ORIGINAL EMPIRICAL RESEARCH



Hey big spender! A golden (color) atmospheric effect on tipping behavior

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Abstract This research examines how gold-related color in atmospherics might influence customer tipping behavior at restaurants. A series of five studies shows that the color gold (as opposed to other colors) in a service atmosphere positively influences consumer tipping. First, a field experiment (Study 1) demonstrates that customers presented with a gold-colored (vs. black-colored) service prop (i.e., bill folder) leave larger tips. Study 2 further confirms this effect of the color gold by validating the findings of Study 1 with a different service prop (i.e., tablecloth). Process evidence demonstrates the underlying mechanism of this effect, whereby a gold-colored service prop increases tipping by influencing status perceptions about the restaurant and the self (Study 3). Additional studies further confirm this by ruling out novelty of the color in this mechanism (Study 4) and by highlighting the effect of status on tipping through status priming (Study 5). The findings of this research have implications for strategic use of color in servicescape design and atmospherics in general.

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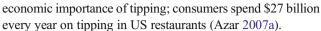
Marketers are extensively using colors to create corporate images, build brand personalities, attract consumers, and shape consumer perceptions (Abril et al. 2009; Labrecque and Milne 2012; Madden et al. 2000). Recent industry trends point to an even greater interest in the use of color as a marketing tool to influence consumer behavior. Apple is incorporating the color gold in their design narratives for strategic purposes to associate their brand with luxury (Strange 2015), and GE provides a wide range of color choices to ensure their refrigerators resonate with consumers (Barry 2015). Hyatt has used the color gold in their "Gold Passport" loyalty program to convey the notions of exclusive benefits and higher status to customers who join the program (Henderson et al. 2011). Across industries, a wide range of color options are available for mobile phones, laptops, and even home appliances (Labrecque et al. 2013). In accordance with these industry trends, academic researchers have recognized the role of color and have provided empirical support for its importance in marketing, including the impact of color on branding (Labrecque and Milne 2012), purchase intention, choice likelihood (Biswas et al. 2014a), and shopping behavior (Babin et al. 2003; Bellizzi and Hite 1992).

Despite these agreements on the importance of color as a marketing tool (Geboy 1996), our understanding of the effects of color remains limited (Crowley 1993; Labrecque and Milne 2012). Most color-related studies in the relevant marketing literature have investigated color effects by using an arousal-evaluation framework and they provide a limited perspective in terms of understanding the complex nature of the color phenomenon (Labrecque et al. 2013). For example, an



arousal-evaluation framework posits that consumers respond to color in two ways: arousal or evaluation (Crowley 1993). Consumers respond to red (vs. blue) by being more active or stimulated (i.e., arousal), but they respond to blue (vs. red) by showing pleasant or relaxed responses (i.e., evaluative) (Crowley 1993). This stream of literature has focused on the dichotomized color hue in the investigation of color effects: red/warm vs. blue/cold. Since color hues are dichotomized based on wavelength, the meaning of color as assessed by consumers (Madden et al. 2000) and colors that are hard to place on the spectrum of red/blue or warm/cold have gained little attention in this stream of literature. To overcome this, some recent works have examined the effects of color on brand personality by using an embodied-referential meaning framework (Labrecque and Milne 2012; Zeltner 1975). More attention, however, is needed to understand the ways in which color influences consumers' behavior when color has associated meanings, whereby consumers associate words or meaning with particular colors (Labrecque et al. 2013) (e.g., white might indicate cleanliness to some, such as in white bedding sheets (Berry et al. 2006)). In addition, extant color research has examined the effects of color by focusing on consumer behavior in retailing, branding, or advertising settings (Babin et al. 2003; Bellizzi and Hite 1992; Lohse and Rosen 2001). However, questions about how colors might influence consumer tipping behavior, which is a pervasive activity in restaurant settings, remain unanswered.

Our study extends prior literature by investigating how gold-colored service props influence consumers' tipping. Service props are the objects used in service delivery and help create the overall atmospherics in a service setting (Fisk et al. 2008). Tip amount is an important variable behind the viability of many businesses. To understand the ways in which goldcolored service props influence consumers, we employ a referential meaning of color framework. Anecdotal evidence and research studies suggest that the color gold is associated with status perception (Drèze and Nunes 2009). Building on the referential meaning of color framework, we posit that consumers activate gold-status (color-meaning) associations when they encounter the color gold. Thus, we incorporate consumers' assessment of color-meaning in our investigation. The color gold is widely used in marketing practices (e.g., The Hunger Games gold-colored special edition book cover), but has gained little attention in the marketing literature. By investigating an understudied but important color, the present research enriches the color marketing literature. Additionally, the present study contributes to service literature. Although their importance in the creation of service atmospherics and service delivery is widely accepted (Berry et al. 2006; Fisk et al. 2008), there is little empirical support in the literature for the strategic use of service props. Moreover, the results of our study could have significant managerial implications for the service industry given the



A series of five studies shows that gold-colored service props (vs. other-colored service props) enhance consumers' tip amount through consumers' status perceptions. The first two studies (Studies 1 and 2) demonstrate the positive effects of gold-colored service props on tipping, the last three studies (Studies 3–5) examine the underlying mechanism of the gold effect. More specifically, in Study 1, a field experiment conducted at a restaurant, we demonstrate that a gold-colored (vs. black-colored) service prop (i.e., bill folder) leads to higher tip amounts (in terms of percentages). In Study 2, we validate this effect of the color gold in a more controlled lab environment. Moreover, we use a different service prop in Study 2 (i.e., tablecloth) to enhance the generalizability of the findings. Delving into the process of the gold effect, we unveil status perception as a mediation mechanism in Study 3 and further confirm this by ruling out a potential explanatory variable related to the novelty of the color in Study 4. In Study 5, we provide further evidence of status as the underlying mechanism by examining the effects of priming status.

The remaining sections are organized as follows. We first review the literature on color, atmospherics, and tipping. Building on the theoretical framework in the color literature, we link these literature streams to propose our hypotheses. We then test our hypotheses with the help of five studies. Finally, we present our conclusions by outlining our contributions and limitations, in addition to providing suggestions for future research.

Theoretical background

Color

A significant body of research in marketing literature has examined the role of color in the context of two key research questions: (1) "Which colors influence consumers?" and (2) "What effects do colors have on consumers and what are the associated implications for businesses?" (Crowley 1993).

A stream of literature has addressed the first question based on three dimensions of color: hue, chroma, and value (Gorn et al. 1997, 2004). Hue refers to the pigment of a color such as blue, yellow, and green. Chroma refers to the amount of pigment in color, for example, low chroma colors are dull and high chroma colors are rich and deep. Value is the degree of lightness of a color on a scale ranging from low (black) to high (white) (Gorn et al. 1997). Among the three dimensions of color, hue has been the main focus of color-related studies, especially in the marketing literature.

Although marketers use a wide array of color hues in marketing contexts, most researchers have studied dichotomized color hues such as warm versus cool (or red vs. blue) and



examined consumers' reactions to them. A wide range of studies has shown the effects of color on different aspects of consumer behavior and the associated marketing implications (Madden et al. 2000). For example, consumers' purchase intentions were higher for merchandise displayed on a blue-colored background (Babin et al. 2003), and consumers rated a blue-colored shopping environment as more pleasant (Crowley 1993). Although these studies provide meaningful insights, color hues other than red and blue also need to be studied given the variety of colors used by marketers. Our study intends to contribute to the literature by exploring a less-studied color hue, that is, the color gold.

In investigating the second question (i.e., "What effects do colors have on consumers? and what are the associated implications for businesses?"), researchers have focused on the effects of color mostly in the contexts of retailing, advertising, and branding (Bellizzi and Hite 1992; Labrecque et al. 2013; Lohse and Rosen 2001). Psychology literature has noted that the effects of color could be context dependent, for example, red clothing motivates approach behavior at a dinner party but the same color motivates avoidance behavior in a street sign (Elliot and Maier 2014).

In sum, the present research extends the extant color marketing literature in two ways. First, we expand the color hue spectrum in the marketing literature beyond red/blue or warm/cold to a different color (gold). Second, we extend the study context of the color effects to tipping in a service setting, which is a novel setting and has been under-explored thus far. Table 1 presents a summary of the key color studies in greater detail as well as highlights our contribution. In the next section, we build the theoretical foundation for our hypotheses.

