aforementioned studies acknowledge that service workers practice manipulative ploys in order
to more effectively control the rewards structure. As Erving Goffman (1959) in remarks concerning performance pointed out, "Regardless of the particular objective an individual has in mind and of his motive for having the objective, it will be in his interests to control the conduct of others, especially their response treatment of him" (1959, p. 4). Thus service workers must seek to control the behavior of customers as it is this group that regulates the service workers' system of rewards.

One study used participant observation in conjunction with an experimental treatment procedure to determine if promotional practices provide a means of manipulating the reward structure governing a waitress' work. The results indicated that given the assumption that the 15% norm governs tipping behavior, the waitress who through promotional activity sells the diner the maximum quantity of food and liquor will maximize her returns and concomitantly, is able to exercise a measure of control over the reward structure governing her work (Butler & Snizek, 1976).

The social norm that a tip should equal 15% of the bill is based on the construct of reciprocity (Gouldner, 1961; Homans, 1961). Interaction between diner and waitress is then premised on a mutual exchange of financial reward (tips) in exchange for services rendered. An empirical study contemporary to that of Butler and Snizek, illustrated the fact that while tipping behavior is mediated by social norms, there are other variables that influence tipping behavior as well. The researchers found that one-third of the variability in tipping behavior was explained by the social norm that the tip should equal 15% of the
bill, but that variations around this baseline were strongly related to group size. The authors allege that their findings support the diffusion of responsibility hypothesis; that the responsibility of each customer to the waiter/waitress may be psychologically divided among the people present, thus people who dine in groups leave smaller tips than people who dine alone. The results did not support the popular tipping stereotype of the Big Spender, since those diners whose bill was higher than the average did not tip a higher percentage. Also, there were no real differences between tips left by groups of women, groups of men or mixed groups. The authors go so far as to suggest that a waiter-waitress should consider giving separate checks because this technique "might short-circuit diffusion of responsibility and increase income enough to justify the extra effort" (Freeman, Walker, Borden, & Latane, 1976; "Happiness is a Separate Check," 1976; Honn, 1976; Wall Street Journal, June 22, 1976).

Elman (1976) and Snyder (1976) both refute this argument by noting that an equally plausible explanation for tipping patterns observed in the aforementioned study is that customers take into account the amount of time and effort per dollar of food required to serve a table. They speculate that increases in the number of customers served result in less than proportionate increases in the amount of work required. Thus they conclude that equity theory posits a more acceptable theoretical framework for interpreting the data presented by Freeman et al. (1976).

For the most part, researchers have failed to include the physical attractiveness of the waitress as a salient variable when
investigating the determinants of tipping behavior. Landy and Sigall (1974) have determined that the physical attractiveness of an individual performing a task affects the manner in which people evaluate both the performance and performer. This was so even though the task performance being evaluated was completely unrelated to the physical attractiveness of the performer. Thus, physical appearance not only affects the way in which one reacts to another's accomplishments, but the more attractive the performer, the more positive the subject's evaluation of her work. One researcher demonstrated that attractive waitresses earned more than double the tips of unattractive waitresses in a study in which the quality of service and the number of patrons served were the same. After sixteen trials, using sixteen different waitresses in a nightclub setting, homely waitresses reportedly averaged $40.00 per night, average attractiveness waitresses earned $60.00 per night, and highly attractive waitresses averaged $95.00 (Greve, 1978).

The present study is a field study utilizing a combination of observational techniques, archival data (dinner checks) and self-report measures to determine which variables, if any, have a significant impact on tipping behavior. Some of the variables were chosen for this study because they are consistently addressed by the popular media and survey research: quality of service, speed, efficiency, age of payee (University of Texas, 1957; "Tips to Make More Tips," 1963). Other variables were chosen because their import seems to be consistently underrated: attractiveness, cleanliness, number of diners in party, waitress' age (Brennan, 1977). The research hypothesis of this basically correlational study is to delineate those variables that significantly
influence tipping behavior, other than that of the norm that a tip should equal 15% of the dinner bill. Concomitantly, the null hypothesis states that there are no variables other than that of the 15% tipping standard that govern tipping behavior.

This empirical approach presents a unique opportunity to apply behavioral science knowledge to a very pragmatic concern. It is hoped that as the dynamics surrounding tipping behavior are delineated, increased knowledge will enable both management and the consumer to promote the development of an enlightened perspective regarding the tipping convention that will benefit restaurant management, service personnel and the customer alike.
METHOD

Subjects. There were two distinct groups of participants in this study: diners and waitresses. The former group was comprised of 600 tables of diners at a large Midwestern restaurant specializing in steak and lobster entrees. The tip received from each of the 600 tables was recorded either by the waitress who served the table (350), or was traced through the charge card receipt (150). Since tradition dictates that if there is a man in the dinner party, that he take care of the dinner check, the diner who left the tip was most often a male. However, there were a small number of females who paid the bill; usually this was the case when the party was exclusively female. Since the entrees range in price from $5.50 to $19.95, the diners tended to be of above-average socio-economic status and middle-aged.

The waitresses were employees of the designated restaurant. Sixteen of the twenty-two waitresses who were employed on a full-time basis consented to participate in a study of tipping behavior. Those who did not participate objected to sharing information about tips noting that in view of the present system of reporting to the Internal Revenue Service, it was unwise to share that particular information with anyone. However, since there seemed to be no other systematic reason for their non-participation, the data reported by the sample of sixteen waitresses should be considered an accurate representation of the pattern of tipping in this fine-dining restaurant.
The waitresses who agreed to participate were for the most part, a heterogeneous group except that the majority of the women were either single or the head of a household. Their ages varied from early twenties through the mid-sixties, the range of waitress experience varied from one month to twenty years, and the educational background varied from some high school education through a Bachelor's degree.

**Materials.** The waitresses were asked to record their tips on a tip sheet as shown in Appendix C. In order to cross check the tip sheets with the charge receipts, the waitresses were asked to note the number of the dinner check. They were further asked to note the number of customers in the party, and their own personal satisfaction with the tip received by rating the tip as (1) inadequate, (2) adequate, or (3) more than adequate.

