



## Understanding the Influence of Cues from Other Customers in the Service Experience: A Scale Development and Validation

E. Deanne Brocato<sup>a,1</sup>, Clay M. Voorhees<sup>b,2</sup>, Julie Baker<sup>c,\*</sup>

<sup>a</sup> Marketing, College of Business, Iowa State University, Ames, IA 50011, United States

<sup>b</sup> Department of Marketing, The Eli Broad College of Business, Michigan State University, East Lansing, MI 48824-1122, United States

<sup>c</sup> Department of Marketing, M.J. Neely School of Business, Texas Christian University, Fort Worth, TX, United States

### Abstract

During most consumer exchanges, particularly in service and retailing settings, customers are “in the factory” and, as a result, the presence of other customers can have a profound impact on customer experiences. Despite studies demonstrating the importance of managing the customer experience and customer portfolios, the marketing literature lacks a comprehensive scale that can be used to assess individuals’ perceptions of other customers during commercial transactions. This study conceptualizes a three-dimension, Other Customer Perception (OCP) scale to address this gap. Using a seven-step scale development process, the multi-dimensional conceptualization is supported and validated and the research demonstrates the impact of the OCP dimensions on consumers’ approach and avoidance intentions. The findings provide a clearer understanding of how other customers can indirectly influence assessments of a customer exchange and can assist in the measurement of other customer perceptions in future research efforts.

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Bricks and mortar retail service experiences are largely social activities. This is true because in these settings the experience has a necessary human component due to the inseparability of the service delivery. As such, the behavior of individuals in commercial settings cannot be adequately understood without examining the social influences that occur (Prus 1989; Tombs and McColl-Kennedy 2003). An important, but largely overlooked, social influence that is present in many retail service environments is the other customers who simultaneously occupy a facility with a focal customer. Perceptions of these “other customers,” who are often strangers, have the potential to enhance or detract from an individual’s evaluations of, and experience with, an organization (Mourali 2003). Martin (1996) suggested that consumers impact one another in a commercial context directly through interpersonal encounters or indirectly by being part of the environment. It is on the latter type of other customer influence that we focus our research. When other customers are analyzed as a part of the

environment, their influence is manifested through an individual’s perceptions about them based on observed characteristics.

Initial interest in the role of other customers in a service environment began with Baker’s (1987) introduction of social cues as a component of the physical environment. Since this conceptualization, managerial and academic interest has grown in how customers influence each other (e.g., Grove and Fisk 1997; Martin 1996; McGrath and Otnes 1995). Lehtinen and Lehtinen (1991) went so far as to argue that the presence and behaviors of other customers may have a stronger impact on influencing an individual’s perception of service quality than contact with service personnel.

Building on these notions, the effects of some aspects of other customer influence on increasing customer satisfaction and loyalty have been demonstrated (Bitner 1990; Martin and Pranter 1989). Despite this interest, the marketing literature offers little guidance on what observable characteristics of other customers might influence an individual’s evaluations about and behaviors towards a service firm. This is an important topic for two primary reasons.

First, the increased attention on other customers in the academic literature has provided support for emerging managerial initiatives focused on customer portfolio management

\* Corresponding author. Tel.: +1 817 257 7535; fax: +1 817 257 7227.

E-mail addresses: Brocato@iastate.edu (E.D. Brocato),

Voorhees@bus.msu.edu (C.M. Voorhees), j.baker@tcu.edu (J. Baker).

<sup>1</sup> Tel.: +1 515 294 9634.

<sup>2</sup> Tel.: +1 517 432 6469.

and more explicit segmentation of service consumers (Martin and Pranter 1989). Lovelock and Wirtz (2007) have discussed the necessity of managing the customer portfolio of customers' observable characteristics such as appearance, behavior, and age. Due to the inherent inseparability in many service transactions, managers need to actively manage the composition of their customer base to enhance the service experience. In fact, Gummeson (1993, p. 99) suggested that "recruiting the right customers is as important as recruiting the right personnel." For example, many entertainment venues explicitly manage the appearance of their customer base in an effort to reflect the desired image of their target market. Similarly, Abercrombie and Fitch recently offered cast members of the show *Jersey Shore* payment to stop wearing their clothing as they felt it was alienating their core customers (Horovitz 2011). While this notion may seem intuitive, the marketing literature has not offered researchers or managers a framework or way to measure the perceptions that current and potential consumers have of other customers.

Second, we argue that other customer perceptions are the building blocks upon which managers can encourage customer-to-customer interactions. An individual would be more likely to interact with other customers if their perceptions of these customers are positive. Silpakit and Fisk (1985) argued that the right customers can enhance the comfort of being among other people and may affect customers' willingness to participate in the service production. Managers who want to encourage and enhance interactions between their customers should have a better chance of success if they understand whether their customers view each other positively, and, if not, what characteristics might be at issue.

In order to advance research on the customer-based component of the social environment and the practice of managing the customer mix, it is necessary to have a comprehensive, parsimonious way to assess a set of other customer characteristics that influence consumer perceptions of, and behaviors towards, service organizations. More specifically, a valid, reliable scale that measures individuals' perceptions of other customers could fill this gap and provide important insights to marketing scholars and managers about the nature of this critical aspect of service experiences. Accordingly, our research has four major objectives: (1) to provide a conceptual definition and foundation for the dimensions of other customer perceptions (OCPs); (2) to develop and validate scales to measure the various dimensions of OCP through a series of studies addressing the latent structure, reliability, and validity of the constructs; (3) to build the OCP framework within a nomological network by specifying and testing its effects on behavioral constructs; and (4) to determine whether the OCP dimensions increase explained variance in behavioral constructs above and beyond a measure of service quality. In order to complete these objectives, we first review the theory and literature that relates to other customer perceptions. Then, we report results of a qualitative study that we used to identify the dimensions of OCP. Finally, we detail the results of a seven-step scale development process that was executed to create a parsimonious, reliable, and valid OCP scale.

## Research background

The context of our study is commercial social exchanges where other customers within the exchange venue are observable. We define "other customers" as customers who are in the service facility simultaneously with – and who are unacquainted with – a focal customer. The focal customer and other customers do not need to interact. This definition is consistent with prior research that shows people can be present together in a commercial facility, but not engage or involve with each other (Argo, Dahl, and Manchanda 2005; McGrath and Otnes 1995).

Overall, only a few studies have focused on the behaviors of other customers during the service experience. Interested in how others interact to facilitate interpersonal exchange, Grove and Fisk (1997) identified both positive and negative critical incidents caused by other customers within a theme park setting. Positive incidents included good deeds and generous acts performed by other customers, while many of the negative incidents included behaviors that occurred while standing in line. This study also found that an individual's evaluations of other customers' behaviors were based on easily observable characteristics, such as age or nationality. Martin (1996) examined to what extent people perceived other customers behaviors as satisfying or dissatisfying. Similarly, Martin and Pranter (1989) investigated the issues of customer compatibility and customer behavior, finding that the classification of compatible and incompatible behaviors is often situation-specific.

Other studies have focused on the types of customer-to-customer interaction, and the resulting outcomes to the firm. Using a qualitative method in retail settings, McGrath and Otnes (1995) discovered eleven distinct forms of interpersonal behaviors between unacquainted shoppers resulting from customer-to-customer interaction. Extending this research, Moore, Moore, and Capella (2005) empirically established the positive impact that customer-to-customer interaction had on loyalty to the firm and word of mouth in a high personal contact service setting. More recently, marketing scholars have started to examine how to facilitate customer-to-customer interactions within a service setting. For example, Gruen, Osmonbekov, and Czaplewski (2007) found that motivation, opportunity, and ability influenced customer to customer interaction, and that interaction enhanced service value perceptions and customer loyalty.

