## Masters' Thesis

# The Effect of FLE Burnout on Customer Satisfaction and the Moderating Role of FLE

# **Empathy in the Restaurant Industry**

A focus on the customer-related implications of employees' emotional state

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# Table of contents

Abstract.		5
Chapter 1	l. Introduction	6
Chapter 2	2. Theoretical background1	1
2.1	Customer experience and satisfactionI	1
2.1.1	Customer satisfaction1	3
2.2	FLE burnoutI	5
2.2.1	FLE burnout and customer satisfaction1	6
2.3	EmpathyI	8
2.3.1	<i>FLE empathy and customer satisfaction</i> 2	0
2.3.2	The effects of FLE empathy2	2
2.4	Synthesis and conceptual model2	3
Chapter 3	3. Methodology2	6
3.1	Systematic literature review2	6
3.1.1	Phase 1: design of the search2	8
3.1.2	Phase 2: the execution2	8
3.1.3	Phase 3: the analysis2	9
3.1.4	Phase 4: the confluence	0
3.2	Scenario-based role-playing experiment3	0
3.2.1	Sample3	1
3.2.2	Stimuli3	1
3.2.3	Measurements	2



3.2	2.4 Reliability and Validity	34
3.2	2.5 Research ethics	35
3.2	2.6 Data collection	
3.2	2.7 Method of analysis	
Chapte	r 4. Analyses	
4.1	Assumptions of ANOVA	
4.2	Main results of ANOVA	
4.3	Differences for age, gender and education	44
4.4	Manipulation checks	44
4.5	Reliability and validity	45
Chapte	r 5. Conclusion and discussion	47
5.1	Answer to the research question	47
5.2	Theoretical contributions	
5.3	Managerial implications	49
5.4	Limitations and suggestions for further research	51
Referen	1ces	54
Append	lices	77
A: Op	perationalization of key concepts	77
B: Inc	clusion and exclusion criteria	
C: Ca	ohen 's Kappa	80
D: Sc	cott's Pi	81



E: Scenario's	84
F: Measurement items included in questionnaire	89
G: Assumptions of ANOVA	91
H: Results ANOVA	94
I: Differences for age, gender and education	98
J: ANOVA – gender differences	100
K: ANCOVA assumptions and output	101
Covariate 1: gender	
Covariate 2: age	
Covariate 3: education	
L: Manipulation checks	112
<i>M: Validity – correlations</i>	113

# List of abbreviations

ANCOVA	Analysis of covariance
ANOVA	Analysis of variance
CS	Customer satisfaction
FLE	Front-line employee
NPS	Net promoter score
SERVQUAL	Service quality
TSR	Transformative service research



## Abstract

To increase awareness for the customer-related implications of employees' emotional state, this research aims to better understand the effect of perceived FLE burnout symptoms on customer satisfaction and the moderating role of perceived FLE empathy. First, a systematic literature review has been conducted in order to acquire and aggregate existing knowledge about the key concepts' *empathy* and *customer experience*. Second, a scenario-based role-playing experiment has been performed where perceived FLE burnout symptoms (absent vs. present) and perceived FLE empathy (low vs. high) were the manipulated variables (e.g., Bitner, 1990; Karande et al., 2007; Söderlund and Rosengren, 2008). The results indicate that perceived FLE burnout symptoms have a negative effect on customer satisfaction, but perceived FLE empathy has a much stronger, positive effect on customer satisfaction, and no statistical interaction effect is present. For further research, it is suggested to focus on the real life, dyadic interactions between FLEs and customers. It is recommended to managers to focus on improving the empathic ability of FLEs in order to enhance customer satisfaction and simultaneously reduce burnout symptoms, improve business performances and increase future revenues.

*Key concepts: Customer Experience, Customer Satisfaction, Perceived FLE Burnout Symptoms and Perceived FLE Empathy* 



## **Chapter 1. Introduction**

By late June 2020, COVID-19 had infected more than eight million people worldwide (Guo et al., 2020). People are inherently afraid of getting COVID-19 because of the high potential for infection and mortality (Chen & Eyoun, 2021). The fear of contracting COVID-19 is especially prevalent in restaurants - as restaurants are high-contact businesses (Choi et al., 2014) and may cause front-line restaurant employees to fear coming into contact with customers who may be infected (Chen & Eyoun, 2021). COVID-19 spread rapidly around the world and in order to stop or slow down the transmission of this highly contagious virus, government and public health experts have offered several safety precautions (Kabadayi et al., 2020). Many service organizations are looking for alternative ways of how to deliver their services to keep meeting the demands of their customers. In many cases, service employees are therefore forced to deliver their services at a distance and their work environments are drastically altered (Carnevale & Hatak, 2020). In addition, the COVID-19 pandemic created "service megadisruptions" for businesses, mainly in the services sector. Many companies are struggling to maintain continuity in their services, whilst others are simply "hibernating" or even closing down their operations (Chen & Eyoun, 2021). Previous research shows that the restaurant industry has been the most affected by the COVID-19 pandemic and four out of ten restaurants have been closed (Chen & Eyoun, 2021).

Apart from the COVID-19 pandemic, the hospitality industry is already acknowledged as being one of the most stressful professions (Zohar, 1994). Front-line employees (further referred to as FLEs) within the hospitality sector have frequent and intensive interpersonal contacts with guests and are therefore highly susceptible to stress and burnout (Yagil, 2006). Furthermore, these intensive interpersonal contacts are challenging because it entails balancing a complex set of requirements from managers, colleagues and customers (Söderlund, 2017). Therefore, it is not surprising that customer contact employees are at risk of burnout (Cho et



al., 2013; Cordes and Dougherty, 1993; Lings et al., 2014; Singh et al., 1994; Singh, 2000; Yagil, 2006; Yavas et al., 2013). In addition, Seltzer & Numerof (1988) argue that FLEs are more susceptible to burnout than those in managerial or administrative functions. Employee burnout has major complications for employees' health and both productivity and effectivity of the organization (van Dierendonck, Schaufeli & Buunk, 1998). Thereby, stress levels of restaurant FLEs are known to be higher than employees in other industries due to regular customer interactions and long working hours (Choi et al., 2014; Han et al., 2016). This is reinforced by the COVID-19 pandemic by causing stress, emotional exhaustion and anxiety in hospitality workers, especially with restaurant employees, which negatively affects FLE well-being and results in burnouts (Yıldırım & Solmaz, 2020; Choi et al., 2014; Han et al., 2016).

Considering the high stress levels of FLEs in restaurants and the fact that the restaurant industry has been affected the most by the COVID-19 pandemic, this research will focus on FLEs experiencing burnout within the restaurant industry.

Media and academics pay much attention to the FLEs in healthcare, but the more traditional FLEs, like the ones in the restaurant sector, have received little attention (Voorhees et al., 2020). Nevertheless, this is highly important since burnout has major negative consequences like depression, distress, anxiety, diminished self-esteem, sleep disorders, fatigue (Chen & Kao, 2012; Cordes and Dougherty, 1993; Kristensen et al., 2005; Maslach et al., 2001, Schaufeli et al., 2008), lower job satisfaction and a lack of organizational and personal commitment (Miller, Ellis, Zook & Lyles, 1990). Considering these consequences, it is improbable that FLEs with burnout symptoms have the ability to generate positive experiences for customers through interacting with them (Söderlund, 2017). In addition, previous research has identified that there is a negative relation between FLE burnout and customer satisfaction (Yagil, 2012). This research will focus on perceived FLE burnout symptoms rather than on



burnout symptoms from the employee perspective since it might be the case that employees are burned out but that this is not perceived by the customer.