Using the format shown in the index card in Appendix D, the observers recorded information on several variables from each table that a designated waitress served. Among the variables noted were: the time the customer(s) was (were) seated, the time the waitress first approached the table to greet the customer(s), the time the customer(s) ordered the entree, the time the entree was served, the number of people in the party, and the estimated age of the customer who paid the dinner check. The observers also made a frequency count of the number of times a waitress smiled while interacting with a table, and the number of times she approached the table to check whether the customer(s) was (were) satisfied and/or needed something.

The observers also rated the attractiveness and the cleanliness of each waitress using a scale of 1 - 10 (with 10 being the most
favorable rating). In making their ratings, the observers were asked to read the instructions included as Appendix E which directed them towards specific aspects of a waitress' appearance. Having carefully considered each of these aspects, the observers were asked to choose the rating which seemed most appropriate.

The observers were then asked to consider the objective data that they had noted about the service for a particular table, and to make a subjective evaluation (on the same scale of 1 - 10) as to the quality of the interaction between waitress and diners at the table. Having integrated both these objective and subjective components, the observers assigned an overall rating of service for each table a waitress served on a given evening.

Lastly, each waitress who participated in the study filled out a card included as Appendix F, giving her age and the number of years she had been employed as a waitress.

Procedure. The waitresses who consented to participate were asked to record the tips earned from each of their tables on at least three designated evenings. The waitresses were reassured that these records would be confidential and used solely for the purposes of the present study. Due to the fact that the amount of a tip is a very sensitive issue, it was important to check that the tips being reported by each waitress were indeed accurate. Approximately 25% of all the dinner checks were paid for by a charge card. When a credit card was used, most often the customer entered the amount of the tip on the charge receipt. Thus at the end of each evening, the tips that
each waitress reported were checked against the available charge receipts to insure the veracity of the waitresses' report. At no time did the tip sheets differ from the tips entered on the charge receipts.

Data for the study were gathered from several different sources. Sixteen waitresses reported data regarding: (1) their satisfaction with each tip they reported, (2) their age, and (3) their years of experience as a waitress. The researcher, with the support of the restaurant management, gathered the following data from 250 charge receipts: (1) the amount of the bill, (2) the tip left the waitress (if included on the charge receipt), and (3) the number of diners in the party. Additionally, the researcher gathered the following data from 350 dinner checks where a waitress participating in the study had recorded the tip she received: (1) the amount of the bill, and (2) the number of diners in the party.

Independent observers collected data from 184 tables of diners on variables affecting service delivery and also made subjective evaluations about three attributes of the waitress.

As noted previously, the issue of the reliability of the percentage of tip (the dependent variable) was addressed by a manipulation check to insure that the tips reported by the waitresses were indeed accurate. The information gathered by the researcher was from a clearly reliable source (dinner checks). However, the information gathered by observational techniques is valuable only if an acceptable degree of interrater reliability has been established. Thus a training schedule was arranged for the observers.
The observers, two men and five women, had been recruited from among the researcher's family and friends. They ranged in age from twenty-one to sixty-two years and were unaware of the hypotheses under investigation. At a general meeting, it was explained that the observers would collect data as customers at a fine-dining restaurant, and that sometimes the observers would observe from the bar area, and at other times, they would eat dinner while noting the activity of the waitresses around them. The observers were reimbursed for all expenses incurred.

Subsequently, the observers went as a group to the restaurant, sat at the bar, and while casually conversing with one another, were instructed to observe two specific waitresses and to record data on eight variables. After thirty minutes, the observers met with the researcher to discuss any difficulties, to compare the results of their observations, and to clarify any questions they might have had. Then the observers returned to the bar area and again discussed the results of their observations. Subsequently, when they were actually observing the waitresses, they were in groups of two or three, equipped with paper and pencil, busily engaged in what appeared to be business correspondence while they made notations which were kept as discrete as possible concerning the variables of interest.

The study was carried out between July 21 and August 5, 1977. Observations were made on evenings which were chosen to represent a diverse clientele as well as fast and slow operating times.

On a particular evening, the researcher herself, being employed as a waitress in the same establishment, would solicit the cooperation
of two to four waitresses to record tips for that evening. Most often, waitresses were selected because they had been assigned to work in close proximity to each other for that evening. The researcher then contacted the observers who had agreed to work that evening and told them who they would observe and where the table and/or bar stool with maximum visibility was, in order that they might request that the hostess seat them there. After the observers were situated, they began to record data on the tables that were subsequently seated and attended to by one of the waitresses who had agreed to record her tips that evening. Customers were escorted to their tables by the hostess. As is the restaurant's policy, customers are assigned to each waitress' station in turn except for those instances where a customer specifically requests a particular table or a particular waitress.

The waitresses attended to their tables in the usual manner unaware that they were being observed. At the end of the evening, they turned in the tip sheets to the researcher who then matched the tips to the appropriate dinner check and subsequently, to the observer's data. The researcher was able to correctly match the tip to the observer's data because the tip sheet included the check number. Since the dinner check was routinely punched in the time clock when the order was given to the chefs, and, since the observers had noted at what time the customers ordered dinner, the dinner checks were matched to the observers data accurately.

There was an ever-present concern that if the waitresses became aware of the fact that they were being observed, the validity of the study would be impaired. However, at no time did the waitresses guess
that they themselves were under scrutiny. In fact, while waitresses were cooperative, they evinced little curiosity about the study and it appeared that they had agreed to participate solely as a personal favor to the researcher. Three waitresses did become aware that there were "customers" who were helping the researcher with the study. They were told that the individuals concerned were noting the number of diners at each table and the age of the payee. This explanation was readily accepted. The nonchalance that the waitresses exhibited regarding this project is probably due to at least three factors. Most waitresses have no previous experience with research projects and thus there was no suspiciousness that would lead them to try to second-guess the "real" purpose of the study. Secondly, during the summer, business was brisk and the waitresses were kept extremely busy. Thus communication between waitresses except for social amenities became limited. Lastly, the researcher was a coworker who solicited their cooperation. Thus it became possible to ask waitresses to share information regarding their tips even though it is not information that is generally shared with one another, and seldom with outsiders. The personal cooperation elicited was further enhanced by the fact that the day after a waitress recorded her tips, the researcher returned to her the same tip sheet with a record of the percentages of the bill she was "making off" each table. This feedback mechanism seemed to facilitate cooperation and most curiosity about the project was limited to rhetorical questions regarding the previous evening's earnings.

