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Customer Greeting in Offline Retail Stores: A Literature Review and a Case Study

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The Customer Experience: Customer Greeting in Offline Retail Stores

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Abstract

The retail industry is confronted with big challenges due to technical innovation, digitalization and online shops. This can be seen in the high number of stores closing across the whole industry. If Brick and Mortar retailers want to succeed in the competition with online stores, they need to rely on their unique characteristics and integrate in-store technologies. One major advantage of offline retailers is the personal service, which increases the shopping morale of customers. An important part of the customer service experience is the personal customer greeting. Retail management are training their employees to professionalize and improve in this regard. This work collects and discusses literature regarding the effect of customer greeting and the future role of salespeople. Behavior scientific methods shed light on ways performance can be improved. Moreover, it reports on studies discussing the utility and feasibility of new technologies in the offline retail industry, and how technology can analyze customer and salespeople's behavior, and improve the customer service experience. The focus lies on recent studies within the years 2010 to 2019. In total six articles are focusing on greeting among the 149 screened articles within the field of offline retailing. The reviewed literature indicates that customer greeting can increase sales and that service performance can be improved with interventions. Moreover, following the reviewed literature, the role of salespeople is changing from performing all in-store productivity tasks to provide personal, interactive service and assistance to customers which involves new technology, internet and social media.

Keywords: customer greeting, retail, store, customer service, organizational behavior management, technology

The Customer Experience: Customer Greeting in Offline Retail Stores

The retailing industry is one of the largest economic sectors in the world in terms of investment, business establishment and large-scale employment. Global retail sales neared 25 trillion dollars revenue in 2018, with American companies such as Walmart, Costco, and Amazon topping the list of most profitable retail organizations of 2019 (Deloitte, 2019; Statista, 2019). Retailing and retailers are changing rapidly, following the pace of technological advances, innovations in digitalization (e.g., e-commerce, social media), and consumer demands (Berman, 2019; Crittenden, Peterson, & Albaum, 2013; Grewal, Motyka, & Levy, 2018; Juaneda-Ayensa, Mosquera, & Sierra Murillo, 2016; Pantano, Passavanti, Priporas, & Verteramo, 2018; Pantano & Priporas, 2016; Rippé, Weisfeld-Spolter, Yurova, Dubinsky, & Hale, 2017; van Doorn et al., 2016). Social media and news release are ripe with examples of 'end of the world scenarios' of how e-commerce will be the end of Brick and Mortar stores, robots will take over the human workforce, and an upcoming recession. Rummler and Brache (2012) adequately stated "The entire business scenario is played out in the social, economic and political environment" (p. 8). What follows is an introduction depicting aspects of today's retail market and the pivotal role of salespeople in delivering outstanding customer service experience for the survival of the offline retailers.

The retail revolution has brought about worldwide mass corporate layoffs, a record high amount of Brick and Mortar stores closing and filing for bankruptcies (e.g., Topshop, H&M, Sears, C&A, Victoria's Secret, Gap, Walmart, J.C. Penney, Tesla) followed by a decline in demand for commercial real estate properties (Berman, 2019; Rippé et al., 2017). Contrary to beliefs, statistic shows an upward trend for all months in the number of people employed in the US retail trade sector since the Great Recession of 2009 up until February 2019. In February

2009 14.7 million people were employed, compared to 15.8 million in the same period in 2019 (U.S. Bureau of Labour Statistics, 2019). Correspondingly, one out of ten people holds one of 18.6 million jobs in retail in The European Union (EU) according to European Commission (2019). The retail industry is also vulnerable to policies and politics governing trade agreements. Changes in the United States (US) trade policies and the withdrawal from the Trans-Pacific Partnership (TPP) agreement has disrupted the global market by adding new trade tariffs, such as tax on imports and exports of goods (e.g., metals, minerals, agricultural products, clothes, electronics and hardware). The US trade war against China creates political tension between countries adding to the speculations of a starting recession (Deloitte, 2019; Jamrisko, 2019). Europe is suffering from internal conflicts such as the United Kingdom's (UK) withdrawal from the EU known as Brexit, the sovereign debt crisis in Greece and Italy's planned budget deficit. The textile and apparel retail business in Europe will encounter the greatest losses due to Brexit (European Commission, 2019). Technology and digitalization offer the consumer ultimate control over their shopping experience. With a snap of the fingers, the consumer can conveniently sit at home and order goods and services online, around the clock, with deeper discounts, free shipping and home delivery the following day. Furthermore, an online purchase provides consumers with the control to edit, update, change or cancel the order before, during and after the delivery has taken place. The dynamic of customer-salesperson interaction in physical retail stores has changed with modern technology (Berman, 2019; Juaneda-Ayensa, Mosquera, & Murillo, 2016; Pantano et al., 2018). Customer's use of mobile phone and smart devices (e.g., tablet, smart watches), combined with immersive instore technology (e.g., storefronts, displays and beacons) have to some extent replaced the function of the salesperson

within physical store locations (Grewal et al., 2018; Juaneda-Ayensa, Mosquera, & Murillo, 2016; Pantano et al., 2018; Pantano & Priporas, 2016; Rippé et al., 2017).

The concept of a smart store is to integrate technology within Brick and Mortar stores to increase insights into operational efficiency, improve service quality and create entertainment. By combining Big Data (e.g., volume, variety, velocity and veracity), and intelligent realities which is a combination of Extended Reality Technologies (XR) (i.e., augmented reality, augmented virtuality, virtual reality & mixed reality), Artificial Intelligence (AI) and the Internet of Things (IoT), offline stores can optimize their operational efficiency, services and customer experience. This is achieved with automated checkout, virtual trial rooms, info beacons, indoor positioning systems, smart shelves, eye-tracking, facial recognition, loyalty discounts, robots, in-store layout optimization, optimized supply chain management and other interactive systems (Hwangbo, Kim, & Cha, 2017; Pantano & Gandini, 2017). Cisco (2013) suggested an extension of the IoT concept developed back in 1999 by Ashton (2009) which was limited to machine-to-machine (M2M)communication. The Internet of Everything (IoE), as suggested by Cisco added people and process components to the equation, resulting in IOE as a superset of IOT (Cisco, 2013; Pantano et al., 2018). In other words the concept merges M2M, people-to-people (P2P) and machine-to-people (M2P) communication, providing retailer and scientist's with the opportunity to collect and analyze data containing subtleties of consumer behavior (e.g., facial recognition, voice recognition, eye-tracking, recognizing gender and age) which before was out of reach (Cisco, 2013; Grewal et al., 2018; Hwangbo et al., 2017; Pantano et al., 2018). Smart store technologies have not become mainstream yet, due to high costs and uncertain and slow return of investment. However, luxury fashion brand retailers such as Louis Vuitton, Ralph Lauren, and Nike are facilitating for a greater customer experience, interacting with technology

and salespeople within offline store locations. There are also limitations regarding legal and ethical privacy regulations (e.g., location data, preference, and appearance) which must be upheld (Grewal et al., 2018; Hwangbo et al., 2017; Oliveira et al., 2018; Wang, 2019).

Despite the popularity of e-commerce, a substantial part of consumers continues shopping in offline stores because of the shopping experience (e.g., personal or social), not necessarily because they have a need for a product or service (Liu, Brun, Burns, & Hou, 2013; Tauber, 1972). Grewal, Levy, and Kumar (2009) defined customer experience as "Customer experience includes every point of contact at which the consumer interacts with the business, product or service" (p. 1). The experience of browsing, looking, touching and feeling the product materials, receiving personal service from employees and social interaction are all valuable outcomes (i.e., recreational and entertaining) related to offline shopping (Liu et al., 2013). Liu et al. (2013) compared consumers of luxury goods in online and offline stores, investigating which attributes of these environments motivates consumers spending. The results show that sensory stimulation of touching, feeling, tasting and interacting with the products and the interaction with in-store salespersons increased trust in the service and quality. There are some inherent risks for consumers buying online related to security (e.g., payment, privacy and information), privacy (e.g., facial recognition, preferences) and shipment (e.g., delays, damaged goods, delays). Top five attributes of online retailing according to luxury shoppers is convenience, price, product availability, no pressure from salespeople and online trust (Berman, 2019; Grewal et al., 2018; Liu et al., 2013). Additionally, customer service was the fourth most common theme among 16% of respondents. According to respondents, the catering and attending to their needs made them feel acknowledged, successful and important when shopping in offline stores. Important traits of salespeople were attitude towards the consumer, the personal service and assistance picking out

products. It can be concluded that the role of traditional salespeople is still valuable and actual (Liu et al., 2013). Clearly, consumers are emotionally influenced by store aesthetic, salespeople, product and brand image (Berman, 2019; Liu et al., 2013; Pantano & Dennis, 2019; Pantano & Gandini, 2017; Pantano et al., 2018). According to van Doorn et al. (2016) in 2025 service from humanoid service robots will be commonplace in the retail market, replacing human frontline employees. Questions regarding to which extent the automated social presence of robots can work in addition to store employees or totally replace them remains to see (Lewis & Loker, 2016; van Doorn et al., 2016).

Organizational behavior management (OBM) is an approach based on the scientific method of behavior science and is used to evaluate best practice within organizations and to make informed decisions based on quantitative data of functional behavior environment relations (Houmanfar, Herbst, & Chase, 2003). This kind of managerial approach is more widespread among high reliability organizations, such as the military, aviation, healthcare, wildfire firefighting and mining, which all have the potential of catastrophic failures causing irreversible damage to the environment and fatal loss of human lives. In these high-hazard environments a large number of decision makers and employees are engaged, working with complex systems and technologies under high-pressure conditions (Alavosius, Houmanfar, Anbro, Burleigh, & Hebein, 2017). OBM practitioners have over a decade built up experimentally proven practices from field and lab experiments with the aim of increasing employee productivity and performance (Haas & Hayes, 2006; Houmanfar et al., 2003; Houmanfar, Rodrigues, & Smith, 2009; Johnson, Houmanfar, & Smith, 2010; Maraccini, Houmanfar, & Szarko, 2016; Rafacz, Houmanfar, Smith, & Levin, 2018; Rummler & Brache, 2012; Tammemagi & O'Hora, 2013). Organizations are the sum of individual behavior and are prone to fail if human factors are not

considered adequately in design of processes and communication (Daniels, Daniels, & Abernathy, 2006). High reliability organizations successfully manage complex and dynamic processes with a range of management practices, such as explicitly and accurately communicating information about environmental contingencies related to the task at hand (Alavosius et al., 2017). A similar management strategy will be required for retail organizations if they want to succeed in the 21st century.

Approach, greeting, courtesy and closing were four classes of the company's courtesy standards which were chosen as customer service behaviors and operationally defined by Brown (1979) for completing the sales transaction. The first-class approach was defined as moving towards the customer, or to immediately waiting for the customer if any attempt on approaching was initiated on the customer's part. The customer would be recognized by a verbal utterance, assuring that they would be taken care of as soon as possible, if the salesperson could not help immediately. Greeting, the second class was defined as the salesperson greeting the customer with "Hello", "Good morning" or other welcoming phrases which were considered socially appropriate. Brown (1979) reports on an intervention with the goal to train salespeople to follow the defined courtesy standards. The four classes of target behaviors were presented in video tapes modeling correct performance of target behaviors as part of the first intervention phase. The study showed that performing target behaviors positively correlated with a higher share of customers rating their service satisfaction as higher.

Customer service verbal behaviors of bank tellers were the subject of the study by Crowell, Anderson, Abel, and Sergio (1988). The researchers used an audio recording system to track the occurrence of eleven verbal categories of behaviors for six bank tellers. The behavioral performance intervention consisted of task clarification, performance feedback and social praise.

As a result of the intervention all target behaviors increased. The experimental manipulation was effective because in the absence of the intervention behaviors declined, and when feedback and praise was reinstated the performance improved again. Greeting customers was defined as the bank teller using an opening phrase such as “Hello” or “Good morning” at the start of the transaction. In a feedback intervention study by Shaw Brown and Sulzer-Azaroff (1994) greeting was significantly correlated with customer satisfaction, which was not the case for smiling and looking. Customer greeting was defined by Shaw Brown and Sulzer-Azaroff (1994) as an act initiated by the bank teller with the use of an opening word or phrase such as “Hello”, “May I help you”. If the customer initiated the greeting first, this was not considered an occurrence on the behalf of the bank teller. Concurrent customer-teller greetings were scored as an instance of greeting. An observation made in the study was that bank tellers who had been working at the local bank for a longer time displayed more emotions when greeting customers compared to one bank teller who was recently employed.

In an study by Slowiak, Madden, and Mathews (2006) customer service behaviors of four appointment coordinators working at an outpatient clinic needed to improve. Appointments were scheduled with customers face-to-face and over the phone. The three target behaviors selected for the intervention were greeting, friendly tone of voice and closing. The intervention consisted of job aid, task clarification, goal setting, feedback and performance contingent consequence intervention. The greeting consisted of four telephone identified components such as (1) “Hello” or “Good morning”, (2) naming the clinic and center, (3) presenting oneself by name and (4) offering to help the customer. In conclusion, all service behaviors increased as a result of the multicomponent intervention. A similar study was conducted in the same setting, with a bigger

sample of 20 appointment coordinators who's telephone service behaviors needed to improve on the request of management (Slowiak, 2014).

Customer service behaviors of 115 employees of a large department store located in the U.S. was the experimental setting of Eikenhout and Austin (2008). The performance intervention involved goal definitions, feedback, reinforcement and the use of a performance matrix. Customer greeting was defined as saying "Hello", or "How are you doing today" to every customer that passed the service employee within two meters or were located in any area in which an employee was working. In this case customer greeting was recorded as customer greeting opportunities. If the customer passing an employee was not looking away or engaged in a conversation with someone else and were passing an employee within two meters there was an opportunity for the employee to greet the customer. Additionally, if a customer was browsing or located within an area where an employee was working, that was also registered as an opportunity. The five identified target behaviors all increased as a result of the feedback and package intervention. It is interesting to note that a reversal phase resulted in an abrupt decline of performance levels.

The purpose of this literature review is to acquire knowledge about the modern-day retail situations in terms of environment, technological advancement and consumer habits. Accordingly, the main research question is to what extent research has focused on salespeople greeting customers within retail stores. Further, how many articles reported on new retail store technology or used technology as measurement of employee performance such as serving customer or increasing productivity. What measures of validity has been reported within the studies? The scope of this literature review is to evaluate the added value of improving performance of sales employee at the initial interaction of greeting customers who enters brick

and mortar retail stores. This very specific act of greeting the customer entering the store sets the occasion for an employee to deliver high-performance customer service, influence consumer spending, and influence satisfaction (Johnson et al., 2010).

Method

Literature searches were performed using OneSearch and Web of Science to identify empirical research studies focusing on customer greeting performance of employees in Brick and Mortar stores. Further the relationship between employee's customer greeting performance and customer service experience in retail stores is of importance for this inquiry. Only peer-reviewed and published journal articles, spanning the years 2010 to 2019 with consistent search parameters, restricted to *human, retail business or organization, available online* and in the *English language* were included. The retail workforce is known for its diversity representing all genders, sexual orientations, cultures and countries, with an age ranging from younger adults (ages between 18 to 35 years), adults (36 to 55 years) and older adults (aged older than 55 years).

Search engines

OneSearch and Web of Science had some differences. The first difference noticed was regarding the labeling of search criteria (i.e., restrictions) when conducting searches. The differences in labeling was not hindering the research investigation and is hence not elaborated on any further. The second difference was the availability of options to restrict searches. For instance, the articles identified through Web of Science were additionally screened for meeting the criteria as peer-reviewed. This was only done for articles meeting the inclusion criteria for deep reading and coding.

Onesearch. The first searches for literature were performed in OneSearch at the University of Nevada, Reno. The library searches over the library catalog and articles from online journals. This search engine is adequate for investigating interdisciplinary topics. Search requests are defined in terms of keywords, author, title, subject fields, or full-text words (approximately 70% of OneSearch content allows full-text search). Two search requests for "customer greeting and retail" within all journals, and "customer greeting" in JOBM, JABA and JEAB was done April 15th, 2018. The search request accounts for articles published after January 1st, 2010 to 2018. In addition, a search for customer greeting in JABA and JOBM was conducted June 4th, 2019 for the period of January 1st, 2010 to December 1st, 2019.

Web of Science. The Web of Science database is considered a more reliable source, covering multidisciplinary information from over 18,000 journals. A literature search was done screening for customer greeting of employees in retail stores as a common variable among them. The first search was done April 19th, 2019 and the last search was done on April 30th, 2019 using the Web of Science engine. Journal articles after January 1st, 2010 was included in this search request.

Search strategies

Searches were defined by using Boolean operators such as and, or and not. By searching terms (e.g., productivity, greeting, customer greeting) independently and in combination. For instance, searching all fields for the combined search terms greeting and retail limit the search to articles containing the combination of the two words. The symbol "*" was used as placeholder, for example on the word greet* to retrieve respective variations, such as greeted and greetings.

Inclusion criteria. Employee's greeting of customers in retail store setting had to be reported in the result and discussion sections for inclusion. No limitation was set on the amount of experiments the article contained, if one of them reported on greeting as described above. Laboratory experiments and the use of hypothetical experimental situations was included in this inquiry, if the findings could be extrapolated to the natural service setting meeting predefined criteria.

Exclusion criteria. Articles were eliminated if they were categorized as literature review, statistical, descriptive, books, dissertations, discussion, editorial and theoretical articles. Also, research topics about gender, sexuality and minority groups were eliminated.

Further excluded were entertainment industry (e.g., cinemas, museums, etc.) and service providers (e.g., banks, travel agencies, adventure packages, spas, hotels), because these settings differ substantially from retail stores. Manufacturers, wholesalers and internet retailers were also excluded. When more than one retail settings were used within a field experiment and some were meeting the inclusion criteria and others not, the studies were included.

The screening processes. A data collection sheet was constructed for use during all search steps, screening of titles, keywords, and abstracts, removal of duplicates, screening full text for eligibility, screening during deep reading and further coding for eligibility. This structure allowed to keep track of changes (i.e., year, reference, abstract, population, measurement(s) & recording, results, summary). Operational definitions defining each category were developed for the screening process to be accurately conducted.

Procedure

OneSearch. OneSearch searches keywords within all fields (e.g. author, title, keywords) if not explicitly changed. This specific parameter did not limit the search. For example, if the search was not restricted by searching within a specific journal the result would provide results from all fields and across disciplines. A few test searches were conducted before performing the final search.

Customer greeting. The advanced search function in OneSearch allowed for the selection of eligibility criteria as available online, scholarly, peer-reviewed, and published after January 1st, 2010 to December 31st, 2018. The first search resulted in 2206 journal articles, by searching the term customer greeting within all fields. The second variation of the search was done to reduce the number of results. This was done by searching for the term customer greeting within subject terms and resulted in two publications. The third search for customer greeting and retail within subject terms gave no results, because it was to narrow.

Step 1. When knowing the limitations of the searches, the first search as shown in Figure 1 and Table 1 was a combination of the terms customer greeting and retail within all disciplines and resulted in 484 published journal articles. Further screening based on the preselected inclusion and exclusion criteria resulted in 63 articles which were added to the data collection sheet for further reading and coding.

Behavior analytic journals. The second search request for customer greeting using the OneSearch engine was within behavior analytic journals. The journals selected for review were JOBM, JABA, and JEAB. The dates for when these searches were executed varied, therefore they are specified for each search in the following steps.