Contradictory to burnout symptoms, employee empathy is crucial for FLEs to possess (McBane, 1995; Varca, 2009). Employee empathy is critical in creating memorable experiences, especially within the hospitality industry, and it is a major driver of customer satisfaction (Ariffin & Maghzi, 2012; Bitner, 1990; Hsieh & Tsai, 2009; Lam & Chen, 2012; Lin & Worthley, 2012; Parasuraman et al., 1994; Sohrabi, Vanani, Tahmasebipur, & Fazli, 2012). However, research by Hart, Paetow & Zarzar (2018) shows that burnout reduces peoples' empathic concern. This indicates a negative relationship between burnout and empathy, meaning that the more empathic individuals show less burnout symptoms (Wilkinson, Whittington, Perry & Eames, 2017). Improving the empathic ability of employees could foster employee well-being and improve levels of customer satisfaction (Homburg, Wieseke & Botnemann, 2009) and business performances (Marandi & Harris, 2010; Galante et al., 2016).

This research aims to better understand the effect of perceived FLE burnout symptoms on customer satisfaction and the interaction of perceived FLE burnout symptoms and perceived FLE empathy on customer satisfaction. This leads to the following research question:

RQ: "How do perceived FLE burnout symptoms affect customer satisfaction and what is the moderating role of perceived FLE empathy?"

It is important to answer this question in order to provide managers with a better understanding of the effects of perceived FLE burnout symptoms on customers and their level of satisfaction. Moreover, it is critical for managers to know how the perception of FLE empathy influences levels of customer satisfaction in order to be able to improve business performances and future revenues. Besides, it might have an impact on how managers train and employ their employees. In addition, this study will contribute to previous research by gaining insights in the employee burnout-customer satisfaction link in order to eventually build theories



concerning employee behavior and its impact on customer satisfaction (e.g., Bitner et al., 1990; Delcourt et al., 2013; Hartline and Jones, 1996; Keh et al., 2013; Smith et al., 1999, Söderlund and Colliander, 2015; Winsted, 2000), because little research has been done regarding the influence of perceived FLE burnout symptoms on customer satisfaction (Söderlund, 2017). Moreover, this study does not only contribute to research on perceived FLE burnout symptoms and customer satisfaction, but it also adds to a more general stream of research that recognizes the effect of employees' emotional state on customers' responses to an offer (Söderlund, 2017). Although previous research pays attention to employees' display of burnout symptoms, this research focuses on the customer-related implications of employee burnout, which is a less well-studied area (Söderlund, 2017). Moreover, there is limited knowledge about the interaction of perceived FLE burnout symptoms and perceived FLE empathy on customer satisfaction, while this might be relevant for managers to know since it will allow them to increase customer satisfaction through empathic FLEs and simultaneously reduce burnout symptoms. This research addresses these theoretical voids and contributes to previous literature by focusing on the perception of FLE burnout symptoms and FLE empathy and providing knowledge about the effects on customer satisfaction, together with the strengths of these effects.

Concerning the managerial relevance, existing research shows that hospitality organizations often fail to address the problems related to employee well-being, like employees' experience of work-related burnout, supportive feelings and their feeling of being valued (Anderson, Provis, & Chappel, 2001; Tabacchi, Krone, & Farber, 1990; Zohar, 1994). However, this is vital for organizations since employees display of burnout symptoms negatively influences customer satisfaction (Yagil, 2006) and employee performances (Söderlund, 2017). In addition, previous research has not focused on customers perceptions of employee's display of burnout. Instead, most studies are based on self-assessments of employees with regard to burnout (Söderlund, 2017). However, it is critical for restaurant



managers to know the implications of FLE burnout and to understand how customers perceive burned-out FLEs because this might change the way managers address burnout symptoms of employees, and how they train and employ them. Moreover, it is important for managers to understand the effect of perceived FLE burnout symptoms on customer satisfaction in order to address the issues associated with burnout through providing FLEs with organizational support (Walters & Raybould, 2007) or mindfulness trainings (Johnson & Park, 2020). In addition, a management report of KPMG (2020) indicates that more organizations need to take action and address burnout symptoms in order to respond to the COVID-19 pandemic. Since there is little reason to believe that the implications of the COVID-19 pandemic will be short-lived (Carnevale & Hatak, 2020), it is vital to find ways to deal with this "new normal" and help FLEs to better adjust to their new work conditions, provide support and address the issues surrounding workplace burnout.

As previously stated, employee empathy is a major driver of customer satisfaction. However, it is unclear whether perceived FLE empathy also has a positive effect on customer satisfaction and what the strength of this effect is. Lastly, burnout reduces people's empathic concern (Hart, Paetow & Zarzar, 2018), thus if perceived FLE empathy positively affects customer satisfaction it is not only important for managers to improve the empathic ability of FLEs but also to reduce the symptoms of burnout.

This research first addresses the theoretical background in chapter two, where theories most relevant to this research are discussed and combined and a conceptual model is portrayed. Chapter three concerns the methodological part of this research, where selected techniques and methods are explained. Chapter four contains the analyses of the data collected. In chapter five, a conclusion will be drawn, theoretical and managerial contributions will be discussed and an elaboration on the limitations of this study together with suggestions for future research will be provided.



## **Chapter 2. Theoretical background**

This chapter will highlight the key concepts concerning the conceptual model of this research, which include customer satisfaction as a measurement of customer experience, perceived FLE burnout symptoms and perceived FLE empathy. Relationships between these key concepts will be identified with knowledge gained from a Systematic Literature Review. This will result in a synthesis of the three concepts in order to eventually reach expectations about the formulated research question. This chapter will conclude by presenting the conceptual and statistical model for this research.

## 2.1 Customer experience and satisfaction

Academic research on customer experience is thriving and according to ninety-three percent of business leaders, delivering a relevant and trustworthy customer experience is crucial for overall business performances (Harvard Business Review Analytic Services, 2017). Moreover, the customer experience plays a major role in identifying the success of a company's offering (Gentile et al., 2007), and many qualitative studies have stimulated the idea of delivering a unique customer experience (Collier et al., 2018). Customer experience is a powerful construct but a clear understanding is missing (Lemke, Clark & Wilson, 2011).

As one of the first scholars, Holbrook & Hirschman (1982) spoke about the consumption experience, focusing on the experiential aspects of consumption. In addition, Schmitt (1999) elaborates on creating a holistic experience for customers, while Pine & Gilmore (1998) were focusing more on the experience economy and addressed the importance of customer experiences and the benefits firms could derive from it. However, there is ambiguity about whether customer experience is the response of the customer to an offering (Meyer & Schwager, 2007) or an evaluation of the quality of the offering (Kumar et al., 2014). Gentile et al. (2007) argue that the customer experience is based on the interactions between a customer and a company's offerings, which elicit a reaction. It concerns a personal experience involving



rational, emotional, sensorial, physical and spiritual levels. The assessment of the experience is based on the difference between a customer's expectations and the stimuli resulting from the interaction.

