



---

# MANAGING SERVICE QUALITY AND EFFICIENCY IN CALL CENTERS: A TAUTOLOGY OR CONTRADICTION?

Sumei van Antwerpen<sup>1</sup>

<sup>1</sup>*Department of Operations Management, University of South Africa, South Africa*

## Abstract

This article reports on the experiences of managers in outsourcing telecommunications call centers in South Africa on service quality and efficiency, and whether service quality is sacrificed for service efficiency. This qualitative case study collected data from eight participants through semi-structured face-to-face interviews. Inductive reasoning was applied in this study. Participants were purposively selected through criterion sampling based on their experience within the call centre industry. Thematic analysis were conducted whereby themes and sub themes were identified. Call center managers use different metrics to manage service quality and efficiency and two thirds of them suggests that service quality is not sacrificed for service efficiency, and a quarter feels otherwise. These findings contradict previous studies on service quality and efficiency. The article provides actionable insights for the management of outsourced call centers on managing service quality without compromising service efficiency. The findings can be implemented in the operations of inbound and outbound call centers.

## Keywords

Telecommunications Call Center, South Africa (RSA), Inbound, Service Quality, Service Efficiency, Call Center Managers (CCM)

---

## 1. INTRODUCTION

The Republic of South Africa's (RSA) telecommunications sector boasts one of the most advanced infrastructures on the continent and is home to a large and mature call center industry (Kilian, 2015). The call center industry is one of the world's fastest growing industry from the beginning of the 21st century (Mwendwa, 2017; Shemeuli, de Luque, & Bahamonde, 2020), and organizations that experience challenges to their service delivery often outsource their services to inbound call centers. However, outsourcing call centers operate under constant pressure to be sustainable and globally competitive (Banks, 2011; Bryden, 2019; Legros, Jouini & Koole, 2021; Mahomed, 2021; Koole & Li, 2021), and to find the perfect equilibrium between service quality and efficiency remains a challenge (Yarborough & Hester, 2015). Service quality is vital in the outsourcing call center environment, as poor service quality reflects directly upon the main company and affects its profitability (Legros, Jouini & Koole, 2021; Afthanorhan, Awang, Rashid, Foziah & Ghazali, 2019).

Call centers serve as a help desk or "one-stop shop" for customer queries (Bryden, 2019; Saberi *et al.*, 2017; Chicu, Ryan & Mirela, 2016) and are thus regarded as service sector organizations. These centers require a combination of technology, human talent, and task procedures to deliver an appropriate and efficient performance (Shemeuli *et al.*, 2020). Telephone agents provide a variety of services, which include carrying out a set of actions or functions by applying various information and communications technology (ICT) processes and acting as the link between external customers, the environment, and the internal operations of the organization (Clark *et al.*, 2019; Malhotra & Mukherjee, 2004; Saberi *et al.*, 2017; Sato, 2018). The actions of the call center agents directly influence customer's service quality perceptions and allow clients to have easy access to information and assistance, resulting in a good or bad experience (Hu, Allon & Bassamboo, 2022; Jyoti *et al.*, 2017). The service quality within the call center context is pivotal for satisfying customers by meeting their needs to create loyalty amongst customers.

Managing service quality and service efficiency concurrently is an ongoing challenge (CallMiner, 2022). The measurement and management of efficiency and quality as constructs remain a central theme in research on call centers. Banks and Roodt (2011) conducted a similar study and eluded that "Companies attempt to achieve customer satisfaction by offering their customers easy access to their services and products whilst lowering their

costs through a consolidated approach. This approach has its problems and managers struggle to balance the efficiency and quality imperatives of their businesses". When service quality is sacrificed for efficiency, it poses the risk of customer dissatisfaction, with possible financial implications (Ando *et al.*, 2020; Chang *et al.*, 2017; Kallel *et al.*, 2019). Quality and efficiency differ: quality is the (uncountable) level of excellence, while efficiency is the (countable) level of excellence. Service quantity within the call center industry is often referred to as 'efficiency' or 'productivity' whilst quality is referred to as 'effectiveness'. Service quality and efficiency are vital to ensure the competitiveness and sustainability of outsourced call centers (Banks & Roodt, 2011; CallMiner, 2022; Clark *et al.*, 2019; Parasuraman *et al.*, 1985, 1988; Ramya, Kowsalya & Dharanipriya, 2019). Ando *et al.* (2020) emphasize that quality reflects the extent to which a service meets or exceeds customers' expectations by customer satisfaction after rendering services.

This study applied the Deming's (1982) and Crosby's (1974) total quality management (TQM) theories; these theories are relevant but forgotten as point of departure, which entails that more modern theories are used in literature when looking at TQM theories. Deming stated that constant improvement of systems (metrics) consequently improves service efficiency and quality. Similarly, Crosby (1979) and Sobral, Chambel and Castanheira (2019) indicated that the ideal standard of quality is zero flaws based on the assumption that delivering services of a high quality is often less expensive, which has led to a popular argument that quality is free. Both these theorists focus on service quality and service efficiency and are deemed as relevant to the aim of this article.

The aim of this article is to determine how call center managers (CCMs) view their role in managing service quality and efficiency within the call center environment in RSA. Constant cost reduction causes a shift in management focus to efficiency rather than quality. Unfortunately, this constant drive to reduce cost compromises the strategic attempt to satisfy customers' needs (Sobral *et al.*, 2019). Through interviews, the study investigated the experiences (unit of analysis) of CCMs (unit of observation) regarding service quality and efficiency to shed light on how these constructs are managed and to provide recommendations to CCMs. The key research question that this article addresses is: How do RSAs CCMs support the findings of previous studies on the management of service quality and service efficiency? This article is limited to the management of four outsourced inbound call centers of a cellular telecommunications network operating in RSA; these call centers deal with technical queries and support from the general public as primary customers. A second objective of the study is to compare the findings from a similar study conducted by Banks and Roodt (2011) with three constructs namely service quality, service efficiency and the possible conflict between the constructs that are dealt with, and this explains the frequent reference to these authors in the article. Seminal work in the call center environment is referenced on service quality and service efficiency, namely Banks and Roodt, Aksin, Armony and Mehrotra and Ellway, that might be dated but recent studies although limited on service quality and service efficiency are included.

## 2. THEORETICAL BACKGROUND

This section provides a comprehensive background about the call center environment and management, with an emphasis on service quality and efficiency.