Step 2. The search was done April 15th, 2018, with the combined terms "customer greeting" and "retail" within all fields, in JOBM, JABA, and JEAB. Resulting in one JOBM publication, and none for the others.

Step 3. The search was done June 4th, 2019 for articles in JABA and JOBM by using the search term "customer greeting" within all fields. The search request resulted in 15 articles in JOBM, and three articles in JABA.

Web of Science search. The search for literature as shown in Table 3 was started April 19th, 2019 and run the last time on April 30th, 2019, by using the Web of Science Core database search engine, including the indexes SCI-EXPANDED, SSCI, A&HCI, and ESCI. The literature search was performed searching through all fields (i.e., ALL) combining the search terms with the Boolean search words.

Step 4. The result of all search attempts was 66 journal articles which were selected for further screening and coding. This search request combined six-word groups of synonyms as shown in Table 2 with the use of the Boolean operators and, in accordance with previously defined criteria.

WordNet. The most relevant search terms were combined for the Web of Science literature search. Included terms were retail, store, service, greeting and productivity as shown in Table 2 preparation of this search, word groups consisting of synonyms were created by using a lexical database named WordNet, Thesaurus generators and the main Google search engine. Also, previous literature was scanned for titles, subject terms, and notes.

The final coding processes. With the use of the data collection sheet all main results for both engines (i.e., OneSearch and Web of Science) were analyzed and coded as shown in Table 4

to Table 9. Articles were screened and coded for title, keywords and abstract, if not fully read from the beginning. If any doubts arise whether to include or exclude the article, it was always included for further analysis. The first method for solving such problems was to further read the main sections of the article or reading it full length. Reason for inclusion or exclusion were noted in the data sheet. All main inclusion and exclusion criteria of articles were checked again during the deep reading and coding phase.

Customer greeting. In summary the OneSearch on customer greeting resulted in 63 articles within all fields. All articles were screened based on title, abstract and keywords, which resulted in the exclusion of nine articles. The remaining 54 articles were read full length and coded, which resulted in the exclusion of additional 32 articles. In the next phase, 22 articles were read in depth and coded resulting in further exclusion of 10 articles. In addition, one article was identified as a duplicate from the JOBM search and therefore removed. As shown in Table 4 the 11 remaining articles were studies from different journals, using different research methods and approaches to study service interactions in the context of retail. All 11 articles were coded for measures of validity, measurement and technology as shown in Table 5. The JOBM search resulted in 15 articles as shown in Table 8 which were read in full length. Among the 15 articles eight were coded for reports of validity, measurement method and technology which can be viewed in Table 9.

Web of Science. In summary, the Web of Science search resulted in 66 articles which were screened based on title, keywords and abstract all together. Among the 66 articles, 49 were excluded from further analysis, and 17 included for full-text reading and coding. Afterwards three articles were included as shown in Table 7. Within all 66 articles coding was done for reports on measures of new retail technology and the 13 articles included can be seen in Table 6.

This search was not limited to the predefined exclusion criteria because the purpose was to account for the frequency of articles reporting on new retail technology. Included were also the tree articles which all contained greeting, and all 13 articles was additionally coded for measure of validity and measurement.

Results

In summary all searches resulted in six articles that met all criteria, namely, Johnson et al. (2010), So, Lee, and Oah (2013), Jiun-Sheng Chris Lin, Fisk, and Liang (2011), Otnes, Ilhan, and Kukarni (2012), Söderlund (2016) and Kim (2010). An overview of the 11 articles which remained in the final screening step are shown in Table 4. 3 articles, namely, Jiun-Sheng Chris Lin et al. (2011), Otnes et al. (2012) and Söderlund (2016), observed and reported on the effects of employees greeting customers in offline retail stores, and were included for meeting the eligibility criteria. Two articles contained laboratory experiments and a second field experiment, namely Keh, Ren, Hill, and Li (2013) and Orth, Bouzdine-Chameeva, and Brand (2013). Söderlund (2016) conducted three studies, in which the field study was at Brick and Mortar retail outlets. The other two studies were text-based roleplay scenarios for a clothing store and hotel setting. However, no further specification was provided to where the participants responded to the text-based roleplay scenario. All articles used survey methods as part of the research procedure for one or more studies.

Customer greeting and retail

The result of coding the 11 articles for validity, measurement and new technologies can be seen in Table 5. Otnes et al. (2012) reported on self-service technologies within retail store in the introduction section of the paper. Söderlund (2016) mentioned self-service technologies and

radio frequency identification technology in the introduction section. In a study by Victorino, Verma, Bonner, and Wardell (2012) video vignettes were produced, simulating retail encounters of employees use of scripting in service setting. The video vignettes were inserted into a survey and sent out as a video experiment to a sample drawn from the U.S population. Two research studies by Orth et al. (2013) and Alhouti, Butler, Johnson, and Davis (2014) used audio tape recorder. All articles reported on measures of internal, external and construct validity, except for Chan (2014). Studies which had customers observe and rate the service performance of employees were J. S. C. Lin and Liang (2011), Jiun-Sheng Chris Lin and Lin (2011), Keh et al. (2013), Victorino et al. (2012), Orth et al. (2013) and Otterbring (2017). Secret shoppers rated the performance of employees in a field study by Söderlund (2016). In a study by Lam, Walter, and Ouyang (2013) retail store managers of 63 stores evaluated the customer service performance of their salespeople, and the 245 salespeople rated their own display rule perception and affective states at work. In the studies by Jiun-Sheng Chris Lin et al. (2011) and Jiun-Sheng Chris Lin and Lin (2011) trained observers rate the service encounter between employees and customers and then follow the customer to the store exit to ask them to rate the service encounter. If the ratings of customer and employee match, the reliability and credibility of the experimental defined measures increased. The 20 most frequently used terms among the 11 studies are displayed in Figure 2. This analysis was used to investigate the link between search terms, criteria match and search results.

JOBM

15 articles were published in the JOBM of which two, Johnson et al. (2010) and So et al. (2013), met the criteria for inclusion. All 15 articles with study characteristics are shown in Table 8. In Johnson et al. (2010) customer greeting and productivity of employees were chosen

as the dependent variables for the in-store performance intervention. The independent variables were the introduction of implicit or explicit information given to the employees about work. In the So et al. (2013) study the dependent variables were verbal service behaviors. However, if an increase occurred in two out of the four verbal service behaviors, employee productivity would increase as well. Customer greeting in different service settings was part of performance intervention in four studies by Crowell, Hantula, and McArthur (2011), Johnson et al. (2010), Slowiak (2014) and So et al. (2013). In Table 9 a summary of the 8 articles containing a performance intervention was coded for technology, measurement technique and reports of validity.

Web of Science Core Collection

The Web of Science search resulted in 66 articles and 3 of them mentioned customer greeting at least once. Out of the 3 articles as shown in Table 7, one study by Kim (2010) met the eligibility criteria for inclusion. Greeting, radiant smiles, cheerful looks and eye contact were critical components of employees positive displayed emotions which affected how highly customers rated the service quality of their recent retail store visit. Reports on new technologies in retail stores can be found in 13 out of the 66 articles, as can be seen in Table 6. For this group the word frequency query was applied as well, and the 20 most frequently used words is shown in Figure 3.

Discussion

The main scientific question of this literature review is to which extent research has focused on salespeople greeting customers in retail stores. Journal articles spanning from the year 2010 to the year 2019 have been screened to answer this question. Furthermore, literature

was scanned for customer greeting in offline retail stores in the context of todays revolutionized retail environment (Hwangbo et al., 2017; Juaneda-Ayensa, Mosquera, & Sierra Murillo, 2016; Lewis & Loker, 2016; Shockley, Plummer, Roth, & Fredendall, 2015). It is clear through the integration of Omni channel, social media applications, new in-store technologies such as smart shelves or self-checkout, the role of salespeople will change. Salespeople will not be performing all in-store productivity tasks as before. The review showed that salespeople will focus on serving and teaching customers in the use of in-store technologies, assist with internet and social media apps, and provide an interactive customer service experience in more sophisticated shopping environments (Hwangbo et al., 2017; Javornik, 2016; Juaneda-Ayensa, Mosquera, & Sierra Murillo, 2016). The cross disciplinary search has provided an account of customer greeting in a broader context. Different approaches have been applied to evaluate customer service interaction in the context of offline retail business.

Many aspects are influencing the occurrence and non-occurrence of customer greeting (Eikenhout & Austin, 2008; Johnson et al., 2010; Otnes et al., 2012; So et al., 2013; Söderlund, 2016). Also, the extent to which customers are greeted with a warm smile and genuine interest, an enthusiastic recognition or an emotionless smile can vary due to various reasons (Shaw Brown & Sulzer-Azaroff, 1994). There is a body of research within emotional labor theory which has focused on emotionally displayed rules such as smiling, eye contact, posture and tone of voice (Kim, 2010; Lam et al., 2013; Jiun-Sheng Chris Lin et al., 2011; Jiun-Sheng Chris Lin & Lin, 2011; Otterbring, 2017). Emotionally displayed rules can be translated into cultural practices or cultural norms (Lam et al., 2013). Self-awareness are a prerequisite for an individual to act according to rules. Self-consciousness was according to Burrhus Frederic Skinner (2011) first acquired through verbal interaction with other members of the social community. It was

when the self-became important to other members of the verbal community, that it also became important to the individual (Burrhus Frederic Skinner, 2011). In the context of retail, a store manager wishes to be able to predict and to control the performance of respective employees. When the manager asks the salesperson whether a task has been performed, the employee must act discriminately towards own behavior. Through the process of discrimination training prediction and control over displayed emotions can be achieved. Discrimination is a behavioral process, and not a conscious act executed by the mind (Burrhus Frederic Skinner, 2011). Among the approaches which aim to predict customer service and productivity behavior of employees in retail settings, Kim (2010) focuses on the role of emotional intelligence, Lam et al. (2013) provide an account for the role of displayed rules and affective states, Jiun-Sheng Chris Lin et al. (2011) suggest the emotional contagion theory to understand the mechanisms of service interaction, Söderlund (2016) emphasizes the importance of the employee presence on customer satisfaction and Otnes et al. (2012) provide an elaborative account of marketplace rituals (e.g., language). Concepts such as social intelligence, self-control, affect and motivation are often suggested as predictors of performance, but how to get people to be more motivated and how to improve performance are seldom explicitly explained. The examples of performance improvement provided in Kim (2010) and Jiun-Sheng Chris Lin et al. (2011) are imprecise in advising practitioners on how to bring about change in the performance of employees. The authors Jiun-Sheng Chris Lin et al. (2011) recommend management to employ people with extroverted personalities because these have better abilities to regulate emotions. Emotional behavior has been described by Ashforth and Humphrey (1993) as an implicit and difficult concept within organizational literature. Also, the authors Ashforth and Humphrey (1993) explain the concept of displayed rules as referring to behaviors, making a distinction from

internal states. Further, they mention the practical benefits for customer, managers and peers to relate to observable behavior, then unobservable and speculative definitions of internal states. From a behavior scientific account which would not make a distinction between what occurs inside the person and what can be displayed on the outside such as actions (B. F. Skinner, 1938). What can be managed is the actions of people which shows compliance to the rules, what feelings are related to the rules does not predict or control behaviors which is in accordance or not with the rules (Ashforth & Humphrey, 1993). Salespeople should be trained in deep-acting and empathy strategies to better serve customers. According to Jiun-Sheng Chris Lin et al. (2011) there is a connection between customers buying intention and how deeply felt the service delivery are for the employee. If the employee is feeling cheerful then the employees display of positive emotion towards the customers are more authentic. A problem of generalizing among constructs such as motivation, emotional ability, personal affect and job commitment is that the explanations provided are circular and imprecise without further operationalizing the unit of behaviors entailed and accounting for the behavioral process (Baer, Wolf, & Risley, 1968). According to Holth (2001) the use of redundant concepts as causes for events has no practical use, and the research question is subjected to circular explanations of cause and events. The constructs as mentioned can be accounted for on their own by specifying behavior-environmental contingencies, following the fundamental scientific principle of parsimony (Cooper, Heron, & Heward, 2014). Jiun-Sheng Chris Lin et al. (2011) and Kim (2010) lack operational definitions of customer greeting, which includes a description of the topography of behavior such as greeting and smiling, without specifying its function in context. Nevertheless, the studies by So et al. (2013) and Johnson et al. (2010) have defined greeting and productivity in accordance to the dimension of technology by Baer et al. (1968) as shown in Table 8. Both desired and

undesired behavior were defined by Johnson et al. (2010), which is an important part when designing for performance interventions at workplaces. A functional behavior assessment must be done before starting any training interventions with employees. For instance, both, desirable and undesirable behaviors can increase simultaneously when starting a performance intervention. Both classes of behaviors should be identified, measured and evaluated, with the aim to decrease undesirable behaviors and increase desirable behaviors. In the study by Johnson et al. (2010) the effects of implicit and explicit communication on performance of employees was examined in a brick and retail store. The experiment consisted of an ABC design where condition (A) was baseline, followed by an implicit/rumor (B) and the explicit/rule (C) condition. In the implicit/rumor condition according to Johnson et al. (2010) the store manager selected a random employee and stated the following rumor "I've noticed some suspicious shoppers in our store and I wouldn't put it past Kip to have customers looking at our greeting and productivity" (pp. 40-41). This message was implicit, meaning that it didn't specify the contingency between a specific behavior (e.g., greeting customers within 5 seconds after they entered the shop), the antecedent (e.g., secret shoppers will measure the performance) and consequence (e.g., performance feedback) following the behavior (Johnson et al., 2010). In the explicit rule condition (C) according to Johnson et al. (2010) a memo was distributed to all store employees containing the following information

> "I have recruited secret shoppers to visit our store on a random basis and record your performance in areas of customer service (e.g., saying "hello" to customers that enter the store within 5 seconds) and productivity (e.g., customer service, shipment, merchandising, etc.) This means that high level of customer greeting, and productivity

should be occurring at all times. Your performance in these areas will be included in a group evaluation that will be provided in the form of group feedback." (p. 43).

The message communicated was explicit, meaning that the contingency is specified between the antecedent, behavior and consequence (i.e., the three-term contingency). Johnson et al. (2010) conclude that managers who effectively communicate performance standards may establish stronger stimulus control over repeated work task (e.g., greeting customers), reduce behavior variability, and may increase organizational profit (Johnson et al., 2010).

Neither, Johnson et al. (2010) nor So et al. (2013) accounted for external validity measures in form of out-put such as sales outcome. So et al. (2013) reported further lack of external validity, which could have been avoided through customer satisfaction surveys. On the contrary, social validity and reliability measures were taken by Jiun-Sheng Chris Lin et al. (2011) and Johnson et al. (2010) in the form of surveys given to the employees, customers and use of secret shoppers. Applied interventions should strive to achieve effectiveness, social validity and to make lasting change. Measurement of validity and reliability should be a concern for all who are interested in improving performance at the workplace, and within the studies reviewed there is room for improvement.

The search processes

Although structure, topography and availability of search functions varies among databases, the literature search strategy remains the same. First, the use of OneSearch, an American search database (comparable to, e.g., Oria in Norway) was not an eligible source for conducting a literature search. To compensate for this an additionally search was done in the Web of Science Core Collection. A common finding among both databases was that Johnson et

al. (2010) came up if simply searching the term customer greeting without limiting the search any further. A strength of using multiple databases is the diversity of journal sources in results. One of the goals was to get insight into a new field (i.e., retail) and topics (i.e., customer service interaction) related to offline retail (e.g., physical stores, Brick and Mortar stores, retail stores). The wide range of investigated sources gives a broader perspective on the topic of customer greeting. Literature search across disciplines challenges biases which are pre-existing assumptions and generates new ideas for future field research methodologies. The search results from the two data bases were different and reduced research source and citation bias. Inter observer agreement was not done for any of the searches and this is an overall weakness of the reliability and credibility of the findings, but two databases have been used.

Customer greeting should not be seen as isolated topic, it is a part of customer service behaviors performed by employees to serve customers within service settings. For that reason, most articles mention the term customer greeting when defining customer service or when providing examples of customer service practices. The assumption that few interdisciplinary publications reported on performance intervention in retail stores could be confirmed by the literature review. On the other hand, more publications reported on observed behavior. The search criteria were therefore not limited to performance intervention, as this would have restricted the scope too far (i.e. just two articles were found with this settings).

The majority of the Web of Science search results was not relevant in terms of customer service. Combining "retail", "store", "customer", "service", "greeting" and "productivity" resulted in solely 66 articles, which might indicate that the search was to narrow for this topic and needs to be further systematically replicated. It can also be due to a lesser amount of research published on the topic.

The search results have been exported into NVivo and a word frequency test has been run to check matching between search terms and frequent words. The NVivo word frequency query reported accurately that greeting was not among the most frequently reported words within the OneSearch and Web of Science search result. However, this was expected as costumer greeting is a small subset of the topic of customer service. The search inquiry confirmed this notion.

Future research and Outlook

Future literature reviews should increase the broadness of the search, as in here solely 66 articles have been screened. Also, articles published before 2010 are out of the scope of this review. A deeper look at these articles and the evolution of the topic in time might reveal some noteworthy studies. Furthermore, exploring and comparing customer greeting within service sector (e.g., hotel, restaurants, theme parks, transportation, tour operators) and retail sector might open new insights. The service industry relies heavily on customer greeting and might thus be further developed in this regard than the retail industry. The current literature review have given an overview of the retail situation of today and positioned the importance of customer greeting in offline-retail stores.

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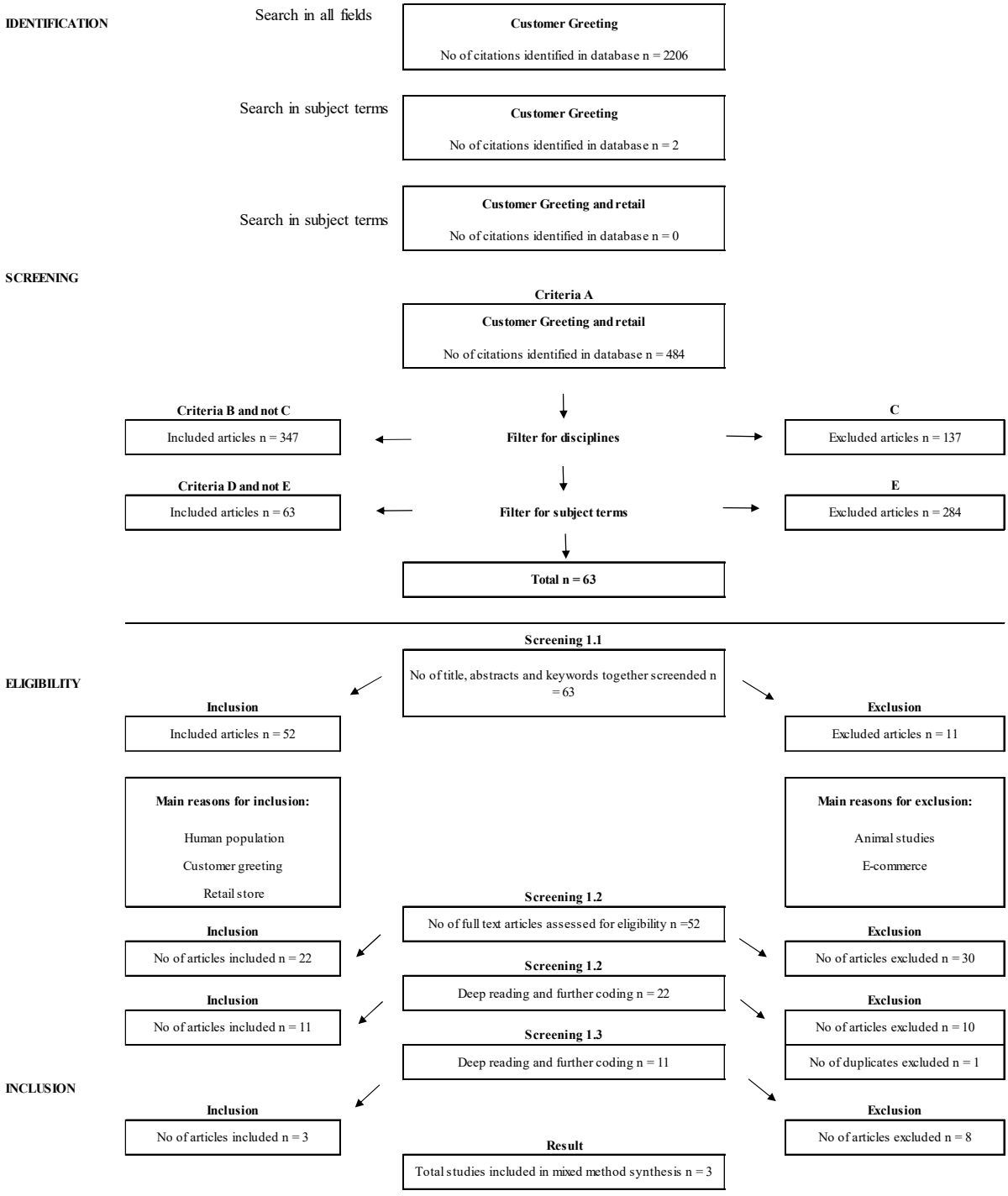

N. N = total number of studies. A - H = represent a specicfic section of the screening process which is explined in Table X. Screening 1.1 = Articles which were added to the data collection sheet for coding. Flowchart of the screening process for the literature review on customer greeting and retail.