Multiple scholars assert that customer experience reflects the responses of a customer to firm-related contact. Homburg, Jozíc & Kuehnl (2017) build on definitions from Schmitt (1999) and Verhoef et al. (2009) who view customer experience as the evolvement of the sensorial, affective, cognitive, behavioral and relational responses of a customer to a firm's offerings by experiencing a journey of several touchpoints in prepurchase, purchase and postpurchase phases while continuously assessing this journey against co-occurring experiences. In addition, Lemon & Verhoef (2016) apply a broader definition and view customer experience as a multidimensional construct, focusing on customers' responses to a company's offerings during the entire customer journey. McColl-Kennedy (2018) takes a customer focused perspective and builds on a fundamental study by McColl-Kennedy (2012), highlighting the significance of interactions at touchpoints. Thereby, McColl-Kennedy (2018) emphasizes that the customer experience must be viewed as a journey, consisting of several touchpoints over time.

Furthermore, Becker & Jaakkola (2020, p. 637) define customer experience as *nondeliberate, spontaneous responses and reactions* to particular stimuli. However, both Lemon & Verhoef (2016) and Becker & Jaakkola (2020) confirm that a deeper understanding of customer experience is needed, complementary to existing papers. The aforementioned studies contribute to a holistic understanding of customer experience but a more atomistic perspective is necessary. In line with this, research by De Keyser et al. (2020) aims to refine the broad definition of customer experience to ensure a better understanding by disentangling it into smaller pieces, referred to as 'CX components'. These CX components agglomerate together into three overarching building blocks. The first block, labeled as 'touchpoints', refers to the



points of interaction that take place between the customer and the firm during the customer journey. The second block, referred to as 'context', implies the conditional resources that are internally or externally available to the customer. The third building block, labeled as 'qualities' points to the type of customer responses to customer-firm interactions. These three building blocks, together with their components, constitutes the basis of the TCQ nomenclature, which aims to define customer experience in a simple but precise manner.

#### 2.1.1 Customer satisfaction

Organizations carefully managing the customer experience benefit from an increased customer satisfaction (McColl-Kennedy et al., 2018). Customer satisfaction serves as a significant building block to enrich our understanding of customer experience (Lemon & Verhoef, 2016). This research includes this more focused construct, customer satisfaction, as a measurement of customer experience. It is known that satisfied customers are vital for long term business successes (Kristensen et al., 1992; Zeithaml et al., 1996; McColl-Kennedy & Schneider, 2000) and that customer satisfaction has a direct effect on future revenue streams (Fornell, 1992). In addition, determining customer satisfaction is critical for effectively delivering services (Yüksel & Rimmington, 1998), and it is key to meet the needs and wants of customers (Han & Ryu, 2009). Customer satisfaction can be defined as a post-consumption assessment of a particular product or service (Yüksel & Rimmington, 1998). In addition, McDougall & Levesque (2000) define customer satisfaction as the overall assessment of the service provider. However, two clear conceptualizations emerge from existing literature as a means to define customer satisfaction: the transaction-specific perspective and the cumulative perspective (Boulding et al., 1993). Concerning the transaction-specific definition, customer satisfaction is viewed as a post-choice assessment of a particular purchase. From a cumulative perspective, customer satisfaction is defined as the overall evaluation of both the buying and consumption experience with a particular good or service (Fornell, 1992; Johnson and Fornell,



1991). This study focuses on the latter. In other words, this study views customer satisfaction as the overall level of contentment with a product or service experience. In order to measure the complex construct customer satisfaction in a general way, a measurement of Söderlund (2017) can be adjusted and used for this study. The scale of Söderlund (2017) is used in several national satisfaction measurements and in many published academic journals (cf. Fornell, 1992; Johnson et al., 2001; Rego et al., 2013).

Higher levels of customer satisfaction lead to higher levels of customer loyalty, which results in future revenue (Gilbert & Veloutsou, 2006). Furthermore, in current markets with fierce competition it is widely believed that the key to achieving a competitive advantage is to provide a high-quality service that will lead to satisfied customers (Han & Rya, 2007). In addition, Anderson and Fornell (2000) hypothesize that firms exist and compete in order to generate satisfied customers. The success of a business depends not so much on the amount of goods and services it can produce, but rather on how well it satisfies its customers in order for them to return and keep the business growing (Gilbert, Veloutsou, Goode & Moutinho, 2004). On the other hand, dissatisfied customers will not only go elsewhere, but are likely to actively convince others to go with them (Gilbert et al., 2004). Since customer satisfaction leads to customer loyalty, it serves as a future criterion (Heale & Twycross, 2015), and therefore this research will also include a widely used measurement of customer loyalty from Zeithaml, Berry & Parasuraman (1996). In addition, the Net Promoter Score is a singular question that correlates customer satisfaction and primarily customer loyalty with organizational growth (Reichheld, 2003). Therefore, this more simplistic measurement will also be included in this study. Lastly, since customer experience can also be defined as the evaluation of the quality of an offering (Kumar et al., 2014), the empathy dimension of SERVQUAL will be included in this study (Zeithaml, Berry & Parasuraman, 2002). SERVQUAL is a measurement of customers perceptions of service quality and many studies have effectively used this scale (Zeithaml,



Berry & Parasuraman, 2002). Only the empathy dimension will be included because this fits within the interest of this study and the remaining dimensions are not appropriate for the experimental design of this study.

Considering the restaurant industry, in the late 1980s and 1990s, a few studies focused on aspects of the dining experience that define levels of customer satisfaction (e.g., Knutson 1998; Davis & Vollmann, 1990; Dubé, Renaghan & Miller, 1994; Kivela, Inbakaran & Reece, 2000). More recent research focuses on links between customer satisfaction and performances, emphasizing that higher levels of customer satisfaction lead to an increased probability of repeated purchase, which positively influences restaurant sales (Gupta, McLaughlin & Gomez, 2007).

#### **2.2** FLE burnout

FLEs are customer-contact employees like service delegates who execute their work under the constraints of both the internal and external environments of an organization (Edmondson & Boyer, 2013). This is challenging because these employees need to balance a complicated set of demands from colleagues, customers and managers (Söderlund, 2017). Therefore, it is not surprisingly that customer contact employees are at risk of burnout (Cho et al., 2013; Cordes and Dougherty, 1993; Lings et al., 2014; Singh et al., 1994; Singh, 2000; Yagil, 2006; Yavas et al., 2013).

Burnout has received growing recognition (Schaufeli, Leiter & Maslach, 2009) and is described as "a specific form of work stress" (Cordes & Dougherty, 1993), "a modern illness" (Golembiewski et al., 1998), "a long-term response to chronic emotional and cross-personal stress at work" (Maslach et al., 2001), and is conceptualized as a three-part mental syndrome. The first part considers *emotional exhaustion*, which refers to feelings of overload, lack of energy and desensitization and is often referred to as fatigue (Söderlund, 2017). The second part is *depersonalization*, which refers to the propensity of employees to de-individualize



customers and treat them as objects instead of people (Söderlund, 2017). The third part comprises of *reduced personal accomplishment*, which refers to a very low motivation, low self-worth and inefficiency (Argentero et al., 2008; Babakus et al., 1999; Cordes & Dougherty, 1993; Hsieh & Hsieh, 2003; Lee & Ashforth, 1990; Maslach et al., 2001; Singh et al., 1994). However, it is worth mentioning that some researchers wonder if the third part is really associated with the burnout construct. It has been argued that burnout consists mostly of emotional exhaustion and depersonalization (Cox et al., 2005; Kristensen et al., 2005; Schaufeli et al., 2008) and that emotional exhaustion constitutes the core of the burnout construct (Cho et al., 2013; Cox et al., 2005; Demerouti et al., 2001; Garman et al., 2002; Grandey et al., 2012; Lings et al., 2014; Maslach et al., 2011).