The review of the literature suggests that the academic attention paid to the social effects of other customers in retail service settings has been scarce and scattered. There have been no attempts of which we are aware to develop a comprehensive, parsimonious, conceptual framework and measures with which scholars can begin to further understand how observable characteristics of other customers influence retail experiences. Our study attempts to begin to fill this gap by identifying the dimensions of other customer perceptions (OCPs), and developing a reliable and valid scale to measure OCP.

We use social impact theory to inform our investigation. Social impact theory suggests that people are influenced by the mere presence of another person or group of people (Latané 1981). Research on social impact theory has focused on the

influence of social presence that results from size (i.e., number of people present), proximity (i.e., immediacy), and social source strength (i.e., importance) (Latané 1981). In a recent study examining social impact theory in a retailing context, Argo, Dahl, and Manchanda (2005) demonstrated when and how non-interactive social presence (e.g., other customers) differing in size and proximity affected consumers' emotions and self-presentation behaviors. However, this research did not identify the characteristics of other customers that might influence the perceptions and behaviors of consumers. We posit that along with proximity, immediacy and social source strength, certain observable characteristics of other customers may also have a critical impact on how consumers evaluate an organization.

We begin by describing a qualitative study that helped us identify, in the words of consumers, the dimensions of OCP. The theoretical bases that support each dimension are also incorporated into the discussion.

### Identifying the dimensions of OCP

Because the extant literature offers little guidance about what specific characteristics influence consumers' perceptions of other customers, we start with a grounded theory approach to identify the dimensions of OCP. Respondents were recruited through referral (Arnold and Reynolds 2003), where 109 undergraduate students were asked to provide the name and contact information for an individual that would be willing to participate in a focus group for a small incentive. To ensure a diverse group of participants, strict referral guidelines were given to the recruiters. Ultimately, participants consisted of a convenience sample of students at a large public university and referred adults who participated in exchange for a small gift.

Eight focus group interviews were conducted with an average of eight participants in each session. Professional moderators were given a discussion guide that was intended to elicit discussions of how consumers affect each other in a service or retail setting. The group members were asked about how they evaluated their experiences and particularly how other customers could affect their experience (i.e., what did they take into account when making evaluations). Each focus group lasted approximately ninety minutes.

The transcripts were read and analyzed by a coding team. Using a categorization process suggested by Lincoln and Guba (1985), recurring themes in the data were identified by listing items that reflected similar characteristics. Our objective was to look for common descriptors that represented each dimension and to develop a definition for each dimension. Note that we are focusing solely on observable characteristics of other customers, which by our definition excludes companion shoppers. We are also not examining interactions between customers, nor are we looking at the number of people present (a topic which has been addressed in the crowding literature).

The qualitative data suggested three recurring themes, which we labeled and grouped into the dimensions of OCP. The first dimension is "Similarity," the second is "Physical Appearance" and the third is "Suitable Behavior." We next define each dimension, and integrate the theoretical explanations and prior research

that support each one. Also we include several illustrative quotes from participants in our qualitative study for each dimension.

### Similarity

In line with Rossiter and John (2002) recommendations for construct definition, we originally developed operational definitions for each construct that explicitly referenced the object, attribute, and rater for each construct. Similarity was defined as the extent to which an individual customer (i.e., the rater) felt that they were similar to and could identify (i.e., the attributes) with other customers (i.e., the object) in the service environment. In commercial transactions, this definition is linked to the fact that customers tend to gravitate towards environments with which they are most compatible (Martin and Pranter 1989). For example, a teenage girl would be more likely to shop at a clothing store where other teenage girls shop rather than in one where "soccer moms" shop. In other words, individuals tend to feel more comfortable when they are around other customers with whom they feel similarities.

The following quotes were representative of the customer comments associated with perceptions of similarity:

*"When I go out to eat I enjoy a place where I can identify with the other people there and they are like me."*

*"I like being in a place where I feel like I can fit in with the group, like I am one of the crowd."*

*"When I go out to a place to shop or eat I like when the people around me are like I am, it is important to me to be comfortable where I go and feeling like I fit in makes me comfortable."*

*"If I can identify with other customers it makes me feel good, sometimes I will start talking to the people around me while I am waiting because if I can identify with them I kinda feel like I know them."*

The dimension of similarity is consistent with social identity theory (Tajfel 1981). Social identity theory states that individuals derive the social part of their identity from membership in a social group (Tajfel 1981). This intergroup categorization leads to favoring the "in group" and discriminating against the "out group." In the context of sharing a service facility with other customers, social identity theory would suggest that consumers prefer to surround themselves with others who have similar characteristics. Consumers will be more compatible with other customers with whom they can identify and are likely to evaluate those customers positively within a retail environment.

### Physical appearance

Physical appearance was defined as the physical characteristics and overall look (i.e., the attributes) of other customers in the service environment (i.e., the object) as perceived by individual customers (i.e., the rater). For example, one may perceive that a hair salon is upscale by seeing well-dressed customers getting services at that salon. McGrath and Otnes (1995) found that shoppers interacted with others whom they visually judged to be like themselves, using cues such as

age, gender, and appearance. The following quotes provide a representation of responses related to physical appearance.

*"I can tell what a place is like just by looking at the other people there, if they look nice I usually think that the place is a nice place to go."*

*"I have gone to places before where my whole family dressed up and looked good, then we show up and people there were dressed like they were going to a baseball game, it made me think we went to the wrong place."*

*"You can tell how good a place is by how the people look that are there."*

This dimension is supported by inference theory and the theory of affordances. Inference theory states that people make judgments about the unknown on the basis of information they receive from cues that are available to them (e.g., Huber and McCann 1982). Other customers in a commercial space offer important cues to consumers (Baker et al. 2002; Huber and McCann 1982). Similarly, the theory of affordances suggests that people perceive their physical environment as a meaningful entity and that such a perception conveys information directly to them (Gibson 1979). These theories imply that consumers attend to social cues, along with design and ambient cues (Baker et al. 2002), when evaluating a service organization because they offer reliable information about the service firm.

In a non-commercial setting, people have been found to make evaluations about others based on numerous visual characteristics, such as appearance (Aronoff, Woitke, and Hyman 1992). However, this study did not extend the inferences about appearance to an organization. Prior empirical research has found that design cues, ambient cues and employee social cues in retail and service environments provide information to consumers about service quality, time and effort costs, merchandise quality, and patronage intentions (e.g., Baker et al. 2002; Bitner 1992; Donovan et al. 1994; Grewal et al. 2003). Several widely used measures assessing service quality (SERVQUAL) and performance (SERVPERF) incorporate evaluations of the physical environment and the service personnel (Cronin and Taylor 1992; Parasuraman, Zeithaml, and Berry 1988). However, no studies were found that empirically examined whether observable physical appearance of other customers (i.e., how people look) other than age (Thakor, Suri, and Saleh 2008) influence consumer perceptions.

### *Suitable behavior*

The third OCP dimension we uncovered in the qualitative data is other customers' suitable behavior. Specifically, suitable behavior was defined as the extent to which an individual customer (i.e., the rater) felt that other customers (i.e., the object) in the service environment behaved appropriately (i.e., the attributes) given the consumption context.