### 2.1 Call center environment

Call center services replaced face-to-face customer contact through branch networks (Sato, 2018; Chicu *et al.*, 2016). There are two types of call centers in the industry: 1) inbound call centers operated by a company or an outsourced company—with call center agents playing the passive role—to administer incoming product and service support or enquiries from customers and 2) outbound call centers also operated by the company or outsourced—with call center agents playing an active role—to conduct telemarketing, debt collection, or market research among other services (Mahomedy, 2021; Bryden, 2019; León, Burga-León & Morales, 2017; Chicu *et al.*, 2016; Reynoso, 2016).

The strategic role of call centers is shifting, as they become primary stakeholders in service delivery as well as the main point of contact for clients. Companies attempt to achieve customer satisfaction by offering their customers easy access to their services and products while lowering costs through a consolidated approach, an argument pertinent in literature on call center research (Shemeuli *et al.*, 2020; Chang *et al.*, 2017; Saberi *et al.*, 2015; Masson *et al.*, 2016). However, this approach has its problems and managers struggle to balance quality and efficiency because they are perceived as mutually exclusive concepts (Chicu *et al.*, 2016; Biloslavo *et al.*, 2013; Hudson *et al.*, 2017).

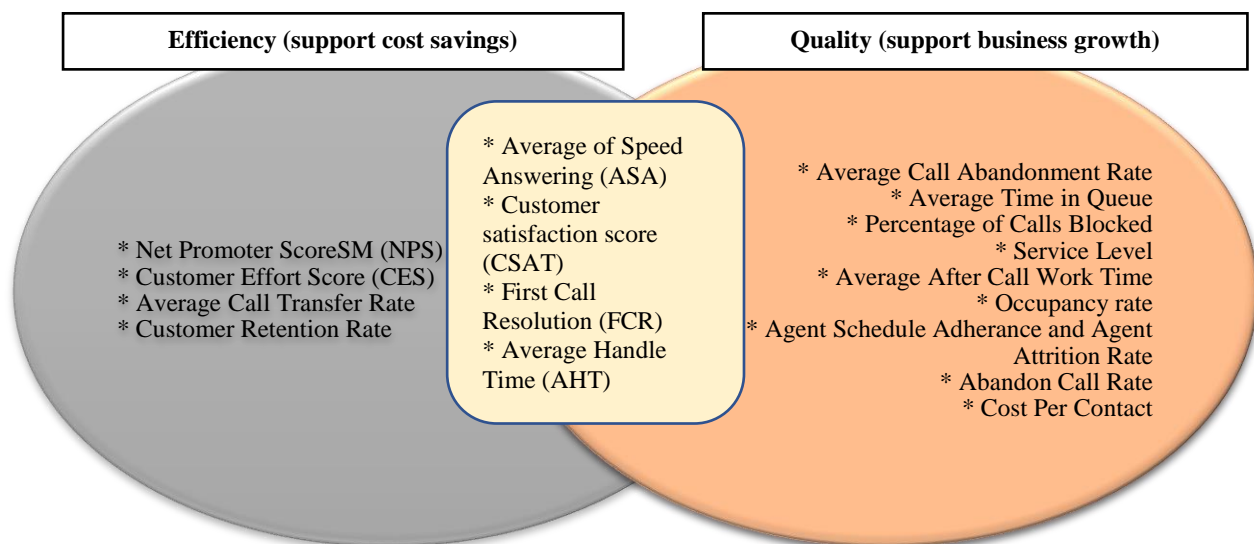
### 2.2 Managing call centers

Efficient and effective call center operations primarily depend on a strong workforce, planning and management (Kappa *et al.*, 2020; Sato, 2018; Mehrotra *et al.*, 2010). CCMs manage and take responsibility for the actions and performance of call center agents (Leon, Leon & Morales, 2017). Koskina (2007:170) depicts that these managers hold "a high level of technical, detailed and bureaucratic control" while the call center agents' opinion and decision-making do not matter because call centers are regarded as bureaucratic organizations according to and Raz

and Blank (2007).

Call center managers use rigid procedures and measurement tools, referred to as routinization of behaviors and Taylorism principles (Bhanpat *et al.*, 2018; Woydack, 2019) to measure quantity. Call center managers determine what their agents are doing, how fast they are doing it, and how customers are satisfied. These measures are characteristics of a mass production model they create an easily measurable environment (Bhanpat *et al.*, Koskina, 2007; Shemeuli *et al.*, 2020). Typically, the managers are assigned to a group of call center agents to monitor performance according to predetermined Key Performance Indicators (KPIs). Quantitative metrics are employed to determine agent achievements (Clark *et al.*, 2019; Chicu *et al.*, 2016; Hudson *et al.*, 2017). These procedures tend to undermine efficiency. To stay competitive, call centers need to be efficient, and find a balance between quality and quantity (Fieberg, 2014; Woydack, 2019). As mentioned, such benchmarks can be divided into two different types: firstly, perceived service levels and secondly operational measures – such as the time taken to answer a call.

Efficiency can be measured through a humanistic approach, or the use of technology (seen as informative control), as a mechanism or method to monitor service delivery efficiency. Specialized call management software (Figure 1) is used to evaluate both the quality of services rendered and the effectiveness of call center agents constantly. A high-performing call center typically measures to the service quality and service efficiency KPIs, but it is only through simultaneous measurement of employee engagement and customer satisfaction that CCMs get the full advantage of these measurements to provide them with deliverables. Note that there are metrics that measure



both efficiency and quality although limited options are available.

**Figure 1:** High performing inbound call center metrics

Source: Compilation from CallMiner (2021), Rennstam (2019), Bourke (2020) and Dogan (2022)

Most metrics used focus on quality (Figure 1); thus, there is clearly an imbalance between the constructs measured. Call monitoring is regarded as one of the main tasks of quality analysis tools in the call center environment (Hu *et al.* 2022; Saberi *et al.*, 2017). In practice, efficiency and quality of call center reporting metrics play an essential role in measuring progress toward key business goals. In the view of the uncertainties, scholars have called for more research to conceptualize the efficiency and quality constructs within the outsourcing call center environment where performance measurement has historically been viewed in terms of the more easily identifiable metrics such as speed of response, length of call, and wrap-up time. One of the biggest strains on call center efficiency are identified as the use too many portals to perform their tasks. Many agents end up with multiple tabs open on their screens, flipping between them to complete the inquiry generation process. This juggling act severely impacts lead quality and quantity (CallMiner, 2022; Legros *et al.*, 2021; Woydack, 2019).

### 2.3 Call center efficiency

Miksen (2019) refers to efficiency in the workplace as the time taken to execute a task, stating that efficient employees and managers can complete tasks in minimum time and limited resources available by utilizing certain time-saving strategies. Considering technology in terms of efficiency, the improvement in computer and

telecommunications technology greatly assists in maximizing productivity, while minimizing wasted effort or expense (Bhanpat *et al.*, 2018; Bourke, 2019; Fieberg, 2014; CallMiner, 2021).