Many symptoms of burnout are mentioned in previous literature. For convenience, these symptoms can be grouped into five categories: physical, emotional, behavioral, interpersonal, and attitudinal (Kahill, 1988, p. 285). Concerning the physical symptoms, burnout negatively affects physical health and causes illness in general. It also adds to somatic complaints like sleep disorders. In addition, the most frequent emotional symptoms are fatigue, irritability, blameworthiness, depression and feelings of being powerless (Armstrong, 1979; Beck & Gargiulo, 1983; Forney et al., 1982). Regarding the behavioral symptoms, burnout causes unproductive conduct and low job performance. Moreover, it increases turnover intentions and substance use (Kahill, 1988). Concerning interpersonal symptoms, burnout negatively affects relationships with customers, family members and friends. Lastly, attitudinal symptoms include the desire to escape from customers, a reduced level of job satisfaction, and a negative approach towards customers, colleagues and oneself (Kahill, 1988).

## 2.2.1 FLE burnout and customer satisfaction

Previous research implies that burnout is communication-inducing, which means that individuals who experience burnout might share their symptoms with their colleagues (Bakker



et al., 2007; Maslach & Leiter, 2016). It is imaginable that customers might hear such conversations and it is even conceivable that employees suffering from burnout explicitly express their feelings when interacting with customers (Söderlund, 2017). Moreover, research by Bakker et al. (2007) suggest that a person experiencing burnout can communicate symptoms to another, in other words, "the crossing over of burnout". In addition, previous research has shown that customer's appraisal of the emotional state of the employee has a positive effect on the positive emotions of the customer and a negative effect on the negative emotions of the customer (Söderlund & Rosengren, 2007, 2008).

Burnout has major negative consequences like depression, distress, anxiety, diminished self-esteem, sleep disorders and fatigue (Chen & Kao, 2012; Cordes and Dougherty, 1993; Kristensen et al., 2005; Maslach et al., 2001, Schaufeli et al., 2008). Furthermore, employees experiencing burnout have lower levels of job satisfaction and a lack of organizational and professional commitment (Miller, Ellis, Zook & Lyles, 1990). Considering these consequences, it is improbable that employees with burnout symptoms have the ability to generate positive experiences for customers through interacting with them (Söderlund, 2017). Earlier research found that employee burnout is negatively related to customer outcomes (Garman, Corrigan & Morris, 2002; Halbesleben & Rathert, 2008; Shen et al., 2015). In addition, previous research has identified that there is a negative relation between FLE burnout and customer satisfaction (Yagil, 2012; Söderlund, 2017). However, no research is to be found concerning the visibility of burnout and previous research did not focus on customers' perception of FLE burnout symptoms. Instead, most studies are based on self-assessments of employees with regard to burnout (Söderlund, 2017). This research will address this gap and contribute to previous literature by focusing on customer perceptions of employee behavior, which is linked to customers' assessment of services (e.g., Bitner et al., 1990; Hartline & Jones, 1996; Smith et al., 1999; Winsted, 2000). It is important to pay attention to perceived FLE burnout since



burnouts are not necessarily perceived by customers. Moreover, this study also adds to the relatively new research area of Transformative Service Research (TSR), which focuses on the relationship between service and well-being. More specifically, TSR pays attention to the creation of "uplifting changes" with the purpose of improving the lives of both customers and employees (Anderson & Ostrom, 2015). This research contributes to the increased interest in TSR and focuses on the implications of perceived FLE burnout on customer satisfaction in restaurants.

In order to address the issues associated with burnout, managers could provide employees with organizational support (Walters & Raybould, 2007). Previous research has shown that perceived organizational support can mitigate stress levels, thereby reducing burnout symptoms (Mutkins, Brown & Thorsteinsson, 2011). Perceived organizational support refers to the perception of an employee regarding the degree to which the organization appreciates their contribution and is concerned with their well-being (Alcover, Chambel, Fernández & Rodríguez, 2018). This is in line with Transformative Service Research, which focuses on the relationship between service and well-being (Anderson & Ostrom, 2015).

Considering the above, it is expected that perceived FLE burnout symptoms in a restaurant service context are negatively related to customer satisfaction. Therefore, the following is hypothesized:

H1: Perceived FLE burnout symptoms negatively affect customer satisfaction.

#### 2.3 Empathy

The relevance of empathy in customer-employee interactions has become evident in previous studies (Aggarwal et al., 2005; Giacobbe et al., 2006; Parasuraman, Zeithaml & Berry, 1988). Empathy contributes to customer satisfaction (Annamalah et al., 2013), and can be seen as an interpersonal phenomenon since it takes two to empathize; the subject and the target (Betzler, 2019). Empathy connects these two individuals, who were otherwise in isolation from



each other. Thereby, the *empathizer* is the one empathizing with the *target* (Davis, as cited in Håkansson & Montgomery, 2003). The empathizer pays attention to the target's needs and often tries to help, while the target welcomes the concern of the empathizer (Håkansson & Montgomery, 2003). However, people differ from each other concerning their empathic ability (Dymond, 1949). Some individuals are highly sensitive and often perceive what the other is thinking and feeling, while other people are unsusceptible and slow in picking up signals to be empathetic (Dymond, 1949). In order to describe people's capability to deduce what another individual is thinking and feeling, Ickes (1993) used the term "empathic accuracy". The empathic accuracy of an individual is determined by the familiarity with the target and the motivation of the empathizer (Klein & Hodges, 2001). Besides, the empathic accuracy of females is suggested to be higher than for males (Klein & Hodges, 2001). In addition, there are studies that found gender differences in the sense that women are more empathic than men (Graham & Ickes, 2000; Davis, 1996; Eisenbeg & Lennon, 1983).

A study by Kerem et al. (2001) concludes that empathy has different meanings for different people, making a distinction between empathizing with another or being empathized with. However, acquiring another person's perspective is key in many definitions of empathy. Dymond (1949) defines empathy as the transposition of oneself into the thinking, acting and feeling of another individual and so seeing the world as he does. Rogers (1959) conceptualized empathy in a more comprehensive form and defines being empathic as perceiving the emotional components and meanings of another individual to feel as if one were the person himself, but without losing the 'as if' condition. In other words, experiencing the pain or pleasure of another individual in the way he feels it but without ever losing the acknowledgement that it is as if you are experiencing these feelings.

For a better understanding of the complex construct "empathy", Morse et al (1992) assembled a model that is very useful within service industries. The model consists of four



components: the emotional, moral, cognitive and behavioral component (Morse et al., 1992). Emotional empathy, also known as affective empathy, can be seen as the ability to subjectively experience the psychological state or intrinsic feeling of another person. Moral empathy refers to the altruistic power that motivates a person to show empathic behavior. Furthermore, cognitive empathy reflects the helper's ability to develop an objective understanding of another's feelings. Lastly, behavioral empathy considers the empathizer's attempt of communicating in order to convey his or her understanding of the other person's perspective and ensure that this understanding is accurate (Morse et al., 1992).