Figure 1. Customer greeting and retail: flowchart of the different phases of the systematic review. The procedural descriptions of A-E are listed in Table 1.

Table 1. *A stepwise overview of the screening process.*

	Description of the screening steps for Customer Greeting	N
A	A search was a combination of 'customer greeting' 'AND' 'retail' within 'all fields' and resulted in the largest outcome of 484 published journal articles.	484
B	Continuing with the last search result of 484 publications, the selected inclusion disciplines was anthropology (34), applied sciences (15), business (207), economics (129), environmental sciences (5), philosophy (11), psychology (34), sciences (5), social sciences (23), Sociology & social history (41) which resulted in 347 journal articles.	347
C	Selected disciplines excluded from the search was agriculture (3), architecture (23), biology (6), botany (1), computer science (14), dance (1), ecology (1), education (31), engineering (45), film (1), geography (14), government (10), history & archaeology (28), international relations (1), journalism and communications (5), languages & literature's (25), law (22), library & information science (6), mathematics (4), medicine (13), meteorology & climatology (1), music (4), nursing (2), occupational therapy & rehabilitation (2), pharmacy, therapeutics, & pharmacology (1), political science (16), public health (15), recreation & sports (3), religion (7), social welfare & social work (8), statistics (3), veterinary medicine (1), visual arts (3), women's studies (14), zoology (2) resulting in 247 journal articles.	247
D	Further included subject terms was customer service (9), customer services (36), customers (10), customer satisfaction (26), customer relationship management (8), customer relations (18), employees (15), performance (16), Quality of service (20), retail stores (7), retailing (13), retailing industry (13), salespeople (7), satisfaction (20), service industries (8), service quality (14), services (13), shopping (10), social aspects (13), social interaction (9), work (8), workers (11) resulting in 131 journal articles.	131
E	Finally, the search was narrowed down by excluded subject terms such as banking industry (14), banks (6), electronic commerce (18), hospitality, leisure, sport & tourism (15), hotels & motels (6), internet (11), marketing (44), online (8), restaurants (12), tourism (8) resulting in 66 publication journal articles for coding.	63

Note. A - E = Representatives of the screening steps in Figure 1. N = Number of journal articles

Table 2. *Word Groups used for the Web of Science Core Collection Search*

Retail	Productivity	Customer	Employee
Boutique	Effective	Buyer	Assistant
Retail organization	Effectiveness	Consumer	Associates
Retail outlet	Efficiency	Guest	Cashier
Retail shop	Performance	Loyalty customer	Clerk
Retail store	Proactive	Loyalty member	Company person
Retailer	Productive	Purchaser	Counterperson
Selling store	Productive effort	Regular shopper	Customer Service Assistant
	Store performance	Shopper	Customer Service Representative
Store	**Service**	**Greeting**	Display Merchandiser
Apparel store	Assistance	Address	Employee
Boutique	Customer engagement	Approach	Floor Manager
Brick and Mortar store	Customer journey	Attention	Frontline staff
Chain store	Customer relationship management	Communicate	Laborer
Clothing store	Customer Satisfaction	Compliments	Hired
Department store	Customer service	Encounter	Jobholder
Discount store	Customer support	First response time	Retail personnel
Exclusive shop	Customer support	Greet	Retail Sales Associate
Fashion store	Customer-brand relationship	Greeted	Retail Sales Consultant
Gift store	Experience	Greeting	Retail Sales Representative
Physical store	Experience management	Hello	Retail Team Leader
Retail	Interaction	Hi	Retail Trainee
Retail Organization	Sales process engineering	Initial contact	Salespeople
Retail Outlet	Service environment	Introduction	Salesperson
Sales location		Meet	Seller
Shop		Meeting	Staff
Shopping center		Nod	Store Manager
Shopping mall		Notice	Supervisor
Specialty shop		Opening phrase	Worker
Store location		Reception	Workforce
Store shop		Recognize	Service worker
		Respond	
		Salutation	
		Service contact	
		Signal	
		Welcome	

Note. Strings of grouped synonyms used as search terms in Web of Science Search for literature

Table 3. *Grouped Word of Synonyms for Web of Science Search*

N	Search Terms Combined	Results
1 - Productivity	All fields = (effectiveness* OR product* effort* OR efficien* OR performance*)	1 037 310
2 – Service	All fields = (service* OR customer service* OR experience* OR satisfaction* OR satisfaction*)	1 260 529
3 - Customer greeting	All fields = (customer greet* OR gree* OR "hello" OR "hi" OR encounter* OR interact* OR welcome* OR communicate* OR contact* OR salutation* OR introdu*	2 031 078
4 – Retail	All fields = retail* OR selling store* OR retail boutique* OR retail shop* OR retail organization* OR retail outlet*	24 761
5 – Store	All fields = (store* OR shop* OR store location* OR fashion store* OR department store* OR physical store* OR chain store* OR specialty shop* OR Brick and Mortar stores* OR sales location* OR boutique*))	127 842
6 – Customer	All fields = (customer* OR shopper* OR consumer* OR buyer* OR purchaser* OR regular shopper* OR loyalty customer* OR guest*)	195 533
7 – Combined	2, 4, 5 and 6	1794
8 - Combined	2, 3, 4, 5 and 6	370
9 – Combined	**1, 2, 3, 4, 5 and 6**	**66**

Note. Overview of the search process using grouped synonyms combined with the Boolean operator OR. At the ending of root words or to include several terminal word-endings the * operator was used. In bold face was the final search result and connector AND between them. The coding. Nr. 9 was a combination of search 1, 2, 3, 4, 5 and 6 with the use of the Boolean operator AND. 66 articles were included in the literature review for screening.

Table 4. *Summary of Final Review of Customer Greeting and Retail Literature across Disciplines*

Study	Greeting	Retail/Service context	Type of study/Sample	Purpose	Results
Lin, J. C., & Lin, C. (2011).	Employee's positive affective delivery was measured in terms greeting, smiling, eye contact etc. (p. 190).	Ten service industries (i.e., shoe retailers, apparel retailers, coffee shops, restaurants, bookstores, etc.	Field observation of 217 pairs of employees and customers in retail stores. Employee survey data. Service interaction by trained observers and exit interviews of customers. Use of Structural Equation Modelling for hypothesized constructs.	The purpose of this study was to examine how emotions of employees affect peers and customers (i.e., emotional contagion theory) in service settings. Observations was done by trained observers examining the antecedents and consequences of employee-customer interactions. The service environment, mood and group of co-workers influence the service outcome.	1. Employee's inner emotions influence affective emotions. 2. A positive work culture influence employee's affective delivery and displayed positive emotions. 3. The service environment is related to employee's display of positive emotions. 4. The level of customer satisfaction depend on emotions associated with the service experience.
Lin, J. C., & Liang, H. (2011).	**Employees' displayed emotions included EDE1 = greeting, EDE3 = smiling etc. (p.358).**	**Fashion apparel stores**	**Field observation of 296 pairs of employees and customers in retail stores. Trained observers collecting employee displayed emotion. Customer exit interview. Survey questions were examined by use of Structural Equation Modelling**	**This research aimed to investigate a model of service environments: Relationships between the employees displayed emotion (i.e., greeting and smiling) customer emotion, satisfaction and intensions.**	**1. The physical environment had a stronger influence on customer emotion and satisfaction than the social environment (i.e., employee displayed emotion & customer climate). 2. Emotional contagion theory was supported in that customer emotion and satisfaction were positively associated with employee displayed emotion (i.e., greeting, smiling etc.). 3. The positive affective delivery of employee's were related to customer emotion and satisfaction.**
Otnes, C., Ilhan, B., & Kukarni, A. (2012).	**"Greeting (acknowledging customers as they enter retail or service venues, and perhaps engaging them in "chit-chat" or more prolonged conversation)". (p. 371).**	**Twenty-seven retailers (i.e., providers) ranging between pure goods to pure service providers.**	**Two interpretive methods: 1. Depth interviews with retailers 2. Field observation of marketplace rituals**	**A study within the Customer Experience Management (CEM) domain: The role of language (i.e., marketplace rituals) have on employee-customer interaction. With the purpose of identifying the most common practices, and related positive customer outcomes (i.e., customer experience) associated with language from a retailer's perspective.**	**Six structural and functional dimensions of language (i.e., marketplace rituals) was identified as most important to retailers from interview data and field notes. Greeting customers was identified as one of them. Customer experience, branding promotion, and organizational were strategic outcomes of ritual language according to retailers.**

Study	Greeting	Retail/Service context	Type of study/Sample	Purpose	Results
Victorino, L., Verma, R., Bonner, B. L., & Wardell, D. G. (2012).	"The three parts of the service interaction (e.g., the greeting, the service process to provide the outcome required by the customer, and the closing) were present across all vignettes". (p. 394).	Video clips scenario - Hotel	Study 1. Interview employees (*N*=9) and managers (*N*=8) from service industries. Study 2. Pilot study with students (*N*=14) on the written scenarios. Study 3. A sample drawn from the U.S population (*N*=456) received an online questionnaire containing video clips.	Can customers discover service scripting in face-to-face encounters. Survey respondents viewed video clips of a service interaction. Standardized interaction was hotel check-in and the customized interaction was concierge services. The written vignettes consisted of three different service script levels.	Customers can detect employee's script use and the degree of scripting across standardized and customized service contexts.
Keh, H. T., Ren, R., Hill, S. R., & Li, X. (2013).	“The employee said ‘Hello,’ ‘How are you today,’ or other greetings to me” (p. 216).	Study 1. Laboratory experiment. Study 2 - Supermarket	Study 1. Laboratory experiment, scenario based with a between-subject design. Study 2. Field study survey of 223 customers	The study seeks to answer how service employee displayed emotions (e.g., greeting, smiling, eye contact, thanking, being pleasant) drives customer affect and satisfaction	The findings suggest employee displayed emotion positively influence customer satisfaction
Orth, U., Bouzdine-Chameeva, T., & Brand, K. (2013).	The salesperson greeted customers across conditions. (p. 307).	Laboratory setting: Simulation of a retail shop selling wine	Study 1. Depth Interviews of 18 salespeople across a variety of retail settings in Northern Germany and France. Study 2. Experiment with a between-subject design in Germany (*N*=60) and France (*N*=60).	This study uses mixed design to examine effect of adding a touch dimension in salesperson-customer service interaction in a non-contact and contact culture.	Results extend research on nonverbal communication in retail service encounters, by adding a dimension of interpersonal touch. Trust and customers evaluation of products in this setting was positively influenced when receiving a brief and light touch on the shoulder from the salesperson.
Alhouti, S., Butler, T. D., Johnson, C. M., & Davis, L. (2014).	The customer provides the employee with feedback in the form of body language, greeting and how they respond to being greeted (p. 319)	Respondents of online survey worked in apparel stores, department stores and electronics stores.	Based on results from qualitative interviews (*N*=12) an online survey was distributed consisting of a 2 × 2 scenario-based experiment (*N=204) of* frontline employees or marketing class student with retail experience.	Examine the aspects of a service interaction which causes salespeople to want to approach a customer or avoid contact.	The results are evaluated within the romantic relationship literature framework. 1. The effects of unwanted attention from salespeople in a service encounter. 2. The receptivity and desire to pursue and avoid is dependent on characteristics of salespeople's emotional intelligence.
Lam, C. K., Walter, F., & Ouyang, K. (2014).	Display of positive emotions such as smiling and greeting. (p. 583).	Global fashion retailer, 63 retail stores located across China	Cross sectional design. 245 frontline sales employees and their supervisors, 63 in total was surveyed.	The role of display rule perceptions for service employee's job performance and their affective states (positive vs. negative).	Display rule perceptions have impact on employee performance. The relationship between employee affective state and rule perception are contributing factors. Among employees with little negative affect displayed rule perceptions was positively associated with voluntary learning. However, this association was not present in employees with high negative affect.

Study	Greeting	Retail/Service context	Type of study/Sample	Purpose	Results
Chan, T., Li, J., & Pierce, L. (2014).	A warmly customer greeting is one activity that can increase chance of successful transaction. (p. 11).	Cosmetic sales department store in a large metropolitan of Eastern China	Study 1. Interviews of cosmetic salespeople in China and the U.S. Track outcomes for 92 female's salespeople of the product group's skin care and makeup for 11 brands over a 4 year's period, tracking commissions.	This research investigates the impact individual peer-based learning have on productivity growth and organizational spillover effects.	Peer-based learning is more effective than learning-by-doing for cosmetics employees. Learning successful sales techniques and the direct teaching may prove more beneficial to individuals who can earn both team and individual based compensation on sales.
Otterbring, T. (from 2013). (2017).	Positive employee displayed emotions (i.e., smiling, greeting, etc.). (p. 285).	Scandinavian retail bank	A quasi-experimental two-group factorial design. With 210 customers fill out a survey at a large retail bank after having a brief service encounter at the store entrance with a smiling vs. non-smiling bank teller.	The purpose of the study was to investigate how bank teller's smiling vs. non-smiling at the entrance of a bank customers affective state and satisfaction, as a mediating feeling of pleasure. Presented within the stimulus response framework and in line with feelings-as-information and emotional contagion theory.	Smiling was positively correlated with satisfaction, mediated by pleasure. Contradict previous findings of emotional contagion theory, suggesting that effects of smiling lasts during the whole service encounter.
Söderlund, M. (2016).	**Employee's greeting was expected to represent approachability to the customer. (p. 452).**	**Brick and Mortar retail outlets. 15 categories (e.g., clothing, shoes, books, furniture, sport goods).**	**A between subject experiment with text-based roleplay scenario for study 1 and 2. Participants were business students (*N*=89) for clothing store scenario and (*N* = 85) for the hotel lobby scenario. Field study 3. Field study with secret shoppers (*N*=600).**	**The study 1. Students visiting clothing retail store got text-based role-play scenario. Study 2. Student got text-based role-play scenario in a hotel lobby with other customers present. Study 3 was in a field setting with mystery shoppers observing employees.**	**In Study 1 and 2, the absence of employee produced lower levels of pleasure and customer satisfaction. In addition, no difference was found between the act of greeting customer and presence condition. Study 3. If salespeople were not visible (i.e., presence of employee) when shoppers entered the store (i.e., first impression) the customer satisfaction was rated with a lower score.**

Note. Studies meeting all inclusion criteria after final screening and coding are in boldface. All other studies were excluded after the final screening and coding process. N = number of participants or respondents.

Table 5. *Customer Greeting and Retail: Coding for Validity, Measurement and Technology*

Study	Validity	Measurement	Technology
Lin, J. C., & Lin, C. (2011).	Convergent, discriminant and construct validity	Observation sheets for trained observers to fill inn.	
Lin, J. C., & Liang, H. (2011).	**Convergent validity**	**Observation sheets for trained observers to fill inn.**	
Otnes, C., Ilhan, B., & Kukarni, A. (2012).	**Analytical validity (external)**	**Transcripts from interviews and field notes**	**Self-service technologies mentioned in the introduction**
Victorino, L., Verma, R., Bonner, B. L., & Wardell, D. G. (2012).	Internal and ecological validity	Video tapes was made for a survey	Video technology as an instrument for conducting research
Keh, H. T., Ren, R., Hill, S. R., & Li, X. (2013).	External and discriminant validity	Online experiment in laboratory setting	
Orth, U., Bouzdine-Chameeva, T., & Brand, K. (2013).	Population validity	Audiotaped interview's and paper and pencil for survey	
Alhouti, S., Butler, T. D., Johnson, C. M., & Davis, L. (2014).	Discriminant validity	Audio taped records of interviews	
Lam, C. K., Walter, F., & Ouyang, K. (2014).	Convergent and discriminant validity	Paper and pencil survey	
Chan, T., Li, J., & Pierce, L. (2014).		Outcome recording of organizational data such as cash registers etc.	
Otterbring, T. (from 2013). (2017).	Internal validity	Paper and pencil survey	
Söderlund, M. (2016).	**Predictive, instructional, construct validity**	**Filling out survey**	**Functional magnetic technology and self-service technologies was mentioned in the introduction**

Note. Overview of articles coded for reports of new technology in retail with additional measures of measurement and validity. Studies meeting all inclusion criteria after final screening and coding are in boldface. All other studies were excluded after the final coding. Empty fields suggest that validity was not reported on within the study. In addition, empty field also indicated no new technology related to retail was mentioned in the full text of the article

Table 6. *Overview of Validity, Measurement and Technology coded within the Web of Science Literature Search*

Study	Validity	Measurement	Technology
Kim, S. H. (2010).	**Convergent (construct) validity**	**Survey**	
Shockley, J., Roth, A. V., & Fredendall, L. D. (2011).	Face, construct, scale, discriminant and predictive validity	Cover letter and email questionnaire	Retail store operational design and the planning for self-service technology implementation serving customer's needs.
To, W. M., Tam, J. F. Y., & Cheung, M. F. Y. (2013).	Construct, discriminant, convergent, predictive validity	Shoppers which were respondents could fill in questionnaires immediately or return them by mail.	Suggest that future research should consider integrating new technologies to simulate the customer's emotional experience and perceived service quality with mobile marketing and internet technologies.
Evanschitzky, H., Iyer, G. R., Pillai, K. G., Kenning, P., & Schute, R. (2015).	Convergent validity (discriminant)	Trained interviewers collected data from respondents	This research accounts for how self-service technologies such as the personal shopping assistant is perceived from the shopper's point of view. Included are users and non-users of this technology. Future possibilities of continuous use and factors related to implementation within retail store settings.
Shockley, J., Plummer, L. A., Roth, A. V., & Fredendall, L. D. (2015).		Publicly available data from Campus database a customer satisfaction index	This study discusses how retailers need to make accurate decisions about stocking and to invest in in-store technologies can increase productivity.
Javornik, A. (2016).			A literature review of the introduction of interactive technologies such as augmented reality has shaped consumer behavior. How consumers have perceived and responded to its introduction from a marketing perspective.