Efficiency is calculated by estimating costs, resources consumed during the action (input), and by subsequently estimating the results or outputs of the action, and then comparing the two actions (Biloslavo *et al.*, 2013). Various authors such as Burke (2019) and Van Antwerpen (2016) among others, add that organizational efficiency can either be subdivided into operational, technical and allocative efficiency, or measured by partial business performance indicators (such as productivity, operational efficiency, and profitability).

#### 2.4 Call center quality

Jyoti *et al.*, (2017) deduce that quality is a competitive weapon ensures more sustainability of an organization and is essential for a sustainable competitive global marketplace. Clients are continuously evaluating the service quality from call centres in terms of problem solving, service received and the duration of calls. Parasuraman *et al.* (1985, p.41) subjectively define service quality as “the discrepancy between consumers’ perceptions of services offered by a particular firm and their expectations about firms offering such services”. They furthermore contended that consumers evaluate service providers in terms of their reliability or capability to deliver the service, ability to inspire confidence, empathy (i.e. sensibility toward the consumers’ feelings), and finally responsiveness (i.e. prompt positive reactions). Organizational sustainability is dependent on the quality of services rendered (Ramya *et al.*, 2019; Afthanorhan *et al.*, 2019) and the quality management process within call centers, which focuses mainly on the interaction between consultants (agents) and customers (clients). These interactions are continuously recorded, monitored and evaluated through effective internal planning and control systems (Wu, 2019). After evaluation, feedback is provided, and initiatives are put in place for continuous improvement. Dogan (2022) and Hu *et al.* (2022) stressed that service quality is a multidimensional concept that has a direct effect on customer satisfaction, companies should ideally increase the quality of their services.

#### 2.5 Relationship between service quality and efficiency

While call center management strives for greater control, they face quality versus quantity dilemma, as highlighted by Raz and Blank (2007) and Woydack (2019) indicating that for the past 13 years this has been an ongoing issue. These authors refer to the perpetual and dynamic tension between quantitative output and service quality, also supported by the findings of a study conducted by Banks and Roodt (2011). Service quality and efficiency in call center studies reveal tension between these concepts (Ellway, 2014; Raz & Blank, 2007), and other studies describe the tension as a conflict (Echchakoui & Baakil, 2019), which represents a ‘trade-off’ (Clark *et al.*, 2019; Ellway, 2014; Gholami *et al.*, 2015). Banks and Roodt (2011) posit that quality is sacrificed for efficiency. The goal of call center agents is to assist their clients as efficiently as possible, and to provide quality service (Hudson *et al.*, 2017; Leon *et al.*, 2017, Chang *et al.*, 2017) to distinguish between the relationship of these constructs.

In the service-sector environment, there is usually a sacrifice, which often relates to quality that is neglected for the sake of being efficient and completing a task in the shortest time (Middleton & Puntney, 2016). In the call center environment, improving competitiveness translates into an increase in the number of calls that can be attended to in given a specific time frame, without sacrificing the quality of service to the customer. According to Middleton and Puntney (2016) and Chang *et al.* (2017), the quicker a task is performed, the greater the risks are that something has not been properly covered or fully considered, thus leading to the detriment of both quality and customer satisfaction. Leon *et al.* (2017) mentioned that role conflict arises from the demands to be fast and simultaneously provide a service of high quality (Sobral, Chambel & Castanheira, 2019); henceforward, customer satisfaction and customer throughput often collide. Conflict furthermore arises between the negative emotions that flow when a client has a complaint and the obligation to express positive feelings.

Previous research concluded that quality and efficiency are two constructs that are opposing and irreconcilable (Banks & Roodt, 2011), but Figure 1 presents an opposing view where efficiency and quality overlap. Dogan (2022) further stresses that CCM put more emphasis on “tangible quantity measures” (e.g., number of calls answered, speed of response, length of call, standardizing response, problem solved in specified limited time and quality of information and service), than on “intangible quality” (e.g., individual customer service, accessibility to relevant help, responsiveness to individual problem, empathy and courtesy, seeing problem through to completion) measurements. Both types of benchmarks are important, and one should not be neglected at the expense of the other because they are interrelated – although not perfectly.

### 3. METHODS

This section addresses the research method used in the study, and should not be confused with research methodology. The key research question that this article addresses is: How do RSAs CCMs support the findings of previous studies on the management of service quantity and service efficiency? Given that the nature of the problem studied was exploratory, the most appropriate design was a qualitative case study with non-probability sampling. An idiographic approach was followed, using a single case qualitative study design, as it allowed the

researcher to enter the natural setting (call centers) of the participants (managers), to observe the behavior and listen to the words used by the participants to describe the environment in which they operate (Struwig & Stead, 2015). Consequently, four outsourced call centers providing a service to an ICT company was selected. Literature is not unanimous about the norm for case studies, but according to Struwig and Stead (2015), Quinlan *et al.* (2019) and Bryman and Bell (2015), the selection of one organisation is enough hence one telecommunications company with four call centres. Ethical clearance was granted by the institution and participants had to sign a letter of consent prior to each interview. The purpose of the study was provided in a participant information letter.

Therefore, the population consisted of CCMs from one of the largest telecommunication network providers' call centers in Gauteng, the economic hub of RSA (Mahomed, 2021; Bryden, 2019). The call center had four offices in the Gauteng province, and the sample was selected using criterion sampling that include several transparency decisions, based on experience in the industry and the position occupied. To identify a distinct group of information-rich participants, the following criteria were applied during the selection process: 1) position (manager), and 2) experience (minimum of eight years' experience in the call center industry, with a minimum of three years at a management level). Two managers from each center proved to be eligible, resulting in eight participants who met the requirements for interviews (Bryman & Bell, 2015; Quinlan *et al.*, 2019) and theoretical saturation was reached. The sample in this study was small, which is typical of qualitative case studies (Yin, 2018). The data were collected through structured interviews using an interview guide to ensure that the same questions were asked to all participants. The interview guide was pretested to individuals with similar profiles to test the questions in terms of clarity; whether the interviewee had the information required and was prepared to divulge it; time to be allocated per interview; whether the participants understood the questions; and if they were willing and able to disclose information needed to solve the problem under investigation.