Other customers' behaviors can have profound effects on service evaluations. It is not difficult to recall a shopping experience in which another person's actions created a negative (crying child, cursing, rudeness, etc.) or positive (friendly

patron, helping behavior, etc.) atmosphere. Illustrative quotes identifying suitable behaviors follow:

*"I like it when I go shopping and people are friendly to me, not just the workers, but the people I run into down the aisles."*

*"When you go out to eat there are just certain things you don't do, like curse. Doing things like that makes other people around you uncomfortable and feel embarrassed for you."*

Grove and Fisk (1997) noted that other customers can detract from individuals' satisfaction by exhibiting disruptive behavior or manifesting incompatible needs within a service environment. More specifically, the authors contended that when other customers violated informal codes of conduct in the service environment, it resulted in lower satisfaction with the experience. This notion of rules of conduct is grounded in role theory and behavior setting theory, and thus provides a basis for understanding how observing other customers' behaviors might affect consumers. Role theory is based on the supposition that people learn behaviors that are appropriate to the positions (i.e., roles, or organized actions in a given setting) they hold in society. Goffman (1967) suggested that interactions between social actors are determined by the specific roles adopted by each party, which results in a role script regarding that interaction. Roles are carried out within the confines of a behavior setting, which is a physical setting within which people and physical objects are configured to carry out specified activities (Wicker 1992). Similarly, behavior setting theory suggests that the behaviors of individuals within a particular setting are determined by a self-regulating social system, or social norms (Garling 1998).

As an extension to role theory, script theory explains how repeated exposure to a service experience provides guidelines as to how interactions in that environment should be conducted (Schank and Ableson 1977). Scripts describe the appropriate sequences of role behaviors in an environment (Schank and Ableson 1977). Script theory suggests that when consumers are within a routine service experience, there are shared expectations as to how the service experience should progress (Bitner, Booms, and Mohr 1994). These scripts have been studied in the context of employee client relationships (Bitner, Booms, and Mohr 1994), but less is known about the codes for customers. It is reasonable that the role of scripts could extend to interactions between customers and the observed interactions of other customers in a service environment. For example, in many settings, customers learn from each other as to how to conduct themselves in service environments and this collective learning can set precedents for suitable and unsuitable behavior. If an individual views another customer violating these scripts for suitable behavior, it is likely that they will downgrade their evaluations of a service provider.

While the roles for customers in a setting may not be as explicit as they are for employees, there are implicit rules, or expectations about behavior, that may exist for the role of "customer" (Grove and Fisk 1997). Specifically, the behaviors of individuals within a particular setting are determined by a self-regulating social system, or social norms (Garling 1998), which serve to set expectations for particular environmental contexts. For example, the behavior setting of a sit down restaurant may

include an implicit rule that customers wait to be seated. Thus, social norms or expectations about how other customers are supposed to behave in certain service organizations can influence consumers' perceptions of and evaluations about them.

### Methods and results

To develop multiple measures for the dimensions of OCP, we followed a structured empirical scale development procedure (e.g., Churchill 1979; DeVellis 1991; Gerbing and Anderson 1988; Netemeyer, Bearden, and Sharma 2003). In order to develop a generalizable scale, we chose three service industries that represent different categories of Lovelock and Wirtz's (2007) process framework: (1) theme parks (intangible actions on people), (2) restaurants (tangible actions on people), and (3) retail clothing store (tangible actions on possessions). In addition, these industries all have in common that customers remain in the facility for a long enough period of time for the impact of other customers to be felt.

A summary of the procedure we used is presented in Table 1. In the following sections, we provide details on each step in our process. We first describe the procedures used for item generation and preliminary screening. Following this, we discuss Study 1 ( $n = 275$ ), which was conducted to select a reduced set of items based on corrected item-to-total correlations and results of principal factor analyses. Study 2 ( $n = 224$ ) is then completed to confirm the factor structure and provide evidence of the reliability and validity of the scales. Subsequently, we present the results from Study 3 ( $n = 339$ ), where we validate the measurement in a student sample ( $n = 173$ ) and a heterogeneous sample ( $n = 166$ ). Moreover, in the third study, we test the nomological validity of the OCI dimensions by investigating the relationships with a series of theoretically based outcome variables. Finally, in Study 4 ( $n = 88$ ), we assess the test-retest reliability of the measures.

#### Item generation

The goal of this scale development effort was to develop short-form scales that could reliably and validly measure the underlying OCP dimensions. As a result, throughout the item generation phase we took care in balancing the exhaustiveness of the item listings with the need to generate a set of items with limited redundancy that had the potential of transforming into actionable, short form scales. With this focus, we integrated the results of the qualitative study with the review of the relevant supporting theory and prior research to develop an initial list of items that represented the three dimensions of OCP. An initial pool of 61 scale items was identified for Similarity (23), Physical Appearance (17), and Suitable Behavior (21). Face and content validities were assessed using judges consisting of six marketing experts (three faculty and three PhD students researching issues related the customer experience and consumer behavior), each of whom evaluated and reviewed the initial items and helped in the reduction of the scale items. The judges evaluated the degree to which each item was representative of the operational definition of each OCP dimension (Hardesty and Bearden 2004). During

Table 1  
 Scale development procedure.

Steps in the process	Study details
<i>1. Construct Definition and Scale Design</i>	
<i>2. Item Generation</i> Literature Review Focus Group Interviews	Preliminary, Qualitative study
<i>3. Item Judging</i> Expert Evaluation for face and content validity	Preliminary, Validation study
<i>4. Initial Purification</i> Item-to-total correlation statistics Exploratory Factor Analysis	Study 1 $n = 275$ Context = Theme Parks
<i>5. Initial Validation</i> Confirmatory Factor Analysis Overall and Comparative Fit Dimensionality Factor Loadings Reliability Validity Convergent Validity Discriminant Validity Scale Norms	Study 2 $n = 224$ Context = Sit-Down Restaurant
<i>6. Final Validation</i> Confirmatory Factor Analysis Structural Equation Modeling Overall and Comparative Fit Dimensionality Factor Loadings Measurement Invariance Reliability Validity Convergent Validity Discriminant Validity Nomological Validity Scale Norms	Study 3 $n = 344$ Younger Sample: $n = 173$ Older Sample: $n = 166$ Context = Retail Clothing
<i>7. Test-Retest Assessment</i> Item-Level Assessments Paired Sample T-Tests Test-Retest Item Correlations Construct Assessments Test-Retest Correlations Cronbach's Alpha Estimates	Study 4 $n = 88$ Context = Retail Clothing

this process, in accordance with Malhotra (1981), the experts reduced the initial set of 61 items to a subset of 41 items by placing items in the dimension categories and leaving out items that did not fit within any of the dimension definitions. Items that were not categorized within a dimension by at least two-thirds of the judges were removed.

Following Bearden, Netemeyer, and Teel (1989) another set of marketing experts (3 different marketing faculty members) were given definitions of the dimensions and asked to judge how representative the items were to the proposed definition (Bloch, Brunel, and Arnold 2003). If less than two-thirds of the judges identified an item as representative of its focal dimension, this item was removed. This process resulted in the retention of 24 items, which were developed to be measured using a seven point Likert-type scale anchored by 1 = "strongly disagree" and 7 = "strongly agree".

### Study 1: Item Purification

**Data collection.** Data for the first study were gathered from a convenience sample ( $n = 275$ ) of undergraduate students (41.2 percent were male and 58.8 percent were female) at a large mid-western university who had recently visited a theme park. The sample was consistent with the demographic characteristics of the student body (78.5 percent were under 25) and ethnically diverse (56.2 percent were White/Caucasian, 9.9 percent were African American, 15.7 percent were Hispanic, 15.7 percent were Asian, and 2.6 percent did not identify themselves in one of these categories). Respondents were asked to evaluate their experience during a recent (within 2 months) trip to a theme park. The experience included the perceptions of other patrons in the theme park environment (based on similarity, physical appearance and suitable behavior). A theme park was chosen for the survey context based on prior use of theme parks in the customer-to-customer literature (Grove and Fisk 1997) and the ability for students to identify with this type of service and the frequency of customer-to-customer exposure in the theme park environment.