Referential meaning of color Earlier studies in the marketing literature have supported a two-dimensional framework, the arousal-evaluation dimension, in explaining color effects (Crowley 1993; Labrecque and Milne 2012). Recent studies have turned their attention to embodied and referential meaning frameworks (Labrecque and Milne 2012; Labrecque et al. 2013), focusing to a greater extent on the effects of the meanings associated with a given color. This theory originated in aesthetics philosophy literature, where Zeltner (1975) originally conceptualized referential and embodied meanings to explain how aesthetics-related stimuli influence people's perceptions. Drawing from this theory, Zhu and Meyers-Levy (2005) used the referential and embodied meanings of music to explain how music influences customers' perceptions (i.e., how music conveys a meaningful message to customers). Labrecque and Milne (2012) applied this theory to color, calling it the referential meaning of color, and used the resulting conceptual framework to explain the effect of color on brand personality.

The embodied part of the theory refers to the meanings intrinsic to stimuli that evoke hedonic or valenced feelings (Labrecque and Milne 2012; Meyers-Levy and Zhu 2010). For example, the embodied meaning conveyed through red evokes arousal, and blue elicits feelings related to happiness (Bagchi and Cheema 2013; Hemphill 1996).

Although the referential meaning framework was not a dominant conceptual framework in early color marketing literature, color associations have been studied as a topic in color psychology literature (Elliot and Maier 2014; Whitfield and Wiltshire 1990) and a few earlier studies in color marketing literature have investigated color-meaning associations. For example, consumers' color preference for certain logos or brands have been found to vary across cultures because of dissimilarities in the meanings of the color activated by color-meaning associations (Block and Kramer 2009; Madden et al. 2000). In this study, we explore the effect of the color gold, which is associated with status perception (discussed in greater detail below); thus, we apply the referential meaning of color as the theoretical framework for our hypotheses. In the next section, we review works on color-meaning associations to identify the meaning associated with the color gold in order to develop our hypotheses from a referential meaning perspective.

Color-meaning associations Color possesses not only aesthetic value but also informative value that conveys a specific meaning (Elliot et al. 2007). Repeated pairings of colors and particular concepts or messages create a strong or implicit learned color association over time. As a result, even the mere presence of color in a particular situation activates color associations (Elliot et al. 2007; Elliot and Maier 2014).

The color gold is often associated with status concepts (Drèze and Nunes 2009). Status is defined as an individual's position or ranking in society and is associated with entitlement, prestige, exclusivity, admiration, and respect from others (Anderson et al. 2015; Drèze and Nunes 2009). Consistent with this concept, it is customary to award golden trophies or gold medals for the first place in competitions, as is done for example, in the Olympics (Drèze and Nunes 2009). Words that begin with "golden" are considered the first or the best (e.g., golden age, golden voice). Consumers are likely to develop a gold-status association through repeated pairings in marketing practices as well. For example, gold is one of the most widely used color hues to convey the meaning of wealth and status in marketing practices. Specific examples include gold labels being widely used in companies' loyalty programs to symbolize high status and exclusive benefits for their loyal customers (e.g., American Airlines' gold membership card).

¹ Power is conceptually different from status. Unlike status, which is determined by "the eyes of others," power is defined as the ability to influence others through control over resources or through the capacity to punish them (Anderson et al. 2015; Emerson 1962; Fiske 1993; Magee and Galinsky 2008).



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Summary
Table 1

Study	Context	What color (IV)	What effect (DV)		Theoretical	Main findings
			Attitudinal	Behavioral	framework	
Babin et al. (2003), <i>JBR</i>	Retail wall color	Orange vs. blue (Hue)	Purchase intentions		Affective and cognitive	Color and light together affected perceived price fairness and purchase intentions
Bellizzi and Hite (1992), Psychology and Marketing	Shopping environment (background color of merchandise)	Red vs. blue (Hue)	and price fairness Pleasure, dominance, arousal, purchase intention	Shopping time	evaluations Arousal and affective dimension of color	urougn anecuve and cognitive responses. Blue (vs. red) shopping environment leads to more positive customer outcomes including more simulated purchases, fewer purchase postponement and stronger intentions to shop and browse. Affective perception of color ander than arousal dimension of color and the color ander than arousal dimension of color and the color and th
Bellizzi et al. (1983), JR	Retailers' interior color	Cool vs. warm color: red, yellow, green, blue and white (Hue)	Perceived store environment and product	Approach orientation (Physical attraction)	Evaluation	May be responsible for this outcome. Warm colors (vs. cool colors) physically attract, however, it produced less positive responses (vs. cool colors) in evaluation factor such as released or favoreable.
Crowley (1993), Marketing letters	Retail: interior color of furniture store	Red, yellow, green, blue (Hue)	Arousal and evaluation of environment and merchandise.		Arousal-evaluation	Evaluative effects are most positive (more pleasant) in cool colors, whereas warm colors are more arousing. Two dimensions of color (arousal-evaluation) are suggested as
Gorn et al. (1997), Mgt. Science	Advertising	Chroma, value and hue (red vs. blue)	Feelings and attitude toward ad and brand		Arousal and hedonic state	High saturation increases likability through feelings of excitement. High value increases litability through the little through through the little through through the little through through the little through the little through the little th
Lohse and Rosen (2001), JA Bagchi and Cheena (2013), JCR	Advertising Online auction, background color	Full color vs. black (hue) Red vs. blue (Hue)	Attitude toward and advertiser and ad. Willingness to pay	Auction bidding (\$) Arousal	Arousal	Inkability inrough reelings of reaxation. Color can signal product quality and credibility of printed ads. Red backgrounds increase bidding price in online auction, whereas it decreases price offer in negotiation, because red induces
Gorn et al. (2004), JMR	Online, screen color	Hue, chorma and value	Perceived download quickness, attitude toward and likelihood to recommend website		Feelings of relaxation	aggressiveness through arousal. All three color dimensions of background screen color influence perceived download quickness through feelings of relaxation, which would in turn influences attitude toward website and likelihood of recommendation
Kaltcheva and Weitz (2006), JM	Online shopping (visual elements of online shopping)	Color wamnth (wam vs. cold color) and saturation	Purchase intention and pleasantness of shopping environment		Arousal	of the website to others. Consumers' motivational orientation moderates the effect of arousal produced by a store environment (color) on the pleasantness of the environment. High arousal has a positive effect on pleasantness for recreational-oriented consumers, but for those who have a task-orientated motivational orientation.
Labrecque and Milne (2012), JAMS	Branding	Hue, saturation and value	Brand personality, purchase intention		Embodied-referential meaning of color	it decreases pleasantness. Hue, saturation and value influenced brand personality, logo shape and likability. Package color and brand personality needs to be aligned to increase purchase intention.



			There are cross-cultural patterns of both similarity and dissimilarity in color preferences and color meaning associations. Color-meaning associations are dependent on cultural background, therefore culture needs to be considered to manage brand and corporate image across international markets. Gold in restaurant atmospherics increases customer's tipping through activation of referential meaning, status perception.
	Main findings		There are crossand dissimila meaning associations are dependen culture needs and corporate Gold in restaura customer's tip referential mand in the referential mand dissimilar and dissimi
	Theoretical	пашемоїк	Color-meaning association Referential meaning of color
		Behavioral	Tipping (\$)
	What effect (DV)	Attitudinal	Liking of the color, logo color preferences, color meanings
	What color (IV)		Hue, blue, green, white, black, red, orange, yellow, brown, purple, green
	Context		Branding Service, restaurant atmospherics
Table 1 (continued)	Study		Madden et al. (2000), Journal of International Marketing This study

Note: JA = Journal of Advertising, JAMS = Journal of the Academy of Marketing Science, JBR = Journal of Business Research, JCR = Journal of Consumer Research, JM = Journal of Marketing, IMR = Journal of Marketing Research, JR = Journal of Retailing, Mgt. Science = Management Science

These prevalent practices help reinforce perceptions related to color–status associations. Research shows that customers in gold and silver tiers perceive themselves as top-tier customers who hold higher status than others, whereas those in blue and yellow tiers do not, implying that the color gold conveys the notion of hierarchy and status (Drèze and Nunes 2009). In sum, it can be posited that consumers associate the color gold with status.

Drawing from the referential meaning of color, we hypothesize that this gold–status association is activated when consumers encounter the color gold in a service landscape, which influences their subsequent behavior.