Study	Validity	Measurement	Technology
Juaneda-Ayensa, E., Mosquera, A., & Sierra Murillo, Y. (2016).	Discriminant validity		An account of Omni channel with customer as respondents from the fashion retail store Zara. The respondents had used at least two channels during their recent shopping experience. They were answering an online survey about purchase intentions, personal innovativeness, and effort and performance expectancy.
Parker, C. J., & Wang, H. C. (2016).		Transcripts of interviews coded with NVivo	Fashion retail app engagement from the perspective of the customer. M-commerce retail apps for fashion. For the design of apps.
Hernant, M., & Rosengren, S. (2017).		Data on loyalty customers was retrieved from the retail organizations database. The effect of retailer sales could be compared to individual customers	Introducing an online store to a Swedish retail organization consisting of physical retail stores. Investigating the purchase behaviors of customers with this introduction.
Lewis, T. L., & Loker, S. (2017).		Questionnaire	The study examines how in-store technology typical for apparel retailers can be advantageous for employees and the service experience. Also, how employees perceive the usefulness and applicability of the technologies were evaluated. A laboratory and a research site were set up with in-store technologies such as body scanner, product configurator and a social media site for the participants to use and rate.

Study	Validity	Measurement	Technology
Hwangbo, H., Kim, Y. S., & Cha, K. J. (2017).		Case study	Internet of things technologies capture data on customer behaviors and enhancing the customer experience with the use of immersive technologies (e.g., hanger, fitting mirror, displays). The case study provides summary of the many technologies to improve marketing practices, productivity, employee-customer interaction, and increase sales opportunities.
Bell, D. R., Gallino, S., & Moreno, A. (2018).		The organization Warby Parker provided sales and returns data combined with data retrieved from other sources.	How demand and operational efficiency requirements are meet when retailers set up showrooms as part of their Omni-channel strategy. How this strategy benefits the retail organization, in this case an online eye-ware retailer, and how customers benefit from this additional service.
Kazancoglu, I., & Aydin, H. (2018).	Internal validity	Audio recordings of interviews	From a customer's perspective how does purchase intention and Omni-channel services relates. What are cons and benefits using the different contact points and suggestions are made for how to integrate and tailor the experience for the comfort and satisfaction of the consumers.
Harsha, P., Subramanian, S., & Uichanco, J. (2019)		Data retrieved from the retail organization	The problem with price optimization when retail organization uses Omni-channel strategies.

Note. Overview of the articles reporting on technology with additional information on measurement and validity. Articles are sorted in chronological order from the first to the most recent publication spanning from 2011 until 2019. Empty fields suggest that validity was not reported on within the study. In addition, empty field also indicated no new technology related to retail was mentioned in the full text of the article. Studies meeting all inclusion criteria after final screening and coding are in boldface.

Table 7. *Summary of Web of Science Literature Coded for Customer Greeting Across Disciplines*

Study	Greeting	Retail/Service context	Type of study/Sample	Purpose	Results
Kim, S. H. (2010).	**Employee's positive emotional displays include cheerful looks, radiant smiles, eye contact and greetings which is critical for how customers rate the service quality. (p. 2347).**	**Department store**	**Department store salespersons was surveyed on emotional intelligence and adaptive selling. Customers having an interaction for 10 minutes rated salespersons positive displayed-emotion and perceived service quality when exiting the store location. The final sample size of salespersons and customers survey responses were 211.**	**The study examined the relationship between salespeople's adaptive selling, emotional intelligence and service quality.**	1. Salespeople's emotional intelligence had an effect on adaptive selling and positive emotional-displays. Both adaptive selling and positive emotional-displays significantly influenced the quality of the serviced from the customer's perspective.
Lewis, T. L., & Loker, S. (2017).	Greeting is part of traditional services offered to customers within retail stores. (p. 99).	A laboratory and research site for apparel in-store technologies were set up.	71 participants working as clothing store employees or formerly employees were using each technology and rating the feasibility and utility for performing current and future retail store job tasks by filling out a questionnaire.	How employees working in a clothing store perceive the feasibility and utility of technology in performing daily and future job tasks. Technologies were evaluated in terms of promoting job satisfaction, getting work tasks executed more efficiently and to increase the service interaction and engagement with customers.	1. The communication/relationship building with customers was scored by the participants as important within all technologies (i.e., body scanner, product configurator and a social media site). 2. Technology-enables activities and store profit was another outcome suggesting that teaching employees how to apply technologies may increase sales and replace more traditional type of sales targeted behaviors.
Hwangbo, H., Kim, Y. S., & Cha, K. J. (2017).	Marketplace rituals involving greeting. (p. 2).	Fashion retail shops in Korea	A case study of a retail organization applying the smart store concept within its stores	To provide an overview of smart store technologies such as the internet of things technologies and immersive customer experience. From a marketing perspective what is the current practices and possibilities related to integration and applicability.	Provide a marketing and computing perspective of implementing in-store technologies. Internet of things technologies capture data on customer behaviors which allows for personal marketing approaches and targeted store inventory. Investment in technologies provide short term gains in terms of increased sales. Technologies within stores change customer behaviors.

Note. A summary of articles which were included in the final coding process from the Web of Science Core Collection database. These articles mentioned greeting within retail stores at least once.

Table 8. *OneSearch (2010-2019): Review of Literature on Customer Greeting in JOBM*

Year	JOBM Reference	Target Behavior(s)	Setting	Population
2010	Fante, R., Gravina, N., Betz, A., & Austin, J.	Wrist posture safety - various repetitive-motion injuries	A small pharmacy on a university campus	Three female pharmacy technicians
2010	**Johnson, R. A., Houmanfar, R., & Smith, G. S.**	**Greeting customers**	**Clothing shop**	**Sales employees**
2011	Crowell, C. R., Hantula, D. A., & McArthur, K. L.	Greeting customers	Major manufacturer of large home appliances	Employees
2011	Gravina, N. E., & Siers, B. P.	Performance appraisal and performance management	Discussion Article	Industrial and Organizational Psychology discipline & The Organizational Behavior Management discipline
2012	Ludwig, T. D.	Ramona Houmanfar to Be Next Editor	Editorial	JOBM
2012	Szabo, T. G., Williams, W. L., Rafacz, S. D., Newsome, W., & Lydon, C. A.	A package intervention that included training.	Human service setting - challenging behaviors	11 supervisors and 56 front-line staff
2012	VanStelle, S. E., Vicars, S. M., Harr, V., Miguel, C. F., Koerber, J. L., Kazbour, R., & Austin, J.	Extension of previous reviews of Balcazar, Shupert, Daniels, Mawhinney, and Hopkins (1989) and Nolan, Jarema, and Austin (1999).	Review (1998 - 2009)	The Journal of Organizational Behavior Management (JOBM)
2013	Houmanfar, R.	Performance feedback	Editorial	JOBM
2013	Palmer, M. G., & Johnson, C. M.	Group punch-in times on a staff clock	Restaurant sub-franchise	Food service employees
2013	**So, Y., Lee, K., & Oah, S.**	**Greeting customers**	**Gas station**	**Employees**
2014	Clayton, M. C., Boron, J. B., & Mattila, L.	Safety strap on their child	A grocery store	Caregivers with small children seated in a shopping cart
2014	Slowiak, J. M.	Telephone Customer Service (greeting customers)	Medical Clinic Setting	20 full time appointment coordinators in a medical clinic.
2016	Conard, A. L., Johnson, D. A., Morrison, J. D., & Ditzian, K.	Considers a dozen strategies labelled temporal generality tactics that may foster the maintenance and institutionalization of intervention efforts in organizational settings.	Discussion Article (1977 - 2014)	Organizational settings
2018	Kelley, D. P., & Gravina, N.	Value-based care, hospitals, patient, healthcare	Discussion Article	Healthcare
2018	Wilder, D. A., Lipschultz, J. L., King, A., Driscoll, S., & Sigurdsson, S.	Preintervention assessment, behavioral safety, Assessment	Review (2000 - 2015)	Assessment in behavioral safety is more common relative to assessment in OBM in general.

Note. Year = Year of publication. JOBM = Journal of Behavior Management. Setting = Place where the intervention took place. Target Behaviors = The activities of people selected for performance improvement. Population = The people participating in the experiment(s). Bold text = The articles meeting all inclusion criteria for the literature review. All other articles were excluded in this literature review.

Table 9. *OneSearch (2010-2019): Coding for Technology, Measurement and Validity within JOBM Studies*

Year	JOBM Reference	Greeting	Technology	Measurement	Validity
2010	Fante, R., Gravina, N., Betz, A., & Austin, J.	Behaviors in a sandwich shop to determine antecedent events associated with customer greeting (Therrien et al., 2005). The structural analysis utilized five antecedent conditions: manager present, radio, door chime, uncontrolled, and a control condition. (p. 328)	wrist support device	Direct observations	Was not reported on in the study. However, the research finding has both external and social validity.
2010	**Johnson, R. A., Houmanfar, R., & Smith, G. S.**	**"Greeting was measured by recording the occurrences of participants' greeting responses based on opportunities to respond (i.e., how many of the customers that entered the store were greeted). To be counted as a greeting, the participant must have initiated the opening word or phrase within the first 5 s of the customer entering the store. If the customer and participant greeted each other simultaneously, the interaction was counted as an occurrence". (p.41)**	**Video camera and voice recorder**	**Automatic recording, survey interview, paper and pencil**	**Lack of reports considering measures of validity. Reported was that this study was a systematic replication of Goulding. Reader identified measures of internal validity with the use of employee surveys, and external validity measures included customer ratings and secret shopper observations.**
2011	Crowell, C. R., Hantula, D. A., & McArthur, K. L.	A customer observation questionnaire was used to observe employee greeting among other service behaviors (p. 322)	Video tapes with role-play of mock interviews	A behavioral customer observation questionnaire (COQ), feedback charts, trained observer, incentives, job analysis (observation, interviews, task inventory questionnaires, critical incidents, customer focus groups).	Concurrent validation study. Training protocol - validation system across the organization. Social validity. Customer survey as control measure of employee service performance
2012	Szabo, T. G., Williams, W. L., Rafacz, S. D., Newsome, W., & Lydon, C. A.	"Lyle would benefit from acquiring was "Hey, what's your name?" This served as an appropriate greeting upon which later instruction on conversation skills could be built". (p. 280)		Trained staff conducting direct observation: biweekly data, consumer data, service review data	Social validity was measured by evaluating goals, intervention and results. Satisfaction surveys for staff at different points in time following training, two years of working and a satisfaction survey for all stakeholders involved with the consumers' teams.

Year	JOBM Reference	Greeting	Technology	Measurement	Validity
2013	Palmer, M. G., & Johnson, C. M.	"Customer greeting and upselling were increased in a restaurant with the use of task clarification, visual prompts, and feedback (Squires et al., 2007)". (pp. 266-267).	Point-of-sale (POS) system was used to clock in at work.	POS system	Social validity survey
2013	**So, Y., Lee, K., & Oah, S.**	**"Greeting customers with Thank you for coming to our gas station." (p. 140).**		**Manager and researcher observed employee performance**	**No measures of validity were reported. Customer satisfaction and sales volume was not collected**
2014	Clayton, M. C., Boron, J. B., & Mattila, L.	Research assistants greeted customers at the store entrance and collected data on safety strap use (p.54). Grocery stores often have greeters at the store entrance (p.56)		Research assistance greeted customers	Future studies should address issues related to social validity
2014	Slowiak, J. M.	Four components and a phone greeting by saying "Hello", "How are you" etc. Followed by identifying oneself and the name of the clinic and offering help. (p. 41)	Phone monitoring	Direct observation and monitoring of phone calls. Use of data coding sheet.	The functional performance analysis tool has not been validated yet. External validity was lacking in that customer survey was not obtained but should be accounted for in future studies.

Note. Year = Year of publication. JOBM = Journal of Behavior Management. Technology = If modern retail store technology was used or discussed in the article.

Bold text = The articles meeting all inclusion criteria for the literature review. All other articles were excluded in this literature review.

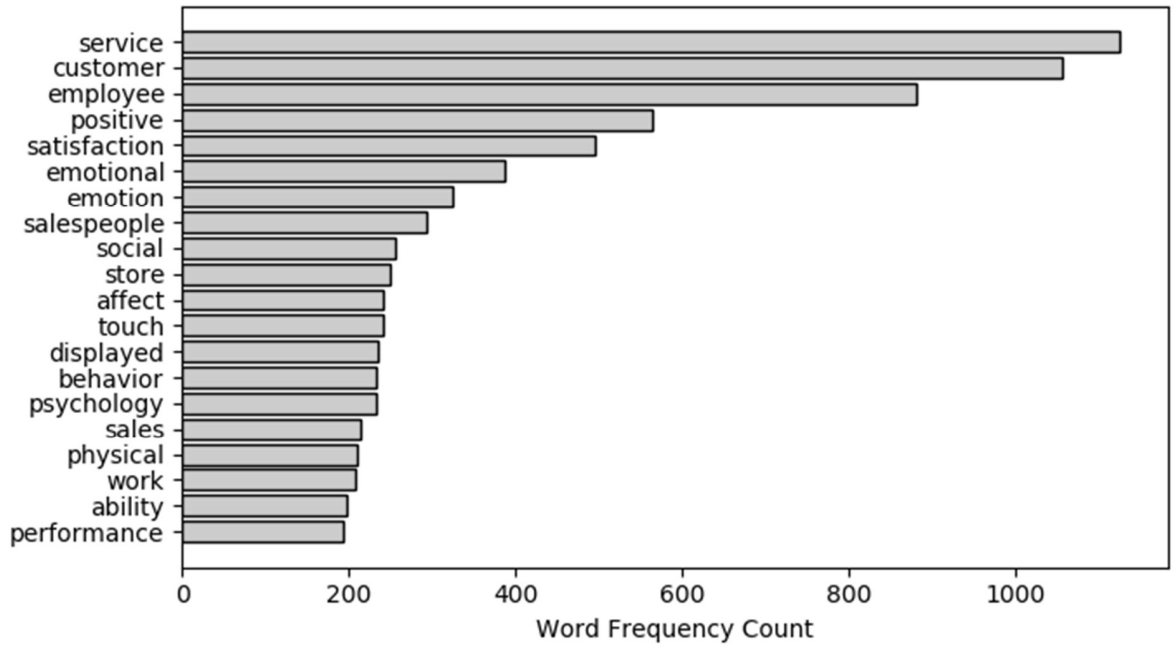

Figure 2. The graph depicts the 20 most frequently used words in the Customer Greeting and Retail search result as seen in Table 4. A list of words was retrieved from NVivo12 by using the word frequency query. Meaningless words were deleted from the list and included no, at, this, that, etc.

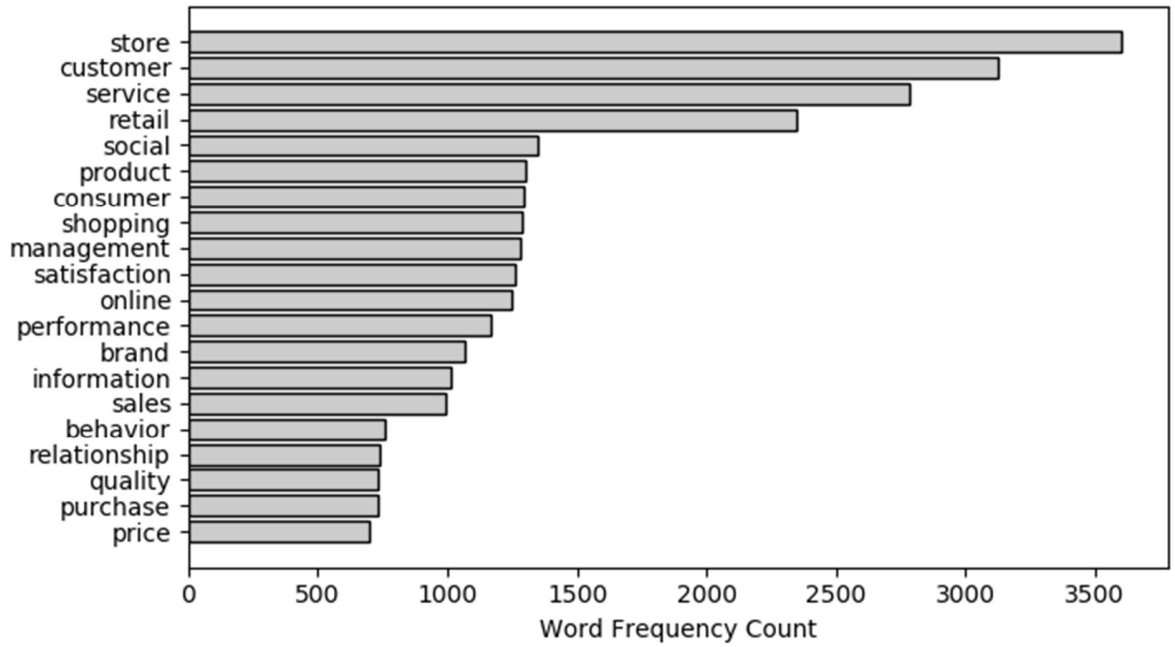

Figure 3. The graph depicts the 20 most frequently used words in the Web of Science search result consisting of 66 journal articles. A list of words was retrieved from NVivo12 by using the word frequency query. Meaningless words were deleted from the list and included words such as it, one, over, specific, research, etc.

A Case Study with MAZE Feedback: Customer Greeting Performance in a Fashion Retail Organization

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Abstract

This is a case study of a consultant firm named MAZE Feedback and one of their customers, which was a fashion retail organization. MAZE is located in Norway, UK, Denmark and Sweden, and offers various businesses technology tools and performance interventions. In this study the focus will be to offer a behavior scientific account of the training intervention and implementation of a feedback software within the fashion retail organization. The goal of the intervention was to improve customer service performance of salespeople, greeting of customers. Responses to customer satisfaction survey was provided by MAZE and regression and modeling have been applied to provide some descriptive measures of customer greeting across physical retail store locations. Perceived strengths and weaknesses of the reported methods used by MAZE will be measured against Organizational Behavior Management literature.

Keywords: customer greeting, retail, physical store, feedback, performance management, customer service employee

A Case Study with MAZE Feedback: Customer Greeting Performance in a Fashion Retail Organization

Organizational behavior management (OBM) is an empirical approach to solve practical problems in the workplace. This approach is a sub-discipline of behavior science with roots from applied behavior analysis, which mainly focuses on socially significant human behaviors. Methods of applied behavior analysis include therapy and training of social skills, language and communication, fine motor skills to solve problem behaviors such as addiction. Practitioners of OBM focus on human behavior related to organizational problems, such as safety, productivity, knowledge, skills and quality (Ward & Houmanfar, 2011). Performance management involves the application of behavioral principles, such as classical and operant conditioning to workplace practices of individuals and groups. Cultural analysis, system analysis and behavior-based safety are additional disciplines of OBM (VanStelle et al., 2012). Applications of organizational behavior management in the workplace should strive to meet the seven dimensions of applied behavior science, which is applied, behavioral, analytic, technological, conceptually systematic, effective and generality as described by Baer, Wolf, and Risley (1968). The focus of OBM is on behavior of individuals and groups, by conducting functional assessments. The aim is to understand environmental contingencies influencing socially significant or target problem behaviors (Houmanfar, Herbst, & Chase, 2003; VanStelle et al., 2012; Ward & Houmanfar, 2011).

