# Long Lines of Customers: How Does Customer Crowding Affect Service Employees?

**Peer Reviewed**

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## Abstract

The purpose of this study is to explore the effects of customer crowding on frontline service employees.  Numerous studies have investigated how crowding affects customers but there is little research explaining how crowding affects employees who spend significantly more time in the service environment. Reported on is a qualitative study conducted with forty service employees who frequently work in a crowed environment.  The results of the study indicate that service employees experience four types of effects from customer crowding. These effects are: (1) emotional effects, (2) behavioral effects, (3) physical effects, and (4) adaptation effects.  This paper provides a rich and vivid understanding of how service employees are impacted by crowds of customers waiting to be served.

## Introduction

"Some days there would be thirty people or more in line….. During the morning you would see the line just grow and grow…. The customers would cause me to get nervous and it would be harder to do what needed to be done".

Service Employee Steve

Consumers experience negative feelings while in a crowded environment (Machleit et al 2000). However, consumers are not the only individuals that experience negative feelings from crowding. The service employee's comments above demonstrate that employees also experience negative feelings while in a crowded environment.  Service employees spend significantly more time in the service environment and thus may be more affected by customer crowding than customers themselves.   Bitner (1992) has strongly argued that service organizations must understand how variables in the servicescape affect *both* the customer and the employee.  Therefore, the purpose of this study is to explore how employees are affected by customer crowding. Most crowding studies within marketing focus on the customer; however, this paper will focus on the *employee's* perspective of crowding.

Customer crowding is defined as an individual feeling of stress that occurs when a person's demand for space exceeds supply (Stokols 1972).  Crowding and its effects on customers have been extensively researched within marketing (Eroglu and Machleit 1990, Hui and Bateson 1991).  Crowding has been shown to have many negative effects on consumers such as decreased shopping satisfaction (Machleit et al 2000), stress, and tension (Langer and Saegert 1977) and less time spent in store (Harrell, Hutt and Anderson 1980).  However, the customer has been the organism of focus for most studies within marketing.

Crowding has been shown to have negative effects on consumers, so it is important to investigate how customer crowding affects service employees. Since service employees spend more time in the service environment than consumers, the effects of crowding may be more frequent, more intense, and longer lasting.  This paper seeks to explore the effects of crowding on service employees and provide service organizations with knowledge about the impact of customer crowding on their employees.  This paper also seeks to describe the employees' viewpoint or perspective on customer crowding to service organizations by investigating the following questions: (1) how does crowding make the employees feel, (2) how does crowding affect their behavior, and (3) how does crowding affect their well-being. This paper also seeks to close a gap within the marketing and business literature by identifying and describing the effects of crowding on service employees.

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## Literature Review

To understand the concept of crowding it is important to first define the concept of density. Density is the number of people and/or objects in a given environment and is an antecedent to crowding (Eroglu and Machleit 1990). Density is a physical condition of the environment while crowding is a response or appraisal of the environment. Crowding is an individual perception that it is affected by the environment and an individual's personality (Stokols 1972). The physical and social characteristics of a setting influence the experience of crowding. Under identical circumstances, different individuals may experience different levels of crowding.

There are three theories which help explain the crowding phenomenon: these theories are behavior constraint, diminished control, and overload/arousal (Evans and Lepore 1992). The first theory of crowding is behavioral constraint theory. This theory proposes that crowding interferes with an individual attaining their goals because it restricts access to valued resources. This theory was developed from Brehm's (1966) reactance theory and proposes that individuals have a desire to maintain their behavioral freedom (Hui and Bateson 1991). Sundstrom (1975) found that greater constraint was associated with feelings of increased stress. The behavioral constraint theory "predicts that high density increases behavioral constraint, which in turn, leads to ill health or poor well-being" (Evans and Lepore 1992, p.165).

The second theory on crowding is based on control. When individuals are in a high density setting, the environment becomes unpredictable and individuals have little or no control over the situation. Control has been shown to reduce the negative effects of crowding. Sherrod (1974) found that when perceived control was high, the negative effects of high density were decreased. Rodin et al (1978) tested perceived control within a field setting and within a laboratory study and found that people with more control felt less crowded, had more positive feelings, and rated their surrounding as more pleasant than those with less control. There have been numerous studies that have shown that reduced control is harmful and leads to distress and ill health (Evans and Lepore 1992; Averill 1973).