**Item reduction.** The items were purified based on an examination of the average corrected item-to-total correlation and results of the factor analysis. Items that did not have average corrected item-to-total correlations above .50 were removed. Moreover, any items that did not have higher correlations with their respective dimension of OCP in comparison with item correlations with the other dimensions' total scores were also deleted. This process resulted in the removal of seven items. Following this, principal factor analysis with oblique rotation was performed. Based on the results of the factor analysis three more items were removed because they had relatively substantial cross-loadings with the other OCP dimensions. These analyses resulted in 14 items remaining across the three dimensions of OCP (5 items measuring Similarity, 4 items measuring Visual Cues, and 5 items measuring Behavior) that were subjected to further testing in Studies 2 and 3.

### Study 2: Initial Validation

**Data collection.** In order to confirm the properties of the OCP scale generated from the purification process, a second data collection was conducted ( $n = 224$ ) at a different university. The sample was consistent with the demographic characteristics of the student body at the university where the data collection occurred (average age was 21.9 years). Ethnicity was also consistent with the student body (90.1 percent were White/Caucasian, 1.8 percent were African American, 2.7 percent were Hispanic, 4.0 percent were Asian, and 1.3 percent did not identify themselves in one of these categories). Respondents were asked to evaluate their experience during a recent (within 2 weeks) trip to a sit down restaurant. As part of the survey, respondents assessed reactions to the overall customer experience as well as the 14 items for OCP.

**Evaluation of the latent structure.** In line with its theoretical basis, the scale for OCP should exhibit properties of a reflective first order, formative second order model comprised of three,

first order factors: similarity, physical appearance, and suitable behavior (Jarvis, Mackenzie, and Podsakoff 2003). The second order of the model is formative because changes in any of the dimensions should affect the overall influence of other customers regardless of changes in the other dimensions. Thus, the three dimensions of OCP do not necessarily need to co-vary with one another. In order to test this structure, we assessed the dimensionality of the first order dimensions in a three factor model. Specifically, each item was forced to load on its intended factor and not allowed to cross-load on other factors.

Results of the confirmatory factor analysis suggested that one additional item should be deleted from the scale. Specifically, one item measuring suitable behavior failed to exhibit acceptable factor loadings (greater than .60, Bagozzi and Yi 1988). After the removal of this item, the three factor solution was re-evaluated and the results provided good fit ( $\chi^2 = 235.47$ ,  $df = 62$ ; CFI = .94; IFI = .94; SRMR = .09). Moreover, the three factor solution provided a significantly ( $\Delta\chi^2 = 585.75$ ,  $\Delta df = 3$ ) better fit than a unidimensional model, providing additional support for the three dimensions of OCP. A complete listing of the remaining 13 items is provided in Table 2, as well as item statistics.

**Construct validation.** In order to test the validity and reliability of the dimensions, the Gerbing and Anderson (1988) method for scale development was followed. First, unidimensionality of the dimensions was assessed, then both convergent and discriminant validity were determined, and finally, reliability of the scale items was evaluated. For unidimensionality we looked at the overall model fit statistics and standardized residuals. As discussed above, the model fit reasonably well and significantly better than a single factor solution. Moreover, an assessment of the standardized residuals did not suggest a need for respecification.

The next step in the construct validation process was the assessment of convergent validity. Preliminary support for convergent validity was found given that all items loaded highly and significantly on their specified constructs. Moreover, the average variance extracted (AVE) for each construct exceeded .50, suggesting that the items were accounting for more truth than error in the construct. Following this, we assessed the correlations between the three OCP dimensions and formally evaluated discriminant validity. With respect to the correlations, all OCP dimensions were significantly correlated, but the magnitude of the correlations provided evidence that the construct is best conceptualized as a formative, second-order factor as the correlations were moderate in size ( $r_{\text{Similarity-Physical Appearance}} = 0.51$ ;  $r_{\text{Similarity-Suitable Behavior}} = 0.25$ ;  $r_{\text{Physical Appearance-Suitable Behavior}} = 0.57$ ). We evaluated the discriminant validity of the OCP dimensions, using the method outlined by Fornell and Larcker (1981) by comparing the average variance extracted to the squared correlations between the dimensions. All AVE values exceeded the phi squared for each pair, thus supporting discriminant validity (see Table 3). We also tested for discriminant validity using a series of chi-square difference tests. Based on Jöreskog's (1971) procedure, the correlations between each OCP dimension were sequentially set equal to 1. Following each iteration, chi square statistics were recorded and compared to the chi square value of the baseline model. In every case, the chi square statistic for

Table 2  
Scale items, descriptive statistics, and factor loadings.

Factor item	Study 2				Study 3 – younger sample				Study 3 – older sample			
	Range	Mean	SD	$\lambda$	Range	Mean	SD	$\lambda$	Range	Mean	SD	$\lambda$
<i>Similarity</i>												
1. I could identify with the other patrons in the facility.	6	5.02	1.19	.75	6	5.06	1.48	.79	6	4.64	1.26	.71
2. I am similar to the other patrons in the facility.	6	4.88	1.13	.90	6	4.99	1.37	.94	6	4.35	1.48	.89
3. The other patrons are like me.	6	4.69	1.16	.86	6	4.91	1.36	.92	6	4.13	1.38	.92
4. The other patrons come from a similar background to myself.	6	4.27	1.34	.63	6	4.65	1.37	.65	6	4.32	1.24	.64
5. I fit right in with the other patrons.	6	4.74	1.22	.74	6	4.80	1.34	.83	6	4.28	1.37	.84
<i>Physical Appearance</i>												
1. I liked the appearance of the other patrons.	5	5.01	1.04	.77	5	5.01	1.25	.84	5	4.77	1.09	.82
2. The other patrons were dressed appropriately.	5	5.47	1.02	.72	5	5.32	1.21	.87	5	5.18	1.12	.85
3. The other patrons looked nice.	6	5.19	1.15	.85	5	5.25	1.21	.89	5	5.01	1.09	.90
4. The other patrons looked like they were my type of people.	6	4.85	1.20	.60	6	4.67	1.29	.66	5	4.52	1.19	.60
<i>Suitable Behavior</i>												
1. The behavior of the other customers were appropriate for the setting.	5	5.84	0.92	.66	6	5.60	1.29	.78	5	5.68	1.13	.66
2. The other patrons were friendly towards me.	5	5.15	1.03	.65	5	4.60	1.17	.64	6	4.73	1.09	.66
3. I found that the other patrons behaved well.	5	5.57	1.00	.88	5	5.28	1.25	.93	4	5.39	1.12	.92
4. The other patrons' behavior was pleasant.	5	5.50	1.02	.90	5	5.06	1.26	.90	5	5.25	1.15	.94

Note: SD = standard deviation;  $\lambda$  = standardized lambda loading.

the baseline model was significantly lower than the chi square value for the models with fixed correlation levels, providing support for discriminant validity among all the OCP dimensions (Jöreskog 1971).

Following an assessment of the validity of the scales, we determined the reliability of the scales for each OCP dimension. Reliability was assessed by calculating both the construct reliability based on the standardized factor loadings and error variances and also using Cronbach's alpha. Reliability estimates based on both calculations exceeded .70 for all dimensions, ranging from .83 to .89. Overall, the steps taken above suggest that the OCP dimensions meet the standards for construct validation. Table 3 provides AVEs, reliability estimates, and correlations for the OCP dimensions.