After the data had been analyzed, the results of the study were formally presented to the employees and management of the restaurant for their comment.
RESULTS

The results of the initial analyses, which are presented in Table 1, describe the expenses incurred during a typical dining episode at this particular restaurant. The average amount of a check was $31.32 while the average tip was $4.30. The average dining episode resulted in a tip that equaled 14.2% of the check; the average tip per person equaled $1.46. The results presented in Table 2 show a frequency distribution of the percentage tipped at 347 tables.

In order to further describe the relationship between the amount of the check of the resultant tip, a simple regression analysis was performed. The best linear prediction of the percentage tipped from the check was: Percentage Tipped = 15.42 + (-.04)(amount of the check). Given the small negative slope (-.04), when the check is small, the percentage tipped can be expected to be slightly less than 15.42%. As the amount of the check increases, the percentage tipped will decrease in direct proportion to the amount of the check. While statistically significant, $F(1, 347) = 8.31, p < .01$, the amount of the check accounted for only 2% of the variance of percentage tipped.

Multiple regression techniques were then utilized to determine whether any of the variables under study had a significant relationship to the percentage tipped. After all of the variables had been entered into the equation, it was possible to account for 12% of the variance in the dependent variable, percentage tipped. The variable that best
### TABLE 1

**MEAN AND STANDARD DEVIATION OF DINING EXPENDITURES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Mean $\bar{x}$</th>
<th>Standard Deviation $s$</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of check</td>
<td>31.32</td>
<td>361.65</td>
<td>350</td>
</tr>
<tr>
<td>Amount of tip</td>
<td>4.30</td>
<td>8.24</td>
<td>350</td>
</tr>
<tr>
<td>Amount tipped per person</td>
<td>1.46</td>
<td>0.43</td>
<td>350</td>
</tr>
<tr>
<td>Percentage tipped</td>
<td>14.2%</td>
<td>25.41</td>
<td>350</td>
</tr>
</tbody>
</table>
TABLE 2

FREQUENCY DATA: PERCENTAGE TIPPED

<table>
<thead>
<tr>
<th>Percentage Tipped</th>
<th>Absolute Frequency</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>3</td>
<td>0.9</td>
</tr>
<tr>
<td>3-5</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td>6-8</td>
<td>27</td>
<td>13.5</td>
</tr>
<tr>
<td>9-11</td>
<td>60</td>
<td>37.0</td>
</tr>
<tr>
<td>12-14</td>
<td>100</td>
<td>66.5</td>
</tr>
<tr>
<td>15-17</td>
<td>95</td>
<td>85.7</td>
</tr>
<tr>
<td>18-20</td>
<td>34</td>
<td>93.1</td>
</tr>
<tr>
<td>21-23</td>
<td>7</td>
<td>95.7</td>
</tr>
<tr>
<td>24-26</td>
<td>8</td>
<td>97.4</td>
</tr>
<tr>
<td>27-29</td>
<td>5</td>
<td>98.6</td>
</tr>
<tr>
<td>30-32</td>
<td>4</td>
<td>99.4</td>
</tr>
<tr>
<td>33-35</td>
<td>1</td>
<td>99.7</td>
</tr>
<tr>
<td>36-38</td>
<td>1</td>
<td>100.0</td>
</tr>
</tbody>
</table>
predicted the percentage tipped was the number of non-task oriented visits, \( F(1, 169) = 6.84, p < .01 \).

When the list of variables entered into the regression equation were limited to those variables considered most salient to the purposes of this study (the number of customers per table, the number of non-task oriented visits, the number of smiles, the overall service rating, the attractiveness rating and the method of payment), all of the variables were significant predictors of the amount per person tipped, except for that of the number of customers per table. The significance levels of these predictor variables are included as Table 3. In combination, the four remaining variables accounted for 17\% of the variance in the amount per person tipped.

Taking into consideration both the aforementioned results, and the results of previous research in the area of tipping behavior, the data were further broken down in order to highlight the influence of the following variables on the percentage tipped: method of payment (cash/charge), the number of people per table, the quality of service and the attractiveness of the waitress.

Method of Payment (Cash/Charge)

The expenses incurred during an average dining episode differ as a function of the method of payment. As shown in Table 4, the amount of the average check for a charge transaction was $36.47 while the tip averaged 15.2\%. In contrast, when the transaction was made in cash, the amount of the average check was $30.60 while the tip averaged 14.0\%.
TABLE 3

VARIABLES THAT PREDICT THE
AMOUNT PER PERSON TIPPED

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Degrees of Freedom</th>
<th>Obtained F value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-task oriented units</td>
<td>(1,177)</td>
<td>10.58, p &lt; .01</td>
</tr>
<tr>
<td>Method of payment</td>
<td>(1,177)</td>
<td>5.03, p &lt; .05</td>
</tr>
<tr>
<td>Number of smiles</td>
<td>(1,177)</td>
<td>4.02, p &lt; .05</td>
</tr>
<tr>
<td>Attractiveness rating</td>
<td>(1,177)</td>
<td>3.90, p &lt; .05</td>
</tr>
</tbody>
</table>
### TABLE 4

**AVERAGE DINING EXPENDITURES: CHARGE AND CASH TRANSACTIONS**

<table>
<thead>
<tr>
<th></th>
<th>Charge Transaction</th>
<th>Cash Transaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of check</td>
<td>36.47</td>
<td>30.60</td>
</tr>
<tr>
<td>Amount of tip</td>
<td>5.63</td>
<td>4.15</td>
</tr>
<tr>
<td>Amount tipped per person</td>
<td>1.74</td>
<td>1.43</td>
</tr>
<tr>
<td>Percentage tipped</td>
<td>15.2%</td>
<td>14.1%</td>
</tr>
<tr>
<td>N</td>
<td>286</td>
<td>314</td>
</tr>
</tbody>
</table>
A charge card was used as the medium of exchange for approximately 25% of the transactions in this particular restaurant.

The best linear prediction of the percentage tipped from the check for cash transactions was: percentage tipped = 15.70 + (-.05) (amount of the check). The equation accounts for 4% of the variance in the dependent variable, $F(1,311) = 11.63$, $p < .01$. For charge transactions, the best linear prediction was: percentage tipped = 15.54 + (.08) (amount of the check). However, this formula accounts for less than 1% of the variance in the percentage tipped, $F(1,285) = 0.46$, n.s.