The third theory of crowding is based on overload arousal. This theory suggests that high density "generalizes excessive stimulation that overwhelms the sensory system" (Evans and Lepore 1992, p.167). When this occurs an individual experiences a greater than optimal level of arousal. This high level of arousal has been shown to cause unpleasant feelings, decreased performance of complex tasks, and health problems (Evans 1978). A study by Baum et al (1981) found that people who screened out information handled high density situations better than those who didn't screen out information. Other studies have shown that increased arousal can lead to increased blood pressure (Evans and Lepore 1992). This theory predicts that high density leads to increased arousal

which leads to health problems. A number of studies have found that when spatial density was high, individuals experienced greater physiological stress-related arousal (Aiello et al 1983).

These three theories of behavior constraint, diminished control, and overload/arousal (Evans and Lepore 1992) help explain the numerous and vast effects of crowding that will be discussed in the following paragraphs.

Research on crowding has found that crowding has detrimental effects on human psychology, behavior, and physical health (Evans and Lepore 1992; Baum and Paulus 1987). Crowding has also been shown to cause negative evaluations of the environment (Schmidt and Keating 1979), psychological distress (Evans, Schroeder, and Lepore 1996), and aggression (Regoeczi 2003). It has also been shown to affect task performance (Heller, Groff, and Solomon 1979), affect (Bruins and Barber 2000), and job satisfaction (O'Brien and Pembroke 1982). Langer and Saegert (1977) found crowding to cause stress and tension. Hui and Bateson (1991) found perceived crowding to cause stress on consumers in a service setting. Aiello et al (1975) found that high density causes stress related arousal (Aiello et al 1975). A study by D'Atri (1975) of prison inmates found that those in high density environments had higher blood pressure.

In marketing, crowding has been found to influence consumers' emotions (Hui and Bateson 1991), shopping satisfaction (Machleit, Eroglu, and Mantel 2000), time spent in store (Harrell, Hutt, and Anderson 1980), and re-patronage intentions (Wakefield and Bladgett 1994). Another study by Hui and Bateson (1991) found that crowding causes negative emotions and stress in consumers. Machleit, Eroglu, and Mantel (2000) found that crowding significantly increased negative feelings, decreased positive feelings, or both for customers. They also found that the emotions of anger, disgust, and contempt had the strongest correlation with crowding. Another study by Berhm (1966) showed that high density situations discourage exploration and reduce enjoyment. Overall, crowding has been found to cause negative effects on consumers.

## Method

Due to the lack of research on employees and crowding, a qualitative study was conducted with frontline employees at two different service organizations. Permission was secured from both companies and interviews were set up with a convenience sample of employees. The employees were asked to think about a recent situation at work when the environment was crowded with many customers waiting in line. The employees were then asked 15 open ended questions about this situation. Each interview lasted approximately 30 minutes.

A total of forty interviews were conducted.  All of the interviewees held positions that required customer contact. The interviewees ranged in age from 16-65 and the male to female ratio was thirty-five percent to sixty-five percent. Reponses from employees ranged from 300 words to 1,000+ words.

## Results

The qualitative comments were analyzed and coded using Lincoln and Guba's (1985) guidelines.   First, the author developed a list of effects of crowding from the literature.  Next, the interviews were read and coded into groups.  After reviewing the groupings numerous times, the author finally deduced four themes or effects of crowding.  The four effects of crowding that emerged were: (1) emotional effects, (2) behavioral effects, and (3) physical effects, and (4) adaptation effect.  These four effects will be discussed in the following paragraphs.

*Emotional Effects.*  Seventy-five percent of the respondents reported negative emotions from crowding.  Respondents commented that they became sarcastic, frustrated, impatient, and even short with people when the environment was crowded. One individual said that crowding "made it harder for them to be happy and smile at the customer". Many employees commented that crowding produced stress, tension, and/or pressure. Some individuals reported leaving worked stressed out and needing time to relax and cool down. One individual said that she "was relieved when the day was over" and that she could "finally get away from work". Other respondents commented that they became agitated and would tend to blow up at customers when it was crowded.   One individual reported a strong dislike of crowding and specifically said "I hate it when it's crowded".  Other individuals reported different emotional states such as anxiety and nervousness. One individual reporting feeling fearful and that she was scared that she wouldn't be able to perform.  Overall many respondents reported negative emotions states from crowding.