The interview guide included biographical questions to determine the profile of the participants (closed questions), and open-ended questions to determine the experiences of CCMs' on the following, namely 1) How do you manage service quality, 2) How do you manage service efficiency, and 3) Is there conflict between the management of service quality and efficiency. The face-to-face interviews were audio-recorded with permission of the interviewees and transcribed directly after each interview. Participation was voluntary, and candidates were informed that they could withdraw at any point. To protect anonymity of participants and for data analysis purposes, the eight call center managers were denoted by unique alphabetical letters, according to the specific call center (A–D), and each CCM was denoted by a number (one to eight, e.g. A1, A2). Saturation was reached interviewing the eighth participant, hence meeting the golden standard for data collection (Bryman & Bell, 2015). Fusch and Ness (2015:1409) emphasized that “data saturation is not about the numbers *per se*, but about the depth of the data”, and that a one-size-fits-all method to reach data saturation is not universal as study designs differ and furthermore that enough data is collected to replicate the study.

Yin's (2018) 5-step approach to data analysis was used to analyze the data, namely: (a) compiling the data, (b) disassembling the data, (c) reassembling the data, (d) interpreting the meaning of the data, and (e) concluding the data. The data was organized into groupings, thereafter coded based on the frequency of the words used in the feedback. The data was disassembled to reduce the themes of the phenomenon which was thereafter reassembled into core themes. Checking the pattern to interpret the meaning of the data collected was essential to have the final conclusion of the data.

The researcher recorded the interviews, and the recordings were transcribed to be able to conduct the analysis. A coding scheme was developed during the content analysis to create categories of themes, and a cross-analysis was conducted to identify similar and different themes. Thematic analysis was applied to the transcribed data using nodes to identify emerging themes and insights. Although coding was primarily guided by the call center management theory, some codes were concept (theoretical) and data driven. These codes were directly related to the objectives and data were reduced to parsimonious intention relevant to the study. Themes are initially generated inductively from the raw information or generated deductively from theory and prior research. Themes were identified based on the feedback received after each question, and to find meaningful similarities, as well as standout comments, that could add value in closing the knowledge gap in this study (Quinlan *et al.*, 2018). The researcher's institution granted ethical clearance, and the call center granted permission to conduct research. All participants signed a letter of consent.

#### 4. FINDINGS

This research article was motivated by the challenges experienced by call centers, because they are under constant pressure to deliver affordable high service quality and efficiency. To address the challenges, the study investigated the profile of CCMs (set as control variable to ensure that data were collected from relevant sources), how these managers perceive service quality and service efficiency, and whether service quality is sacrificed by service efficiency. This section will also distinguish between CCMs and agents. The feedback received is presented verbatim.

#### 4.1 Demographic data

Demographical questions included gender, age, call center size, experience and educational background, to provide an overall demographic profile of the participants as provided in Table 1 below.

Call centre	Respondent	Call centre size (seats)	Experience in Call Centre industry	Gender	Age	Highest qualification
A	1	430	9 years	Male	27	Matric <sup>a</sup>
A	2	800	11 years	Male	32	Degree
B	3	350	10 years	Male	28	Diploma <sup>b</sup>
B	4	160	13 years	Female	35	Diploma
C	5	160	10 years	Male	31	Diploma
C	6	220	15 years	Female	35	Diploma
D	7	423	8 years	Male	28	Matric
D	8	160	8 years	Male	32	Diploma

<sup>a</sup>Grade 12

<sup>b</sup>Three year qualification

**Table 1: Demographic data**

Call center sizes varied from 160 to 800 seats, and managerial experience ranged from 8 to 15 years. The age distribution (27 to 35 years) reflects a management profile representing a relatively young workforce, meaning that some might have been managers at 19 years old. These individuals fall mainly into the category of Generation Y, as they were born between 1980 and 1990, and have constant access to technology (Alston, 2020). Kilian (2015, p.2) stated that “the industry contributes to creating employment for school leavers who have little work experience and who might not be able to afford a tertiary education”. In contrast, however, a significant majority (two-thirds) of participants had obtained a tertiary qualification (three-year diploma). This is a male-dominated environment; hence, this study participants include two females and six males. Because of the criterion of years of managerial experience, the participants are highly experienced and will therefore provide useful information to address the problem under investigation.

#### 4.2 Management of service quality

The primary aim was to report on the CCM’s experiences on the management of service quality and efficiency. This section reflects on the feedback from respondents regarding the management of service quality in outsourced call centers. Question: How do you measure service quality? The following themes were identified after analyzing the feedback:

##### **Theme 1: Measurement tools to measure quality (internally – agents)**

The majority of the participants indicated that their call centers have measurement tools in place, such as: SMART; ranking systems; quality frameworks (standard or transaction-based); quality assessors; quality assurance department; continual monitoring; call handling processes; and call listen evaluations, to assist a CCM to monitor the service quality delivered by the agents externally (clients).

“Quality is managed by ensuring that engagement between the staff, team leader, and quality department is consistent” [Participant A1]

The quality department of this call center ensures that specific, measurable, attainable, relevant, and time-bound (SMART) goals are set for agents, thereby providing ample time to measure successes.

“By using quality as a process for continuous improvement and not a stick” [Participant B4]

Some of these actions may appear as rigid measurements to police agents.

##### **Theme 2: Measurement tools to determine service quality (externally – clients)**

The following theme focused on different measurement tools used by CCM to determine the experience of clients regarding service quality: customer satisfaction surveys, voice recordings, call audibility evaluations, call calibrations (strategy to ensure that managers, supervisors and QA teams can effectively evaluate agent performance and improve customer service), remote call listening, and side-by-side evaluations. Feedback focusing on external service quality include:

“Surveys are also sent to customers, usually after the client has called to rate the service received ...” [Participant A1]

“By ensuring that the customers enquiries are answered to, according to their satisfaction ...” [Participant A2]

##### **Theme 3: Interventions to improve service quality**

The majority of the participants emphasized that there are interventions in place to assist agents if service quality is not on par with the policies and guidelines of these call centers. These interventions range from:

- “... the agents are always friendly and helpful, and further training needs are identified and conducted” [Participant A2]
- “Agents that receive poor scores are coached and counselled, depending on the severity” [Participant B4]
- “By conducting the following ..., weekly calibrations and feedback sessions, constant training and conducting coaching and skills transfer” [Participant C5]
- “This information is then used by operations to set plans in motion to correct and improve agent’s skills and customers; experiences” [Participant C6]
- “Issues identified and filtered to the operation are used to coach agents” [Participant D7]
- “Other methods used include call listen evaluations, remote call listening, coaching, feedback sessions, and trend analysis” [Participant D8]

The question that arises is to which extent can training equip agents with skills to address complex calls. Surprisingly, only participant D8 mentioned trend analysis, which can include, according to Bryden (2019) and Mahomed (2021), the move to the cloud, automation and artificial intelligence (AI), omni-channel contact centers, intelligent interactive voice response, advanced self-service tools, big data/analytics, and Internet of things (IoT). To continuously improve service quality, agents should undergo frequent training – not only on technical aspects but also with respect to their general communication skills. The evidence base for these trainings are automatically analyzed calls.