Previous research had indicated that the percentage tipped is inversely related to the number of diners seated at a table (Freeman et al., 1976). Supporters of the equity theory (Elman, 1976; Snyder, 1976) have criticized those who perceived this decreasing function as support for the diffusion of responsibility theory. If, as the latter group would claim, the size of the percentage tipped is inversely related to the total bill size, then this relationship should be manifest in a comparison across bills of different sizes, holding the group size constant. In order to resolve this dilemma, a partial correlation was employed to correlate the amount of the check with the percentage tipped while holding the number of people per table constant. The analysis indicates that the tip does not vary with the amount of the check, $r_{xy} \cdot z(209) = -.04$, n.s. When only charge transactions were considered, the amount of the check was significantly correlated with the percentage tipped, $r_{xy} \cdot z(283) = p < .01$. When only cash
transactions were considered, the amount of the check did not vary predictably with the percentage tipped, \( r_{xy} \cdot z(310) = -0.07, \text{n.s.} \).

A further partial correlation was performed in order to test the hypothesis that a Big Spender will tip very generously. However, the concept of a Big Spender appears to be largely mythical since the per person amount of the check did not correlate with the percentage tipped, \( r_{xy} \cdot z = 0.05, \text{n.s.} \).

The data in this present study do not support the inverse function between percentage tipped and group size as described by Freeman et al. (1976). When the mean percentage tipped was calculated for tables with from one to six customers, the data, as presented in Table 5, reflect a quadratic rather than linear function. As portrayed in Figure 1, the percentage tipped for a party of six appears to signal an upward trend in the data. A trend analysis was done and the results indicate that the data fit a quadratic function, \( F(1,339) = 4.53, p < 0.03 \). The existence of a quadratic function is further supported by an a priori contrast which indicates that the percentage tipped for tables of two, four and six diners, differs from the percentage tipped by tables of three and four diners, \( t(339) = 1.905, p < 0.05 \). However, the contrast whereby the percentage tipped by a table of five diners is compared to a table of six diners proved to be nonsignificant, \( t(339) = -1.36, \text{n.s.} \). Furthermore, while a one-way analysis of variance indicates that there are differences between the means of the percentage tipped as a function of group size, a Newman Keuls analysis reveals that there are no significant differences between any specific
TABLE 5

MEAN PERCENTAGE TIPPED AND MEAN AMOUNT TIPPED
PER PERSON AS A FUNCTION OF GROUP SIZE

<table>
<thead>
<tr>
<th>Group Size</th>
<th>$\bar{x}$ % Tipped</th>
<th>$\bar{x}$ Amount Tipped Per Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16.8</td>
<td>$1.69</td>
</tr>
<tr>
<td>2</td>
<td>15.0</td>
<td>1.52</td>
</tr>
<tr>
<td>3</td>
<td>13.2</td>
<td>1.28</td>
</tr>
<tr>
<td>4</td>
<td>13.1</td>
<td>1.42</td>
</tr>
<tr>
<td>5</td>
<td>11.9</td>
<td>1.15</td>
</tr>
<tr>
<td>6</td>
<td>13.4</td>
<td>1.53</td>
</tr>
</tbody>
</table>
Figure 1. Mean Percentage Tipped as a Function of Group Size.
pair of means, rather, the differences in percentage tipped are shared among tables of from one to six diners.

While the previous analysis clearly demonstrates that the percentage tipped varies as a function of group size, it is of interest to note what the actual dollar value of these differences are. The amount of money that customers spent for dinner, and the amount of money they tipped as a function of group size, is presented in Table 6. The mean differences noted present striking variability as the number of customers systematically increases by one diner.

In light of the aforementioned results, it seemed likely that other variables would vary as a function of group size. Values for the following variables are presented in Figure 2 through Figure 5 as the number of customers at a table varies from one to six: the mean number of smiles, the mean number of non-task oriented visits, the mean age of the payee, and the mean service rating. Figure 2 (mean number of smiles), Figure 3 (mean number of non-task oriented visits), and Figure 5 (mean service rating) are remarkably similar to the graph of the mean percentage tipped as presented in Figure 1. It would seem reasonable that as the number of diners increases, the amount of waitress-diner interaction would increase although the arithmetic changes in group size do not necessarily require the same arithmetic changes in the number of smiles or in the number of non-task oriented visits. The fact that the mean service rating also varies as a function of group size is more difficult to account for. Several possibilities may be posed: (1) Waitresses may intuitively perceive tables of six
Figure 2. Mean Number of Smiles as a Function of Group Size.
Figure 3. Mean Number of Non-Task Oriented Visits as a Function of Group Size.
Figure 4. Mean Estimated Age of Payee as a Function of Group Size.
Figure 5. Mean Overall Service Rating as a Function of Group Size.
diners as presenting an opportunity to earn substantial monies while concomitantly discounting the fiscal rewards offered by a table of five diners, and therefore, are more attentive to tables of six diners; (2) Since there is typically more effort exerted in serving a table of six than there is in serving a table of one through five diners, this increased effort was perceived by the independent observers as meriting a higher service rating. Regardless of which interpretation is adopted, the mean number of smiles, the mean number of non-task oriented visits, and the mean service ratings would appear to be correlated with group size.

The variability in the percentage tipped was examined further as a function of both group size and the method of payment. The percentage tipped as a function of group size was calculated for all charge transactions (Figure 6) and for all cash transactions (Figure 7). The results of the analysis of variance indicated that when the method of payment was a charge, the percentage tipped differed reliably as a function of group size, $F(5,269) = 3.947, p < .001$. The post-hoc comparison indicated that the mean percentage tipped for a table of one diner (23.7%) differed significantly from the mean percentage tipped by tables with from two to six diners. When cash transactions were considered, the analysis of variance was significant, $F(5,304) = 3.85, p < .002$, however, the post-hoc comparison did not reveal significant differences between any specific pair of means.
TABLE 6
THE MEAN DOLLAR VALUES OF THE AMOUNT OF CHECK AND AMOUNT OF TIP AS A FUNCTION OF GROUP SIZE