*Behavioral Effects.*  Seventy-eight percent of respondents reported behavioral effects from crowding.  The first behavioral effect mentioned was lack of concentration.  Respondents reported that it was difficult to concentrate when it was crowded and that it was hard to stay focused. The second behavioral effect was mistakes. Many respondents mentioned that they would make more mistakes and that they would forget to do important entries when it was crowded. The third type of behavioral effect was productivity.  Individuals reported that they would try to go too fast while other individuals said they were more productive but the quality of responses to customer was negatively impacted.  The fourth type of behavior effect reported from crowding was decreased communication with customer.  Respondents reported that they would talk less with the customer when it was crowded, while other respondents mentioned that they would cut out the small talk and get straight to the point with customers.  One respondent reported that they would "get less personal with customer and only give them

basic service" when it was crowded. The last type of behavior effect reported was negative communication toward customer. Some individuals said they would snap and say things that they shouldn't have said when the environment was crowded. Other individuals said that they would blow up at the customers, get edgy with customers, and get sarcastic with customers when it was crowded.

*Physical Effects.* Forty-five percent of respondents reported physical effects from crowding. Respondents reported many different types of physical effects such as high blood pressure, migraine headaches, and lower back pain. One individual reported "getting sick" to her stomach when it was crowded while another individual reported "not being able to breathe" when it was crowded. Other physical effects included fatigue, headaches, dizziness, tight muscles, and flushed cheeks. Other individuals mentioned increased blood pressure, tension, and back aches. One individual mentioned that crowding would cause them to sometimes "break down and cry". Another individual mentioned that the crowds would cause them to catch more colds and flu. The last physical effect mentioned was that the crowds would cause them to physically shake.

*Adaptation Effects.* Ninety-two percent of respondents reported making adaptations in order to decrease the effects of a crowded environment. This effect is based on Helson's (1964) adaptation theory which posits that individuals will engage in ways to minimize the negative effects of a situation. Adaptions effects were the largest and most varied category from the qualitative responses. Many of the adaptations were made during the work shift while other adaptations were made either before or after work. This category consisted of four adaptation effects: (1) focusing, (2) preparing, (3) using humor, and (4), relaxing and/or mediating. Each of these adaption effects will be discussed below.

1.  Focusing: Many individuals reported using focusing to help them adapt to the crowded environment. Some individuals mentioned that they would try to stay focused on only one thing at a time and not letting everything overwhelm them. Others mentioned that they would only focus on the customer in front of them and that they would not look at the crowds waiting in line. One individual mentioned that they would "only listen to the customer directly in front of them". Individuals also mentioned how they would try and block out everything else around them so they could focus on the customer directly in front of them.

2.  Preparing: Many individuals reported that they would try and prepare for the crowds. One individual mentioned that they would try to make sure they have everything they needed, such as extra tea, orange juice, milk, and coffee, before the crowd comes. One individual mentioned that they "like to make a list beforehand" because it helps them stay organized. Another mentioned that they like to have a game plan and will create a plan such as a plan with rules for how to handle oversold flights. Another

individual mentioned that they try to be as proactive as possible so they don't have to worry as much when it gets crowded.

3. Relax and/or Meditate: Some individuals reported that they would mediate before work as a way to help them adapt to the upcoming crowded situation. Some individuals mentioned that they would listen to calming music and do stretches before work while other mentioned that they would mentally talk to themselves such as telling themselves to be patient or I'm ready for whatever is going to happen. Another individual mentioned "using time with God to help prepare for the crowds of customers". Some individuals mentioned that instead of relaxing or meditating beforehand, they focused on relaxing after the crowded work environment. For example, individuals mentioned that they like to go home and have a beer while others mentioned that they like to have a glass of wine at home to deal with stress from crowds.

4. Humor: A few individuals reporting using humor to help them adapt to the crowded situation. Some individuals said that they would smile and tease customers such as "telling customers on flights to Las Vegas that Las Vegas is really Lost Wages". Other individuals mentioned that they would try and crack jokes with the customer as a way to break the ice with customers. Another individual mentioned that they would share stories and laugh with coworkers after the crowds had gone.