Study 3: Final Validation

Data collection. In the third study, we sought to further validate the measurement properties of the OCP scales in a new context (retail clothing) and across two consumer groups: younger consumers ( $n = 173$ ; mean age = 20.47 years) and older consumers ( $n = 166$ ; mean age = 48.97 years of age). Specifically, the third study was undertaken to accomplish three tasks: (1) validate the measurement in two distinct customer groups, (2) demonstrate measurement invariance across these groups, and (3) provide evidence of nomological validity. Data were collected for this study using a quota sampling approach where consumers with an approximate age of 20 years and 50 years were targeted. This process resulted in a total sample of 339

Table 3  
Results of measurement model assessment and scale statistics.

Construct	CR	AVE	Correlations									
			1	2	3							
<b>Panel A: Study 2</b>												
1. Similarity	0.89	0.61										
2. Physical Appearance	0.83	0.55	0.51									
3. Suitable Behavior	0.86	0.61	0.25	0.57								
Construct	Younger sample		Older sample		Correlations (younger sample below the diagonal and older sample above)							
	CR	AVE	CR	AVE	1	2	3	4	5	6	7	8
<b>Panel B: Study 3 – younger and older samples</b>												
1. Similarity	0.92	0.69	0.90	0.65		0.55	0.34	0.48	-0.40	0.38	0.40	0.16
2. Physical Appearance	0.89	0.67	0.88	0.66	0.66		0.63	0.51	-0.38	0.46	0.42	0.09
3. Suitable Behavior	0.89	0.67	0.91	0.71	0.49	0.71		0.47	-0.36	0.36	0.43	0.14
4. Approach	0.88	0.66	0.89	0.67	0.54	0.61	0.57		-0.68	0.64	0.73	0.19
5. Avoidance	0.82	0.60	0.84	0.64	-0.42	-0.52	-0.52	-0.76		-0.59	-0.67	0.01
6. Service Quality	0.98	0.94	0.99	0.96	0.25	0.31	0.41	0.51	-0.38		0.67	0.12
7. Positive Word of Mouth	0.97	0.92	0.96	0.88	0.49	0.56	0.56	0.79	-0.74	0.60		0.19
8. Need for Uniqueness	0.95	0.76	0.95	0.78	-0.03	-0.01	-0.06	0.11	-0.04	-0.05	0.00	

Note: All correlations greater than 0.16 are significant ( $p < .05$ ).

respondents. In this study, consumers were asked to reflect on a recent (within the last 30 days) shopping experience at a clothing retailer and then to respond to the 13 OCP scale items as well as items that assessed approach and avoidance intentions and repatronage intentions.

*Validation of measurement properties.* In order to provide further validation of the measurement properties of the OCP scales, confirmatory factor analysis was conducted for both samples and was followed by an assessment of reliability and validity. The results of confirmatory factor analyses that included the 13 OCP items resulted in good fit across both the younger ( $\chi^2 = 248.10$ ,  $df = 62$ ; CFI = .95; IFI = .95; SRMR = .09) and older ( $\chi^2 = 159.92$ ,  $df = 62$ ; CFI = .96; IFI = .96; SRMR = .07) samples. Moreover, the three factor solution provided significantly better fit over the one factor solution in each sample.

Next, we tested the validity and reliability of the scales. Convergent validity was supported as all items loaded highly and significantly on their specified constructs and the AVEs for each construct exceed .50 in each sample (Similarity: younger = .69, older = .65; Physical Appearance: younger = .67, older = .66; Suitable Behavior: younger = .67, older = .71). Evidence of discriminant validity was also found as the AVE for each construct exceed the shared variance for each pair of constructs. Finally, we assessed the reliability by calculating both the construct reliability and Cronbach's alpha for each scale. The reliability estimates all exceed .70, ranging from .88 to .92 across both samples. In the end, the results of these tests further validate the measurement of the OCP dimensions across both samples. Details including, the AVE and reliability estimates for each dimension are presented in Table 3.

*Tests of measurement equivalence.* Following the confirmation of the measurement of the OCP dimensions in both a younger and older sample, we examined the applicability of this scale across both samples using equivalence testing as described by Baumgartner and Steenkamp (1998). As part of this process, we sequentially tested for (1) configural invariance, (2) metric invariance, and (3) factor variance invariance. Configural invariance was confirmed first by conducting a multi-group CFA in which the OCP dimensions were represented as a three factor correlated model. The model fit the data well in each sample, all factor loadings were significant, and tests revealed that the factors were not perfectly correlated, providing support for configural equivalence.

Next, we assessed metric invariance by comparing the fit of a model where the factor loadings were constrained to be equal to the fit of a freely estimated model. The results of this analysis supported metric invariance ( $p > .05$ ;  $\Delta\chi^2 = 8.96$ ,  $\Delta df = 10$ ) across the two samples, suggesting that factor loadings are constant across samples. Finally, we tested for factor variance invariance by comparing the fit of the freely estimated model to a series of models that sequentially constrained the factor variances to be equal. The results provide partial support for factor variance invariance for similarity ( $p < .05$ ;  $\Delta\chi^2 = 4.48$ ), physical appearance ( $p > .05$ ;  $\Delta\chi^2 = 1.83$ ), and suitable behavior ( $p > .05$ ;  $\Delta\chi^2 = 1.02$ ). Given partial support for the invariance of the factor variances, a relative comparison of the standardized effects across the younger and older sample in the nomological

model is appropriate. Complete details on the AVEs, reliability estimates and factor loadings for each sample are provided in Tables 2 and 3. In all, configural and metric invariance was established across both samples, as well as factor invariance for the physical appearance and suitable behavior dimensions.

*Nomological network for OCI.* The results strongly support that the measures for OCP proposed here are reliable and exhibit strong levels of convergent and discriminant validity. However, in order to be useful for both academic research and in practice these measures should be able to effectively predict customer evaluations of the experience and preferences toward exchange partners. For this reason, we now propose a series of relationships regarding how OCP affects individuals' reactions to a customer experience.

The core concept of OCP is rooted in environmental psychology and the principles of approach and avoidance behaviors. Past research has found that elements of the retail/service environment are important predictors of approach and avoidance intentions (e.g., Donovan and Rossister 1982; Wakefield and Baker 1998). The OCP dimensions should predict consumers' approach and avoidance intentions because other customers have been identified as an important component of the service environment (Baker 1987). Specifically, as perceptions of other customers improve, approach intentions should increase and avoidance intention should decrease.

The items that were used to measure approach behaviors were "I enjoyed shopping at this retailer," "I like this store environment," "This is a place in which I feel friendly and talkative to a stranger who happens to be next to me," and "I like to spend time browsing this store." The items that were used to measure avoidance were "I would avoid having to return to this store," "This is a place where I try to avoid people and avoid talking to them," and "I want to avoid looking around or exploring the store." These items were based on the scales introduced by Donovan and Rossister (1982).