<table>
<thead>
<tr>
<th>Group Size</th>
<th>( \bar{x} ) Amount of Check</th>
<th>( \bar{x} ) Difference</th>
<th>( \bar{x} ) Amount of Tip</th>
<th>( \bar{x} ) Difference</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15.50</td>
<td>6.07</td>
<td>2.46</td>
<td>0.70</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>21.57</td>
<td>7.47</td>
<td>3.16</td>
<td>0.64</td>
<td>173</td>
</tr>
<tr>
<td>3</td>
<td>29.04</td>
<td>13.60</td>
<td>3.80</td>
<td>2.49</td>
<td>51</td>
</tr>
<tr>
<td>4</td>
<td>42.64</td>
<td>3.14</td>
<td>5.65</td>
<td>0.19</td>
<td>76</td>
</tr>
<tr>
<td>5</td>
<td>45.78</td>
<td>20.13</td>
<td>5.46</td>
<td>3.45</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>65.91</td>
<td></td>
<td>8.91</td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>
Figure 6. Mean Percentage Tipped for Charge Transactions as a Function of Group Size.
Figure 7. Mean Percentage Tipped for Cash Transactions as a Function of Group Size
Quality of Service

Multiple measures of the quality of service were employed: the number of non-task oriented visits and an overall service rating. A Spearman rank-order correlation was used to determine the strength of the relationship between the percentage tipped and the variables, overall service rating and the number of non-task oriented visits, $\rho(16) = .09$, n.s. The coefficient of determination accounts for less than 1% of the variance in percentage tipped. Similarly, there was a zero order correlation between the mean number of non-task oriented visits and the mean percentage tipped, $\rho(16) = - .05$, n.s. The coefficient of determination once again, accounted for less than 1% of the variance in percentage tipped.

A further evaluation of these relationships was achieved by relating the quality of service to the tips received from individual tables. The Pearson Product Moment Correlation indicated a significant relationship between the number of non-task oriented visits and the percentage tipped, $r(170) = .21$, $p < .01$, whereas the relationship between the service rating and the percentage tipped was not significant, $r(184) = .01$.

It is evident from the previous analyses that the raw data do not have a simple relationship to the dependent measure. Thus the data were collapsed into the three levels shown in Tables 7 and 8 in order that the following analyses might be performed to investigate the possibility of an interaction effect.
### TABLE 7

**MEAN PERCENTAGE TIPPED AS A FUNCTION OF ATTRACTIVENESS**

<table>
<thead>
<tr>
<th>Attractiveness ratings</th>
<th>$\bar{x}$</th>
<th>s</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low attractiveness (1-4)</td>
<td>13.84</td>
<td>4.99</td>
<td>119</td>
</tr>
<tr>
<td>Medium attractiveness (5-7)</td>
<td>13.73</td>
<td>4.50</td>
<td>185</td>
</tr>
<tr>
<td>High attractiveness (8-10)</td>
<td>16.72</td>
<td>6.48</td>
<td>45</td>
</tr>
</tbody>
</table>
TABLE 8
MEAN PERCENTAGE TIPPED AS A FUNCTION OF THE QUALITY OF SERVICE AS DEFINED BY NON-TASK ORIENTED VISITS AND SERVICE RATINGS

<table>
<thead>
<tr>
<th>Quality of Service: Non-task oriented visits</th>
<th>$\bar{x}$</th>
<th>$s$</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low NTOV (0 visits)</td>
<td>13.82</td>
<td>4.86</td>
<td>53</td>
</tr>
<tr>
<td>Medium NTOV (1 or 2 visits)</td>
<td>14.53</td>
<td>4.35</td>
<td>79</td>
</tr>
<tr>
<td>High NTOV (3 or more visits)</td>
<td>15.61</td>
<td>5.32</td>
<td>38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality of Service: Service rating</th>
<th>$\bar{x}$</th>
<th>$s$</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low service rating</td>
<td>13.98</td>
<td>4.66</td>
<td>29</td>
</tr>
<tr>
<td>Medium service rating</td>
<td>14.41</td>
<td>4.61</td>
<td>137</td>
</tr>
<tr>
<td>High service rating</td>
<td>15.38</td>
<td>5.50</td>
<td>18</td>
</tr>
</tbody>
</table>
The Relationship between Attractiveness and the Quality of Service

A chi-square analysis was used to explore the relationship between attractiveness and the quality of service measures. In the low service rating condition, the low attractiveness waitresses typically earned a low percentage tipped whereas high attractiveness waitresses typically earned a high tip, $\chi^2(4) = 12.55, p < .01$. Similarly, in the low non-task oriented visits condition, the low attractiveness waitresses typically earned a low percentage tipped whereas high attractiveness waitresses typically earned a high tip, $\chi^2(4) = 11.38, p < .02$.

In the medium service rating condition, the low attractiveness waitresses were likely to earn a low percentage tipped while high attractiveness waitresses earned a high percentage tipped, $\chi^2(2) = 9.0, p < .06$. Similarly, in the medium non-task oriented visits condition, the low attractiveness waitresses were likely to earn a low percentage tipped while high attractiveness waitresses earned a high percentage tipped, $\chi^2(4) = 4.44, \text{n.s.}$

In the high service rating conditions the high attractiveness waitresses continued to earn a high percentage tipped although it became more likely that the low attractiveness waitresses would earn a high percentage tipped in this condition, $\chi^2(4) = 2.02, \text{n.s.}$ Similarly, in the high non-task oriented visits condition, high attractiveness waitresses continued to earn a high percentage tipped although it became more likely that the low attractiveness waitresses would earn a high percentage tipped in this condition, $\chi^2(4) = 2.93, \text{n.s.}$
Noting these trends, a t-test was performed to test the hypothesis that waitresses who are in the upper ranges of attractiveness typically earn a high percentage tipped regardless of the quality of service rendered. The results, presented in Table 9, indicate that there are no significant differences in the percentage tipped earned between those high attractiveness waitresses who rendered very good service (\( \bar{x} \) percentage tipped = 17.3%), and those who rendered poor service (\( \bar{x} \) percentage tipped = 20.33%).

A similar analysis was performed to test the hypothesis that low attractiveness waitresses earn a low percentage tipped regardless of the quality of service rendered.

The results presented in Table 10 indicate that while there are no significant differences between low attractiveness waitresses who render poor service and those who render excellent service, the mean for the excellent service condition was 14.9% in contrast to the mean of the low service condition, 12.4%.