However, this can be simplified by only distinguishing between cognitive and affective empathy. Besides, researchers generally agree on the cognitive and emotional (affective) dimensions of empathy (Jones & Shandiz, 2015; Wieseke, Geigenmüller & Kraus, 2012). Cognitive empathy can be defined as "taking the perspective of another individual" and affective empathy is known as "understanding and feeling another persons' emotion" (Duan & Hill, 1996). Indeed, many theorists argue that empathy encompasses cognitive and affective components, and leave out the others. In line with Duan & Hill, Lockwood et al. (2017) define the cognitive component as the capacity for taking another individual's perspective, and the affective component as sharing the emotions of another individual.

Previous research shows that taking the other's perspective and appreciate his or her feelings positively relates to prosocial behaviors (Eisenberg, 2000). In addition, many studies argue that empathy results in exhibiting both adaptive and pro-social behaviors, the latter being defined as actions intended to help others (Nguyen et al., 2020; Wieseke et al., 2012).

## 2.3.1 FLE empathy and customer satisfaction

Employee empathy can be defined as an employee's ability to sense and react to a customer's thoughts, feelings, and experiences (Wieseke et al., 2012). Understanding the feelings and perspectives of another individual is considered to be an important characteristic



FLEs should possess (McBane, 1995; Varca, 2009). In addition, employees providing empathy to their customers is an important condition for successfully providing services (Zeithaml et al., 1996). In other words, in order to identify and satisfy customer needs in employee-customer interactions, employee empathy is key (Aggarwal et al. 2005; Giacobbe et al. 2006). It increases the responsiveness and the ability of employees to provide services to customers in a proactive manner (Itani & Inyang, 2015; Annamalah et al., 2011). Furthermore, empathy is critical in creating memorable experiences, especially within the hospitality industry, and it is a major driver of customer satisfaction (Ariffin & Maghzi, 2012; Bitner, 1990; Hsieh & Tsai, 2009; Lam & Chen, 2012; Lin & Worthley, 2012; Parasuraman et al., 1994; Sohrabi, Vanani, Tahmasebipur, & Fazli, 2012). Moreover, previous studies show that empathy can increase the feeling of satisfaction with an interpersonal relationship (Davis et al., 2017).

Empathic employees have a tendency to accurately sense how the customer experiences the service, which makes them able to react more precisely to the customer and adjust their interaction behavior to customer expectations (Bettencourt & Gwinner, 1996; Gwinner et al., 2005). In addition, the ability and willingness of an employee to take the customers' perspective is essential in delivering service quality (Parker & Axtell, 2001). If service employees have the ability to empathize with their customers, they increase their understanding of customer needs since it makes them able to see things from the customer's point of view (Wieseke et al., 2012). This will increase customers' value of interaction which results in higher customer satisfaction (Brady & Cronin, 2001). In addition, Axtell et al. (2007), Dawson et al. (1992) and Homburg et al. (2009) argue that empathetic employees express interest in the customers' welfare and are able to determine and assess the needs and wants of the customer. Besides, employees empathizing with customers makes them more aware of subtle social signals that declare what the customer wants (Costa et al., 2004). Since empathy is a multidimensional construct, this research focuses on the perception of FLE empathy instead of FLE empathy from the



employees' perspective. From this view, it is sure that empathy is perceived by the customer while this is not sure when measuring employee empathy because of individual differences.

In sum, it is expected that perceived FLE empathy is positively related to customer satisfaction. Therefore, the following is hypothesized:

H2: Perceived FLE empathy positively affects customer satisfaction.

## 2.3.2 The effects of FLE empathy

Although people prefer to avoid empathizing with strangers and are more likely to focus on their own situations instead of those of others (Cameron et al., 2019), being empathetic results in cognitive and emotional consequences, which give you a strengthened feeling by having been able to help. Besides, facilitating empathy might improve one's own wellbeing (Galante et al., 2016) and it gives you a satisfied feeling with your own situation (Hansen et al., 2018). In addition, empathy in the work environment might create a more humane situation which is less stressful (Costa et al., 2004). Although little research has been done concerning the link between employee empathy and burnout in the restaurant industry, there is much literature to be found with regard to the healthcare sector. Research by Wilkinson, Whittington, Perry & Eames (2017) found that there is a negative relation between burnout and empathy, which means that when one construct decreases, the other will increase. Or when one construct increases, the other decreases. This means that more empathic individuals show less burnout symptoms (Wilkinson et al., 2017). On the other hand, it means that individuals experiencing burnout tend to treat customers as "impersonal objects" (Maslach et al., 2001, p. 403) and implies that burned-out people are less empathetic (Trauernicht, Oppermann, Klusmann & Anders, 2020). Whilst empathy is related to the ability to focus on another individual (Eisenberg & Miller, 1987), people experiencing burnout have to face the loss of their own resources, which results in an increased focus on themselves (Trauernicht et al., 2020).





However, a study by Wagaman, Geiger, Shockley & Segal (2015), which focuses on social workers, argues that empathy trainings might help employees to prevent burnout. Besides, a study by Johnson & Park (2020) shows that mindfulness trainings can help FLEs in the hospitality sector to empathize with guests and that such trainings can reduce levels of stress and burnout. In addition, within the service industry, most researchers agree upon the possibility to train people to empathy. Improving the empathic ability of FLEs could foster employee well-being and improve levels of customer satisfaction (Homburg et al., 2009) and business performances (Marandi & Harris, 2010; Galante et al., 2016).

Employee empathy may occur together with employees' display of burnout symptoms, and this study examines if perceived FLE empathy changes the impact of perceived FLE burnout symptoms on customer satisfaction. It is expected that, under the condition of high perceived FLE empathy, perceived FLE burnout symptoms have a reduced, negative impact on customer satisfaction. Therefore, the following is hypothesized:

**H3:** Perceived FLE empathy reduces the negative effect of perceived FLE burnout symptoms on customer satisfaction.

## 2.4 Synthesis and conceptual model

Taking the preceding paragraphs into account, this research will focus on customer satisfaction as a measurement of customer experience. Customer satisfaction has a direct effect on future revenue streams (Fornell, 1992) and existing literature indicates that restaurant employees are in a core position to affect levels of customer satisfaction (Kandampully et al., 2018). FLEs in restaurants experience high levels of stress (Choi et al., 2014; Han et al., 2016). These stress levels have increased even more due to the COVID-19 pandemic, which results in burned out employees (Yıldırım & Solmaz, 2020; Choi et al., 2014; Han et al., 2016).

Instead of focusing on burnout from the employee's perspective, this research will focus on customers' perceptions of FLE burnout symptoms, which has not been examined before



(Söderlund, 2017). This is important since burnouts are not necessarily perceived by customers, but a negative relation has been found between employee burnout and customer satisfaction (Yagil, 2012; Söderlund, 2017).

Moreover, previous research shows that empathy is an important characteristic which FLEs should possess (McBane, 1995; Varca, 2009). Nevertheless, employee empathy is a major driver of customer satisfaction (Ariffin & Maghzi, 2012; Bitner, 1990; Hsieh & Tsai, 2009; Lam & Chen, 2012; Lin & Worthley, 2012; Parasuraman et al., 1994; Sohrabi, Vanani, Tahmasebipur, & Fazli, 2012). In addition, there is a negative relation between burnout and empathy, meaning that when one construct decreases, the other will increase (Perry & Eames, 2017). These relationships are depicted in the conceptual model in figure 1, together with the statistical model in figure 2 and the associated sub questions and hypotheses. For the operationalization of the key concepts, see appendix A.