One of the participants (B4) indicated that although they are appraised on a weekly basis, ranked from best to worst, agents who are consistently providing quality service can become coaches, as part of a reward system.

“By using a set standard quality framework that monitors the advisers’ interaction with clients, which are linked to all staff’s KPIs and performance scorecards” [Respondent B3]

Service quality furthermore influence KPIs and performance scorecards either in a negative or positive way.

### 4.3 Management of service efficiency

The perceptions of CCM regarding service efficiency are outlined in the section below. The question posed was: How do you measure service efficiency?

#### Theme 1: Talent management

Feedback includes the importance of having enough staff to handle inbound calls as well as the recruitment of skilled agents.

“We also measure schedule adherence within the call center, which ensures that we have the right number of people at the right time” [Participant A1]

“By ensuring that the right people, quantity and quality are at the right place at the right time” [Participant A2]

“By recruiting and retaining people with the right skills and attitude” [Participant C6]

It is evident from the responses that recruiting and retaining people with the right skills and attitude contributes to efficiency in terms of talent management, which correlates with the findings from Aksin *et al.* (2007), Mehrotra *et al.* (2010), Mwendwa (2017) and Dhanpat *et al.* (2018).

#### Theme 2: Typical call center measures focusing on efficiency

Tools for measuring efficiency were highlighted; they include operational scorecards, performance management techniques [Participant B3] staff schedules [Participants A1, B4 and C5], and average handling time (AHT) [Participant C5]. The average handling time plays a major role in managing efficiency within the call center environment (Hidayah Ibrahim, Suan & Karatepe, 2019; Dohan, 2022) and is highlighted by the responses received. Participant D7 stressed that the emphasis should be placed on real-time monitoring and contact-handling measures to manage efficiency. Participant D8 indicated that they use contact-handling measures for agents, resource utilization and cost-efficiency measures to ensure overall service efficiency, which supports the findings from scholars such as Van den Schrieck *et al.* (2014), Koçağa *et al.* (2015) and Dhanpat *et al.* (2018). The feedback provides a concrete idea of the types of management practices adopted to accomplish efficiency results.

#### Theme 3: Reflections on quality

It is furthermore emphasized that quality should not be compromised when managing efficiency.

“Cut out any unnecessary dialogue between agents and customers, but do not compromise quality” [Participant A2]

“Delivering excellent quality and service to our customers time to our customers in the least amount of time, striking the balance so that it’s not at the customer’s expense” [Participant C6]



Although this section specifically addressed service efficiency, the concept of quality is important to such an extent that a theme is dedicated to its inclusion; these concepts cannot function in isolation. Figure 1 illustrates a summary of quality measuring metrics (software programs).

Considering these findings, the next aim was to determine whether conflict exists between service quality and service efficiency in the call center industry.

#### 4.4 Conflict between constructs (quality and efficiency)

This section presents the responses of managers when asked if they experience conflict between managing quality and efficiency in their call centers. The question asked was: Do you experience conflict between service quality and service efficiency?

Call centers employ different metrics to measure quality and efficiency. Of all participants, two (B3 and D7) mentioned that they experience conflict between these two constructs, and one (C5) was not certain of the conflict.

“The conflict between the two lies in understanding the two components and thus aligning how these are going to be managed” [Participant B3]

“Yes to a certain degree. [Participant D7]

“Call centers have not agreed on the balance between quality and efficiency, due to a silo approach between departments such as quality, business intelligence and workforce management” [Participant C5]

A significant majority of the participants (A1, A2, B4, C6, D7 and D8) indicated that there is no conflict between the constructs, and they are confident that the conflict is manageable with different metrics in place. They also posit that these constructs are managed and measured in silos. Three of the eight respondents raised the concern that service quality should not be sacrificed for service efficiency, even though there is no clear evidence that this is indeed the case. Furthermore, participant D7 pointed out that “efficiency focuses on waste reduction”, but a concern arises that to which extent can agents handle complex problems, as waste reduction is associated to efficiency as a benchmark, whether agents can solve complex problems, which does not necessarily address quantity or efficiency.

Participant A2 is aware of the relationship between quality and efficiency and emphasized the possibility of compromising quality while managing efficiency, meaning that the participant is aware of the relationship between these two concepts but did not see conflict between them. The two answers were conflicted, as is the relationship between efficiency and quality.

Participant C6 is aware of the relationship between quality and efficiency. The response to the question posed was conflicting. Although the respondent indicated that there was no conflict between quality and efficiency, he/she cites the possibility of compromising quality by service efficiency.

“No, it is all related to ADT and CSI. We drive ADT to ensure that we accurately execute a call the first time and maintain a good quality by providing the right information. Oftentimes, we risk compromising the quality of service delivered” [Participant C6]

The majority of the participants (5) indicated that it is manageable as different metrics influence quality and efficiency. These results contradict arguments by Aksin *et al.* (2007), that managing these two metrics creates conflict.

## 5. DISCUSSION

The study provided insights on how CCM view the management of service quality and service delivery in the context of a South African telecommunications company, with four outsourced call centers. The existing literature posits that quality might be sacrificed for service efficiency in outsourced call centers; thus, more research on these concepts is needed to verify the extant literature. This study examined the perceptions of CCMs on service efficiency and quality, by asking questions such as how quality and efficiency are measured, and whether quality is sacrificed for efficiency. These perceptions are usually measured against a predetermined standard such as metrics (refer to Figure 1). For example, although FCR is reportedly measured, none of the participants indicated how it is measured. This could be an indicator of a conflict.

Two thirds of the managers could not discern an explicit tension between managing service quality and efficiency in the call center environment, and not all of them were aware of the relationship between these two concepts. This finding is inconsistent with previous studies (Banks & Roodt, 2011; Ellway, 2014; Raz & Blank, 2007) that pointed out that there is a conflict between managing service quality and service efficiency as CCM struggle to balance the efficiency and quality priorities of the business.