**Separating cash and charge payments.** The above analyses were repeated within the context of differing methods of payment. It was hypothesized that the attractiveness dimension might have a more significant impact on customers who pay in cash. The results presented in Table 11 indicate that when payment is made with a charge card, high attractiveness waitresses averaged 17.8% of the check when the quality of the service was high, and 16.4% of the check when the quality of service was low, \( F (3, 3) = 4.76, \) n.s. Low attractiveness waitresses who render excellent service averaged 13.5% of the dinner check.
TABLE 9

COMPARISON BETWEEN THE PERCENTAGE TIPPED BY HIGH ATTRACTIVENESS WAITRESSES WHEN A HIGH OR LOW QUALITY OF SERVICE WAS RENDERED

<table>
<thead>
<tr>
<th>High Attractiveness condition</th>
<th>x % tip</th>
<th>s</th>
<th>t</th>
<th>One-tail Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>High service rating</td>
<td>17.37</td>
<td>4.21</td>
<td>1.46</td>
<td>.33</td>
</tr>
<tr>
<td>Low service rating</td>
<td>20.33</td>
<td>6.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High NTOV</td>
<td>18.03</td>
<td>6.94</td>
<td>1.30</td>
<td>.23</td>
</tr>
<tr>
<td>Low NTOV</td>
<td>18.64</td>
<td>5.31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 10

COMPARISON BETWEEN THE PERCENTAGE TIPPED BY LOW ATTRACTIVENESS WAITRESSES WHEN A HIGH OR LOW QUALITY OF SERVICE WAS RENDERED

<table>
<thead>
<tr>
<th>Low Attractiveness condition</th>
<th>x (% tip)</th>
<th>s</th>
<th>t</th>
<th>One-tail Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>High service rating</td>
<td>15.18</td>
<td>4.78</td>
<td>1.13</td>
<td>.376</td>
</tr>
<tr>
<td>Low service rating</td>
<td>11.98</td>
<td>4.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High NTOV</td>
<td>14.77</td>
<td>4.11</td>
<td>1.43</td>
<td>.095</td>
</tr>
<tr>
<td>Low NTOV</td>
<td>12.83</td>
<td>5.89</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 11

Comparison of the Percentage Tipped in a Charge Transaction by High Attractiveness and Low Attractiveness Waitresses When a High or Low Quality of Service Was Rendered

<table>
<thead>
<tr>
<th>Charge Transaction</th>
<th>High Attractiveness</th>
<th>Low Attractiveness</th>
<th>One-tail Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>condition</td>
<td>x % tip</td>
<td>s</td>
</tr>
<tr>
<td>High NTOV</td>
<td>17.8</td>
<td>3.11</td>
<td></td>
</tr>
<tr>
<td>Low NTOV</td>
<td>16.4</td>
<td>6.79</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>x of tip</th>
<th>s</th>
<th>t</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>High service rating</td>
<td>15.53</td>
<td>2.10</td>
<td>1.75</td>
<td>.24</td>
</tr>
<tr>
<td>Low service rating</td>
<td>14.73</td>
<td>3.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High NTOV</td>
<td>13.48</td>
<td>1.48</td>
<td>2.52</td>
<td>.08</td>
</tr>
<tr>
<td>Low NTOV</td>
<td>16.17</td>
<td>3.74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
while those who rendered poor service averaged 16.2% of the bill, $F(4,2) = 6.38, \text{n.s.}$

When the payment was made in cash, the results presented in Table 12 are consistent with the patterns noted in previous analyses. There were no differences in percentage tipped when a high attractiveness waitress rendered excellent or poor service, $F(5,7) = 2.51, \text{n.s.}$ Similarly, there was no difference in percentage tipped when a low attractiveness waitress rendered excellent or poor service, $F(7,8) = 1.79, \text{n.s.}$ However, the mean percentage tipped for high attractiveness waitresses was 19.3% when the waitress rendered poor service and 18.1% when she rendered excellent service. In contrast, the low attractiveness waitresses earned an average of 10.9% when the waitress rendered poor service and 15.0% when she rendered excellent service.
TABLE 12

COMPARISON OF THE PERCENTAGE TIPPED IN A CASH TRANSACTION
BY HIGH ATTRACTIVENESS AND LOW ATTRACTIVENESS WAITRESSES
WHEN A HIGH OR LOW QUALITY OF SERVICE WAS RENDERED

<table>
<thead>
<tr>
<th></th>
<th>High Attractiveness</th>
<th></th>
<th></th>
<th>One-tail Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>condition</td>
<td>x % tip</td>
<td>s</td>
<td>t</td>
</tr>
<tr>
<td>Cash Transactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High service rating</td>
<td></td>
<td>17.37</td>
<td>4.22</td>
<td>1.46</td>
</tr>
<tr>
<td>Low service rating</td>
<td></td>
<td>20.33</td>
<td>6.18</td>
<td></td>
</tr>
<tr>
<td>High NTOV</td>
<td></td>
<td>18.12</td>
<td>8.36</td>
<td>1.58</td>
</tr>
<tr>
<td>Low NTOV</td>
<td></td>
<td>19.29</td>
<td>5.28</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Low Attractiveness</th>
<th></th>
<th></th>
<th>One-tail Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>condition</td>
<td>x % tip</td>
<td>s</td>
<td>t</td>
</tr>
<tr>
<td>High service rating</td>
<td></td>
<td>15.03</td>
<td>5.71</td>
<td>1.33</td>
</tr>
<tr>
<td>Low service rating</td>
<td></td>
<td>10.95</td>
<td>4.27</td>
<td></td>
</tr>
<tr>
<td>High NTOV</td>
<td></td>
<td>15.24</td>
<td>4.69</td>
<td>1.30</td>
</tr>
<tr>
<td>Low NTOV</td>
<td></td>
<td>12.0</td>
<td>6.14</td>
<td></td>
</tr>
</tbody>
</table>
DISCUSSION

While the best linear prediction of the percentage tipped from a dinner check was 15.42% minus four hundredths times the amount of the check, the fact that this equation, which supports the prescribed 15% norm, can account for only two percent of the variance in tipping behavior indicates that there is a great deal of variability around the 15% norm. In the present study, approximately 25% of the dining parties left a tip that equaled less than 12% of the bill. Concomitantly, 25% of the dining parties left a tip that equaled 17% of the bill or more. Thus, 50% of the dining parties left a tip that equaled between 12% and 18% of the bill. However, only 10% of the dining parties left a tip that equaled 14.5% to 15.5% of the bill, thus dispelling the widely-held belief that the 15% standard is somehow a fixed precept of tipping behavior. While the aforementioned formula reflects the fact that the 15% standard acts as a guidepost to tipping behavior, the focus of the present study is to delineate the variables that mediate the variability around the 15% norm.