Performance management.

The most important tasks in performance management when executing behavioral interventions can be summarized as follows.

Behavior. Behavior is defined as activity of living organisms, all that a person does when interacting with the environment, observable through space and time (Cooper, Heron, & Heward, 2014). The frequency of behavior is aimed to be altered by changing the environment. A target behavior is the behavior selected for improvement, such as answering more telephones at a call center. Other related terms often used in business are key performance indicators, key behavior indicators or key behavior. Whatever the name, how technically the definition of the desired behavior is will determine its success (Daniels, 2000, p. 89). Within behavior science learned behavior is referred to as operant behavior. The operant behavior is emitted, which is a result of operant conditioning. An operant is a class of responses sharing the same function, but not the same topographies. The causes governing operant behavior are not always obvious. Operant behavior is different from respondent behavior which is elicited by a stimulus that precedes it, Respondent behavior is often referred to as involuntary behavior, meaning that the individual is not able to control it or is not subconsciously aware of doing it, such as blinking. An antecedent is an environmental condition or stimulus which occurs prior to a behavior (Cooper et al., 2014).

First, the behavior should be operationalized. This means to clearly define the target behavior and the circumstances under which it occurs and not occurs so that everyone can objectively observe and measure it. When the behaviors have been identified a performance level is decided upon, and the performance can be tracked through the use of a mobile app, a score board or by having someone independently observing and recording the duration, frequency or both of the behaviors (Daniels, 2000, pp. 87-88). The basis for goal clarification, is to provide a good definition of the target behavior, which is context specific and referred to as the behavioral intervention. An intervention are measurements to solve a behavioral problem, in here, for example in an organization. The intervention should be accompanied by a risk assessment and

evaluations in regards of ethical aspects. If training is conducted, the training should be similar to the contingencies of the real work environment. To make sure the skills acquired during training generalize to the work environment.

Measurement. Type of measurement and recording equipment or method must be defined. The measure should be compared to performance standards, and what progresses can be expected within a certain time. The focus should be on behaviors and not performance in terms of results, which might be an additional measure. Different types of behavior measurements have been listed in Daniels (2000, p. 89). Without measurement reinforcement is limited according to (Daniels, 2000).

Baseline. A baseline is a measure taken of one or more behaviors without influencing any control over the behaviors or making any changes to the environment. This should be done over a specific amount or time, until the behaviors under observation has stabilized. If the behavior is deemed stable according to a predefined stability criterion, then evaluations of effect are more reliably drawn (Murray Sidman, 1960). The aim is to control for all other variables in the environment which also can be causing a positive or negative change in target behaviors (Cooper et al., 2014).

Pre-assessment. A pre-assessment of the working environment must be conducted. A good pre-assessment can provide greater insight about the variables at work. The pre-assessment should consist of collecting data on the behaviors of interest. The data collection process should stop when the behaviors under observation have reached a stability criterion. Clarification of job roles, responsibilities and activities over what should be done is necessary. The best performer and repeated activities or best practices should be defined. A functional analysis of target behavior has to be conducted, in order to observe what type of performance manipulation is

required to bring about the desired performance change (Baer et al., 1968). Finally, the value of improvement must be evaluated against the cost of the solution (Block & Brillinger, 2000).

Stimulus control. The discriminative stimulus is what precedes or occasions the occurrence of operant behavior, through differential reinforcement during the lifetime of the individual. Differential reinforcement can be described with the following example. The discriminative stimulus signals that the likelihood of operant classes of responses will be reinforced in its presence. For instance, requesting a coffee in the presence of a service employee at a restaurant will probably lead to a coffee being served. However, when in the presence of someone unfamiliar or when sitting at the kitchen alone the request for a coffee will probably not be reinforced. The absence of someone's presence or the absence of anyone should serve the function of an S-delta. An S-delta is the characteristic of stimuli preceding a response signaling the absence of reinforcement, such as a STOP sign (Pierce & Cheney, 2013). The process of discrimination entails that an individual differentially responds to the presence of two or more stimuli or events. Response frequency and behavioral variability are dimensions of response strength (Pierce & Cheney, 2013). Discrimination can be used as a measure of stimulus control strength. Generalization is a process at the other end of the continuum of discrimination. It can be explained as the occurrence of a conditioned response to the presence of a conditioned stimulus without direct training. Generalizations are often referred to as occurring across settings, time, and people (Pierce & Cheney, 2013).

Reinforcement and punishment. Contingencies of reinforcement are events that follow behavior and may be presented or removed. The effects of behaviors are to either increase or decrease frequency of responding. Positive reinforcement is a basic contingency of operant behavior. A positive reinforcer is a stimulus or an event that strengthens the probability of an

operant occurring when present (Pierce & Cheney, 2013). Negative reinforcement involves an increase in responding followed by a decrease or removal of an event or stimulus. Positive punishment can be recognized when an operant produces an event followed by a decrease in responding. Negative punishment consist of removal of stimuli or event, followed by a decrease in frequency of responding (Pierce & Cheney, 2013). Reward does not say anything about the increase in behavior or performance, but the concept of reinforcement is dependent on an increase in behavior. According to Daniels (2000, pp. 219-221) paying employees more is not necessarily correlated with increased performance, which often is mistaken when rewarding employees. There is a difference between reward and positive reinforcement. Employees who perceive their workplace as enjoyable in terms of environmental and social reinforcers have a better basis for performing well (Daniels, 2000, p. 219). Negative reinforcement may increase undesirable behaviors, such as calling in sick instead of arriving five minutes to late at work. The employee might increase his days of sick leave to avoid the negative consequence such as punishment from a supervisor Murray Sidman (1993). Counter control is observed as increase in avoidance and escape behaviors, but in the worst case it can lead to retaliation. The individual act's in punishing ways against the surrounding environment, such as cursing at a person or an object, hitting and kicking anything that is within reach. These behaviors increase in the presence of negative reinforcement and under punishing conditions (Murray Sidman, 1993).

Feedback. Feedback is suggested to have the functions of both an antecedent and as a consequence for behavior. Antecedents are stimuli or events which precedes and evoke a response. For instance, goal clarification, a nudge, the presence of a store manager are all stimuli or events which can have antecedent effects (Crowell, Anderson, Abel, & Sergio, 1988). (Daniels, 2000, p. 102). When feedback is functioning as a consequence following behavior then

it has response-strengthening effects (Crowell et al., 1988; Daniels, 2000). Performance interventions which uses feedback interventions can be efficient in getting behavior started (Daniels, 2000). How likely it is that an employee responds to feedback depends on each individuals unique learning history and the current situation. Daniels (2000) state that previous experiences with consequences, current consequences and the consequences expected determines how the employee will respond to the managers feedback. Performance feedback from management on customer service behaviors are said to be less frequently compared to feedback related to observable outcomes, such as increased sales (Eikenhout & Austin, 2008; Loewy & Bailey, 2008). Feedback can be delivered visually (e.g., textually, graphics or from recordings) and verbally (in-person, over the phone, in a smartphone app). Often in organizational settings it is acceptable to deliver group feedback, while individual feedback is done more privately. Performance goals are often subject to feedback, and both positive and negative reinforcement can be experienced by the employee when providing feedback.

Contingency. The concept of contingency has been applied to different levels of analysis. According to K. A. Lattal (1995b) the concept is sometimes referred to as schedules of reinforcement, the relationship among discriminative stimuli, and to describe the relationship between responses and other events that follow such as reinforcement or punishment. Cooper et al. (2014) defines a contingency as the temporal contiguity between a response and the consequence that follows. Response rate, pattern of responding and response topography are functions of contingencies (K. A. Lattal, 1995a). The three-term contingency of reinforcement consists of antecedent, such as a discriminative stimulus, the response of an operant class and the consequences that follows (Pierce & Cheney, 2013). The three-term contingency is applied to conduct functional assessments of environment-behavior relationship.

The principles of contingencies are to bring about change in desired behaviors by changing the environment. In a study by Therrien, Wilder, Rodriguez, and Wine (2005) a behavioral intervention, targeting customer greeting performance of employees, implemented a doorbell, which chimed each time a customer entered the restaurant. The doorbell functioned as an antecedent condition. The discriminative stimulus, sound of the doorbell was signaling or prompting employees to greet the customers. Functional assessment is used to identify variables in the environment, which may bring about change in behaviors. In the experiment by Therrien et al. (2005) antecedent stimuli were manipulated in order to see which conditions occasioned greeting customers more frequently. Results of the intervention suggested that the presence of the manager combined with the doorbell had an effect on employees greeting performance. Also, when adding verbal and graphic feedback by the manager, the greeting performance sustained at a higher level.

Communication. The communication strategy must involve all levels of the organization. Clear organizational values and defined practices (i.e., activities) which directly relate to the organizational goals. Responsibilities should be distributed among employees and immediately asses up against performance goals, and how urgent they are.

Verbal behavior

Complex social phenomena may, according to Ward and Houmanfar (2011), need a special account in order to be adequately accounted for. A complex to simple approach suggests that factors such as language (i.e., verbal behavior) and cultural practices must be acknowledged and included in the analysis of complex human behavior (Hayes, Bunting, Herbst, Bond, & Barnes-Holmes, 2006; Johnson, Houmanfar, & Smith, 2010; Maraccini, Houmanfar, & Szarko, 2016). The simple to complex approach which is the basis for advances made within the field of

behavior science resulted in a rigorous technology of behavior (Arntzen, 2012; Kennon A Lattal & Perone, 1998; Saunders & Green, 1999; Murray Sidman, 1960, 1994; Skinner, 1938)¨.

According to Skinner (1957) simple geometrical and mechanical principles govern non-verbal behavior. This means, for instance, that exerting force to an object will make it move in a certain direction or moving away from something will as an immediate consequence increase the distance from the object. Verbal behavior has dynamics and topographical properties, which are different to nonverbal behavior, according to Skinner (1957). For instance, when a speaker is requesting a cup of coffee while at a coffee shop, the speaker is behaving indirectly upon the environment by producing sound patterns which only in the presence of a listener induces the other person to bring coffee. Furthermore, the consequence of drinking the coffee has no relation to the form of the verbal behavior of requesting coffee. Verbal behavior was preliminary defined as "behavior of speakers is reinforced through the mediation of other persons" (Skinner, 1957, p. 2). In chapter eight of the book *Verbal Behavior* an elaboration of the first definition is provided, accounting for the role of the listener "behavior reinforced through the mediation of other persons [who] must be responding in ways which have been conditioned *precisely in order to reinforce the behavior of the speaker"* (Skinner, 1957, p. 225).

Skinner was not able to exhaust all accounts of verbal behavior, and the role of the listener who is mediating consequences does not only respond verbally. The account of the speaker cannot be separated from non-verbal behavior. Eventually, the extent to which verbal behavior can be useful, depends on the same principles that govern non-verbal behavior. Verbal behavior can be categorized as advice, warning, promises and threats (Skinner, 1957).

Relational Frame Theory (RFT) has expanded the account of Skinner (1957) of verbal behavior. RFT is an attempt to account for important parts of complex human behavior, often

referred to as language and cognition. RFT with application such as Acceptance and Commitment Therapy (ACT) are based on operant experiments, conducted with humans and non-human animals. It showed that there are basic differences in terms of language, concept formation, problem-solving, deductive reasoning, and intelligence. Different accounts have been provided to why humans can derive relations among stimulus classes without directly observed training and learning (Barnes Holmes, Barnes Holmes, Smeets, Cullinan, & Leader, 2004). M. Sidman and Tailby (1982) provide an account of conditional discrimination of stimuli and equivalence relations (e.g., reflexivity, symmetry and transitivity) with the use of matching tasks. A simple matching task contains a sample stimulus "green" and at least two comparison stimulus "blue" and "yellow". With the use of a conditional discrimination procedure the individual is trained to discriminate between A-B-C. When the sample stimulus (A) is trained to be the same as (B), and (B) is trained to be the same as (C) new derived relations between stimuli occurs among humans who have acquired a verbal repertoire. Derived in this context refers to not being directly trained, it is generalization of stimulus function between B to A, A to C, and C to A. For instance, if A equals B, then the derived relation would be that B also equals A, which is an example of a reflexive relationship. Furthermore, if training A to B, and B to C, the derived relation would be A equal's C which is an example of symmetry. Finally, if C equals to A then a relationship of transitivity has occurred. All these relations must be achieved to conclude that stimulus equivalence has been achieved. Stimulus equivalence has only been evident in verbal humans so far (Barnes Holmes et al., 2004). Without further training relations can be derived even between novel stimuli such as smell, sound, textual and visual stimuli.

RFT is based on stimulus equivalence. Barnes Holmes et al. (2004) and Hayes et al. (2006) suggested an operant account of derived stimulus functions (e.g., smaller vs. bigger,

younger vs. older, smart vs. stupid). This is established through a history of multiple exemplar training and differential reinforcement and results in generalized operant classes of derived relations. These derived relations can then, according to RFT, be brought under antecedent and consequential control (Barnes Holmes et al., 2004). An example from RFT is the relationship between (A) a dollar (B) dime and (C) penny. If it is learned that (A) is larger than (B) then it is derived that (B) is smaller than (A) and this is referred to as mutual entailment. Compared to stimulus equivalence this relationship have an added dimension such as size and shape. By training the relationships between A and B and between B and C, the relationship between A and C can be derived. This is referred to as combined entailment and transformation of function. Together these relationships constitute relational frames. Rules as contingency specifying stimuli is according to Houmanfar, Rodrigues, and Smith (2009) not covering why some rules are effective for some listeners and for others not.

The role of the listener was not well enough accounted for by Skinner (1957) when defining the verbal episode. Rules can influence the listener in terms of source, accuracy, implicit or explicit information, and its effect on the listener (Houmanfar et al., 2009). Peláez and Moreno (1999) outlined a taxonomy of verbal rules, which includes a functional and topographically account of accurate and inaccurate, implicit and explicit, simple and complex and source, which is suggested to differently alter the behavior of the listener. Explicit rules specify the three-term contingency which consist of antecedent, response and consequence. Implicit rules leave out context. An example for an implicit rule is “do your homework”, while an explicit rule is “do your homework now, and in 1 hour you will get rewarded with 10 minutes gaming time if you have written a page”. The complexity of rules refers to characteristics of stimuli dimensions, such as shape, color, texture, height and higher order relations such as faster

than or rounder than. When employees of a company are subject to complex rules, it is more difficult to follow them, and the hand-off of information is subjected to increased vulnerability with regards to accuracy and the delivery of explicit organizational information.

The delivery of accurate and inaccurate rules is related to how precisely descriptions of contingencies are communicated (Peláez & Moreno, 1999). Consider a manager saying to his employee “for each hour worked, you will get paid 20 dollars at the end of the day”. If this is an accurate rule, the employee is payed and will follow the rule in the future. However, if the rule is inaccurate and the employee is not paid, the likelihood of the employee following the rule in the future is reduced. In the workplace the accuracy of rules can vary, and employees may choose to ignore rules which are delivered by their management, if they do not accurately depict the contingencies of their work environment. Unclear communication of rules (i.e., workplace contingencies) can lead to distortion of stimulus control, followed by increased variability in performance. This was shown by Smith, Houmanfar, and Denny (2012), Johnson et al. (2010) and Houmanfar et al. (2009) in lab and field experiments.

The source of rules, which is also addressed by Peláez and Moreno (1999), can have an effect of how employees respond to it. A rule delivered by a manager may exert more control than a rule delivered by a recently hired employee. Another source is the self-generated rules which may be derived from the individuals learning history or current situational dimensions, such as peers may be in accordance or not with desired workplace behavior. Through the derived relational responding theory, the characteristic offered in the account of Peláez and Moreno (1999) with some elaborations can be exerted into practice in the workplace. The perspective holds that it can be both, the individuals learning history and the present contingency, which asserts control over rule governed behavior. Although a rule may specify a contingency, any

consequence of the rule may be derived. Management should focus on organizational communication according to Johnson et al. (2010) "The challenge in designing interventions lies in making explicit and available what is usually implicit" (p. 14).

Goal clarification and feedback. Earlier studies which have assessed the effect of goal clarification and performance feedback on customer greeting behavior have been Slowiak, Madden, and Mathews (2006), Shaw Brown and Sulzer-Azaroff (1994); Slowiak (2014), Eikenhout and Austin (2008), Squires et al. (2007).

Customer service

Crowell et al. (1988) conducted a customer service intervention with bank tellers, measuring eleven verbal behaviors, including greeting customers. They audiotaped and coded the performance of employees in the study. The intervention consisted of task clarification, performance feedback and social praise. The study accounted for the customer journey and service interactions before implementing the intervention. In a study by Shaw Brown and Sulzer-Azaroff (1994), a table with five spaces was set up and customers could rate their satisfaction by putting a poker chip in. The satisfaction rating was ranging between five dimensions of unsatisfied to extremely satisfied. At the end of the service interaction the teller gave the customer a poker chip and requested that they would rate the perceived service by putting it in one of the boxes at a table set up. The response cost of rating customer satisfaction was assumed to be less when they had to get rid of the poker chip handed to them by placing it in the assigned table. The proximity to customers is a prediction of customer greeting performance, as discovered in the study by Eikenhout and Austin (2008). Employees stationed at the cashiers greeted and chatted more compared to employees stationed in other parts of the department store. Another observation reported in the study was that when employees greeted customers, the social

climate among customers and employees became more positive in terms of more frequent positive interactions and chatting customers.

Multicomponent analysis. Slowiak et al. (2006) and Slowiak (2014) used a multicomponent analysis to bring about performance change of greeting customers in a clinical setting, where employees scheduled appointments face to face and over the phone. Crowell, Hantula, and McArthur (2011) made a behavioral intervention based on OMB techniques and industrial organizational management (IOP) which consisted of the following implementations. First a job analysis was conducted to define target behaviors. Focus group interviews and a selection system assessed employee's performance. It was also measure of how well supervisors rated the performance of their employees. A customer assessment system together with a behavioral customer observation questionnaire was implemented to measure the targeted service behaviors of employees. Finally, goal clarification, feedback charts and praise contingent on performance improvements were initiated.

Summary. In this case study, the intervention in a Fashion Retail Organization is described and investigated. The intervention was planned and executed by the consultant company MAZE. One major goal of the intervention focused on customer greeting of salespeople. The outcomes of the intervention are measured with a questionnaire, which was designed by MAZE and distributed by the Fashion Retail Organization among its loyal customers. From a behavior scientific perspective, the effectiveness of the training intervention and implementation of MAZE will be evaluated against the current framework and findings related to customer greeting in the literature.

The paper is structured as follows. In Methods, the intervention and implementation strategy of MAZE is described. Moreover, hypotheses about the intervention outcome are

introduced und described with mathematical models. In Results, the statistical evidence for hypotheses is presented. In Discussion, the statistical results and the implications with behavior science are discussed.

Method

Participants and settings

The following analysis is based on data, which has been collected and processed by MAZE Feedback (MAZE) and one of their customers, a Scandinavian Fashion Retail Organization (FRO). MAZE is a consulting company located in Oslo, Norway, with international offices in Sweden, Denmark and the UK. MAZE offers consulting and a feedback system that helps organizations to reduce variation in performance, by identifying best practice, using direct feedback and applying statistical insight. MAZE developed a feedback software solution, which is sold as a separate package or combined with their coaching and implantation services. The training intervention and implementation by MAZE in the FRO involved all store locations, targeting performance of regional managers (RM), store managers (SM), and salespeople.