Service efficiency and quality in the call center environment were measured, with efficiency measurement being time dependent. One of the most important aspects of a call center is that phone traffic flows correctly (efficiency). In managing efficiency, the focus was on scheduling, call time reduction, and resource expenditure



reduction. Dhanpad *et al.* (2018) assert that call center jobs are designed along the principles of Taylorism, reflecting on organizations that minimize skill requirements, discretion and job cycle time. The study found that agents perceive the managerial approach as too restrictive when dealing with customer queries efficiently, mainly owing to rigid measurements of service quantity. The focus on service efficiency affects service quality (Ellway, 2014, Shemeuli *et al.*, 2020).

Service quality is measured both internally and externally and managed according to the data retrieved from the measurement tools in place. Employee's performance is often regarded as the product in a service context; therefore, a more appropriate management approach should pertain to employee empowerment (Cowgill, 2015). External measurement of service quality, which entails customers' experience and perspectives, can be subjective. Almohaimmeed (2019) conducted a study on the influence of internal and external service quality among employees and customers and found that internal service quality was the main driver for job satisfaction but not loyalty; both job satisfaction and loyalty have significant influences on external service quality as emphasized by Ananthram, Xerri, Teo and Connel (2018). Training and coaching methods are employed to improve service quality. Articles by Saberi *et al.*, (2015) and Mwendwa (2017) on call centers mention that agents receive induction, which focuses on technical and operational skills.

The majority of the CCMs from Generation Y were young male representatives; they revealed that planning played a vital role in their success. In particular, they were familiar with quality management, as most call centers have metrics in place to provide a clear guidance to both managers and agents. This is also the case with managing efficiency. CCMs are familiar with the management of efficiency and the interventions provided by each call center. Most of them, however, unanimously agree that quality should not be sacrificed when managing efficiency. They believed that service quality is not sacrificed for service efficiency. This contradicts statements made by Banks and Roodt (2011), who indicated that managers believe that RSA call centers do not emphasize efficiency, and that the quality of interactions weigh less than the levels of customer satisfaction (Leon *et al.*, 2017), which takes precedence in this industry. Furthermore, despite probing, it is apparent from the findings that the majority of CCMs provide the same rigid answers, making it difficult to discern what the difference between the two constructs are.

The findings contradict research conducted by Raz and Blank (2007), Banks and Roodt (2011) and Ellway (2014) who stated that managing these two constructs creates conflict. CCMs stressed that efficiency is constantly measured to secure low-cost deliverables according to high-quality criteria, such as volumes of calls answered, and calls resolved. The feedback on the outcome of customer satisfaction surveys conducted among callers on quality and efficiency could have contributed to the study with regard to client experience (Sato, 2018). Investing in worker empowerment through a high involvement approach can enhance service quality because employees can customize their service to fulfil the needs of their customers. Although the call center industry focuses on a technological approach to measure service quality and efficiency, a humanistic approach cannot be neglected. The views of Crosby and Deming are also relevant to improvements in operational efficiency and quality in the call center industry. Especially the findings from Banks and Roodt (2011:1) conducting a similar study in RSA, found that "the dilemma between efficiency and quality is prevalent in South African call centres and that efficiency key performance indicators drive management practices".

The study focuses only on the largest cellular telecommunication companies in RSA, specifically inbound call centers that outsource their services. Call center agents were not included in the study; this could have provided valuable feedback on positive and negative aspects in this industry regarding their perceptions on efficiency and quality. Thus, future research could include call center agents.

## 6. RECOMMENDATIONS

Based on the findings from this study, the following recommendations are made for the effective management of service quality and efficiency in the outsourced call center industry: 1) efficiency and service quality be managed by agents and not solely by metrics (human aspect should be considered), 2) realistic measures be in place by not focusing on digital measurements only, 3) effective managerial skills that allow CCM to deal with possible conflict between service quality and efficiency, 4) incorporate metrics that simultaneously measure tangible and intangible drivers to contribute to organizational success and finally to 5) ensure that agents and CCMs work hand in hand to understand the difference between service quality and service efficiency.

## 6. LIMITATIONS

The study investigated one large successful telecommunications company from Gauteng in South Africa that practices outsourcing. However, it is not representative of the entire country future studies should incorporate other call centers in varying industries. Due to limited recent research conducted in this discipline, literature included in this study is dated. Cross-sectional data was used to gauge the proposed relations. This raises the question of

causality. Therefore, in future studies that use longitudinal data would enable the researcher to draw firm conclusions about the direction of the relationships.

## 6. FUTURE RESEARCH

Furthermore, the inclusion of call center agents in the study to determine how they perceive quality and efficiency as key managerial factors could have provided interesting and valuable insight into managers of outsourced call centers. The article calls for more research on the trade-off between service efficiency and service quality in the call center industry from the perspective of call center agents.

## 7. CONCLUSION

The call center industry is characterized by fierce competition, with opportunities for high-volume, low-cost service delivery via technological advances in integrated telephone computer technology. This article makes a valuable contribution to the literature by clarifying whether service quality is sacrificed for service efficiency within call centers as experienced by CCM as highlighted in research studies conducted prior to this study. Contrary to the extant literature, the study does not consider the viewpoint of customers. Call centers are essential for industries such as insurance, finance, automotive, sales, business, retail, information technology, and basic services in RSA. Each industry has different requirements and opportunities for job seekers based on their skills and experience. Although the outsourced call center industry is associated with plenty of advantages, it is also prone with challenges. These challenges include offering high operational efficiency at a low cost, while providing quality service to customers. The outsourced call center industry is a major economic contributor and source of job opportunities. Metrics to measure quality and efficiency are different. Measuring these metrics separately does not imply that CCMs are certain about what quality and efficiency (quantity) are, or what the relationship between these constructs are. The findings of this study contradict other studies in the call center industry: two thirds of the participants but agrees with the outcomes from Rabin and Steinhauer (1988) but disagree with the findings from the Banks and Roodt' (2011) study that pointed out that there is a conflict between the constructs. The findings reveal that managers are aware of the reality that customers are paying for the services rendered; however, with greed and profiteering, managers end up emphasizing quantity over quality.

Recent studies on call centers in the RSA environment could not be found; therefore, this study provides an opportunity to explore this segment of the market in greater depth, and to address the shortcomings identified. The knowledge gap has been closed, as the purpose and objectives of the study have been met.

## ACKNOWLEDGEMENTS

Credit goes to Mr Deenan Gounder for his expertise.