**Proposition 1.** *The OCP dimensions will have a positive, direct effect on approach intentions.*

**Proposition 2.** *The OCP dimensions will have a negative, direct effect on avoidance intentions.*

Research has demonstrated that customer perceptions of service quality are a strong predictor of behavioral intentions (e.g., Bitner 1990; Baker et al. 2002; Cronin and Taylor 1992) and the human factor is a critical component of service quality. Service quality perceptions have largely been measured by focusing on employees as the human factor in a service experience. Extant service quality measures do not explicitly include the effects of other customer perceptions on behavioral intentions. One reason this may be the case is that SERVQUAL, the measure of service quality that has been used or adapted in most of these studies, was developed within the context of industries such as appliance repair and insurance, in which other customers are not a part of the service experience. However, our literature review shows that when multiple customers share the same service facility, perceptions of the other customers who are present can influence intentions and behaviors. Thus, we argue that



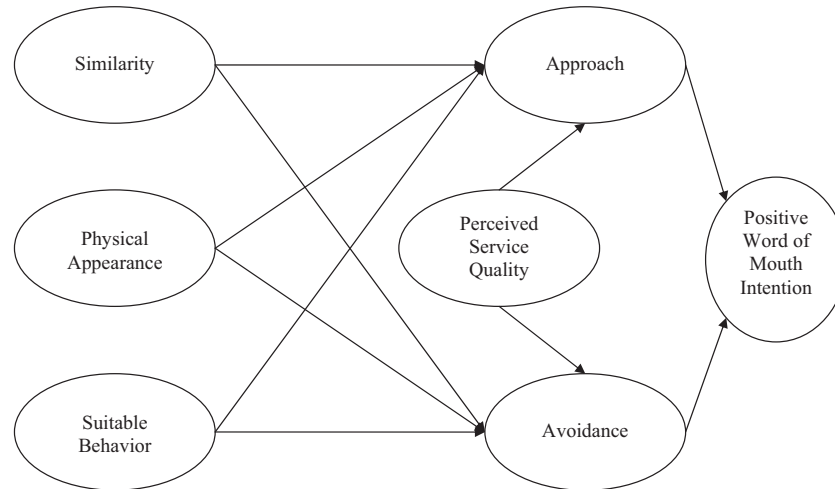


Fig. 1. Nomological network for OCP.

the OCP dimensions provide a complementary extension to the assessment of human factors in a service experience and should still significantly affect approach and avoidance intentions after accounting for the direct effects of perceptions of service quality.

**Proposition 3.** *The OCP dimensions will have significant, direct effects on approach after accounting for the direct effects of perceived service quality.*

**Proposition 4.** *The OCP dimensions will have significant, direct effects on avoidance after accounting for the direct effects of perceived service quality.*

The literature also supports the relationship between approach/avoidance and loyalty behaviors (e.g., Grewal et al. 2003; Wakefield and Baker 1998). Based on this preliminary evidence in the literature, we propose that approach and avoidance will both directly affect a consumer’s willingness to spread positive word of mouth. In order to operationalize positive word of mouth to test these propositions, we adopt three items based on those introduced by Zeithaml, Berry, and Parasuraman (1996).

**Proposition 5.** *Approach intentions will have a positive, direct effect on positive word of mouth intentions.*

**Proposition 6.** *Avoidance intentions will have a negative, direct effect on positive word of mouth intentions.*

The propositions are represented in Fig. 1.

*Results of nomological validity testing.* Nomological validity was assessed by investigating the proposed relationships in separate structural models that included both the measurement models and structural coefficients for both the younger and older samples. Moreover, in an effort to provide a conservative test of the effects of the OCP dimensions on approach and avoidance, we first controlled for the effects of perceived service quality. Specifically, a perceived service quality construct measured using two-items from Brady and Cronin (2001) was included in the model as an antecedent to approach and avoidance intentions.

Prior to estimating the structural models within each subsample, we assessed the degree to which common method bias

may impact the results. First, we conducted a CFA-based one factor test, which revealed that a single latent factor did not adequately represent the data, providing preliminary evidence that method bias is not significantly biasing the interpretation of the data. Next, we employed the partial marker variable technique as introduced by Lindell and Whitney (2001) and Malhotra, Kim, and Patil (2006). Specifically, a measure of consumers’ need for uniqueness was included as a marker variable as it was theoretically unrelated to the OCP constructs. We used six items from the need for uniqueness scale introduced by Tian, Bearden, and Hunter (2001) that assessed the extent to which a consumer purchased products in an effort to be unique. Across both the older and younger samples, the two lowest bivariate correlations between need for uniqueness and the model variables were both less than or equal to .01. Using these correlations as estimates of potential bias in the data, we re-estimated the correlation matrices for the research models and re-ran both the measurement and structural models. The results of these discounted tests revealed no changes in the significance of the research results, suggesting that method bias did not threaten the interpretation of the nomological testing.

First, we assessed the measurement model across both samples. The results revealed that the model fit the data well and that all constructs were measured reliably and validly across both the younger and older samples (see Table 3 for results of the measurement model testing). We report complete scale statistics for the constructs included in the testing of the nomological model in Panel B of Table 3. Results of the structural model tests suggested that the model fit the data well across both the younger ( $\chi^2 = 776.13$ ,  $df = 259$ ; CFI = .96; IFI = .96; SRMR = .09) and older ( $\chi^2 = 554.13$ ,  $df = 259$ ; CFI = .97; IFI = .97; SRMR = .08) samples. Moreover, every proposed path was significant across both samples with the exception of the effects of physical appearance on both approach and avoidance intentions in the older sample.

In the younger sample, we first estimated a model that excluded the paths from the OCP dimensions to approach and avoidance in an effort to establish the baseline effects of service quality on these outcomes. In this model, perceived service

Table 4  
 Results of the nomological model testing.

Hypothesized paths	Younger sample (N=262)		Older sample (N=174)	
	Path coefficients	R <sup>2</sup>	Path coefficients	R <sup>2</sup>
Similarity → Approach	0.26*	.64	0.26*	.61
Physical Appearance → Approach	0.26*		0.08	
Suitable Behavior → Approach	0.17*		0.15*	
Perceived Service Quality → Approach	0.36*		0.50*	
Similarity → Avoidance	-0.15*	.48	-0.23*	.52
Physical Appearance → Avoidance	-0.31*		-0.08*	
Suitable Behavior → Avoidance	-0.18*		-0.17*	
Perceived Service Quality → Avoidance	-0.24*		-0.57*	
Approach → Positive Word of Mouth	0.71*	.78	0.55*	.71
Avoidance → Positive Word of Mouth	-0.27*		0.40*	

**Structural model fit statistics:**  
 Younger sample:  $\chi^2 = 776.13$ ,  $df = 259$ ; CFI = .96; IFI = .96; SRMR = .09  
 Older sample:  $\chi^2 = 554.13$ ,  $df = 259$ ; CFI = .97; IFI = .97; SRMR = .08

\*  $p < .05$ .

quality significantly affected both approach and avoidance and explained 34 percent and 22 percent of the variance in each construct, respectively. When the paths from the OCP dimensions were added to the model, the explained variance in approach intentions increased from 34 percent to 64 percent and the explained variation in avoidance intentions increased from 22 percent to 48 percent. Also, approach and avoidance explained 78 percent of the variance in positive word of mouth intentions. Moreover, similarity ( $\gamma = .26$ ,  $p < .05$ ), physical appearance ( $\gamma = .26$ ,  $p < .05$ ), and suitable behavior ( $\gamma = .17$ ,  $p < .05$ ) all significantly affected approach. Also, similarity ( $\gamma = -.15$ ,  $p < .05$ ), physical appearance ( $\gamma = -.31$ ,  $p < .05$ ), and suitable behavior ( $\gamma = -.18$ ,  $p < .05$ ) had significant, negative effects on avoidance behaviors. Approach ( $\beta = .71$ ,  $p < .05$ ) and avoidance ( $\beta = -.27$ ,  $p < .05$ ) were strong drivers of positive word of mouth intentions (Table 4). Finally, we conducted a post hoc assessment of mediation and the results revealed that the OCP dimensions did not have a significant direct effect on positive word of mouth intentions after accounting for the effects of approach and avoidance, but the indirect effect for each OCP dimension on positive word of mouth intentions was significant, providing evidence of indirect-only or partial mediation (Zhao, Lynch, and Chen 2010).