Atmospherics and service props

The influence of atmospheric elements (e.g., color, light, music, and scent) on consumer behavior is well documented in the literature (Bitner 1992; Biswas et al. 2016; Singh 2006). For example, Madzharov et al. (2015) found that semantic associations of a warm (vs. cool) scent in retail atmospherics influence customers' spatial perceptions, which, in turn, increases power restoration motivation and subsequently enhances the purchase of premium brands. More recently, Biswas et al. (2017) examined the role of light in atmospherics and found that changing the ambient light influences restaurant patrons' alertness levels and their tendency to order healthy versus unhealthy foods. These studies suggest that subtle cues in atmospherics impact customers' behaviors by influencing their perceptions toward the environment and self. In a similar vein, service literature has recognized the importance of subtle atmospheric elements in service environments because such elements contribute to the creation of customer experiences and shape customers' perceptions of the service provider (Baker and Cameron 1996; Berry et al. 2006; Bolton et al. 2014).

Service props are a subtle, but important, aspect of atmospheric elements in service settings (Fisk et al. 2008). Using the analogy of props in the stage of a service performance, Fisk et al. (2008) referred to the objects in a service delivery process as service props (e.g., restaurant booth, airline seat, or hotel bedding) and proposed that they can contribute to and shape consumers' perceptions of the overall service atmosphere and experience (Bolton et al. 2014; Fisk et al. 2008; Haeckel et al. 2003). Thus, we posit that the colors of service props can shape consumers' perceptions of the service experience. In sum, these literature streams support the notion that gold–status associations activated by the color of service props should influence consumers' perceptions of the service atmosphere and experience. These perceptions



about the service atmosphere and experience should in turn influence tip amounts.

Tipping

Tipping is a prevalent consumer behavior that allows customers to set the price of a portion of a service offering (Lynn et al. 1993). Consistent with prior research, we conceptualize tipping in percentage terms in all our studies. Although tipping is widely accepted as a voluntary payment behavior that demonstrates consumers' appreciation and gratitude toward service providers, surprisingly, prior research has documented that tip amount has a weak relationship with server's efforts, restaurant's food, or even service quality (Azar 2007a; Kwortnik et al. 2009; Lynn and Grassman 1990; Lynn and Latane 1984; Lynn et al. 1993). Several empirical studies have instead identified several drivers of tipping behavior that are extraneous to the specific service or meal quality. For example, prior research has documented the relationships between tip amount and weather conditions or even specific characteristics of the servers (such as servers' gender, body shape, hair color, amount of cosmetics, and customer touching behavior) (Guéguen 2012; Jacob et al. 2010; May 1980; Rind and Bordia 1996; Stephen and Zweigenhaft 1986). Although color has not gained much attention as a research topic in this literature stream, a few recent works have tested color as a manipulation stimulus that improves servers' physical attractiveness (e.g., lipstick, clothing, or hair color) (Guéguen 2012; Guéguen and Jacob 2012, 2014; Lynn et al. 2016). Another stream of research on the motivations for tipping has suggested that tipping is a largely norm-driven behavior (Azar 2007b; Lynn et al. 1993). For example, it has been found that customers leave a tip to adhere to social norms and to avoid feeling guilty for not leaving one (Lynn and McCall 2000; Lynn 1997; Lynn et al. 1993).

In relation to the social norm perspectives, different tipping customs across countries suggest that consumers use tipping, in part, as a tool for status display (Azar 2007b; Lynn 1997). For instance, tipping was found to be more prevalent in countries where achievement or status is highly valued (Lynn et al. 1993). Consistent with this, historical accounts suggest that tipping could be related to an individual's motivation toward status. Historically, tipping has been used as a tool to display an individual's status, as the custom of tipping allows wealthy consumers to demonstrate their socioeconomic status to themselves, their guests, or their servers (Lynn 1997; Shamir 1984). Although there are differing views as to whether tipping started in 16th century Europe or whether it was prevalent in the Roman era, scholars agree that tipping originated as a socioeconomic status feature (Azar 2004), whereby individuals of economically higher status (i.e., wealthy) gave tips to people of economically lower status. In essence, tip amount is, therefore, likely to be influenced by the tipper's desire for status and status display (Azar 2007b; Conlin et al. 2003; Lynn 1997; Lynn and Grassman 1990; Lynn and Sturman 2003; Lynn et al. 1993).

The idea that tipping is, in part, driven by a desire for status display (Lynn 1997; Shamir 1984) suggests that customers are likely to leave a generous tip when their status perception becomes salient. Applying this to a referential meaning perspective, it can be hypothesized that gold-colored service props will activate consumers' gold–status associations, which would, in turn, make their status perceptions salient. This will lead consumers to leave larger tips since they are likely to display their status perception activated by the gold-colored service props through tipping. More formally,

H1: Consumers presented with a gold-colored service prop will leave a larger tip (%) than consumers presented with a non-gold-colored (e.g., black or white) service prop.

Underlying process for effects of gold color on tipping behavior

In her seminal piece on servicescape, Bitner (1992) suggested that atmospherics usually affect individuals' perceptions of the environment itself first, which would, in turn, generate individuals' internal responses and subsequent behaviors. Multiple studies have supported this conceptual framework by showing that atmospherics influence customers' perceptions of a service provider. For example, customers attribute service failure to service organizations more frequently when they see that service environments are disorganized (vs. wellorganized) (Bitner 1990). In a similar vein, it has also been proposed that atmospherics in a servicescape can be an extrinsic cue for customers to infer the quality of service and that of the service provider (Baker et al. 1994; Bitner 1992; Zeithaml 1988). Customers infer restaurant service quality from facility aesthetics, including interior design and décor (Heung and Gu 2012). Along the same line, it has been suggested that service props influence customers' perceptions of the serviceproviding organization because they create the overall atmosphere (Berry et al. 2006; Fisk et al. 2008). These perceptions of the environment itself could influence self-perception in service contexts such as restaurant settings, because being in a restaurant and consuming its services could be regarded as possession of the restaurant's services, whereby they become part of the extended self, similar to possessed objects (Belk 1988).

Building on this relationship among service props, overall perceptions of atmospherics, and their influence on self-perception, we propose that gold-colored service props influence consumers' perceptions of the restaurant itself, which would, in turn, affect consumers' self-perception, leading to the generation of subsequent behavior. Applying this to the referential



meaning of color framework, we propose a serial mediation mechanism of the effect of gold, such that encountering goldcolored service props activates consumers' status perceptions of a restaurant, which, in turn, elevates individuals' self-status perception, subsequently increasing the amount they leave as tip. Formally,

H2: The effect of a gold-colored service prop on tipping amount will be serially mediated by status perception such that: a gold colored (vs. non-gold colored) service prop → increased restaurant status perceptions → increased self-status perception → tip amount (%).

Across five studies, we test our hypotheses using a bill folder (Studies 1, 3, 4, and 5) and tablecloth (Study 2) to manipulate the color of service props. We use these service props as manipulation instruments for two main reasons: First, both of them are managerially relevant because they are relatively easy and inexpensive to change on short notice (as compared to the color of interior décor). Second, bill folders and tablecloths are the service props that customers encounter with a high physical proximity in a dining situation, and thus their colors have greater exposure for customers and can also be more salient.

Study 1: the effect of the color gold on tipping

Design, participants, and procedure

Study 1, a field experiment, tested H1 that encountering a gold-colored service prop (a bill folder in this study) increases tipping. We tested gold-colored bill folders against blackcolored folders because black ones are commonly used in restaurants. We conducted a two-week field experiment at an independently owned (i.e., non-chain) restaurant during lunch hours. During these two weeks, a total of 252 customers had lunch at the restaurant, and these customers' payment amounts were recorded. Across all studies, anyone tipping above and below three standard deviations of the mean were removed, consistent with the approach of prior studies (Mandel and Johnson 2002; Rucker et al. 2011). In Study 1, this resulted in 17 participants being removed, yielding 235 participants for analysis. Two participants were excluded from Study 2 based on the same criterion. In Studies 3, 4, and 5, tipping did not fall outside this range; hence, no respondents were removed from those studies based on this criterion.