## Works Citation

- Afthanorhan, A., Awang, Z., Rashid, N., Foziah, H. & Ghazali, P., (2019), "Assessing the effects of service quality on customer satisfaction", *Management Science Letters*, 9(1), pp.13-24.
- Aksin, Z., Armony, M. & Mehrotra, V. (2007), "The Modern Call Center: A Multi-Disciplinary Perspective on Operations Management Research", *Production and Operations Management*, Vol. 16 No. 6, pp. 665–688.
- Ando, A., Masumura, R., Kamiyama, H., Kobashikawa, S., Aono, Y. & Toda, T., (2020), "Customer satisfaction estimation in contact center calls based on a hierarchical multi-task model". *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, 28, pp.715-728.
- Almohaimmed, B.M. (2019), "Internal service quality and external service quality using two versions of SERVQUAL scale: an empirical evidence from five malls in the capital city of Asudi Arabia, *Verslas: teorija ir praktika*, Vol. 20 No. 1, pp.158-169.
- Alston, C. (2020), "Generation Y: definition, characteristics and personality traits", available from: <http://study.com/academy/lesson/generation-y-definition-characteristics-personality-traits.html> (accessed November 12, 2021).
- Ananthram, S., Xerri, M.J., Teo, S.T.T. & Connel, J. (2018), High-performance work systems and employee outcomes in Indian call centres: a mediation approach. *Personnel Review*, Vol 47 No 4, pp 931-950.
- Banks D., & Roodt, G. (2011), "The efficiency and quality dilemma: what drives South African call centre management performance indicators?", *South African Journal of Human Resource Management*, Vol. 9 No. 1, pp.55-71.
- Biloslavo, R., Bagnoli, C. & Figelj, R.R. (2013), "Managing dualities for efficiency and effectiveness of organisations", *Industrial Management and Data Systems*, Vol. 11 No. 3, pp.423-442.

- Bourke, D. (2019), "The best way to measure call centre quality assurance metrics", available at: <https://www.callcentrehelper.com/the-best-way-to-measure-call-centre-quality-assurance-metrics-143685.htm> (accessed November 20, 2021).
- Bryden, N. (2019), "Contact Centre Operations: Siccode 88999a August 2019", Available at: <https://www.whoownswhom.co.za/store/info/4767?segment=Business+Support+Services> (accessed July 10, 2022).
- Bryman, A. & Bell, E. (2015), *Research methodology: business and management contexts*. Oxford: University Press.
- CallMiner. (2021), "What are QA Metrics? Examples of QA metrics for call centers, aligning metrics with your goals, and best practices", Available at: <https://callminer.com/blog/qa-metrics-examples-qa-metrics-call-centers-aligning-metrics-goals-best-practices/> (accessed March 13, 2021).
- CallMiner. (2022), "25 Call Center Leaders Share the Most Effective Ways to Boost Contact Center Efficiency" Available at: <https://callminer.com/blog/25-call-center-leaders-share-effective-ways-boost-contact-center-efficiency/#:~:text=%E2%80%9CKey%20components%20in%20increasing%20the,Confidence%20in%20employees%20increases%20efficiency.> (accessed June 20, 2022).
- Chang, M., Jang, H., Li, Y. & Kim, D. (2017), "The relationship between the efficiency, service quality and customer satisfaction for state-owned commercial banks in China", *Sustainability*, Vol. 9 No. 12, pp.1-15.
- Chicu, D., Ryan, G. & Mirela, V., (2016), "Determinants of customer satisfaction in call centres", *European Accounting and Management Review*, Vol. 2 No. 2, pp.20-41.
- Clark, C.M., Tan, M.L., Murffett, U.M., Rogers, P.S. & Ang, S. (2019), "The call center agent's performance paradox: a mixed-methods study of discourse strategies and paradox resolution", *Academy of Management Discoveries*, Vol. 5 No. 2, pp.152-170. <https://doi.org/10.5465/amd.2016.0024>.
- Cowgill, B. (2015), "Competition and productivity in employee promotion contests", *Work*, March 10, 2015.
- Crosby, P.B. (1979), *Quality is free: the art of making quality certain*, New York: McGraw-Hill.
- Deming, W.E. (1982), *Out of the crisis*, MIT: Cambridge Mass.
- Dhanpat, N, Modau, F.D., Lungisani, P. MaboJane, R. & Phiri, M. (2018), Exploring employee retention and intention to leave within a call centre. *SA Journal of Human Resource Management*, 16 (0), 1-13.
- Dogan, O. (2022), A process-centric performance management in a call center, *Applied Intelligence*, pp.1-14.
- Echchakoui, S. & Baakil, D. (2019), "Emotional Exhaustion in Offshore Call Centers: A Comparative Study", *Journal of Global Marketing*, Vol. 32 No. 1, pp.17-36, DOI: 10.1080/08911762.2018.1427293.
- Ellway, B.P.W. (2014), "Is the quantity-quality trade-off in call centres a false dichotomy?", *Managing Service Quality*, Vol. 24 No. 2, pp.230-251.
- Fieberg, M. (2014), *The efficient management of a call centre*. Unpublished Masters dissertation, University of the Free State, Bloemfontein, South Africa.
- Fusch, P.I., & Ness, L.R. (2015), Are We There Yet? Data Saturation in Qualitative Research. *The Qualitative Report*, 20(9), 1408-1416. Retrieved from <https://nsuworks.nova.edu/tqr/vol20/iss9/3>.
- Gholami, R., Higón, D.A. & Emrouznejad, A. (2015), "Hospital performance: efficiency or quality? Can we have both with IT?", *Expert systems with applications*, Vol. 42 No. 12, pp.5390-5400.
- Hidayah Ibrahim, S.N., Suan, C.L. & Karatepe, O.M. (2019), "The effects of supervisor support and self-efficacy on call center employees' work engagement and quitting intentions", *International Journal of Manpower*, Vol. 40 No. 4, pp. 688-703. <https://doi.org/10.1108/IJM-12-2017-0320>.
- Hu, K., Allon, G. & Bassamboo, A., (2022), "Understanding customer retrials in call centers: Preferences for service quality and service speed", *Manufacturing & Service Operations Management*, 24(2), pp.1002-1020.
- Hudson, S., Gonzalez-Gomez, H.V. & Rychalski, A. (2017), "Call centers: is there an upside to the dissatisfied customer experience?", *Journal of Business Strategy*, Vol. 38 No. 1, pp.39-46.
- Jyoti, J., Kour, S. & Sharma, J. (2017), "Impact of total quality services on financial performance: role of service profit chain", *Total Quality Management*, Vol. 28 No. 8, pp.897-929.
- Kallel, H., Ben Hamad, S. & Triki, M. (2019), "Modeling the efficiency of Tunisian and Moroccan banks using the SFA approach", *International Journal of Productivity and Performance Management*, Vol. 68 No. 5, pp.879-902.
- Kappa, S.F., McClain, C., Wallace, K., Cinquina, P., Lawson, D., Smith, M.M., Walz, E., Edwards, B. & Kirsh, G.M. (2020), Implementation of a centralized, cost-effective call center in a large urology community practice. *Reviews in urology*, 22(2), p.67.
- Kilian, A. (2015), "South Africa continues to see big jobs potential in call-centre sector", *Engineering News*, 17 April 2015, available at: <http://www.engineeringnews.co.za/article/south-africa-continues-to-see-big-jobs-potential-in-call-centre-sector-2015-04-17> (accessed August 12, 2021).