It was found that variables which are traditionally associated with the speed and efficiency of service delivery did not have a significant impact on tipping behavior. While it may be true that diners prefer an adequately timed dining episode, if there is a long pause before the customer is greeted, or if there is a long wait before the entree arrives, the inconvenience does not appear to affect the amount of tip
a diner will leave. While speed of service delivery did not have an impact on tipping behavior, the number of smiles the waitress flashed at her customers, the number of times she checked in with the table, her own attractiveness and the method of payment were variables that did influence the percentage tipped. However, the variable that most influenced how the percentage tipped would vary from the prescribed norm was that of group size. For example, a party of five tipped 11.9% on the average, while a solitary diner tipped an average of 16.8%. Furthermore, while tables of two were most likely to adhere to the 15% norm, parties of three, four and six people tipped approximately 13%. This finding, that a solitary diner, and groups of three through six diners do not exhibit the expected conformity to a 15% standard, conflicts with other research studies (Asch, 1951, Gerard, Wilhelmy, & Conalley, 1968; Milgram, 1969) that would predict that increasing the size of a group puts more pressure on the individual (payee) to conform to established norms. This is especially salient in restaurant dining since the approximate bill size is easily calculated by any member of the dining party who perused the menu, and since the tip is most often placed on the table, the percentage tipped becomes a matter of public record. Of course, for those who prefer to be more discrete about their tipping behavior, there are a variety of ploys used to conceal the amount of the tip from others in the dining party. Since group pressure to conform is premised upon public behavior, in those instances where the tipping ritual is dispensed with without group awareness of the monies that have been exchanged, group pressure to conform is not an issue.
Another study that explored the relationship between group size and the percentage tipped was that authored by Freeman et al. (1976) who endorsed the diffusion of responsibility theory to account for the tipping patterns evinced by parties of differing size. According to this view, to the extent that many people contribute to the check, the responsibility of each to the waiter-waitress may be psychologically divided among the people present. Another perspective is offered by Snyder (1976) and Elman (1976) who suggest that equity theory is a more viable explanation. The results of a partial correlation where group size was held constant indicated that tip does not vary with the amount of the check. This finding does not support the ever-popular myth of the Big Spender who spends freely and tips commensurately. Thus, equity theory seems to present a more plausible theoretical framework as it appears that the customer takes into account the relative time and effort per dollar of food that is required to serve a table. As group size increases, the amount of effort expended by the waitress to service each additional customer results in less than proportionate increases in the amount of work required. Thus equity theory would predict that larger parties tip a smaller percentage of the bill because what they perceive as fair compensation for the service rendered, is a smaller percentage of the dinner check.

However, when only charge transactions are considered, the percentage tipped is remarkably consistent with the prescribed standard regardless of how group size varies, except for solitary diners who tipped an average of 23.7%. Thus social norms operate more powerfully when the medium of exchange is a charge card. This may be in part
a function of the license taken with an expense account. However, it remains unclear what percentage of charge transactions are billed to expense accounts. An equally plausible explanation is that those diners who have the financial credentials to acquire credit cards, are also those who dine out more frequently and thus are more familiar with tipping protocol, and, are more able to incur the costs associated with fine dining and the tipping convention.

The amount of money that people spend for dinner varies remarkably as a function of group size. Since the standard gratuity is based on a percentage of the dinner check, the bigger the tab, the bigger the tip a waitress can expect to earn. In most restaurants, there are tables for a couple, tables for a party of four, and tables for a party of six. The present findings (Table 6) indicate that tables of three spend, and therefore tip, much less than tables of four, and that tables of five spend and therefore tip much less than tables of six. The implication for the waitress is clear: it is a far better proposition to have a table of 4(6) seated on a 4(6) top table, than it is to have a table of 3(5) occupying the same table. Furthermore, a waitress is likely to make more money from a table of four than a table of five, so if parties of six are in short supply, a station replete with tables of four may be financially more rewarding than a station consisting of a mix of tables for parties of four and parties of six diners.

While most of the variables under the control of the waitress had no significant effects on the percentage tipped, there were particularly notable observations regarding the attractiveness of the waitress and the quality of service. Highly attractive waitresses averaged 17.3%
of the tab when the service they rendered was excellent, and 20.33% of
the tab when the service they rendered was evaluated as poor. When
low attractiveness waitresses rendered excellent service, they made on
the average, 14.9% of the tab; when they rendered poor service, they
earned 12.4% of the tab. These results are compatible with contem­
porary research which has concluded that highly attractive women are
also perceived as more sensitive, kind, interesting, sociable, sexually
warm and responsive, and skilled, than less attractive women. One
might conclude that highly attractive waitresses have less control over
the reward structure governing their work because the percentage tipped
they earn remains constant regardless of their competency. In contrast,
low attractiveness waitresses have a high degree of control over the
reward structure governing their occupation because average or below
average service is likely to be rewarded with a below average tip,
while excellent service is likely to be rewarded with the prescribed
15% norm. However, it is somewhat discouraging to note that all else
being equal, low attractiveness waitresses who render excellent service,
cannot match the percentage tipped earned by highly attractive waitresses
who deliver poor service.

The implications of these findings for restaurant management are
important, for in order to evaluate an individual's work performance,
one cannot rely solely on how successful the employee is in generating
tips from diners. It is equally important to note that the results of
survey literature which have echoed diners' claims that their tipping
behavior reflects a subjective evaluation of the quality of service,
is not supported in this study. Previous research has demonstrated
that survey methods may be irrelevant or even misleading (Phillips, 1971). This fact is due in part to the various biases that may affect the validity of verbal reports (e.g. impression management, experimenter bias, demand expectation). However, an even more basic factor affects the validity of survey research when the topic area is personal behavior or social interaction (Skinner, 1971). The processes and contingencies that control behavior are at once complex and elusive. Thus it is often the case that peoples' responses concerning their own behavior are at best speculative. Thus, survey research as a vehicle to collect information about one's tipping behavior is of dubious value.