During the first week of the field experiment (Monday through Saturday), only gold bill folders were presented to 119 customers. In the second week, only black bill folders were presented to 116 customers. This method ensured that the day of the week was not an influencing factor. It should also be noted that there were no special events or holidays

during these two weeks. To rule out the possibility of design differences such as size and texture of the bill folder, we made certain that both folders were identical except for their color (see Fig. 1). We collected data from the merchant copy of each customer's receipt, including the price of the meal, tip amount in dollars, payment method (credit card or cash), and server name.² The restaurant did not suggest pre-calculated tips on the receipts, nor did they add any automatic tip to the check for parties greater than a certain size.

Results and discussion

To test H1, we conducted an ANCOVA. Tip percentage (tip amount divided by meal price including tax) was the dependent measure, and color of the bill folder (gold vs. black) was the independent variable. Based on the tipping literature, we included several factors that might influence tipping as covariates: server, payment method, and day of the week (Lynn et al. 1993). Consistent with H1, the results of the ANCOVA analysis revealed the effect of the bill folder color. Specifically, customers presented with the gold-colored bill folder left higher tip amounts than those presented with the black-colored bill folder ($M_{gold} = 21.5\%$ vs. $M_{black} = 18.9\%$; F(1226) = 4.76, p < .05). Additionally, we explored whether there were any interactions between color and payment mechanism (cash vs. credit card), server, server gender, and day of the week on tipping behaviors. No significant interactions were found (all p-values > .20).

In sum, the first study—a field experiment—revealed that encountering a gold-colored service prop increased consumers' tipping amount. Although this study provided support for the existence of our hypothesized gold effect, it has limitations in terms of the limited controls and measures of extraneous variables (e.g., individual customers' mood or involvement in tipping) that might influence tip amounts. We address these concerns in the following studies.

Study 2: robustness of the gold effect

Study 1 showed that customers who encounter gold-colored (vs. black-colored) bill folders leave larger tips. Although this gold effect supports H1, it is limited to one service prop, the bill folder. Moreover, one might have concerns about double money-priming effects. That is, the gold-colored bill folder might prime money thoughts twice because a bill folder may be associated with a payment check and the color gold can also be associated with money. Thus, a gold-colored bill folder might heighten the accessibility of the idea of money twice

² Since individual's identifiable information could not be collected, returning customers were not captured. When customers left a tip in cash, wait staff noted the tip amount on the merchant copy of the receipt.



Fig. 1 Bill folders used across studies

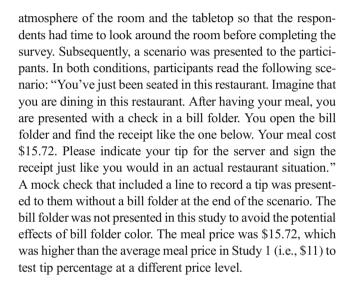


(Vohs 2006). This double money-priming effect can potentially influence our results because even a subtle reminder of money can change subsequent consumer behavior (Vohs 2006; Vohs et al. 2008). Study 2 attempted to address this concern by investigating a different service prop-the tablecloth. Therefore, the purpose of Study 2 was twofold: (1) to extend the gold color effect beyond the bill folder context by examining the effects of the color gold in tablecloths and (2) to rule out alternative explanations related to the double moneypriming effect because tablecloths are not related to money/ tipping as are bill folders.

Design, participants, and procedure

Study 2 involved two manipulated conditions—gold- vs. white-colored tablecloths. White was used as the control/ comparison color because white tablecloths are used commonly in fine-dining restaurants (Allen 2009) and the color that is considered neutral (Kay and Regier 2003). To enhance ecological validity and realism, we designed the lab experiment such that the participants could actually experience the atmospheric element of the tablecloth. The settings for the experiments were labs with identical tables and lighting, no windows, and all other atmospheric elements constant between the rooms. We set up tables in a manner similar to that at actual restaurants. Tabletop items included tablecloths (gold vs. white), plates, cutlery, salt and pepper shakers, and glasses. To avoid potential confounds related to presence of other colors, we used noncolored, transparent tableware (See Fig. 2 for tabletops).

Sixty-nine undergraduate students enrolled in marketing courses (average age = 21.1 years old, 42% male) at a major US university were assigned randomly to the two manipulated conditions (tablecloth color: gold vs. white); the participants received course credit for participation. To eliminate the potential influence of presence of others on tipping, only one participant at a time was assigned to each room. We told the participants that we were running a survey on a restaurant. Upon entering the lab, the participants were seated and received brief instructions asking them to describe the



Results and discussion

Participants were randomly assigned to the gold (n = 35) or white tablecloth (n = 34) condition. Based on extant tipping studies that have identified customers' demographic factors (such as gender and age) as factors that influence tipping (Conlin et al. 2003; Lynn et al. 1993), we controlled participants' age and gender.³ To avoid any potential idiosyncrasies due to meal time (Madzharov et al. 2015), we included time of day as an additional covariate.4

Tipping behavior Data were analyzed using ANCOVA to compare the tipping percentage in gold versus white conditions. Consistent with the gold effect found in Study 1, tipping in the "gold" condition was significantly higher than tipping in the "white" condition ($M_{gold} = 22.94\%$ vs. $M_{white} = 20.33\%$; F(1, 64) = 5.86, p < .05). The difference in tipping between the gold and the white tablecloth conditions suggests that the



 $[\]overline{^3}$ Age and gender were not significant covariates in Studies 2, 3, and 4. In Study 5, gender was not a significant covariate but age was (F(1,79) = 11.32,p < .001).

Time of day was not a significant covariate.

Fig. 2 Tabletops in Study 2





effect of the color gold extends to service prop contexts beyond the bill folder. This enhances the generalizability of our findings to a broader service landscape. Moreover, our findings rule out the potential alternative explanation related to the double money-priming effect.

Study 3: status as a mediation mechanism

The consistent results of Studies 1 and 2 provide evidence that encountering the color gold increases tipping. Study 3 investigated the mediation mechanism underlying this gold effect and, specifically, status perceptions through the referential meaning of the color gold. Specifically, Study 3 was designed to test H2, which proposes serial mediation in the following form: color of service prop \rightarrow perceived restaurant status \rightarrow perceived self-status \rightarrow tipping (%). Additionally, we ruled out possible alternative mediators such as mood and involvement.

Design, participants, and procedure

Study 3 was conducted in a lab at a major US university. Eighty-eight undergraduate students enrolled in marketing courses participated in this study (average age = 21.8 years old, 55.7% male) for course credit. The study tested two manipulated conditions (color of bill folder: gold vs. black). The participants were randomly assigned to the gold bill folder (n = 45) or the black bill folder (n = 43) condition and the study was run across several sessions. There were up to 10 participants in each session. Each participant was given a packet containing instructions, a picture of the restaurant, bill folder with a mock receipt inside (see Fig. 3), and questionnaire. They were guided to follow the instructions and answer the questions. The participants were first given the following scenario: You are dining during lunch hours in the pictured restaurant [same picture shown across conditions]. The same

bill folders as in Study 1 were used (See Fig. 1). At the end of the scenario, the participants were instructed to open the bill folder, take out the receipt from the folder, indicate a tip amount, and sign the receipt, just as they would at an actual restaurant. The receipt indicated the total cost of the meal as \$11 (the average meal price in Study 1). Next, the participants were asked to evaluate the restaurant's status with the help of two items ("this restaurant is special" and "this restaurant has a high degree of status"; $\alpha = .70$), in addition to self-status ("I feel special in this restaurant," "I have attained a high degree of status in this restaurant," and "I have more status in this restaurant relative to other customers"; $\alpha = .63$). They were also asked to rate their mood (feeling good, pleasant, happy, positive; $\alpha = .94$) and involvement in tipping ("tipping is important," "a concern to me," "relevant," and "matters to me"; $\alpha = .92$). All items were anchored on seven-point scales (1 = strongly disagree, 7 = strongly agree). We measured perceptions of restaurant and self-status by adapting scales developed by Drèze and Nunes (2009). To rule out possible alternative explanations, mood and involvement were measured using existing scales (Allen and Janiszewski 1989; Bower and Landreth 2001). Appendix Table 5 provides details pertaining to each of the scales and measures used in Study 3. See Appendix Table 6 for the composite reliabilities, AVEs, and CFA factor loadings. Appendix Table 7 shows the correlations of the variables used in Study 3. Similar to the approach employed in Study 2 and also based on prior research (Conlin et al. 2003; Lynn et al. 1993), age and gender were used as covariates.

Results

Tipping We performed an ANCOVA on the tip percentage (DV) with the bill folder color as the independent variable while controlling for age and gender. The tip percentage was calculated by having the tip amount divided by meal price (\$11). Consistent with the results of Studies 1 and 2, the



Scenario

Imagine that you are dining during lunchtime at a restaurant.