Figure 1: Conceptual model

## Sub questions

- 1. What is the relationship between perceived FLE burnout symptoms and customer satisfaction?
- 2. What is the relationship between perceived FLE empathy and customer satisfaction?
- 3. What is the interaction effect of perceived FLE burnout symptoms and perceived FLE empathy

on customer satisfaction?



Figure 2: Statistical moderation model (adapted from Jin-Sun Kim, Judy Kaye, Lore K. Wri, 2001)

H1: Perceived FLE burnout symptoms negatively affect customer satisfaction

H2: Perceived FLE empathy positively affects customer satisfaction

H3: Perceived FLE empathy reduces the negative effect of perceived FLE burnout symptoms

on customer satisfaction



## **Chapter 3. Methodology**

This chapter will elaborate on the methods of data collection, used to conduct this study. First, attention will be paid to a systematic literature review that has been performed as a form of secondary data. Thereafter, the focus will be on a scenario-based online experiment which is conducted to collect primary data.

#### **3.1** Systematic literature review

In order to assess, review and aggregate literature about the key concepts' *empathy* and customer experience, a systematic literature review has been carried out. This means the review is clearly planned and the review steps are fully described since all actions are transparent (Boland et al., 2013). A systematic literature review aims to identify all empirical evidence that fits the predefined inclusion criteria to answer a specific research question or hypothesis. By using explicit and systematic methods in examining articles and all available research, bias can be minimized (Snyder, 2019). This provides reliable findings from which conclusions can be derived and decisions can be made (Snyder, 2019). Conducting a systematic literature review consists of four general phases. These phases form a synthesis of various standards and guidelines that are suggested for literature reviews. Phase one concerns the design of the review, followed by the conduct of the review in phase two. Phase three focuses on the analysis and eventually the review will be written in phase four (Snyder, 2019). These four phases are used in this research in order to provide the reader with a transparent and detailed description of the process. In figure 3, the PRISMA diagram (adapted from Moher et al., 2009) is depicted to provide an overview about the flow of information through the different stages of the systematic literature review, followed by a further elaboration on the four above-mentioned phases.





Figure 3: PRISMA Flow Diagram (Adapted from Moher et al., 2009)



#### 3.1.1 Phase 1: design of the search

In this stage, scoping searches are defined in order to find relevant literature about the construct empathy and customer experience, see figure 3. Moreover, inclusion and exclusion criteria are developed in order to set boundaries for the systematic literature review. For the inclusion and exclusion criteria, see appendix B.

## 3.1.2 Phase 2: the execution

Regarding phase two, all 6,088 titles and abstracts are scanned in order to identify which articles could be relevant. This process has been carried out by two independent teams, consisting of four researchers in total. All researchers were aimed by a systematic literature review on both empathy and customer experience. However, each researcher had a different viewpoint and focus. Two teams were created and each consisted of two independent researchers. The first team consisted of researcher one and two and coded article 1 up to 3,000. The second team consisted of researcher three and four and coded article 3,001 up to 6,088.

The process started with each researcher independently coding the articles that were assigned to his or her team. Thereby, the researcher decided for all four researchers if an article was relevant or not according to the predefined inclusion and exclusion criteria. Afterwards, the researchers of each team compared the codes and made an overview of the similarities and differences. Concerning the dissimilarities, each team filtered out all the codes that were aligned in order to be left with the ones that were different. Each team planned a meeting in order to discuss each decision they did not agree upon to eventually reach alignment.

After these discussions, the interrater reliability was measured as a percent agreement with the use of Cohen's Kappa (Landis & Koch, 1977). Interrater reliability occurs when researchers assign the same score to the same data item (Pykes, 2021). The Kappa value for team one and two were .73 and .38 respectively. This means that the level of agreement was substantial for team one and fair for team two (Landis & Koch, 1977). The fair level of agreement of team



two might be caused by not understanding the inclusion and exclusion criteria of each rater properly. However, the implications for this study are minor since each disagreement has been discussed until alignment was reached. See appendix C for an elaboration on Cohen's Kappa.

The Cohen's kappa measurement for interrater reliability can be misleading since there might be a proportion of agreement that occurred by chance. Scott's Pi is a way to measure the reliability of nominal-scale coding and shows the degree of agreement between two coders while taking into account both the observed proportion of agreement as well as the proportion that would be expected by chance (Craig, 1981). For an elaboration of Scott's Pi, see appendix D.

## 3.1.3 Phase 3: the analysis

After peer screening on the basis of set inclusion and exclusion criteria, 330 articles seemed relevant for conducting this research. For a second iteration, the titles and abstracts were scanned in more detail to be left with the most relevant articles. During this second iteration, articles about psychiatry, nursing, psychotherapeutic reactions, medicines, aggressiveness, dementia and disabled people were excluded. This because of time constraints and to keep this research within a framework of hospitality service. This second iteration resulted in 102 remaining articles. These articles seemed relevant according to their title and abstract and were downloaded and imported in Mendeley (Mendeley Reference Manager, 2020) in order to review the full text. This resulted in an inclusion of 14 articles since many papers addressed employee stress, or empathy in psychological settings or other settings too deviant from the hospitality industry. In addition, by making use of the snowballing approach (Wohlin, 2014), 13 additional papers were identified and included. Furthermore, to look beyond the scope of the systematic literature review and to provide a more complete view, grey literature has been included as well (Mahood et al., 2013), which resulted in 159 additional papers.



#### 3.1.4 Phase 4: the confluence

This last phase brings everything together. In total, 186 articles have been scrutinized and synthesized in order to wright the theoretical background.

## 3.2 Scenario-based role-playing experiment

In order to gather primary data, a scenario-based role-playing experiment (SBRPexperiment) has been performed, similar to the article by Söderlund (2017). This is a wellestablished method to collect data and is used by a number of academic papers (Rungtusanatham, Wallin & Eckerd, 2011). In order to test the hypotheses, a 2x2 betweensubjects design was used. A major advantage of an experiment is that treatments are assigned to participants before the effects are measured, which ensures a time asymmetry between the cause and effect (Söderlund, 2017). The two factors of the design were the level of perceived FLE empathy by the customer (high vs. low) and perceived FLE burnout symptoms (absent vs. present). Role-play scenarios were developed as experimental stimuli and participants were asked to adopt an a priori defined role (Rungtusanatham et al., 2011). In this study, this reflects the role of the customer who interacts with a waitress in a service encounter. The scenarios were part of a survey with measures of customer satisfaction (Fornell et al., 1992; Söderlund, 2017), customer loyalty (Zeithaml, Berry & Parasuraman, 1996), NPS (Reichheld, 2003), SERVQUAL (Zeithaml, Berry & Parasuraman, 2002), manipulation checks and several demographic questions. The four treatment groups are presented in table 1.

Tab	le 1	l.S	cenario-	based	role	e-pl	aying	exper	iment	(2x2)	design	)
-----	------	-----	----------	-------	------	------	-------	-------	-------	-------	--------	---

		Perception of FLE empathy			
		High	Low		
Perception of FLE burnout symptoms	Absent	CS	CS		
	Present	CS	CS		

Note: CS is an abbreviation for customer satisfaction



#### 3.2.1 Sample

This study contains a very broad sample since this research is focused on customers of restaurants in the Netherlands, which represents a wide range of ages and backgrounds. The respondents were randomly allocated to one of the four role-play scenarios. Just as in the paper of Söderlund (2017), a convenience sample was used to reach participants because a random sample was not available of the population of interest, similar to many experiments (Seltman 2018). Each participant was asked to read the scenario and to imagine they were the customer. Then the participant was asked to answer all the subsequent questions in the online survey, which included the scenario as well. After all four scenarios, identical questions were asked.