The FRO was comprised of 125 Brick and Mortar stores spread across five regions. All were similar in size and contained about the same range of assortments. Stores are either freestanding or located inside shopping malls. The opening hours were Monday to Saturday ranging from 10:00 a.m. to 8:00 p.m. and few were open on Sundays between 12:00 a.m. to 4:00 p.m. as well. The company offers a broad selection of men and women's fashion clothing and jewelry product lines, from popular Scandinavian fashion designer brands (e.g., Replay Jeans, Saint Tropez, and Lyle and Scott) and global brands (e.g., Lee Jeans, Havaianas and Tommy

Hilfiger). Since 2014 the FRO has had an Omni channel strategy and launched their new online web-shop this spring.

The FRO was considered as a research partner for this thesis project because MAZE started implementing a training intervention to improve the customer service performance of salespeople. The goal of the training intervention is a reduction of variation in performance and an improvement of customer service performance across all stores. In the long term, this should reduce costs and improve sales. In recent years, the company has been shutting down many of its stores. Ever since 2015, the organization has continued to shut down stores, also causing layoffs.

The FRO has been a customer of MAZE since 2012 when they acquired the feedback software system. The FRO implemented the feedback software system themselves within a few store locations, following descriptions provided by MAZE. In the absence of successful outcomes, it was decided in 2017 to buy the full training intervention and implementation package from MAZE. All descriptions concerning the training intervention and implementation in the FRO by MAZE, focusing on improving customer greeting performances has been described in as much detail as possible. The available information is based on descriptions by MAZE, both in the form of verbal and textual communication. All communication has been translated from Norwegian into English. Only the content of the training intervention and implementation plan which was relevant for this research investigation and had value for future replications were included in the thesis. Following is a detailed description of the procedural steps.

Data collection

The researcher obtained quantitative, secondary data collected by the consultant company MAZE on behalf of the FRO. The owner of the survey data rights used for this investigation is the FRO. Consent was obtained for this research project through MAZE. The primary data source was respondents of an online customer survey. For this research purpose, the data was extracted, sorted and redistributed by MAZE to the researcher in a spreadsheet. The spreadsheet contained responses to a varying number of questions, displayed in percentages from January 2017 until April 2019 for all stores (28 months). The spreadsheet consisted of 28 sheets each representing a month. Each sheet contained the number of respondents per month, ambassador score and up to 14 survey questions for up to 125 shops.

Online survey. The main questions from the online customer survey has been translated as shown in Figure 11. From January 2017 until June 2018, the customer survey consisted of seven questions. From June 2018 until April 2019 seven additional questions were added. Survey questions remained the same and had the same wording and structure throughout all 28 months. The customer survey comprised of seven-point Likert scale questions with corresponding statements ranging from I “strongly disagree” to I “strongly agree”. The numerical value represented the share of agreeing costumers among all costumers.

Filling in the online survey form. The customer selected which box to mark by moving the mouse cursor over the blank space and then tapping the left mouse button to leave a mark. Next, the customer then moved the mouse cursor over the button labeled “next” in the bottom left corner of the screen to proceed to the next question.

Survey language. The survey was by default viewed in the native language, but by a single click it could be changed into English.

Survey link. An attached survey link was sent out by email after loyalty customers had done a recent in store purchase. The survey link was sent out the same day or at the latest within two business days following a loyalty customer purchase. The survey link remained active for a week after it was sent out.

Inclusion criteria. The online survey was only included if fully completed by the customer. The customer could only proceed on to the next question if the current question had been filled out. Only one question appears on the screen at a time, and the button labeled "next" will not function before the blank space underneath the question is filled in.

Respondents. Customers signed up on a voluntary basis for the loyalty club in stores or by contacting the customer service by email, phone or social media (e.g., Facebook or Instagram). The age limitation for becoming a member was set to 16 years. Also, proof of being a registered civil resident of the country was a prerequisite. The loyalty customers received an online customer survey link in their email inbox after making an in-store purchase. Respondent were asked to recall and evaluate the service given to them by the sales-employees. MAZE reported an average response rate of 20 percent. The average shopping duration spent at the store was not controlled for but estimated to be between 10 and 60 minutes. Shopping frequency was not controlled for in this study.

The Customer Loyalty Club. The customer loyalty club membership was free of charge. All members of a household can share a single membership. As a member of the customer loyalty club customers receive personal offers and news and gather bonus points for each in-store or online purchase they make. After reaching a certain level of bonus points, the membership level increases and the points can be exchanged for a bonus check to be used within physical store locations.

General Data Protection Regulation. The customer club membership is automatically terminated if no purchase is made within a timeframe of 24 months, and all personal data deleted. When visiting the company's online-store page and clicking on the tab marked as 'customer members club' the information that most prominently appear are textual information regarding the European Union (EU) General Data Protection Regulation (GDPR) which was implemented in May 2018. Changes has been made to the legal terms and conditions of the customer loyalty club membership contract. These changes affect the way customer's personal data are being stored and applied by the company for research and marketing, and customers rights regarding this. When customers are requested to answer the customer survey by MAZE, distributed by the FRO the first page always follows a standard format containing information provided to the customer in accordance with the GDPR. The customer can choose to not respond, to respond and be kept anonymous, respond and give up some or all demographic information that the company is asking for. There is always provided information on how to withdraw consent during or after responding to the questionnaire. MAZE had their contact information available for any questions or concerns related to the survey, personal privacy or consent. No personal data about respondents were treated in this research project.

Respondent demographics. Differences in demographics (e.g., age, education, gender, ethnicity, profession, occupation, status, income level and marital status) was not controlled for. However, one can assume that the respondent population share some general commonalities such as living in the same country and sharing a common language, shoppers are both women and men, and the main customer groups are younger adult and adults. Scandinavians lives in a welfare state, they are used to having a high-living standard with high incomes resulting in higher buying power. Customers who sign up for a member's club may share some of these

uniform characteristics. However, its outside of the scope of this investigation to account for these similarities and differences.

Software. The feedback software by MAZE was used in stores to provide region managers, sales managers and salespeople with direct customer feedback on their group and individual performance. The software application can be viewed and tailored for different displays and purposes (e.g., computers, tablets, mobile applications, digital signage displays) and customized for different organizational roles (e.g., top-management, sales-director, marketing, RM, store manager and salespeople). Communication becomes more explicit when all levels of the organization uses the same system to evaluate and monitor performance. In addition, there are tools provided in the system for 1:1 feedback between manager and staff. Details about how this works has not been provided by MAZE.

Login. The feedback software has one common log-in for all to share in addition to a personal log-in for each individual user. The common-login was for the store manager and all employees working in the store. The store manager and employees could log-in to see the customer feedback on how they were performing as a group with insights (e.g., detailed information and coaching). The software showed visual displays and graphs of store performance, which could be compared to the performance of other stores in the same region. The store manager could also engage salespeople in having a common team goal and to compete against other stores within the same region. The software shows relevant content and insights based on the preselected target behaviors chosen for the team. No individual performance feedback was accessible to others using this log-in, due to ethical considerations. Each store and employee could choose if they wanted to have common group goals, or just work on their own individual goals.

Each employee has a personal login where they could choose among six target behaviors to practice improving their individual performance. After choosing one or three target behaviors the system would automatically reconfigure showing only relevant data (e.g., information, customer feedback and coaching). Built-in gamification technology was used to activate and engage users to obtain goals. Information was not accessible to anyone else in the FRO.

Updates. Daily, the system would update, providing users with customized feedback with detailed insights and coaching messages. The feedback from customers was used as an ongoing measure of current performance.

Measurements

After sorting through 28 months, the data analysis counted 115 stores which were consistent and contained data throughout all months. Ten shops were not present in all 28 months, hence excluded from the analysis. The ambassador score was, according to MAZE, an indicator of the overall service quality Most important for this thesis is the outcome of question one, regarding greeting.

Dependent variables. Outcome recordings (i.e., customer responses to the online survey) was the source of information for the following variables. The two dependent variables included in the following investigation were number of respondents for each store, and the second variable was the share of greeted customers. Greeted customers were identified with the answers to question one “I was acknowledged with a smile or a greeting when I entered the store?”. Note that the data source does not contain the total number of customers entering the stores. If there were many shopping tourists in the summer months this would not show in the data, because of the low probability of tourists holding a loyalty club membership as earlier described. In this

case, the measure of employee performance of greeting customers was measured the share of customers answering positive to question one. This is the same source of feedback that employees', store managers and RM receive by using the feedback software app from MAZE. Survey responses are obtained from January 2017 until April 2019. The training intervention including the software app was introduced for the store managers in November 2018.

Independent variables. The training intervention, implementation and feedback system provided by MAZE are independent variables, included the customer survey feedback.

Operational definitions. The total number of customers which answered to the questionnaire completely is called customer count N in the following. Greeting was measured by customer responses (i.e., feedback) to the question "I was acknowledged with a smile, or a greeting when I entered the store". The respondents selected among five answer alternatives ranging from I "strongly disagree" to I "strongly agree". The share of greeted costumers R is defined as the ratio between costumers that selected "strongly agree", "agree", or "slightly agree" and the total number of customers who filled out the questionnaire completely This question was part of an online customer survey consisting of 14 questions in total.

Customer greeting. A complete definition of how customers greeting was defined in the FRO was not provided. The customer survey questions produced by MAZE were based on the best performance practices identified in a workshop with the FRO. In a conversation with representatives of MAZE some concrete examples of greeting were given. For instance, greeting a customer involved making eye contact, smiling or nodding or welcoming them to the store. The time between a customer entering the store and being greeted by sales employee was not set.

Feedback. Feedback was defined as external customer feedback obtained from the online survey. The training intervention by MAZE was defined as every interaction MAZE have had with the FRO, including the implementation and the feedback software. The intervention implementation started from June 2018 and is currently ongoing.

Procedure

Training intervention and implementation. For a summary of the training intervention implemented at the FRO by MAZE, as shown in *Table 10*. The training intervention and implementation involved all store locations, targeting performance of RM, SM, and salespeople. A workshop with the best performing SM and salespeople was conducted early on to define the best practice of customer service. The best practice was then set as a performance goal for the intervention

Overall performance of stores was monitored involving performance goals for store managers, RM and the top-management by using the feedback software Communication becomes more explicit when all levels of the organization use the same system to evaluate and monitor performance. MAZE was activating all levels of the organization by integrating the software system, holding all levels accountable for meeting performance goals.

The implementation plan consists of three phases. The procedure does not contain exact dates and durations for all actions taken, and some actions may be overlapping du to inconsistencies in the descriptions. MAZE produced and delivered the presentations and training material for all mentioned meetings and workshops. The researcher was not involved in the planning, execution or evaluation of the training intervention.

Phase 1. The first phase of the project has been defined as starting on June 13th and lasting approximately until the middle of September 2018.

Step 1. On June 13th, MAZE sent a suggestion for information material to the top-management, to be redistributed to the rest working in the FRO. The information material contained information about MAZE, the upcoming organizational changes, the implementation plan, and reasons for the necessity of the actions. The information material addressed employees' ethical concerns and rights and reassured that workers' rights and interests where considered throughout the process.

Step 2. On June 18th, a meeting was held with eight of the best performing store managers and salespeople recognized by the FRO, including the head of the RM. During this time the representatives provided Maze with a description of the customer shopping journey, and the critical points of sale (e.g., customer-service interactions). By identifying the customer journey, both management and sales-employee became aware of opportunities and potential improvement by positively influencing customer experience to increase customer spending. These opportunities had been neglected in the past, because they were not recognized before. MAZE identified customer greeting, which is a central aspect of delivering excellent customer service, as one of the main problems that needed improvement. For each customer-salesperson interaction, there was an increased likelihood of having a positive influence on the customer's perceived satisfaction with the store experience, in addition to an increase in sales.

During the meeting MAZE further asked the representatives attending the meeting to define up to six best practices that the store-employees could learn and practice every day to improve their customer greeting skills. For instance, a sales employee would choose one best practice behavior that they wanted to practice such as greeting customers by smiling at them.

Greeting a customer can be divided into smaller action steps (i.e., target behaviors) such as smiling, nodding or establishing eye-contact with the customer who enters the store. The salespeople choose between one and three action steps to practice at a time.

Following this meeting, MAZE made a customer survey based on the best practices identified. Responses from customers would provide the store employees with group feedback about their level of performance within stores.

Step 3. On June 28th, a proposal for the online customer survey was sent from Maze to the FRO for approval. The survey draft was based on the definition of best practices, which were chosen as performance goals for salespeople in the previous meeting (see step 2). The main area of performance improvement was customer greeting. One of the survey questions would ask the customer "when entering the store where you greeted by a salesperson with a nod, a smile or a hi?". Further, requesting the customer to rate their level of satisfaction on a scale. The question contained target behaviors of salespeople (e.g., smiling, nodding or saying hi to customers). The first draft was approved by the FRO for testing.

Step 4. Between the 13th to the 17th of August the first draft of the customer survey was distributed with a survey link in an email by the FRO to members of the loyalty club, who recently had visited one of the store locations. The email containing the customer survey link was sent within a day following a registered purchase within one of the stores. The customer feedback from the survey was analyzed by MAZE, and adjustments were made to the customer survey form. Next, a revised customer survey form was then presented to the FRO during a Skype meeting, and was approved.

Step 5. From August 20th to August 31st, the top-management was introduced to the MAZE system, as previously defined under training, implementation and software.

Phase 2. Phase two of the project falls between September 17th and December 31st of 2018. The second phase

Step 1. One week, from September 17th to 21st an anchoring and implementation meeting with top-management and region managers of the FRO was held. The goal of the meeting was to establish mutual commitment about the consulting process and to clarify responsibilities of implementation, coaching, system and software. A plan for regional implementation in stores was made.

Step 2. October 8th and 9th a workshop with the retail managers was held to introduce the training intervention (e.g., the best practices, feedback software, managerial coaching). Among the activities was simulated practice assignments such as role-plays, where the retail managers in pairs of two had to pretend to be a salesperson and customer by using the feedback software. After this workshop all retail managers had a short status meeting with their sales leaders. In this meeting the sales leaders got to practice holding a presentation about the workshop the retail managers had attended at their upcoming staff meetings.

Step 3. Within two weeks, between October 15th and 27th, all store managers had been logged on to the feedback software. The onboarding (i.e., orienting and training) of all store managers started, beginning with five selected regions. The workshop introduced store managers to the MAZE system and the feedback app, one region at the time. The RM were engaged with planning, implementation and completion of the training together with MAZE. Prior and posterior, meetings with MAZE and RM were held to prepare them for conducting these

workshops for the remaining regions independent of MAZE. At an extra cost consultant from MAZE could further be involved with the onboarding process, if requested by the FRO.

Step 4. During three days in November, the RM, who received training by MAZE, continued with onboarding of store managers. At least four hours of the training focused on the MAZE system and software.

Phase 3. The third phase of the implementation started in January 2019 and was planned to continue until June 2019. The third phase included measurements to improve target behavior.

Step 1. In January, the FRO identified their best performing RM. Following this, a best practice workshop was held with the top performing RM and the best practices was defined with action steps.

Step 2. Three to five days following the first workshop in January, the remaining RM attended the workshop. Following these two workshops an assessment standard of best practices for the RM was updated in the MAZE system.

Step 3. During March and February, a five-day meeting was held for all RM, with a status update of past and current performance evaluation by MAZE. Also, preparations were done for onboarding of store managers working towards best practice.

Step 4. In June, the half-year meeting will be held with top-management and RM. Follow-up of performance status since the last meeting. Evaluation of best practice, implementation of the MAZE method and use of the feedback software.

Statistical analysis

The data for the following analysis was the outcome of the questionnaire as provided by MAZE. The aim was to get insight into how effective the intervention by MAZE was to improve employee performance. Question one, “I was acknowledged with a smile or a greeting when I entered the store?” was the most important dependent variable of the research question. The current investigation entails a statistical analysis of this question for the months January to April of each year. This specific time interval was chosen as the only interval present in all three years on record, spanning from January 2017 until April 2019. Furthermore, the questionnaire is used to verify or falsify a range of hypotheses. Some of the hypotheses, such as correlations between two or more questions, can be investigated with linear regression, identifying the degree and the type of correlation. For other hypothesis, a statistical model was required, to subtract, for example the seasonal variations in behavior.

Hypothesis 1. Information about the total number of customers is missing from the dataset. Therefore, the number of returned questionnaires is used to estimate the number of costumers. These responses fluctuate with the seasonal variation seen in the data set.

H1a. The number of customers does not fluctuate with season.

H1b. The number of customers fluctuates with season.

Hypothesis 2. The employee’s workload increases as a result of more customers visiting the store, which has a negative effect on number of customers greeted. The trend can be observed as a variation in greeted customers, defined as the share of costumers answering positively on question one, “I was acknowledged with a smile or a greeting when I entered the store?”.

H2a. The share of greeted customers is negatively correlated to the total number of customers.

H2b. The share of greeted customers is positively correlated to the total number of customers.

H2c. There is no correlation between the share of greeted customers and the total number of customers.

Hypothesis 3. The share of greeted customers fluctuates with season, following Hypothesis 1 and 2.

H3a. The share of greeted customers does not fluctuate with season.

H3b. The share of greeted customers fluctuates with season.

Hypothesis 4. The effect of the intervention will take place on a specific date with an increase in greeted customers.

H4a. The training intervention by MAZE had a positive effect on the customer greeting performance of salespeople. Seen as an increase in amount of positive feedback to question one, "I was acknowledged with a smile or a greeting when I entered the store?" from customer responses.

H4b. The Training intervention had no effect on the customer greeting performance of salespeople. No increase in amount of positive feedback to question one.

Formulas. Hypothesis 2 can be investigated to some degree with a linear regression between number of questionnaire responses and share on positive feedback on question one. For the other hypothesis, the investigation will be conducted with the use of models. Models are mathematical representations of the respective hypothesis. The difference between a model and the available data will be expressed as a statistical error ε. By minimizing the magnitude of the

statistical error ε, we can fit the model to the data. The amount of questionnaire responses is called N and changes as a function of time t, meaning that t represents the time in month since January 1st, 2017. The share of greeted customers in percent, is called R.

The models contain the parameters, N_{Base}, N_{Peak} , t_0, T, R_{Base}, R_{Peak} , R_{Jump} and t_{Jump}, which have been selected such that the error ε is minimal.

H1a. The total number of questionnaires responses N(t) can be modelled as a constant value.

$$N(t) = N_{Base} + \varepsilon$$

H1b. The total number of questionnaires responses N(t) can be modelled as an oscillating function (e.g. sin) with mean N_{Base}, peak N_{Peak}, period T and a start point t_0.

$$N(t) = N_{Base} + (N_{Peak} - N_{Base}) \cdot \sin(2\pi \cdot (t - t_0)/T) + \varepsilon$$

H2. The correlation between questionnaire responses N and share of greeted costumers R is tested with a linear regression.

$$R = b + m \cdot N + \varepsilon$$

H3a. The share of greeted costumers R(t) can be modeled as a constant value.

$$R(t) = R_{Base} + \varepsilon$$

H3b. The share of greeted costumers R(t) can be modelled as an oscillating function (e.g. sin) with mean R_{Base}, peak R_{Peak}, period T and a start point t_0.

$$R(t) = R_{Base} + (R_{Peak} - R_{Base}) \cdot \sin(2\pi \cdot (t - t_0)/T) + \varepsilon$$

H4. The effect of the intervention is modeled as a positive (H4a) or negative (H4b) jump R_{Jump} at time t_{Jump} in the share of greeted costumers R(t).

$$R(t) = R_{Base} + (R_{Peak} - R_{Base}) \cdot \sin(2\pi \cdot (t - t_0)/T) + R_{Jump} \cdot \text{pos}(t - t_{Jump}) + \varepsilon$$

The function pos is 1 if $t - t_{Jump}$ is positive and 0 if $t - t_{Jump}$ is negative, meaning that the value R_{Jump} is added after the time t has passed the time of intervention t_{Jump}.