After having your meal, you are presented with a check in a bill folder, like the one in front of you. Please open this bill folder and remove the receipt. Your meal cost \$15⁷². Please indicate your tip for the server and then sign the receipt just like you would in an actual restaurant situation.

RE	STAURANT
K	noxville TN
86	5.974.5311
•••••	•••••
TABLE:	01/12
SERVER:	34 PAT
DATE:	12/09/2014
TIME:	12:30
	SALE
CARD	
TYPE:	MC
ACCT:	XXXX XXXX XXXX
	1111
TRANS	HYU8789798234
KEY:	
AUTH	12345
CODE:	
EXP DATE:	XX/XX
CHECK:	1111
Amount:	\$15.72
+Tip:	
= Total:	
Signature:	

Fig. 3 Scenario and mock receipt in Study 3a, 4 and 5

ANCOVA revealed a significant main effect of service prop color (F(1,84) = 6.42, p < .05). The participants presented with gold-colored bill folder left a larger tip (M = 26.52%,

SD = 8.83) than the participants presented with the black-colored bill folder (M = 22.40%, SD = 5.94). These results validate H1.



^a Notes: Meal price was \$11.00 in Study 3

Mediation To test the underlying mechanism outlined in H2 (color of service prop → perceived restaurant status → perceived self-status \rightarrow tip (%)), we performed a serial mediation test, using a bias-corrected bootstrap procedure (Hayes' Model 6; as recommended in Hayes 2013; n = 1000) with color as the independent variable, perceived restaurant status and perceived self-status as mediators (in that sequence), and tipping percentage as the dependent variable. We used age and gender as covariates. Consistent with H2, the bootstrap results provided statistical evidence of serial mediation effects. The confidence interval for the indirect path (color of service prop \rightarrow perceived restaurant status \rightarrow perceived self-status \rightarrow tip) did not include zero (95% CI = .03, 1.50), indicating support for H2.⁵ Specifically, the analysis revealed that a gold-colored (vs. black-colored) service prop predicted perceived restaurant status with marginal significance ($a_1 = .40, p < .1$), and perceived restaurant status predicted self-status perception $(d_{21} = .45, p < .001)$, which, in turn, predicted tip amount in percentage ($b_2 = 2.03$, p < .05). Thus, as was hypothesized from the referential meaning perspective, the color gold exerted its influence on consumers' tipping behavior through its referential meaning, namely, status perception. See Table 2 and Fig. 4⁶ for the results. These results provide process evidence of the indirect effect of the color gold on tipping.⁷

To rule out mood and involvement as possible underlying processes, we examined whether color affected mood or involvement and found non-significant results (Mood: F(1,86) = 2.91, ns; Involvement: F(1,85) = .23, ns). Next, we ran simple mediation tests to check whether mood or involvement mediates the effect of color on tipping. The results showed no significant indirect effects for either variable (color \rightarrow involvement \rightarrow tipping, 95% CI [-.22, .80]; color \rightarrow mood \rightarrow tipping, 95% CI [-.10, 1.29]). Finally, we assessed our serial mediation model while controlling for each variable. For involvement, the results of our serial mediation model were the same,

Table 2 Model summary for the effects color on bill folder through restaurant status and self-status (Study 3)

Restaurant status	Self-status	Tipping (%)
.40 * (.21)	.11 (.19)	.40 ** (1.64)
_	.45 **** (.09)	-1.20 (.94)
=	_	2.03** (.96)
4.50 * (1.86)	.90 (1.67)	14.38 (14.65)
$R^2 = .07$	$R^2 = .25$	$R^2 = .12$
F $(3, 84) = 1.95$ p = .13	F (4, 83) = 6.9 $p < .001$	F(5,82) = 2.34 p = .05
	.40 * (.21) 4.50 * (1.86) R ² = .07 F (3, 84) = 1.95	.40 * (.21) .11 (.19) 45 **** (.09) 4.50 * (1.86) .90 (1.67) R ² = .07 R ² = .25 F (3, 84) = 1.95 F (4, 83) = 6.9

Notes: Coefficients are unstandardized and presented with standard errors in parenthesis

showing significance at a 95% CI [.01, 1.42]. When mood was used as a covariate, the serial mediation model was marginally significant at 90% CI [.01 and .81]. Based on these results, we ruled out mood or involvement as possible mediators.

In sum, the results of Study 3 support H1 and H2. Next, Study 4 examines the possible role of novelty of gold-colored folders.

Study 4: examining the role of novelty

It can be argued that novelty of the color gold might drive our previous findings because gold-colored service props are more novel than props of the other colors used in Studies 1–3 (e.g., black and white). If the novelty of the color leads to the perception of status, which in turn increases tipping, one could hypothesize that any novel color would lead to an increase in tipping. Study 4 was designed to rule out this potential alternative explanation by examining tipping when customers encountered a bill folder of a color that is perceived as being equally novel as the gold-colored bill folder. While Study 1 was a field study, Studies 2 and 3 were conducted with student participants; Study 4 enhances the robustness of our findings by using a more diverse consumer base (MTurk panel).

Pretest

First, we conducted a within-subject pretest to determine the stimuli for Study 4: a bill folder color that is perceived to be as novel as the color gold. Fifty participants were recruited through an online (MTurk) panel (median age = 40–45 years old, 52% male) in exchange for monetary compensation (\$1). The respondents



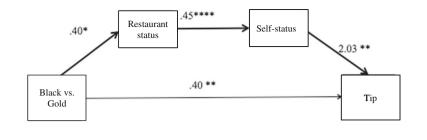
These results are a combination of two datasets that were collapsed. In the first round of data collection, 76 participants were randomly assigned to the black-colored bill folder condition (n = 39) or the gold-colored bill folder (n = 37) condition. Tipping in the gold condition (M = 26.24%, SD = 8.78) was significantly larger than that in the black condition (M = 22.60%, SD = 5.63) at F(1,72) = 4.16, p < .05. Serial mediation tests showed a significant indirect path at the 90% CI [.0040, .1488] but failed to establish significance at the 95% CI. Acknowledging the significance of the indirect path at the 90% CI from the first dataset we collected, we conducted another round of data collection and then collapsed the two datasets into one to ensure that the lack of power would not be a concern in this study. The two rounds of data collection followed the same procedures; recruitment, manipulation, and the lab environments were the same.

⁶ This result shows significant serial indirect effects. However, we do acknowledge that the direct effect remains significant, which suggests the existence of additional factors that could be influencing tipping behavior.

⁷ We tested for a simple mediation effect of status (either restaurant status or self-status alone as a mediation mechanism), however, as predicted only a serial mediation chain was established.

p < .1, **p < .05. ***p < .01, ****p < .001

Fig. 4 The effects of color (gold vs. black) on bill folder on tipping through restaurant status and self-status (Study 3)



Notes: Coefficients are unstandardized. * p < .1, ** p < .05, *** p < .01, **** p < .001

completed a computer-based survey. They were given a scenario of dining at a restaurant. They were then told that they were presented with a check in a bill folder described as gold, blue, green, red, orange, white, or black. The respondents were asked to complete a survey about the novelty of each bill folder, that is, they rated the bill folder as being new, unusual, novel, and atypical ($\alpha = .94$), where 1 = strongly disagree and 7 = strongly agree (adapted from Cox and Cox 2002). The pretest results showed that the orange-colored bill folder was perceived to be as novel as the gold-colored folder $(M_{gold} = 5.33 \text{ vs. } M_{orange} = 5.45; \text{ t } (49) = -.998, p = .32).$ As expected, the black-colored bill folder was perceived as being the least novel ($M_{black} = 2.23$, SD = 1.23). Based on these pretest findings, we chose the orangecolored bill folder for testing against the gold-colored bill folder.