- Koole, G. & Li, S. (2021), A practice-oriented overview of call center workforce planning. arXiv preprint arXiv:2101.10122.
- Koskina, A. (2007), "How 'Taylorised' is call centre work? The sphere of customer practice in Greece". In Burgess, J., and Connell, J. (eds), *Developments in the call centre industry – Analysis, changes and challenges*, Routledge, London, pp.170-188.
- Legros, B., Jouini, O. & Koole, G. (2021), "Should we wait before outsourcing? Analysis of a revenue-generating blended contact center", *Manufacturing & Service Operations Management*, 23(5), pp.1118-1138.
- León, F.R., Burga-León, A. & Morales, O. (2017), Supervisor's behavioral complexity: Ineffective in the call center. *International Journal of Business Science & Applied Management (IJBSAM)*, 12(1), pp.29-43.
- Mahomed, Y. (2021), "Contact centre operations", (Siccode) per Statistics South Africa: 88999a. September 2021", Who owns whom: Johannesburg, South Africa.
- Malhotra, N. & Mukherjee, A. (2004), "The relative influence of organizational commitment and job satisfaction and job satisfaction on service quality of customer-contact employees in banking call centres", *The Journal of Services Marketing*, Vol. 18 No. 2/3, pp.162-183.
- Masson, S. Jain, R., Ganesh, N.M. & George, S.A. (2016), "Operational analysis of Indian telecom service providers", *Benchmarking: An International Journal*, Vol. 23 No. 4, pp.893-915.
- Middleton, N. & Puntene, J. (2016), *The effective ecologist – succeed in the office environment* (1<sup>st</sup> Ed.), Pelagic Publishing, Wales.
- Miksen, C. (2019), "What is the difference between efficiency and effectiveness in business?", available at: <http://smallbusiness.chron.com/difference-between-efficiency-effectiveness-business-26009.html> (accessed June 15, 2020).
- Miller, N. & Hendrickse, R. (2016), Differences in call centre agents' perception of their job characteristics, physical work environment and wellbeing. *Problems and Perspectives in Management*, Vol 12 (No 4), pp 51-63.
- Mosese, M. & Mearns, M. (2016), "Leveraging management information in improving call centre productivity", *South African Journal of Information Management*, Vol. 18 No. 1, pp.2078-1865. <http://dx.doi.org/10.4102/sajim.v19i1.690>
- Mwendwa, L., 2017. Factors influencing call center agent attrition: A case of Kenya Power call center (Doctoral dissertation, University of Nairobi).
- Parasuraman, A., Berry, L.L. & Zeithaml, V.A. (1991), "Refinement and reassessment of SERVQUAL scale", *Journal of Retailing*, Vol. 67 No. 4, pp.420-450.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49, pp.41-50.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988), "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, Vol. 64 No. 1, pp.12-40.
- Quinlan, C., Babin, B., Carr, J., Griffin, M. & Zikmund, W. (2019), *Business research methods*, (2<sup>nd</sup> Ed), Cengage Learning, United Kingdom.
- Rabin, J. & Steinhauer, M.B. (1988), *Handbook of human services administration*, Marcell Dekker Inc., New York.
- Ramya, N., Kowsalya, A. & Dharanipriya, K., (2019), "Service quality and its dimensions", *EPRA International Journal of Research & Development*, 4(2), pp.38-41.
- Raz, A.E. & Blank, E. (2007), "Ambiguous professionalism: managing efficiency and service quality in an Israeli call centre", *New Technology, Work and Employment*, Vol. 22 No. 1, pp.83-96.
- Rennstam, M. (2020), "What to measure and manage in your call centre", available at: <https://www.callcentrehelper.com/what-to-measure-and-manage-in-your-call-centre-6447.htm> (accessed December 26, 2020).
- Reynoso, L.F.L. (2016), "A study on call/contact centers' inbound and outbound management process", *South Asian Journal of Management Sciences*, Vol. 10 No. 2, pp.1-10.
- Saberi, M., Jussain, O.K. & Chang, E. (2017), "Past, present and future of contact centers: a literature review", *Business Process Management Journal*, Vol. 23 No. 3, pp.574-597.
- Sato, H. (2018), "Are call centers sweatshops?", *Annals of Business Administrative Science*, Vol. 17 No. 5, pp.193-202.
- Shemueli, R.G., de Luque, M.F., & Bahamonde, D. (2020), The role of leadership and engagement in call center performance: answering the call in Peru, *Leadership & Organization Development Journal*, in press.
- Sobral, F., Chambel, M.J. & Castanheira, F. (2019), "Managing motivation in the contact center: The employment relationship of outsourcing and temporary agency workers", *Economic and Industrial Democracy*, 40(2), pp.357-381.
- Struwig, F.W. & Stead, G.B. (2015), "Research: planning, designing and reporting", (2<sup>nd</sup> Ed.), Pearson, Cape Town.
- Taylor, F.W. (1911), *The principles of scientific management*, Harper & Brothers, United Kingdom.

- Tran, C.T.T. & Dollery, B. (2020), “An empirical analysis of municipal efficiency and local resident satisfaction by council type in Victorian local government”, *Australian Journal of Public Administration*, Vol. 79 (in print).
- Van Antwerpen, S. (2016), “Pivotal role of call centre managers from an outsourced telecommunications company: A case in Gauteng, South Africa”, *Journal of Communication*, Vol. 7 No. 2, pp.197-207.
- Woydack, J., (2019), Language management and language work in a multilingual call center: An ethnographic case study. *Revista Internacional de Organizaciones*, (23), pp.79-105.
- Wu, S.J. (2019), “Assessing the individual and synergistic effects of quality management practices on operations performance”, *International Journal of Productivity and Performance Management*, Vol. 69. No. 2, pp. 297-320.
- Yarborough, S. & Hester, P.R. (2015), “Understanding contact center agents’ preferences for selecting calls to work”, *Applications of Management Science*, Vol. 17, pp.71-93.
- Yin, R.K. (2018). *Case Study Research: Design and Methods* (6th Ed.). London: Sage Publications.