## Managerial Implications

The review of the literature on crowding and the findings of this study led to the development of five managerial implications and guidelines for service organizations. These guidelines will help service organizations reduce the effects of crowding on employees and thus improve the overall level of service that service organizations provide. The implications and guidelines are discussed below.

1. Service organizations should consider employees when designing work environments. In particular organizations may want to design the service environment so that the employee feels protected from the customers. Several employees in this study mentioned feeling threatened or imitated by the customers in line. Adding a minor barrier between the employee and the customers could help the employees not feel as fearful of the customers. This is especially important as the number of hostile and enraged customers increases.

2. Service organizations should consider helping employees cope with the effects of crowding. Many employees shared their tips on coping with crowding, such as focusing and using humor, and these tips and strategies may need to be disseminated among other employees. Sharing

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these tips with new employees could help them more easily adapt to their new work environment.  Service organizations should also consider teaching service employees on how they want them to respond in crowded situations.  Employees need to know if management wants them to focus on moving individuals through the line or to focus on providing a high level of service despite the long line of customers. Knowledge about how to cope or deal with crowding may greatly help the employees' emotional and behavioral reactions to crowding.

3.  Service organizations should consider changing or rotating job responsibilities when the service environment is crowded.  For example, service organizations may want to assign a fast food restaurant employee to two hours on the drive through, two hours at the counter, and two hours in the kitchen or dining room.  Rotating job responsibilities would provide employees with a break or cooling off period from customers. Another option for service organizations to consider is providing more breaks for employees during crowded times. Providing employees with small and frequent breaks may help provide relief from the emotional and behavioral effects of crowding.  Another suggestion is to provide a day off between high volume days or to limit the amount of days worked in a row.  Several employees mentioned that they had a harder time coping on the 4th or 5th day of work when compared to their first or second workday during a work week.

4.  Service organizations should strive to make employees feel valued and appreciated on high crowding days.  Service organizations should acknowledge the hard work of their employees and thank them for going the extra mile such as thanking them for working the day after Thanksgiving.  Words of support and appreciation can go a long way toward decreasing the negative effects of crowding. Service organizations should also consider adding perks or rewards for working on high crowding days such as free food and raffles in the breakroom.  Service organizations should also consider recognizing the employee who had the most sales or who served the greatest number of customers.  Words of affirmation and appreciation can quickly and easily lift the employees' spirits.

5.  Service organizations should focus on selecting the right type of employee if the service environment is frequently crowded.  Service organizations should consider using personality testing when selecting employees. Extroverts thrive in crowded environments and thus may be a better fit for the job of a service employee.  An extrovert's reactions, emotions, and behavioral responses may be more aligned with the service levels of the organization.  Extroverts will probably experience less physical effects from crowded environment because they enjoy being around lots of

people.  Personality testing may help service organizations find individuals who are better suited for dealing with crowded environments.

## Conclusion

This paper explored the effects of customer crowding on service employees.  By conducting a qualitative study with 40 service employees, this research project found that service employees experienced four types of effects from customer crowding. These effects are: (1) emotional effects, (2) behavioral effects, (3) physical effects, and (4) adaptation effects. For emotional effects from crowding, most employees reported some type of negative emotions from crowding such as frustration, impatience, agitation, and anxiety.  For behavioral effects, service employees reported that crowding affected their (1) concentration, (2) mistakes, (3) productivity, (4) communication with customers, and (5) communication toward customers.  For physical effects, service employees reported experiencing high blood pressure, headaches, fatigue, susceptibility to more sicknesses, and not being able to breathe at times.  For adaption effects, service employees reported making adaptations during work such as focusing and using humor while other employees reported making adaptations before or after work such as preparing and relaxing and/or meditating.

These findings help to close a gap within the marketing and business literature by describing the effects of crowding on service employees.  Most studies on crowding have focused on the customer while neglecting the service employee who is also in the same crowded environment as the customer.  The qualitative nature of this study provides a rich and vivid picture of how crowding affects service employees.  The findings of this study provide service organizations with knowledge about how their employees are being affected by crowding.  The managerial implications of this study provide service organizations with many tips and guidelines for reducing the effects of crowding on service employees and thus improving the overall level of service that service employees provide.  Employees are a valuable resource and service organizations should try and meet their needs and preferences because happy employees make happy customers.

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