Design, participants, and procedure

In the main study, ninety-five participants recruited through an online (MTurk) panel (median age = 26-30; male 58%) participated in exchange for monetary compensation (\$1). The participants were presented with a scenario featuring a restaurant photo (same as the photo from Study 3; see Fig. 3). The meal price was \$15.72 (the same as in Study 2). Except for color (gold vs. orange), the bill folder image was the same as the one used in previous studies (see Fig. 1). The participants were given a hypothetical scenario of dining in a restaurant. A bill folder and receipt were displayed on the screen. Then, they were asked to indicate a tip amount. Next, the participants were asked to evaluate the restaurant's status ("this restaurant is special," "this restaurant has a high degree of status," "this restaurant has more status relative to other restaurants," and "this restaurant seems upscale"; $\alpha = .91$), self-status ("I feel special in

 $^{^{8}}$ We added two items to restaurant status perception from Study 3 to make it a multi-item scale.



this restaurant," "I have attained a high degree of status in this restaurant," and "I have more status in this restaurant relative to other customers"; $\alpha = .77$), and novelty of the bill folder (same items as used in the pretest; $\alpha = .84$). All items were anchored on seven-point scales (1 = strongly disagree, 7 = strongly agree). See Appendix Table 5 for details regarding the scales and measures. Correlations, composite reliabilities, AVEs and CFA factor loadings are given in Appendix Tables 60 and 7. As in Studies 2 and 3, we used participants' age and gender as covariates (Conlin et al. 2003; Lynn et al. 1993).

Results and discussion

Manipulation checks At the end of the experiment, the participants were asked to indicate the color of the bill folder they saw at the beginning of the survey. The three participants who did not answer this question correctly were excluded from our analysis. As demonstrated in the pretest, the orange- and gold-colored bill folders were perceived as equally novel in the main study $(M_{orange} = 4.82)$ vs. $M_{gold} = 4.58$; F(1.93) = .91, p = .34). Additionally, to rule out attractiveness of the bill folder as an alternate mechanism, we administered a two-item scale about the attractiveness of the bill folders adapted from Biswas et al. (2014b) (the bill folder looks very good in terms of visual appearance; the bill folder is very attractive; r = .87). The results showed no significant differences between the orange- and gold-colored bill folders on attractiveness $(M_{\text{orange}} = 5.16 \text{ vs. } M_{\text{gold}} = 5.51; F(1,93) = 2.46, p > .10).$

Tipping As in Studies 2 and 3, we ran an ANCOVA on the tip amount (DV) with the service prop color (orange vs. gold) as the independent variable and age and gender as covariates. We found that tipping in the gold condition was marginally higher than in the orange condition ($M_{gold} = 22.04\%$ vs. $M_{orange} = 19.80\%$; F (1,91) = 3.37, p < .10). If tipping is a function of the novelty of bill folder color, the orange-colored bill folders should have yielded similar tipping behaviors as the gold-colored

folders because orange was perceived to be as novel as gold; however, the orange-colored folders did not yield similar tipping behaviors.

Mediation Our primary interest was to demonstrate that the gold condition (in comparison to the orange condition) was a function of status and not novelty alone. As we did in Study 3, we tested whether the color gold (vs. orange) affects tipping percentage through restaurant status and self-status perception. We performed a serial mediation test by using a bias-corrected bootstrap procedure (Hayes's Model 6; as recommended in Hayes 2013 with service prop color as the independent variable, perceived restaurant and perceived self-status as mediators (in that sequence), and tipping percentage (tip amount divided by meal price, \$15.72) as the dependent variable. The confidence interval of the indirect path (color of service prop \rightarrow perceived restaurant status \rightarrow perceived self-status \rightarrow tip (%)) did not include zero (95% CI = .20, 2.03; n = 1000), which suggests a significant indirect effect (Zhao et al. 2010). Specifically, the analysis revealed that the gold-colored (vs. orange-colored) service prop enhanced the perceived restaurant status ($a_1 = .80$, p < .001); consequently, the perceived restaurant status increased perceived self-status ($d_{21} = .58$, p < .001), which, in turn, increased the tip (%) ($b_2 = 1.64$, p < .05). Thus, the participants who encountered a gold-colored (vs. orange-colored) service prop perceived that they were in a restaurant of higher status, which, in turn, enhanced their own perceived status and, ultimately, led them to leave a bigger tip. See Table 3 and Fig. 5 for the results.9 These results further support our hypothesis that gold effects are driven by status perception, not by novelty. In addition, as predicted, the color gold exerted its influence through its referential meaning associated with status perception. That is, consumers responded to the gold color through restaurant status perception and their tipping behavior was influenced by self-status perception induced by the color gold.

Even though there were no significant differences between the attractiveness of the orange- and gold-colored bill folders, we re-ran the mediation test controlling for attractiveness given the directionality of the means in favor of the gold-colored bill folder. The results were the same, even when controlling for attractiveness. In short, the gold-colored bill folder led customers to elevate their restaurant status perceptions, which in turn led

to enhanced self-status perceptions and, ultimately, increased tipping.

Overall, the results of Study 4 were consistent with the mediation mechanism established in Study 3. Significant indirect effects of the gold-colored (vs. orange-colored) bill folder on tipping further supports that status is an underlying mechanism of the gold effect and not a function of novelty or attractiveness of the bill folder. We provide more conclusive evidence of status perception as a mediation mechanism of the gold effect in Study 5.

Study 5: inducing status and its effects on tipping

We proposed gold-color induced perceived status as a key underlying factor in influencing the effects of service prop color on tipping amount. If this is indeed the underlying factor, the same effects should be obtained when status is induced (e.g., through priming) in the case of non-gold colored service props. Thus, we predict that

H3: In the absence of any priming, consumers presented with a gold service prop will leave a higher percentage tip than consumers presented with a nongold service prop, and this effect will be weakened when status is primed.

Design, participants, and procedure

Eighty-five undergraduates enrolled in marketing classes (average age: 21.5; 51% male) at a major US university participated in a 2 (service prop color: gold vs. black) × 2 (status: non-primed vs. primed) between-subjects design experiment. The participants received course credit for participation. Bill folders were again used as the service prop in this study. As in Studies 2, 3, and 4, participants' age and gender were used as covariates in the data analysis.

Status manipulation The status prime was adapted from prior research (Drèze and Nunes 2009; Dubois et al. 2012). Specifically, in the status-primed condition, at the beginning of the survey, the participants were asked to write a short essay about a situation in which they held status (what happened and how they felt). In the non-primed condition, there was no such essay.

Tipping behavior Next, the participants were presented with the same scenario as in Studies 3 and 4 (see Fig. 3), featuring the same restaurant photo. As in



⁹ This result shows significant serial indirect effects accompanied by significant direct effects, which suggests the existence of additional factors that could be influencing tipping behavior.

Table 3 Model summary for the effects color on bill folder through restaurant status and self-status (Study 4)

Antecedent	Restaurant status	Self-status	Tipping (%)
Color (Orange vs. Gold)	.80 **** (.21)	05 (.19)	2.53 * (1.36)
Restaurant Status	_	. 58 **** (.09)	-1.09 (.77)
Self-Status	_	_	1.64** (.75)
Constant	4.2**** (.39)	.90 (1.67)	18.68 **** (3.67)
	$R^2 = .21$	$R^2 = .25$	$R^2 = .09$
	F(3, 91) = 8.14	F(4, 90) = 14.28	F(5, 89) = 1.83
	<i>p</i> < .001	<i>p</i> < .001	p = .11

Notes: Coefficients are unstandardized and presented with standard errors in parenthesis

Studies 3 and 4, they were told to imagine that they were dining in the pictured restaurant and presented with a gold- or black-colored bill folder. Then, they were instructed to open the bill folder and indicate the tip they wanted to leave. The meal price was \$15.72, the same as in Study 4.

Results and discussion

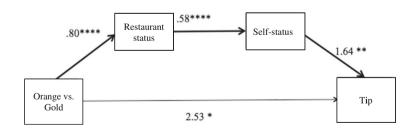
The same attractiveness items measured in Study 4 were used in Study 5 to again rule out attractiveness as an alternative mechanism. The results showed no differences between the black- and gold-colored bill folders in terms of attractiveness ($M_{black} = 5.07$ vs. $M_{gold} = 5.33$; F(1,83) = .844, p = .36). There was a significant color by status interaction (F(1, 79) = 3.99, p < 0.05). Consistent with H1 and the findings of our previous studies, in the non-primed condition, tipping in the gold (vs. black) condition was significantly higher ($M_{gold} = 21.92\%$ vs. $M_{black} = 17.66\%$; F(1, 43) = 13.14, p = .001). Also, as predicted (in H3), this effect was weakened when status was primed ($M_{gold} = 21.66\%$ vs. $M_{black} = 20.44\%$; F(1, 34) = .08, p = .78) (see Fig. 6). There was also a signif-

icant priming effect in the black condition. Tipping in the primed black-colored bill folder condition was marginally higher than in the non-primed black-colored bill folder condition ($M_{primed\ black} = 20.44\%$ vs. $M_{non-pimed\ black} = 17.66\%$; F(1, 35) = 3.70, p < .10). There were no effects of priming for the gold-colored folder condition ($M_{primed\ gold} = 21.66\%$ vs. $M_{non-pimed\ gold} = 21.92\%$; F(1, 42) = 1.08, p = .30).