Similar effects were found in the older sample. First, the inclusion of the OCP effects increased the explained variance in approach intentions from 50 percent to 61 percent and the variation explained in avoidance intentions from 47 percent to 52 percent. Similarity ( $\gamma = .26$ ,  $p < .05$ ) and suitable behavior ( $\gamma = .15$ ,  $p > .05$ ) significantly affected approach intentions, but physical appearance ( $\gamma = .08$ ,  $p > .05$ ) was not a significant driver. These results coupled with the findings from the younger sample provide support for P1. Avoidance was significantly affected by similarity ( $\gamma = -.23$ ,  $p < .05$ ) and suitable behavior ( $\gamma = -.17$ ,  $p < .05$ ), but physical appearance's effect ( $\gamma = -.08$ ,  $p > .05$ ) was not significant. Thus, across both samples, P2 is largely supported as the OCP dimensions consistently predict avoidance intentions. Positive word of mouth intentions

( $R^2 = .71$ ) were significantly affected by both approach ( $\beta = .55$ ,  $p < .05$ ) and avoidance ( $\beta = -.40$ ,  $p < .05$ ). These results provide strong support for P3 and P4 as both approach and avoidance had significant effects in both samples. In the older sample, similar mediation effects emerged as the effects of similarity and suitable behavior on positive word of mouth intentions were partially mediated, but physical appearance did not have a significant direct or indirect effect on positive word of mouth intentions. Taken together, these results provide strong evidence for the nomological validity of the OCP dimensions.

Study 4: Test-Retest

In the fourth study, we assess the test-retest reliability of the OCP scales. When assessing test-retest reliability, factors such as the time between administrations of the survey and the nature of the scales need to be considered. Because the OCP measures introduced in this study assess the respondents' evaluations of other customers during a specific retail experience there are risks of memory and variability effects. Because of this, we employed careful controls during the data collection process in an effort to reduce the bias associated with memory effects. Specifically, in the initial administration of the survey used in Study 3 all respondents were asked to provide a detailed, open-ended description of their service experience. In doing so, they were asked to provide details on (1) the name and location of the retailer that they were evaluating, (2) the purpose of their visit, (3) their interactions with employees, (4) items that they inspected or tried on, and (5) products that were purchased. This open-ended section was then retained and provided to the respondents prior to the second administration to increase the salience of the original event that they had evaluated, allowing for a more accurate test-retest assessment.

One month after completing the original survey, all respondents from Study 3 (N=339) were contacted and asked to complete a short follow-up questionnaire based on the retail

experience that they had evaluated in the original study. As part of this follow-up communication, all respondents were given the qualitative description that they had provided about the original experience at the first administration. This process resulted in 88 respondents (26.0 percent response rate) completing the follow-up study used for the test–retest assessment.

In assessing the test–retest reliability of the OCP scales, a number of tests were conducted. Paired sample *t*-tests and correlations were calculated between individual scale items and test–retest correlations and Cronbach’s alpha were calculated for each OCP dimension. The results of the paired *t*-tests revealed no significant differences in the mean values of each item across time periods, with the exception of the third physical appearance item, which was significantly higher (+.28) in the first time period. Correlations between the scale items ranged from .47 to .67. For each OCP dimension, test–retest correlations for Similarity (.72), Physical Appearance (.72), and Suitable Behavior (.70) all exceed .60. Moreover, the estimates of Cronbach’s alpha for each OCP dimension exceeded .70: Similarity (.95), Physical Appearance (.92), and Suitable Behavior (.92), providing preliminary evidence that the measures are stable across time periods.

### General discussion

Our research extends current knowledge by demonstrating that a service consumer’s perceptions of other customers matter, and that these perceptions can explain variation in outcomes above and beyond that explained by just modeling the effects of perceptions of employees (i.e., service quality). Despite the importance of and interest in this topic, to date marketing scholars’ understanding of the characteristics that drive other customer perceptions has been limited. Moreover, there has not been a reliable and valid instrument to measure OCP. Our research fills these conceptual and measurement gaps. We proposed a theoretically supported conceptualization of OCP to provide a basis for the three-dimensional nature of the scale. The OCP scale was developed and tested in four studies, following scale development guidelines suggested in the literature (Churchill 1979; DeVellis 1991; Gerbing and Anderson 1988; Netemeyer, Bearden, and Sharma 2003). Across three industries, and multiple respondent samples, the scale was found to be reliable and to exhibit strong levels of convergent and discriminant validity. Finally, we built our OCP framework within a nomological network by specifying and testing consequent effects of the OCP dimensions, and examining the incremental effects of OCP over service quality perceptions on behavioral intentions.

In Study 3, evidence was provided about the usefulness of the OCP measures to predict theoretically and practically important relationships. Specifically, the OCP scale effectively predicted customers’ approach and avoidance behaviors (with the exception of the physical appearance to avoidance link for older respondents) to a retail service experience. Also consistent with previous studies, approach and avoidance were strong predictors of behavioral intentions. Overall, these findings provide robust support for the proposed consequent effects and validate our three dimensional conceptualization of OCP. In addition, we

demonstrated that the OCP dimensions were able to add significantly to service quality perceptions in predicting approach and avoidance behaviors.

It is also important to note the value of the relatively short form of the OCP scale. The development of short form scales that still maintain acceptable measurement properties provides several benefits to researchers. First, the reduced form of the scales allow them to be used in a complementary role in ongoing survey efforts as these scales will not dominate limited space in traditional surveys. Also, given the limited number of items, researchers can more easily mix these items among other measures in a survey in an effort to reduce method effects. Finally, the results demonstrate that these sub-dimensions retain their structure well in short form and are discriminant with other measures of the customer experience and behavioral intentions. As a result, researchers can confidently include these items in survey efforts as they should provide novel and independent insight into evaluations of retail customer experiences.

### Theoretical implications

Our findings extend and complement several theoretical frameworks that were used as a basis to guide our study. First, the OCP scale extends social impact theory, because we show that along with the number of people present, proximity and importance, the observable characteristics of other customers present in a retail service setting can also impact consumer perceptions and behaviors. In fact, a comparison of the structural models for the younger and older samples suggests that social cues like physical appearance play a more prominent role in the appraisal process for younger consumers. This result suggests that differences in our data are mostly due to situational characteristics. More specifically, in a service situation where an individual is shopping for themselves, the importance of the physical appearance increases. However, it is possible that customer traits (e.g., attention to social comparison information, need for social approval) may impact the effect of OCP dimensions on outcome variables. More research is needed that leverages the OCP scales to better understand potential differences in the utilization of cues from other customers across types of customers (trait-based) and social contexts (state-based).

Second, we found that, as suggested by social identity theory, consumers prefer other customers in a retail establishment to be similar to them. While this result may seem to be intuitive, academic research has not heretofore empirically addressed this notion. For service researchers, these results reveal an opportunity for future research that investigates the extent to which improvements in OCP can drive increases in identification with other customers and the service provider.

Third, extant research has shown that customers make inferences about the unknown by drawing inferences from cues in the physical environment and employees that are available to them (e.g., Baker et al. 2002). This study extends our knowledge of cue utilization to include other customers in the service setting. To capture a more complete picture of the influence of the physical and social retail service environment on consumers, researchers should include OCP’s in future studies.

Fourth, our findings suggest that consumers in a behavior setting (e.g., retail environment) evaluate others based on behaviors expected of those people in their role as customer. Furthermore, as script theory would argue, these behaviors should represent appropriate sequences of role behaviors that are suitable to the setting. Future studies should investigate the importance of roles and scripts between not only employees and customers, as has past research, but also as found in the interplay between customers. For example, an interesting question for role and script theories is how do managers “train” customers to how to interact with one another?