## 3.2.2 Stimuli

As stated above, this study is conducted through the use of a role-play scenario approach (Söderlund, 2017), which is often used in research on service encounters (e.g., Bitner, 1990; Karande et al., 2007; Söderlund and Rosengren, 2008). Role-play scenarios are particularly useful for variables and contexts that are not easy to manipulate in a field setting. This approach allows to systematically manipulate variables as well as the context. In this research, the role-play scenario is based on the customer who pays a visit to a restaurant and interacts with the waitress. One basic narrative was developed after which four variations were created, based on the different manipulations of the 2x2 factorial design, see appendix E for the scenarios. For the development of the basic narrative, the article of Sukhu, Bilgihan & Seo (2017) was used. The basic narrative was assumed to encompass a service encounter with a normal, average service experience in order to represent a setting in which both perceived FLE burnout symptoms and perceived FLE empathy are likely to affect customer satisfaction.

For the manipulation of perceived FLE burnout symptoms, the manipulation that was used by Söderlund (2017) is applied with adjustments to fit this research in order to properly mimic the perception of FLE burnout symptoms. Because researchers have been questioning if



the third facet of burnout "reduced personal accomplishment" is part of the construct, this manipulation focuses only on the two facets "emotional exhaustion" and "depersonalization", in line with Söderlund (2017). A distinction has been made between the presence and absence of the perception of FLE burnout symptoms which was manipulated by making the waitress appear depleted or full of energy. Moreover, the level of focus and orderliness and the extent to which the waitress appeared to be withdrawn and distracted by her own thoughts were adjusted for both the absence and presence of burnout. For an elaboration of the scenarios, see appendix E.

For the manipulation of perceived FLE empathy, a distinction is made between high perceived FLE empathy and low perceived FLE empathy. The manipulation that was used in the article by Pilling & Eroglu (1994) was adjusted to this research. More specifically, it was manipulated by making the waitress interact like one who "recognizes and relates well to the customers' needs and concerns, seems to care about them, and takes action accordingly" (high empathy) or as one who "does not recognize and relate well to the customers' needs and concerns nor seems to care about them" (low empathy). For the scenarios, see appendix E.

Research by Hoffman (1977) shows that females appear to be more empathetic than males. In addition, behavioral research shows that people, both men and women, tend to perceive women as more empathetic than men (Davis, 1996; Eisenberg & Lennon, 1983) and therefore, the scenarios included a waitress, in order to enhance the measurement of perceived FLE empathy.

## 3.2.3 Measurements

The participants of this research are randomly allocated to one of the four scenarios after which they were asked to respond to a few questions. These questions contain items to measure customer satisfaction (Fornell et al., 1992; Söderlund, 2017), customer loyalty (Zeithaml, Berry & Parasuraman, 1996), NPS (Reichheld, 2003), SERVQUAL (Zeithaml, Berry & Parasuraman,



2002), several demographic questions and manipulation checks. For an overview of the measurement items included in the questionnaire, see appendix F.

## Dependent variable – Customer satisfaction

In order to measure customer satisfaction, two scales were used. First, to measure customer satisfaction in a more general way, two of the three satisfaction items were used from the paper of Söderlund (2017). These items are used in several national satisfaction measurements and in many published academic journals (cf. Fornell, 1992; Johnson et al., 2001; Rego et al., 2013). The two items were adapted to the restaurant service context and were as follows: (1) "How satisfied or dissatisfied are you with the service in this restaurant?" and (2) "To what extent does the service in this restaurant meet your expectations?". A 7-point Likert scale is used since empirical evidence shows that 7-point Likert scale items ensure a more accurate measurement of the actual evaluation of a respondent and are particularly useful for online surveys (Finstad, 2010). Second, the Net Promoter Score is used as a more simplistic approach to measure the complex construct customer satisfaction and consists of only one item ("How likely is it that you would recommend this restaurant to a friend or colleague?") (Reichheld, 2003). This measurement is appropriate for this research since it is related to organizational growth and customer loyalty (Reichheld, 2003). Therefore, better recommendations can be made with regard to managers and the scores can be used to encourage managers to improve the empathic ability of employees in order to reach organizational growth.

The perception of FLE burnout symptoms is not only likely to affect customer satisfaction but it could also affect customer loyalty (Gilbert & Veloutsou, 2006; Yagil, 2012). In addition, researchers suggest a strong relationship between customer satisfaction and loyalty (Saad Andaleeb & Conway, 2006). Therefore, a measurement of customer loyalty, adapted from Zeithaml, Berry & Parasuraman (1996), was also included in the survey and consisted of the following three items: (1) *I would like to come back to this restaurant in the future,* (2) *I* 



would recommend this restaurant to my friends or others, and (3) I would say positive things about this restaurant to others.

In addition, the empathy dimension of SERVQUAL was also included in the survey in order to assess service quality. Three items of Zeithaml, Berry & Parasuraman (2002) were adjusted to the restaurant context and used in the survey: (1) *This waitress gives you individual attention*, (2) *This waitress has your best interest at heart*, and (3) *This waitress understands your specific needs*.

#### Manipulation checks

In order to check the manipulation of the independent variable 'perceived FLE burnout symptoms', the same manipulation check was used as in the paper of Söderlund (2017). Participants were asked to respond to three statements: (1) "*The waitress' batteries appear to be flat*", (2) "*The waitress is a cold person*", and (3) "*The waitress is revoked*". A scale ranging from 1 (totally disagree) to 7 (totally agree) was used for these items (Finstad, 2010).

In order to check the manipulation of the moderator 'perceived FLE empathy', the same manipulation check was used as in the paper of Collier, Barnes, Abney & Pelletier (2018). This measurement consisted of four items: (1) "*The waitress tried to empathize with my feelings during the service encounter*", (2) "*The waitress tried to see the experience through my perspective*", (3) "*The waitress tried to understand my point of view during the experience*", and (4) "*The waitress put herself in my shoes*". A scale ranging from 1 (totally disagree) to 7 (totally agree) was used for these items (Finstad, 2010).

## 3.2.4 Reliability and Validity

In this section, efforts made - prior to the stage of data collection - to ensure reliability and validity will be discussed. Chapter four will elaborate more on the rigor of this research, which is achieved through measurements of validity and reliability.



#### Reliability

In order to ensure reliability, several efforts have been made prior to the stage of data collection. First, with regard to the systematic literature review, different raters interpreted and assessed the same articles, which fostered inter-rater reliability (Belur, Tompson, Thornton & Simon, 2018). However, the levels of inter-rater agreement could have been higher since the levels for the two groups were substantial and fair (Landis & Koch, 1977).