Taken together, these results show that tipping in the black condition increased with status priming, while tipping in the gold condition stayed the same irrespective of priming because gold is a status-laden color. The results of the gold, primed condition might indicate ceiling effects for a golden atmospheric effect because gold + status priming did not yield significantly higher tipping percentages than the black + status priming condition (i.e., the two bars on the left in Fig. 6 are not significantly different).

In short, tipping increased with status priming. This priming effect was evident with the non-status-related color, black. The difference in tipping between the black and gold conditions weakened when status priming was induced. These findings provide further evi-

Fig. 5 The effects of color (gold vs. orange) on bill folder on tipping through restaurant status and self-status (Study 4)



Notes: Coefficients are unstandardized. p < .1, *** p < .05, *** p < .01, **** p < .001



^{*}*p* < .1, ***p* < .05. *** *p* < .01, **** *p* < .001

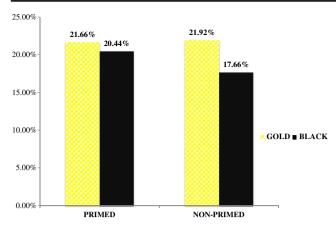


Fig. 6 Tip (%) when status is primed vs. non-primed (Study 5)

dence for our theorization related to status inducement of the color gold and its effects on tipping amount.

General discussion

The results of this research enhance our understanding of how the color of service props influences consumers' tipping behavior. Consistent with the referential meaning of color, we found that activation of the gold-status association enhanced consumers' subsequent status perception and enhanced tipping behavior. Study 1, a field experiment, showed that restaurant customers who encountered a gold-colored (vs. black-colored) service prop (i.e., bill folder) left larger tips. Study 2 enhanced the robustness of this finding by generalizing the effects of the color gold by using a different service proptablecloth. We delved into the underlying processes in Studies 3-5. Study 3 revealed that customers increased their tip amounts (%) through enhancement of restaurant status and self-status perception (in that sequence) when they encountered a gold-colored(vs. black-colored) service prop. In Study 4, we provided further process evidence by ruling out novelty as a potential alternative mechanism that drives this effect of the color gold. In Study 5, we provided direct process evidence by showing that status priming weakens the effects observed in our earlier studies.

Theoretical contribution

Our research makes theoretical contributions to several literature streams in marketing. Most importantly, our findings enrich color marketing literature by identifying the ways in which the color gold influences consumers' tipping behaviors. Unlike most previous studies in the color domain, which use the arousal-evaluation framework to identify a process mechanism, we employed the referential meaning framework and revealed a color-meaning association (i.e., status perception) as our key underlying process through which the color gold influences tipping. The results of our studies consistently show that the color gold influences tipping behavior positively through status perception. These results somewhat contradict previous research findings, which showed consistent patterns of less favorable consumer outcomes with warm (vs. cool) colors. Our results demonstrated the positive effects of gold, which is likely to be considered as a relatively warmer color based on the wavelength of the color hue. Gold is considered a tertiary color represented by a blend of yellow-orange, both of which appear to be closer to warmer colors. By considering the meaning of color to consumers, we can explain why the color gold generates positive consumer outcomes. Moreover, our focus on the gold color is novel because prior research has focused predominantly on the effects of the colors red and blue. Future research needs to pay greater attention to colors and their learned color-meaning associations instead of focusing only on color typologies based on the primary/secondary or the warm/cold dimension.

Our study also contributes to the service atmospherics literature. We investigated the effects of color on tipping behavior by using service props. Although other factors in service settings, such as artifacts, color, and ambient condition, have been recognized as important elements that affect customers' behavior and attitude toward a service-providing organization (Berry et al. 2006; Bitner 1992; Bolton et al. 2014), there is little empirical support for this. We find that the color of service props (e.g., bill folders and tablecloths) influences consumers' perceptions of restaurant status, which eventually increases consumers' tipping. Thus, our study results provide empirical support for the importance of service props as a marketing tool that can enhance consumer spending and help create positive perceptions about a service-providing organization.

Third, we contribute to tipping literature by identifying a new predictor of tipping, namely, the status perception induced by color. Extant tipping literature has identified the predictors of tipping from the service encounter perspective (server gender, server looks, server behavior, or service quality) (Hubbard et al. 2003; Lynn and McCall 2000; May 1980; Rind and



Table 4 Summary of key findings and managerial implications of color in marketing

Key findings Managerial implications

Colors instill meaning in service props that contribute to the formation of consumers' perceptions about service providers.

Colors of service props in service atmospherics influence customers' tipping behaviors.

Status perception is the key mechanism through which the color gold influences customers' tipping behavior.

Marketing managers must pay attention to the meanings of color and the details of service design, even in seemingly meaningless objects, since they come into play in creating perceptions about service providers.

Marketing efforts extended to the strategic use of color in service environments can increase tipping revenue, which could have a positive influence on server's service delivery.

Marketing managers should try to increase factors that trigger status perceptions in the design of the service environment—using the color gold is one way.

Status perceptions might be triggered in other service elements, beyond gold service props, such as signage, interactions with employees, etc.

Status perception triggers might be beneficial for other payment behaviors beyond tipping, such as open pricing systems.

Bordia 1996; Stephen and Zweigenhaft 1986) or in relation to the factors that affect individual customers' emotional states, and weather conditions (Cunningham 1979; Rind and Bordia 1996; Seiter 2007). Although a few studies have proposed that tipping can be related to individuals' motivation for status display (Lynn 1997; Shamir 1984), no study had tested the status perception induced by color as a construct that relates to tipping. To the best of our knowledge, our study is the first to test status perception induced by color as an underlying mechanism that influences tipping behavior positively.

Managerial implications

This research also has several important managerial implications; Table 4 summarizes the key findings and implications. Our findings could provide insights for marketing managers in service industries, where tipping is an important source of revenue. For example, managers might be able to increase tipping revenue by incorporating factors that trigger status perception in the design of service environments. More specifically, restaurant managers might use marks of social status in their restaurant menu designs, such as symbols or pictures that signify status. The results of our study suggest that use of the color gold could increase tipping rates by significant levels. Extrapolating a two-percentagepoint increase in tip amounts, as was observed in many of our studies, to the whole restaurant industry adds up to a very high increase in total amount of tips. Specifically, based on the estimated tips in US restaurants, which stood at about \$27 billion, a two percentage point increase from the current average tip of 15% (Azar 2007a; May 1980) translates to more than a 13% (i.e., 2/15) increase in the level of change, resulting in \$3.5 billion (i.e., 27 billion X .13) of additional tipping revenues. Moreover, given the general downward trend in the tipping rate and the fact that most wait staff rely on tipping for a living wage, especially given the \$2.13 federal minimum wage for tipped wait staff (Sheridan 2014), the findings of our research have important implications for the economy and the overall well-being of restaurant employees. In other words, given that many restaurant employees mostly earn from tips, this can potentially lead to significant changes in the earnings potential of a large number of people.

Beyond restaurants, at a more general level, our findings could provide insights on service design to marketing managers. For example, the use of status symbols when providing service in a hotel or casino might increase consumer spending on the service beyond tips. Companies should examine ways to increase status perception through salutations (e.g., hello Mr./Mrs./Dr.), packaging (Ampuero and Vila 2006), brand prominence (Han et al. 2010), and signage, just to name a few examples. However, as suggested by Study 5, there might be ceiling effects on tipping and voluntary payment with increased status primes and perceptions.

Our findings inform marketing managers that color can make seemingly meaningless objects nuanced (Rawsthorn 2010) and influence customers' perceptions and behaviors, such that managers need to choose the color of small details such as service props with the



overall marketing strategy in mind. Marketing managers and even designers tend to regard color simply as a part of decoration, particularly when it is not incorporated with the brand (Rawsthorn 2010). In contrast, our findings suggest that color can imbue meanings that influence customers' spending and likely their repeat patronage. For example, crisp white beddings in the Westin hotel chain convey to customers that the beds are clean and contribute to the distinctive experience at the hotel (Berry et al. 2006). This positive experience from the referential meaning of white in hotels (i.e., cleanliness) has influenced consumers to buy the bedding for their home, as well as turned Westin guests into repeat customers (Schoenberger 2004).