Results

The statistical analysis of feedback on question one "I was acknowledged with a smile or a greeting when I entered the store?" within the first four months of ever year is presented in Figure 4. Following is the statistics. The first year 2017 had a mean of 75.9%, median 76.3% and standard deviation 12.9%. For the second year 2018 the mean was 77.5%, median 78.9% and standard derivation 12.8%. The reports for 2019 was a mean of 78.6%, median 79.6% and standard derivation of 12.0%.

H1a. The total number of questionnaire responses $N(t)$ was fitted to the data with $N_{Base} = 4572$ with a standard error of 862.

$$N(t) = 4572 + \varepsilon.$$

The model is compared to the data in Figure 5.

H1b. The total number of questionnaire responses was fitted to the data with $N_{Base} = 4620,\ N_{Peak} = 5380,\ t_0 = 3.03$ months and $T = 6.02$ months with a standard error of 676.

$$N(t) = 4620 + (5380 - 4620) \cdot \sin(2\pi \cdot (t - 3.03)/6.02) + \varepsilon.$$

The model is compared to the data in Figure 6.

H2. The linear regression for total number of questionnaires responses and share of greeted customers resulted in an intercept of $b = 80.49$, a slope of $m = -0.000802$ with an R-value of $R = -0.163$ and a P-value of 0.40. The linear regression in comparison with the data is shown in Figure 7. This weak negative correlation supports Hypothesis H2a, negative correlation or H2c, no correlation.

H3a. The share of greeted customers $R(t)$ was fitted to the data with $R_{Base} = 76.8\%$ with a standard error of 4.22%.

$$R(t) = 76.8\% + \varepsilon.$$

The model is compared to the data in Figure 8.

H3b. The share of greeted customers $R(t)$ was fitted to the data with $R_{Base} = 76.8\%$, $R_{Peak} = 72.09\%,\ t_0 = -1.77$ months and $T = 6.02$ months with a standard error of 2.49%.

$$R(t) = 76.8\% + (72.09\% - 76.8\%) \cdot \sin(2\pi \cdot (t + 1.77)/6.02) + \varepsilon.$$

The model is compared to the data in Figure 8.

H4. The effects of the intervention are modeled as a positive (H4a) or negative (H4b) jump. The model was fitted to the data with $R_{Base} = 76.2\%,\ R_{Peak} = 71.55\%,\ t_0 = -1.77$ months, $T = 6.02$ months, $R_{Jump} = 2.41\%$ and , $t_{Jump} = 21.34$ month with a standard error of 2.27%. This indicates that the model fits best with a sudden increase in greeted customers of 2.41% in October 2018, 21.34 month after the introduction of the questionnaire.

$$R(t) = 76.2\% + (71.55\% - 76.2\%) \cdot \sin\left(2\pi \cdot \frac{t+1.77}{6.02}\right) + 2.41\% \cdot \mathrm{pos}(t - 21.34) + \varepsilon.$$

The model is compared to the data in Figure 10. The positive jump supports H4a.

Discussion

The data source for this investigation was secondary, meaning that the customer survey responses was not directly obtained for this purpose, and to which degree the data has been processed was not controlled for. The data was also retrieved from a sample population, which indicates that statements about causal relationships and generalization about the overall population should be done with caution.

The statistical description of answers to question one, “I was acknowledged with a smile or a greeting when I entered the store?”, allows some interpretations. It can be seen in the histogram in Figure 4 that amount of shops where less than 50% of costumers have been greeted, was reduced in each year. Moreover, the amount of shops where more than 80% of costumers have been greeted increased consistently throughout the years. The improvement is reflected in the development of the median (from 76.3% in 2017 to 79.6% in 2018) and the mean (from 75.9% to 78.6%). Furthermore, the consistency of the behavior improved which is reflected by the reduced standard derivation (from 12.9% to 12.0%). These developments indicate a success of the process developed by MAZE.

Hypotheses.

H1. According to the results, the first hypothesis H1a had a standard error of 862 compared to a smaller standard error 676 for hypothesis H1b. The H1b hypothesis is therefore considered the better fit for the data and hypothesis H1a is rejected, suggesting that the number of customer responses fluctuates with season. The optimization model showed that the duration of a season lasted for six months. Included in the six months was the time between seasons. The

model seems realistic, considering the yearly cycle of twelve months. However, some months are consistently incorrect in the model such as October.

For all years, October is one of the months peaking in the data set and it is always higher than the model predicts. A possible explanation for this may be the phenomenon named Black Friday, where people for a week shop at discount for pleasure or for Christmas gifts. The phenomenon goes on for about a week online, with an additional Cyber Monday. From black Friday and during the weekend people flock to the retail stores, making it the busiest weekend of the year.

H2. The number of responses is weakly negatively correlated to the share of customers greeted (correlation coefficient of R = 0.163). This provides support for hypothesis H2b, which has a week negative correlation, or H2c, stating there is no correlation at all. Hypothesis H2b, cannot be rejected based on the current investigation, but we can describe the relationship as not significant, which is shown by the high-P-value of 0.40. The linear regression showing this correlation is shown in Figure 7.

H3. Hypothesis H3 a result in a standard error of 4.22% and hypothesis H3b in a standard error of 2.49%. This means that hypothesis H3a is more likely and hypothesis H3b is rejected. The standard error is reduced by a factor of two, which is significant. This means that the share of greeted costumers is very likely to follow a seasonal fluctuation, although not highly correlated to the total number of costumers. Again, the season duration (including time between seasons) is predicted to be 6 months.

H4. The model fits best to the data with a positive jump $R_{Jump} = 2.41\%$ in greeted costumers in October 2018. In comparison to the model with no jump, the standard error was

reduced from 2.49% to 2.27%. Interestingly, the model fits best for an increase of greeted customers in autumn 2018, although the fit of the model is not statistically significant.

Generally, it can be said that there is a large seasonal variation in the share of greeted customers among total customers. An attempt was made to correlate this seasonal variation to the number of total customers. However, this correlation could not be proven with the available data. Thus, the reason for this seasonal variation remains unknown. This significant seasonal variation should be further investigated, and measurements should be taken to reduce it. Further, it can be said that a consistent improvement of salespeople greeting is visible in the data. This is a sign that the intervention of MAZE might be working, and its possible influence on salespeople's greeting behaviors.

Evaluation of the training Intervention.

Measurement. Firstly, when conducting a performance intervention having a well implemented measurement system in place which directly observes and immediately reports actions taken is of uttermost importance. Without accurate and reliable measurement systems such as the use of automatic recordings (i.e., video or tape recording) the effect of human interventions involving more than a few people is hard to make evaluations of effects.

Trained observers. There have been research studies where use of trained observers, secret shoppers, management, and combinations of these has been used such as Johnson et al. (2010). However, such research methods are highly costly considering cost and time. Benefits by using humans as field observers compared to technology, is that they more discreetly record the phenomena of interest within retail organizations not interfering or making the subjects of observation suspicious and cautious (J. S. C. Lin & Liang, 2011; Jiun-Sheng Chris Lin & Cheng-

Yu Lin, 2011; Otnes, Ilhan, & Kukarni, 2012). Compared to technology which requires obtaining informed consent, regular check-ins with the involved parties, all ethical considerations and measures necessary must be taken in advance, or else legal prosecutions can be a turn of event. A measure or reliability, interobserver agreement (IOA) is taken when human observers are involved. This has been widely applied among the studies included for the current study (Johnson et al., 2010; J. S. C. Lin & Liang, 2011; J. S. C. Lin & C. Y. Lin, 2011; So, Lee, & Oah, 2013).

Automatic recording. Strict regulation and laws apply to recoding of individuals which is according to privacy regulations within the EU and EEA. With the introduction of the GDPR, the use of technology as a measurement tool for recording performance of employees is difficult to perform. Some of the benefits of applying technology to observe behavior is that increase reliability and accuracy. Depending on the quality of the equipment, and a clearly defined sample. Conducted correctly it can be experienced as less obtrusive than having trained observers observing and recording behavior. The data can be coded by trained researchers independently and then IOA can be measured to which extent the coding has been performed accurately such as in Johnson et al. (2010). Making evaluations of effects reliable and may increase the internal control of the experiment if environmental variables are captured or held constant.

In a study by Blasingame, Hale, and Ludwig (2014) the use of self-reports and video recording was applied as an pre-assessment tool for performance improvement, identifying antecedents and consequences of the welder set up environment. The intervention was shown to have positive effects with regards to increased efficiency at the manufacturing site according to Blasingame et al. (2014). The video recording set up in the warehouse facing the welder tables

were not obtrusive for the welders who participated in the study. The process design conducted which was based off analysis of the existing environment showed that the main cause inhibiting productivity and efficiency of the welders was related to lack of communication. Therefore, walkie-talkies were implemented as a technological job aid, and resulted in improved efficiency. A case study by Hwangbo, Kim, and Cha (2017) suggest future benefits of applying in-store technology as job-aids for employee to enhance the customer experience and increase customer satisfaction in the competition of market share against e-commerce.

Customer Greeting. The training intervention can further benefit the FRO by more explicitly defining greeting. As shown there is a body of literature regarding customer service and greeting in offline-retail stores. Offline retail in this case is referring to the opposite of online shopping (i.e., e-commerce). A pre-assessment analysis of antecedent and consequences controlling the occurrence of customer greeting, such as competing job tasks, lack of resources or resource allocation is also suggested as a measure of improvement (Johnson et al., 2010). A functional analysis of the environment within all store locations, by applying the three-term contingency of antecedent, behavior and consequence can work as a preliminary model. Second, all occurrences of greeting behavior should be recorded and evaluated continuously in the beginning of a performance improvement intervention such as in Johnson et al. (2010).

Pre-assessment. In phase 1, step 2 of the training workshop with the FRO, a map of the customer journey was made. A customer journey map for a typical retail store would provide MAZE and the representatives attending the workshop with an overview of critical contact points. This is one way of making what is implicit organizational information into explicit information that everyone can understand (Houmanfar et al., 2009). These critical contact points can be defined as opportunities of salespeople-customer interaction, brand relationship building

and sales opportunities. The critical points can be defined as antecedents of the in-store environment which should prompt the response of attending to the customers, and consequently get recognized for engaging in target behaviors. If this was the goal of the training intervention by MAZE, then each store should conduct a functional analysis. The analysis should define the customer journey and map out the critical contact points and apply methods used in system analysis (Blasingame et al., 2014; Conard, Johnson, Morrison, & Ditzian, 2016). Additionally, where salespeople are stationed and move during a regular day could add insights of resource allocation. The next step would be to operationally define the target behaviors of customer greeting and decide on how to measure and follow up performance. Frequent peer and store manager feedback of performance on group level have shown to have positive effect in the literature (Houmanfar, 2013; Shaw Brown & Sulzer-Azaroff, 1994; Slowiak et al., 2006; So et al., 2013), a performance management system Gravina and Siers (2011).

Schedules of reinforcement. The target behavior of greeting customers was not a new behavior introduced, but it required shaping of preexisting repertoires of greeting behaviors such as saying “Hi”, making eye contact, smiling and approaching the customers entering the store. High rates of positive reinforcement should be delivered in the beginning of establishing a new behavior as covered in (Cooper et al., 2014). When the frequency of the target behavior seems to stabilize, the positive reinforcement can be delivered less frequently. Intermittent schedules of reinforcement keep performance levels maintain over time and motivates store employee compared to the total absence of positive reinforcement (Daniels, 2000, p. 220).

Feedback. Feedback should be delivered contingent, directly and immediately in the beginning of establishing a habit, and then after attaining fluency the feedback frequency can be delivered at an intermittent schedule, and the source can be from customers instead of

management or peers. A literature review evaluating the effect of different performance feedback interventions can be accessed Alvero, Bucklin, and Austin (2001). The role of communication in organizations has been covered to some extend in the introduction and the review by Conard et al. (2016) can provide a further overview of verbal behavior interventions applied in the workplace.

Customer feedback. Receiving feedback from customers is beneficial because it reflects the current state of the business and allows the customer to get involved with communicating praise, corrective feedback or make suggestions for improvements. However, it may be biased because people tend to give feedback if they recently have had a very negative or out of the ordinary positive experience (Chong & Ahmed, 2017). The average customer may not be bothered answering an online survey or to respond other than neutrally to the survey questions. Within the current investigation the feedback was only given from loyalty club members which may indicate that this group already have established a positive impression of the business. Tourists who visits in the summer months may cause more traffic to the shops and cannot properly be depictured in the data set. Customer feedback may have consequential effects on behavior such as described in Daniels (2000)

Survey responses. There are many possible explanations for why people tend to choose the middle option on the survey. Emotions may influence if a customer rates the service as good or bad. In an experiment with university student they tested how university students test scores affected how they rated a unrelated event such as a service encounter at a café located on campus (Chong & Ahmed, 2017). According to the results the randomly assigned test scores could be reflected in how the participants rated the service encounter Chong and Ahmed (2017). The temporal distance may also affect how accurately past events can be recalled when answering a

customer satisfaction survey. People often feel more comfortable with choosing the safe, middle, the average perceived as conformity. Salespeople and customers may be governed by rules in the form of social norms (Ashforth & Humphrey, 1993).

Evaluation of effects. The most pivotal actions taken by anyone interested in demonstrating causal relationships among dependent and independent variables (e.g., environment and behavior) is at the moment of making a design according to Aaboud et al. (2018). How rigorously the design has been planned and carried out will be the main determinant of future success of observing and interpreting effects among quantitative and qualitative data. This requires years of exposure and practice to be able to carry out a design efficient and accurately (Murray Sidman, 1960; Young, 2018). Statistical analysis can never fully account for all possible variations exerting control in the natural environment. As variation is constant and difficult to control for within basic research, is poses even greater difficulties when trying to exert some form of control and influence over an entire retail organization (Murray Sidman, 1960). The data source and content for this investigation was troublesome to deal with because of lacking control over external and internal variables related to the research question.

Future directions. Direct and systematic replications build upon preexisting scientific knowledge over time, and increase the external validity of interventions implemented (Johnson et al., 2010). It is of crucial importance for practitioners of organizational behavior management to work systematic when dealing with complex systems of organizations or social problems (Baer, Wolf, & Risley, 1987; Gravina & Siers, 2011). For an overview of effective interventions which also impact lasting change over time, Conard et al. (2016) have provided a comprehensive review of the literature. In the review by Conard et al. (2016), there is a call out for more reports on measurement of performance after interventions. However, the majority of JOBM studies

reported on how performance levels were maintained after the end of the intervention. In the case of MAZE the intervention is still ongoing, and therefore no complete data analysis could be made. In a literature review by Houmanfar et al. (2003) the result suggested that out-puts such as organizational profit should be accounted for as a measurement of external validity within future research investigations. Financial outcomes were also not accounted for in this case study, but it would have added an interesting dimension to the added value of increasing greeting performance of salespeople. There is a body of literature which support the notion that increase in service performance, affect customer satisfaction and contribute to the organizational profit (M. G. Brown, 1979; Crowell et al., 1988; Grandey, Goldberg, & Pugh, 2011; Johnson et al., 2010; Keh, Ren, Hill, & Li, 2013; Jiun-Sheng Chris Lin, Fisk, & Liang, 2011; Jiun-Sheng Chris Lin & Cheng-Yu Lin, 2011; Otterbring, 2017; Shaw Brown & Sulzer-Azaroff, 1994; Soderlund, 2018; Söderlund, 2016; To, Tam, & Cheung, 2012) Investigations of work practices in field settings is well known among researchers and practitioners for being troublesome to observe, predict and control for (Gravina & Siers, 2011). The perceived success of the investigation depends on mutual commitment, effort and understanding of the purpose among the involved parties (Block & Brillinger, 2000). In addition, ethical considerations, costs and time is essentially the environmental factors which sets the stage for any act to be played out whether it’s by the direction of the researcher, consultant or manager.

Ethical evaluation

The research ethical institutions

Research contribute to the betterment of society, individual human's wellbeing and health, the society and the global development. When conducting research there needs to be rules, guidelines, norms and values to care for the individual's interests. The researcher has a responsibility to show respect, make sure the consequences of conducting the research has social significance, that the research is conducted in a just way for all involved parties and have and display research integrity. These standards and conducts are meant to help researchers decide between what is god or bad, and right and wrong (Professor E, Arntzen, personal communication, September 17, 2018).

NSD & REK. The Norwegian Centre for research data (NSD) is the data protection research institution for all universities. When planning for a research project which may concern sensitive personal data, data privacy any form of recordings of individuals such as video and audio recordings and pictures the NSD or the Data Inspectorate is involved. This is done to make sure the research is ethical and legal according to laws and regulations. The obtaining, storing and deleting data must be done according to European standards (Privacy, 2019). The Norwegian National Research Ethics Committees is concerned with medical and health research should be consulted and applied to when appropriate (REK, 2019).

The Helsinki declaration. The Helsinki declaration is basic ethical principles regarding human experimentation developed for the medical community, which expresses explicitly that the health of the human subject or subjects involved in the research should be the main focus, and foremost consideration. Everything that is done should have the patient or in the case of

research the participants interest in mind. Also, it states that the individual is more important than how the research can contribute to the interest of society and science (Arntzen, personal communication, September 17, 2018).

General Data Protection Regulation. July 20th, 2018 the EU introduced a new law, the General Data Protection Regulation GDPR on data protection and personal privacy. The goal is to protect the individual's right for personal information and empowerment of what is shared and distribution. This is also considering the sharing of personal data to outside of the EU and EEA (Intersoft Consulting, 2019a). All businesses collecting and storing data on their customers for the purpose of sending email news updates, distributing targeted marketing advertisement, shipping goods or services, collecting loyalty memberships or using surveillance technology to collect user preferences all had to clean up the data stored on their customers, update their use terms and request new consent from the customers to send them news updates, continue their membership, collect and store data according to the new rules.

This is similar in some ways to the consent which is required for research purposes, in that the participant must be provided with explicit and accurate information communicated in an unambiguous way. The participant can then choose to provide the researcher with an informed consent which at any point in time can be withdrawn and accordingly all collected data will be erased for good according to laws and regulation. Within business the GDPR holds business responsible for the removal of personal information across platforms and country boarders if informed consent is not provided by the individual. The business also is responsible for protecting personal data in case of data breach (Intersoft Consulting, 2019b).

The participant must prior to participation be informed about risks, advantages and disadvantages of participating in a research study. What the purpose is, and the methods which

are being used. If any financial institutions are involved, conflict of interests and which institution the researcher belongs to. Of the greatest importance, the participant must be informed and reminded that consent and participation can be withdrawn at any time without any negative consequences. Also, the main researchers must be made known, and available contact information must be available and visible. Written consent must be obtained, be documented or witnessed. The researcher has to evaluate continuously weather the participation is voluntary, has informed consent been adequately provided, conduct a risk analysis, protect anonymous and the right for services (Professor E, Arntzen, personal communication, September 17, 2018).