Finally, our results provide empirical validation to the contentions made by Verhoef et al. (2009) that suggest an experience encompasses more than just a simple evaluation of employee performance. Rather our results reveal that assessments of a customer experience that simply focus on aspects of a firm’s performance (e.g., service quality) may be incomplete in contexts where customers share the service facility. The scales introduced in this research offer a way for researchers to more comprehensively determine what is driving customers’ assessments of a service experience.

#### *Managerial implications*

The OCP scale is a parsimonious, reliable and valid tool that can support emerging managerial initiatives focused on managing the customer experience, customer portfolio, and broader service operations. Our results reveal that failing to account for perceptions of other customers could overlook as much as 30 percent of the variance in customers’ intentions to revisit a firm. This figure is on par with the impact of service quality perceptions and, as a result, service managers need to account for the impact of other customers when developing their service strategies and assessing their impact following implementation. Ultimately the OCP scale can provide managers a way to manage and monitor the composition of their customer base, improve the customer experience, enhance measures of service performance and, where appropriate, encourage interactions between customers. In the following section, we provide discussions on four focal areas of services marketing and operations that could benefit by employing the insights from this research.

#### *Customer segmentation, targeting, and positioning*

Customers that people observe within a service firm, whether in communication efforts, or when they enter the facility itself, become part of the organization’s positioning. Lovelock and Wirtz (2007) underscore this point when they note that in service settings customers examine the customer mix present before deciding whether to patronize an establishment. This suggests that customers can act as informational cues about the type of people that patronize the firm and the type of experience one could expect from a service firm. While a firm can control the communication mix that impacts their position in consumers’ minds, the image of their customer base is more dynamic and without continual monitoring, firms may lose focus on their core positioning. By leveraging the OCP scale introduced in this research, managers could constantly assess current perceptions

of the customers depicted in marketing efforts as well as the customer base in their stores and adjust their targeting and positioning strategies based on this information.

The OCP scale could also aid organizations that want to assess the impact of potential repositioning strategies on the attitudes of their target customers. Specifically, prior to launching a repositioning effort, managers could pretest a repositioning plan using scenario-based research accompanied by the OCP scale to determine how a new target market would evaluate the service experience. Failure to account for other customer perceptions can result in repositioning efforts that fall flat as they fail to resonate with their core or newly targeted customers. A recent example of this is Talbots. Talbots is a retail store that has traditionally targeted career women, by selling classic tailored apparel and accessories in stores designed to evoke a warm, residential feel. Two years ago, the store repositioned itself to attract a younger, trendier customer by adding items such as cocktail dresses and bold statement jewelry (Lutz 2011). However, the newly targeted younger customer not only had trouble feeling trendy when seeing merchandise designed both for her and her mother, but also shopping alongside other customers who represented her mother and not an aspirational peer group. As a result, their sales flattened and their stock price was downgraded (MarketWatch 2011). Retailers facing a repositioning challenge such as this one could benefit from some preliminary testing using the OCP scale to better understand how a mixed customer base may send differential cues to their various target markets. Insights from these research efforts could help managers better calibrate their promotional materials, merchandise selection, and organization of their newly positioned stores.

Moreover, the results of Study 3 illustrate that managers need to be aware that customer age might influence whether and how strongly the OCP dimensions affect behavioral intentions. While each of the three OCP dimensions had effects on approach behaviors in young people, similarity was weighted more heavily by older consumers in influencing approach intentions, and physical appearance was not significant in affecting avoidance for this group. Therefore, marketing efforts, such as advertising, to older consumers should focus on creating perceptions of similarity and avoid issues of physical appearance. By contrast, physical appearance had the strongest effect of the three dimensions on avoidance for young consumers, so marketing tactics should take this into consideration.

#### *Customer portfolio management*

Due to the inherent inseparability in many service experiences, managers need to focus more attention on managing the composition of their customer base. The OCP scale developed in this research can provide a useful tool to assess how customers view the customer base of a service firm and this improved understanding of how customers perceive one another can help retailers refine strategies focused on attracting and retaining the right type of customers. At a broad level, leveraging insights from perceptions of other customers could help retailers better understand who are the “right” customers for their brand and develop strategies to recruit and retain these customers. Similarly, firms

could identify customers who do not fit well with a brand and managers can then reduce their investment in these relationships and even consider “firing” these customers as they may alienate more valuable target customers. In fact, Abercrombie and Fitch recently adopted this approach by offering cast members of the show Jersey Shore payment to stop wearing their clothes as they felt the cast members were inconsistent with the desired image of Abercrombie’s core customers (Horovitz 2011).

#### Customer experience assessment and management

Providing a superior experience for customers is a critical goal for managers of retail service organizations and recent research suggests that other customers play an important role in creating a customer experience (Verhoef et al. 2009). Retail service managers can incorporate the OCP scale to capture a more complete picture of the overall customer experience than has been possible in the past. For example, the scale could be used to better understand social norms expected by customers for issues such as appropriate dress, or suitable behaviors. In doing so, the OCP scale addresses calls in the literature for metrics that can better explain the social environment and its impact on the customer experience (Verhoef et al. 2009). The application of the OCP scale to customer experience assessment marks an important extension of traditional approaches for assessing the customer experience that traditionally focus on perceptions of the firm’s performance (e.g., service quality). Our results reveal that perceptions of other customers play an equivocal role to service quality in shaping the intentions of customers. Using the OCP scale along with traditional service quality measures (e.g., SERVQUAL), managers can gain deeper insight into the customer-related social influences that impact customers. For managers, it offers a way to more comprehensively determine what is driving their customers’ approach and avoidance behaviors compared to service quality alone. Ultimately, by leveraging insights from these assessment efforts, managers could establish a baseline and then implement strategies to leverage the impact of other customers to improve perceptions of the service experience.

#### Customer communities

Finally, our findings have particular importance if managers desire to create and grow customer communities. Specifically, positive OCPs could likely enhance the willingness of customers to collaborate and help each other and also be involved in more communities connected to the brand as customers with high OCPs are more likely to identify with a service firm. The results of an OCP study could provide building blocks upon which managers may encourage customer identification and interactions. Thus, by accounting for the perceptions of other customers, managers can better calibrate their community development efforts and can increase their likelihood of experiencing extra-role behaviors from their customers including involvement in brand communities, customer helping behavior, and loyalty (Johnson and Rapp 2010).

#### Limitations and future research

Like any research project, ours has some limitations. While we were careful to test the scale in different service industries and using different samples, there is a need to gather further evidence of generalizability. In addition, the scale captures relatively broad dimensions of OCP because we designed it to be parsimonious. This broadness leaves the door open for future research to examine the specific characteristics (e.g., demographics) that could influence each dimension.

The concept of other customer perceptions is a complex one that needs more dedicated research. For example, we do not know if the dimensions of OCP have varying effects depending on the commercial setting or type of customer. Future research could compare OCP evaluations across industries to see where it might have the strongest effects on consumer responses. We do not know all the consequences of, or antecedents to, the OCP dimensions. Experimental studies could be designed that would allow the dimensions of OCP to be manipulated to explore these, and other issues.

As customers are given more responsibility in producing their own outcomes in commercial transactions, customer-to-customer involvement will continue to increase and new measures are needed to explain how other customers can impact evaluations of the social aspects of service experiences. The development of the OCP scale provides a key step in the process of better understanding these social dynamics in commercial transactions. Ultimately, the OCP scale enhances researchers’ ability to better explain cues that may impact customer perceptions of social exchange. The results of our scale development process demonstrate that this relatively short-form scale reliably and validly measures individuals’ perceptions of other customers and that these evaluations have direct effects on customers’ reactions to commercial transactions.

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