Lastly, while the 15% norm is adhered to by couples who dine alone, when the number of customers deviates from two, the tipping behavior evinced varies from 11 to 17% of the bill. Thus the 15% norm is not a fact; rather it is a fiction that attributes more potency to the normative guideline than is warranted. The present study suggests that tipping behavior in fine-restaurant dining is not merely a response to a normative structure, but a complex response that also takes into account a number of other variables, among them, the group size, the attractiveness of the waitress, and at times, the quality of service.

Similar research studies, utilizing an empirical methodology, are needed to examine a cross section of restaurants, cafeterias and bars in order to generate hypotheses applicable throughout all price ranges. It is only with an increasing data base, that service personnel and restaurant management alike will be able to identify the variables that correlate with tipping behavior, and thus more accurately evaluate performance, and more accurately generate customer satisfaction.
REFERENCE NOTES


Farrington, R. S. Personal communication, November 20, 1978.

Schein, J. Personal communication, November 1, 1978.

Thomas, W. Personal communication, August 28, 1978.

REFERENCES


Begis, O. The milkman and his customer. Urban Life and Culture 1, July, 1972, pp. 131-165.


Frammolino, R. He's leading war against gratuities. Chicago Tribune, August 31, 1978.


Hyatt, J. C. Waiters and waitresses seeking to be paid the minimum wage, with tips as extras. *Wall Street Journal*, June 22, 1977, p. 46.
Insult me comrade! Newsweek, April 14, 1969, p. 112.


Ledger, J. Tipping, the customer's point of view. Canadian Hotel and Restaurant, May, 1974, pp. 26-29.


Most food service operators opt for service charge if tax credit repealed. NRA News, September, 1976.


The Tab for "Eating Out" was 38 billion in '73. *Chapel Hill Newspaper*, December 6, 1974.


*Wall Street Journal*, June 22, 1976, P. 1


<table>
<thead>
<tr>
<th># of Check</th>
<th>Amount of tip</th>
<th>√ if Charged</th>
<th>Your Rating</th>
</tr>
</thead>
</table>

WAITRESS' TIP SHEET
APPENDIX D
<table>
<thead>
<tr>
<th>Name of Waitress</th>
<th># of table</th>
<th># of people</th>
<th>Time; Customers seated</th>
<th>Time; Customers greeted</th>
<th>Time; Customers order</th>
<th>Time; Entree is served</th>
<th># of non-task oriented approaches</th>
<th># of smiles</th>
<th>Dinner check service</th>
<th>Time of departure</th>
<th>Rate overall service</th>
<th>Estimated age of payee</th>
<th>Rate attractiveness</th>
<th>Rate cleanliness</th>
</tr>
</thead>
</table>
OBSERVER'S INSTRUCTION SHEET

OBSERVER'S INSTRUCTION SHEET

There are three ratings you will be asked to make each night that you observe:

- an attractiveness rating
- a cleanliness rating
- a quality of service rating

In order for you to make these ratings it is important that each observer have a good understanding of what is meant by "attractiveness," "cleanliness" and "service."

Attractiveness: Please think in terms of the whole person. Among the things that you will want to note are:

- the face,
- the figure,
- the hair style, and
- posture.

Cleanliness: Many aspects of appearance combine to given an impression of cleanliness. The following are questions you should note before making this evaluation:

1. Is the uniform pressed and clean?
2. Are the waitress' shoes polished?
3. Is her hair neatly arranged? If it is long, is it pulled back from her face?
4. If makeup is worn, is it applied skillfully?

Service: Many things combine to make up "good service." Some of the things you should be looking for with each individual table are:
(1) Does the waitress greet customers immediately?
(2) Is she alert to their needs or do they seem to look around for her when they want another drink or want to order dinner?
(3) Is food served within a reasonable time or does the table seem impatient with the timing?
(4) Does the waitress revisit the table to ask if everything is alright?
(5) Must the customers seek out the waitress to get the check? After getting the check, does the waitress pick the money up as soon as it is placed on the table?
(6) How often does the waitress smile at her customers? Does she seem to have a good rapport with them?

*The following are pieces of information you will be asked to record.*

# of the table: You'll probably want to number the tables in your own mind so that you can keep them straight.

# of people: This means the number of adults, and number of children who order dinner. Infants and young children often eat off of their parent's plate--so watch for how many meals the waitress serves if you have a table with small children. The number in this space will then be the number of meals served.

Time: Customers seated: The time that the first person sits down at the table.

Time: Customers greeted: The time that the waitress first approaches the table and acknowledges them--sometimes this will be to take a drink order, and at other times she may stop to say, "I'll be with you in just a moment."

Time: Customers order: The time that the first person to order begins to give the order.

Time: Entree is served: The time that the first plate is delivered to the table.
Number of non-task oriented visits (NTOV): This data will be collected simply by marking a small line—and when you get to five, a line drawn thru—1111. The idea is to note how often the waitress comes by to check if the table needs another drink, if the food is to the customer's satisfaction or to see if they need anything. This is not to bring coffee to the table or to bring drinks to the table. This is when the waitress approaches the table for no apparent reason except to inquire about the table's needs.

# of smiles: Number of smiles the waitress makes while interacting with a specific table.

Dinner check service: Here you record simply "yes" or "no" depending on whether the check service was adequate. Check service is adequate if the waitress gives the check to the customer after the meal is finished, and then picks up the money on the table soon after that. The check service is not adequate if the customers have to look around for the waitress or send the busboy to get her in order to obtain the check. Dinner check service is not adequate if the customer puts the money on the table and waits impatiently for the waitress to pick it up. Also, the check should not be handed to the customer until he is ready for it—thus putting the check on the table while they are still eating or drinking would be unacceptable.

Estimated age of payee: Estimate as accurately as possible, the age of the diner who pays the bill.
APPENDIX F
Waitress Information Card

Name: 

Age: 

Number of years employed as a waitress.
The thesis submitted by Joanne M. May has been read and approved by the following committee:

Dr. Emil J. Posavac
Associate Professor, Psychology, Loyola

Dr. Leonard Bickman
Associate Professor, Psychology, Loyola

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

December 15, 1978

Date

Director's Signature