Reflection notes. In a study by M. G. Brown (1979) an feedback intervention was implemented to increase four customer service behaviors in a retail store. These four service behaviors were greeting, offering to help the customer, making small conversations and closing. In the intervention the researchers had chosen on of the salespeople and requested that performance of all four service behaviors would not be performed for 13 customers. These 13 customers were chosen at random by alternating between performing and not performing the service behaviors for every other customer. After each transaction all the customers who was served by that employee were requested to fill out a customer satisfaction form. The survey answers matched the performance of the employee (M. Brown, 1979). Today this would not be considered an ethical behavioral intervention approach. For the customers being served, this was probably not a good experience, and it can hurt the reputation of the store and loyalty customer base. Also, this is not ethical to place an employee in such an aversive and possible punishing position. Finally, one of the reasons for not using a reversal design in retail stores environments is because of the disadvantageous effect it can have on the store profit.

The seven dimensions guiding research practice for applied behavior analysis by Baer et al. (1987) communicate standards, values and norms for conducting research in field settings. The intervention should be effective and alter behaviors of social significance.

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Table 10. *A procedural overview: The MAZE training intervention*

Date	Duration	Steps
2018		**Phase 1**
June.13		A suggestion for information material was sent from MAZE to the FRO to be redistributed to store management and employees.
June.18	3 days	A meeting was held with eight of the 'best performing' store managers and sales employees recognized by the FRO, including the head of the regional managers. In the meeting, a description of the customers shopping journey, with critical points of sale (e.g., customer-service interactions) was identified. In addition, 'best practices' within retail stores for sales-employees was defined. Target behaviors for performance improvement among sales-employees was determined. Greeting all customers entering the retail store, was selected as an area of improvement. The best practices were used as basis for the creation of a customer survey.
June.28		A proposal for an online customer survey was sent from Maze to the FRO and was approved.
August 13 - 17	1 week	Maze analyzed preliminary results of the customer survey and adjusted the questions. At a Skype meeting with the FRO the modified survey was approved.
August 20 - 31	2 weeks	The top-management was introduced to the MAZE system, and the computer software/mobile app.
		Phase 2
September 17 - 21	1 week	An anchoring and implementation meeting with top-management and regional managers of the FRO was held. With the goal of establishing a mutual commitment to the consulting process and to clarify responsibilities of implementation, coaching, system and software. A plan for regional implementation in stores was made.
October 8 - 9	1 day	A workshop with the regional managers. Introduction to the training intervention (e.g., the best practice, feedback software, and managerial coaching). Workshop training consisted of pairwise roleplay as pretending to be the salesperson and customer by using the feedback software.
October 15 - 27	2 Weeks	Onboarding of all store managers, one region at the time. The regional managers were engaged with planning, implementation, and completion of the training. Prior and posterior meetings was held with the regional managers preparing them for holding workshops independent of MAZE, in remaining regions.
		Note. FRO had the option to involve MAZE in the continuation of holding these workshops at an extra cost.
November	3 days	The regional managers continue with the onboarding of the store managers in the remaining regions. At least 4 hours of the training was focused on MAZE system and software.
2019		**Phase 3**
January	3 days	The FRO identified their best performing regional managers. A best practice workshop was held with these top performing regional managers and the best practices was defined with action steps.
	3 to 5 days	A best practice workshop was held with the rest of the regional managers. Following these two workshops, an assessment standard of best practice was updated in the MAZE system.
February/ March	3 to 5 days	A meeting was held for all regional managers, with a status update of past and current performance evaluation. Preparation for onboarding of best practice workshop with store managers.
June		The half-year meeting will be held with top-management and regional managers. Follow-up of performance status since the last meeting. Evaluation of 'best practice', implementation of the MAZE method and use of the feedback software.
Continuous		Status meetings with top-management of FRO were held regularly. Evaluation of the onboarding process from October 2018. Focusing on development and follow-up of regional managers.

Note. Steps = Description of actions taken within each step of the training intervention. FRO = Fashion Retail Organization. *The table shows three phases, with descriptions of actions taken within each step when MAZE Feedback implemented. The table shows three phases, with descriptions of actions taken within each step when MAZE Feedback implemented*

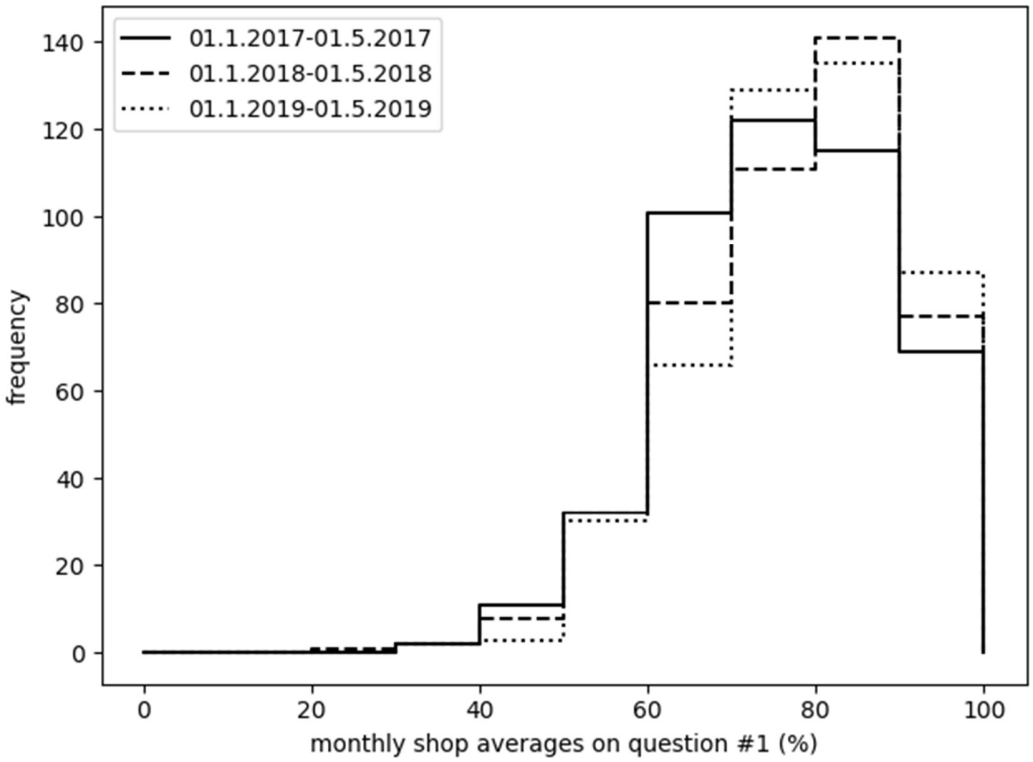

Figure 4. Share of greeted costumers for the same seasonal period within the three recorded years. The figure shows a histogram, highlighting the distribution of greeted costumers among stores.

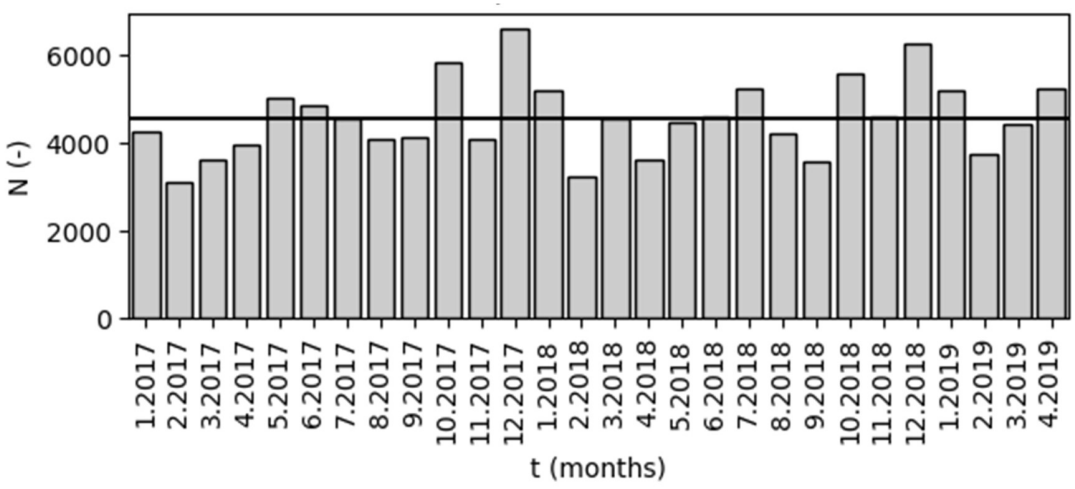

Figure 5. Monthly number of questionnaire responses for all shops. The line shows the model for Hypothesis H1a. Gray bars show the data.

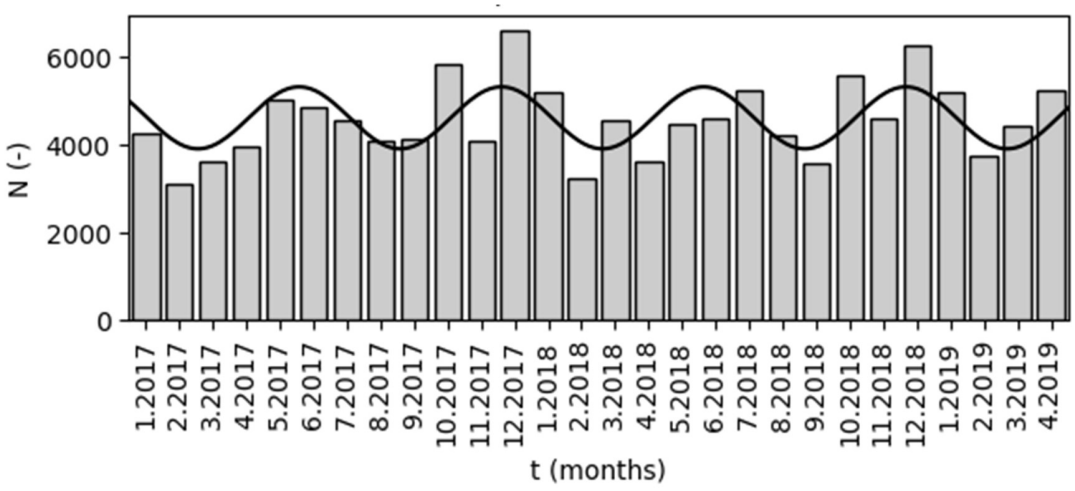

Figure 6. Monthly number of questionnaire responses for all shops. The line shows the model for Hypothesis H1b. Gray bars show the data.

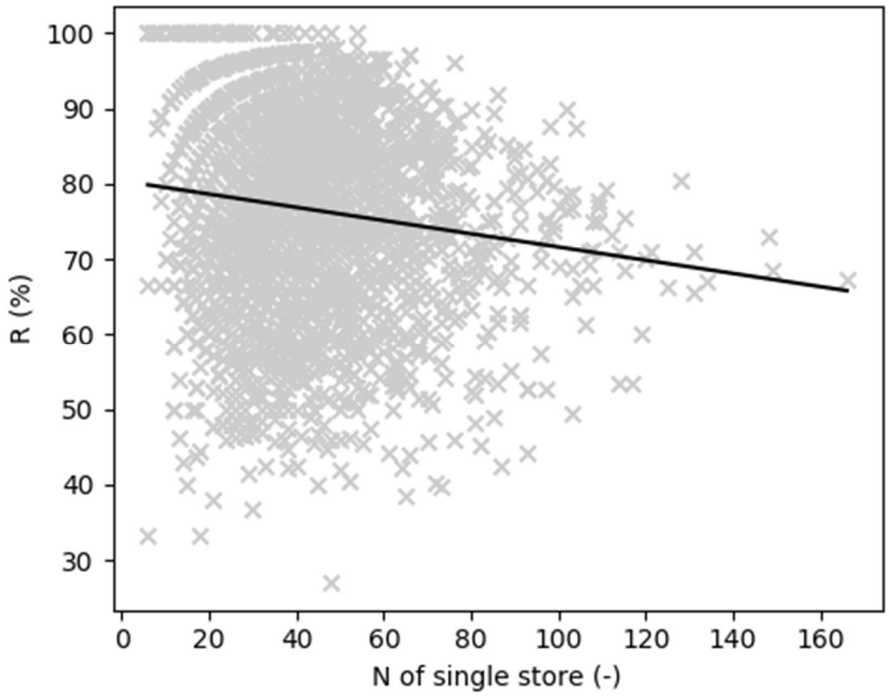

Figure 7. Correlation between number of questionnaire responses N and the share of greeted customers R. The gray crosses represent a singe store within a single month, the black line represent the linear regression.

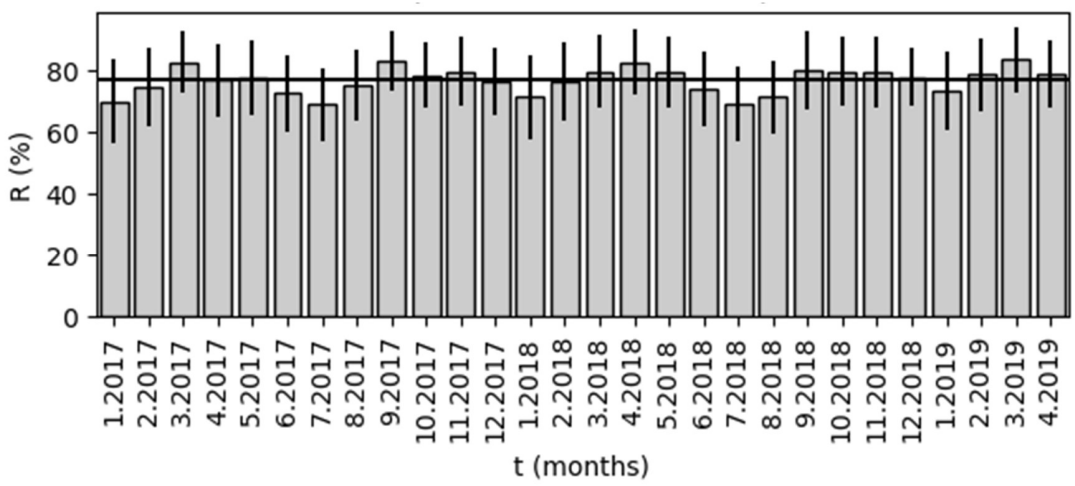

Figure 8. Monthly share of positive feedback on question one. The line shows the model for Hypothesis H3a. Gray bars show the data, error bars and the standard derivation among all shops.

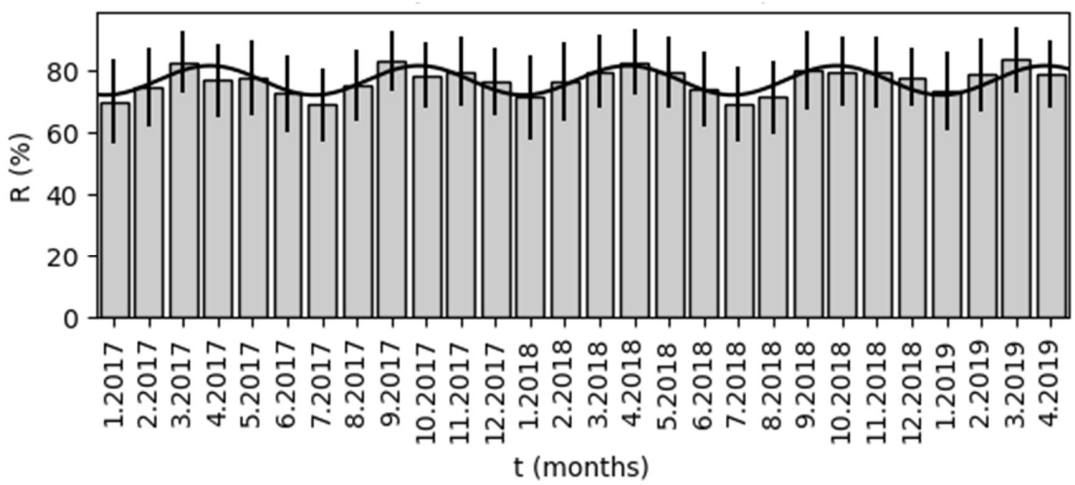

Figure 9. Monthly share of positive feedback on question one. The line shows the model for Hypothesis H3b. Gray bars show the data, error bars and the standard derivation among all shops.

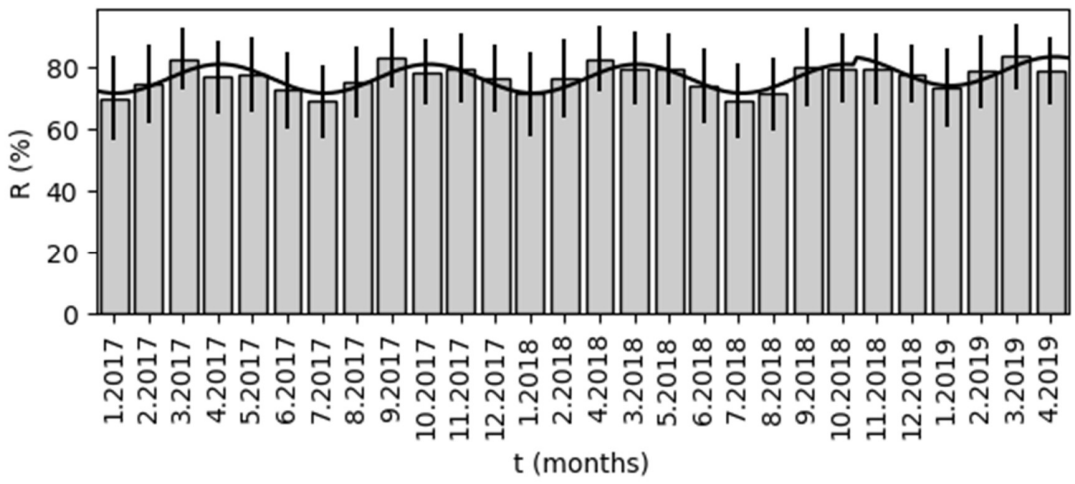

Figure 10. Monthly share of positive feedback on question one. The line shows the model for Hypothesis H4. Gray bars show the data, error bars and the standard derivation among all shops.

When answering the following questions we ask that you give your honest feedback about your recent store visit.

Please rate the degree to which you agree or disagree with the following statements about your experience with the retail staff.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I was acknowledged with a smile or a greeting when I entered the store? *	☐	☐	☐	☐	☐	☐	☐
I was offered the help I needed within a reasonable time frame. *	☐	☐	☐	☐	☐	☐	☐

Did you get help from our staff on the store floor before going to the cashier to pay? *

☐ Yes
☐ No

Were you inside a fitting room? *

☐ Yes
☐ No

Was the salesperson accessible and helpful when you were in the fitting room? *

☐ Yes
☐ No

The salesperson...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Talked, asked questions and was genuinely interested in me as a customer. *	☐	☐	☐	☐	☐	☐	☐
Was good at listening? *	☐	☐	☐	☐	☐	☐	☐
Gave me good advice and inspiration. *	☐	☐	☐	☐	☐	☐	☐
Got me feeling satisfied and safe with my purchase. *	☐	☐	☐	☐	☐	☐	☐
Helped me with everything I needed before leaving me or followed me to the checkout. *	☐	☐	☐	☐	☐	☐	☐

Were you encouraged to try something in the fitting room? *

☐ Yes
☐ No

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I experienced that the store was clean and stylish. *	☐	☐	☐	☐	☐	☐	☐
At the checkout, I felt my purchase was appreciated. *	☐	☐	☐	☐	☐	☐	☐
I got a pleasant ending to the visit. *	☐	☐	☐	☐	☐	☐	☐

Figure 11. The translated and shortened questionnaire used by MAZE Feedback. Only the most relevant questions were included.