Finally, our findings have important implications for businesses that employ an open pricing system, such as auctions and pay-what-you-want (PWYW) pricing, where consumers decide the price. PWYW pricing strategies are seen in online bidding (e.g., eBay), taxis (e.g., Cocoa Beach Taxi, Inc.), and game sellers (e.g., IndieGameStand). Even Panera Bread tried (albeit failed) this pricing strategy for their chili (Kim 2013). Our results suggest that marketing managers need to trigger status perceptions in an open pricing system to increase payment amounts, and a "golden" atmospheric effect is one way to that end.

Limitations and future research directions

Our research mainly focused on the effects of the statusladen color gold on tipping and its underlying mechanism; however, there could be several relevant moderators that require follow-up examinations. Individual's income level or disposable income might moderate the effects of the color gold given their potential influence on spending in general. Individual differences such as the desire for status or need for uniqueness might moderate the gold effect observed in this study. For example, the gold effect might be magnified for individuals who are concerned about their social status or have a strong desire for status. Although extant literature supports the notion that gold is widely used as a symbol of status (Drèze and Nunes 2009), some individuals might have stronger associations between gold and status, while others may have weaker perceived associations. Future work should examine how varying strengths of associations of the color gold with status perception might affect tipping. In relation to potential moderators, restaurant type needs to be examined as well. We conducted our field experiment at a casual dining restaurant and the scenarios in our non-field experiments were also in the context of relatively moderate-priced meals. The effects of the color gold could vary depending on restaurant type. It is possible that atmospherics related to light or music, such as those at higher-end restaurants, could influence our observed effects. We investigated only one effect at a time (bill folder or tablecloth) and there is scope for examining the effects of multiple service props simultaneously.

Although we examined the effects of hue (gold, black, and orange), we did not examine potential effects of color value and chroma (Gorn et al. 1997). Future research should examine the potential effects of color value and chroma on tipping behavior. This could be especially interesting since there might be scope for altering chroma and value while keeping hue constant, perhaps to match certain color—meaning associations. Other colors that might symbolize status, such as silver or bronze, could also be examined.

Our study focused on tipping in a restaurant context. Future studies need to empirically test the robustness of the gold effect in a different tipping context. It would be helpful for business managers to investigate the gold effect in other service contexts such as hair salons, valet parking, or hotels with bellhop service. Given that tips from consumers represent a significant source of income for service providers across various industries (Lynn et al. 1993), applying these findings to other tipping contexts beyond restaurants could be crucial for designing service encounters and service environments to positively influence employee performance and productivity. Moreover, it might be meaningful to examine the effects of the color gold on other outcome variables such as overall perceived experience and brand image perceptions.

Although our study provides support for the use of gold-colored service props to increase tipping revenue, we did not examine the effect of an increase in tipping from the consumer's perspective. It is conceivable that an increase in tipping from their perspective might have a negative influence on their patronization if consumers perceive that the dining experience is more expensive with the increased tip amount. On the other hand, enhanced status perception might offset this negative impact as well. Future research is needed to explore these issues to enhance our understanding of a golden atmospheric effect.

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Appendix

 Table 5
 Descriptive statistics and measurement reliability

	Study	3		Study 4			Study 5		
Scale	M	(SD)	α	M	(SD)	α	M	(SD)	α
Restaurant Status (Adapted from Drèze and Nunes 2009) ^a	4.55	(1.00)	.70	4.40	(1.10)	.91	n/a	n/a	n/a
This restaurant is special	4.67	(1.14)	r = .54	4.40	(1.15)		n/a	n/a	
This restaurant has a high degree of status	4.43	(1.14)		4.42	(1.25)		n/a	n/a	
I feel this restaurant has more status relative to other restaurants.				4.28	(1.23)		n/a	n/a	
The restaurant seems upscale				4.48	(1.30)		n/a	n/a	
Self- status (Adapted from Drèze and Nunes 2009)	4.00	(.97)	.63	3.48	(1.06)	.77	n/a	n/a	n/a
I feel special in this restaurant	4.57	(1.18)		4.06	(1.19)		n/a	n/a	
I have attained a high degree of status in this restaurant	4.01	(1.31)		3.49	(1.41)		n/a	n/a	
I have more status in this restaurant relative to other customers	3.43	(1.32)		2.89	(1.23)		n/a	n/a	
							n/a	n/a	
Novelty (Cox and Cox 2002)	n/a	n/a	n/a	4.68	(1.17)	.84	n/a	n/a	n/a
The bill folder is new	n/a	n/a		4.72	(1.46)		n/a	n/a	
The bill folder is unusual	n/a	n/a		4.37	(1.48)		n/a	n/a	
The bill folder is novel	n/a	n/a		4.56	(1.31)		n/a	n/a	
The bill folder is atypical	n/a	n/a		5.11	(1.47)		n/a	n/a	
Mood (Adapted from Allen and Janiszewski 1989)	5.57	(.93)	.94	n/a	n/a	n/a	n/a	n/a	n/a
At this moment I am feeling good		(.90)		n/a	n/a		n/a	n/a	
At this moment I am feeling pleasant	5.59	(.99)		n/a	n/a		n/a	n/a	
At this moment I am happy		(1.05)		n/a	n/a		n/a	n/a	
At this moment I am feeling positive	5.56	(1.09)		n/a	n/a		n/a	n/a	
Involvement (Adapted from Bower and Landreth 2001).		(.99)	.92	n/a	n/a	n/a	n/a	n/a	n/a
Tipping at a restaurant is important.	6.33	(.90)		n/a	n/a		n/a	n/a	
Tipping at a restaurant is of concern to me.	5.70	(1.25)		n/a	n/a		n/a	n/a	
Tipping at a restaurant is relevant.	6.11	(1.02)		n/a	n/a		n/a	n/a	
Tipping in a restaurant matters to me.	6.03	(1.21)		n/a	n/a		n/a	n/a	
Attractiveness (Adapted from Biswas et al. 2014b)				5.36	(1.10)	.93	5.21	(1.24)	.85
The bill folder looks very good in terms of visual appearance				5.38	(1.07)	r = .87	5.46	(1.20)	r = .7
The bill folder is very attractive				5.35	(1.12)		4.96	(1.45)	

 Table 6
 Summary of CFA results for key constructs in Studies 3 and 4

Scale	CFA loading	CFA loadings		Composite reliability		Average variance extracted	
	Study 3	Study 4	Study3	Study 4	Study3	Study 4	
Restaurant Status (Adapted from Drèze and Nunes 2009) ^a	0.68-0.80	0.75-0.93	0.71	0.91	0.55	0.73	
Self-status (Adapted from Drèze and Nunes 2009)	0.38-0.68	0.60-1.00	0.65	0.81	0.47	0.60	
Mood (Adapted from Allen and Janiszewski 1989)	0.84-0.94	n/a	0.94	n/a	0.80	n/a	
Involvement (Adapted from Bower and Landreth 2001).	0.80-0.95	n/a	0.92	n/a	0.75	n/a	



 Table 7
 Correlations between variables in the hypotheses for Studies 3 and 4

	Study	1	2	3	4	5	6
1. Color	Study3 (black vs. gold)	1					
	Study4 (orange vs. gold)	1					
2. Restaurant Status	Study3 (black vs. gold)	.20 *	1				
	Study4 (orange vs. gold)	.35**					
3. Self-status	Study3 (black vs. gold)	.15	.49**	1			
	Study4 (orange vs. gold)	.18	.61**				
4. Tipping(%)	Study3 (black vs. gold)	.27*	.01	.21	1		
11 3 7	Study4 (orange vs. gold)	.18	.07	.22*			
5. Involvement	Study3 (black vs. gold)	.05	.04	.08	.12	1	
	Study4 (orange vs. gold)	n/a	n/a	n/a	n/a		
6. Mood	Study3 (black vs. gold)	.16	.49**	.34**	.19	.33**	1
	Study4 (orange vs. gold)	n/a	n/a	n/a	n/a	n/a	

^{*} Correlation is significant at the 0.05 level (2-tailed)

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^{**} Correlation is significant at the 0.01 level (2-tailed)

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