#### Validity

Internal validity is the extent to which it can be concluded that changes in X caused the changes in Y (Seltman, 2008). In order to ensure internal validity, it is best to have no differences on average since it is practically inconceivable to have no differences at all between the different groups. This can best be assured through randomly assigning treatments to experimental units (Seltman, 2008). While conducting the experiment for this research, respondents were randomly assigned to different scenarios, enhancing internal validity. In addition, the scenarios are evenly presented which leads to balanced groups. Furthermore, respondents did not know which treatments they were assigned to. This is also called "blinding" and ensures internal validity. These endeavors nearly removed all threats to internal validity. Besides, a major advantage of a randomized experiment is the ability to make causal conclusions (Seltman, 2008). In addition, construct validity is the degree to which a research instrument precisely measures all aspects of the construct (Heale & Twycross, 2015). Construct validity is enhanced by deriving measurements from existing, published literature.

## 3.2.5 Research ethics

Concerning the conduct of this research, efforts are made in order to avoid bias during data collection, data analysis and interpretation in order to ensure objectivity (American Psychological Association, 2003). Moreover, data is processed and interpreted in an honest way, without falsifying or misrepresenting data. In order to follow an ethical path, the following



principles are taken into account. First, informed consent was ensured by providing participants with information about the aim of the research, the associated risks and what is required from them. Thereby, participants engaged in the research process on a voluntary basis. Second, during the conduct of this research it aimed to protect anonymity and confidentiality of the participants. The survey was able to be filled in anonymously, as to conceal the identity of the participants and to ensure privacy. In addition, attention is paid to confidentiality during the stage of data storage and the analysis (Nijmegen School of Management, 2020–2021). Moreover, findings may be applied in organizations in order to understand how burned-out employees are perceived by customers. Lastly, the research participants did, at any stage, have

the right to withdraw from the research process without being persuaded to continue (American Psychological Association, 2003).

#### 3.2.6 Data collection

On June 3, 2021, the survey was published and distributed among people who were easy to contact. An anonymous open survey link was used and participants did not have to fill in any personal information, ensuring confidentiality and anonymity to the respondents. The survey was accessible on smartphones, tablets and computers. After checking the representativity of males and females, the survey was closed on June 10, 2021.

In total, 338 responses were collected, of which 95 were incomplete. These incomplete responses were

deleted to reduce bias (Hair, 2019), which means the sample thus consists of 243 respondents

129
113
1
243
46
67
53
71
6
243
7
41
126
66
2
1
143

Table 2. Descriptive statistics


of which 113 were men, 129 were women, and 1 was noted as different. The descriptive statistics of the present research are depicted in table 2.

# 3.2.7 Method of analysis

Just as in the article of Wall & Berry (2007), the data of this research are analyzed by performing a two-way ANOVA, which will be further elaborated in chapter four. According to Hair (2019, p. 372), the primary purpose of a two-way ANOVA is to understand if there is an interaction between the two independent variables and the dependent variable. ANOVA is particularly useful when used in conjunction with experimental designs (Hair, 2019, p. 372). That is, research designs in which the researcher directly controls or manipulates one or more independent variables to determine the effect on the dependent variable(s) (Hair, 2019, p. 372). When both the predictor and moderator variable are dichotomous (categorical), 2x2 ANOVA (also called two-way ANOVA) is used for testing moderating effects (Jin-Sun Kim, Judy Kaye, Lore K. Wri, 2001, p. 68).

In order to conduct a 2x2 analysis of variance, the four assumptions of ANOVA should have been met. These include (1) interval or ratio scale of measurement (2) independence of participants, (3) normality of scores and (4) homogeneity of variance (Field, 2018). The first two assumptions were assessed prior to the stage of data collection. In order to meet assumption one, the dependent variable 'customer satisfaction' was measured as a scale variable. In order to meet assumption two, participants were only able to complete the survey once. Assumption three and four needed to be assessed after the stage of data collection. Therefore, these will be discussed in chapter four.



### **Chapter 4. Analyses**

This chapter includes the analyses of the scenario-based role-playing experiment in order to eventually formulate an answer to the research question of this study in chapter five. In order to assess the relationship of perceived FLE burnout symptoms and perceived FLE empathy on customer satisfaction, together with the interaction effect, a 2x2 analysis of variance (ANOVA) has been conducted. This analysis consisted of the absence and presence of perceived FLE burnout symptoms and high and low perceived FLE empathy.

#### 4.1 Assumptions of ANOVA

In order to conduct a 2x2 analysis of variance, the assumptions of ANOVA should have been met, see appendix G for the output. After data collection, assumption three (normality) and four (homogeneity) have been assessed. In order to assess the assumption of normality, the kurtosis and skewness are computed (Hair, 2019). The skewness statistic is .175 with a standard error of .156. The kurtosis statistic is -1.249 with a standard error of .311. Therefore,  $Z_{skewness} = \frac{.175}{\sqrt{\frac{6}{243}}} = 1.11$  and  $Z_{kurtosis} = \frac{-1.249}{\sqrt{\frac{24}{243}}} = -3.97$ . Since  $Z_{kurtosis}$  exceeds the critical value of -2.58 (for a

significance level of .01), the distribution is flatter and thus non-normal (Hair, 2019). However, for sample sizes of 200 or more, these effects may be negligible (Hair, 2019).

Concerning the homogeneity of variance, Levene's test of equality of error variance has been computed (Hair, 2019) with customer satisfaction as the dependent variable. This shows that p < 0.05, indicating that equal variances cannot be assumed and thus the assumption of homogeneity is violated (Field, 2018). However, ANOVA is a robust test, meaning that if not all assumptions are met, F remains accurate (Field, 2018).

### 4.2 Main results of ANOVA

In this subchapter, the main results of the analyses will be discussed. For the results of ANOVA, computed with IBM SPSS Statistics for Apple Mac, version 26 (Field, 2018), see appendix H.



#### Customer satisfaction as the dependent variable

The ANOVA shows a significant main effect of perceived FLE burnout symptoms on customer satisfaction (F = 19.768, p < 0.01), with a small effect size ( $\eta^2 = .076$ ) (Richardson, 2011). The observed power (1- $\beta = .993$ ) shows that the likelihood of finding statistically significant results, if such an effect exists in the population, is high (Seltman, 2008), reducing the chance of type II error (Hair, 2019). Table 3 shows that customer satisfaction - with both levels of perceived FLE empathy - was reduced when the customer perceived FLE burnout symptoms. Therefore, H1 was supported.

Moreover, the results also show a significant main effect of perceived FLE empathy on customer satisfaction (F = 298.832, p < 0.01), with a large effect size ( $\eta^2 = .556$ ) (Richardson, 2011). The observed power is very high (1- $\beta = 1.000$ ), indicating that the likelihood of finding statistically significant results, if such an effect exists in the population, is strong (Seltman, 2008). This also reduces the chance of type II error (Hair, 2019). Table 3 indicates that customer satisfaction – with both levels of perceived FLE burnout symptoms - was increased when the customer perceived FLE empathy, providing support for H2.

Concerning hypothesis 1 and 2, the plot in figure 4 also shows that these hypotheses can be accepted since it is visible that the presence of perceived FLE burnout symptoms decreases levels of customer satisfaction. Perceived FLE empathy however, increases levels of customer satisfaction.



Figure 4: Plot – means of customer satisfaction

Note: the closer the means are to 7, the lower the level of customer satisfaction. Thus, the closer the means are to 1, the higher the level of customer satisfaction. This is because 1 was displayed as 'totally agree' and 7 as 'totally disagree' because of the display of the survey on mobile phones.



However, the interaction effect of perceived FLE burnout symptoms and perceived FLE empathy on customer satisfaction is insignificant (F = 3.844, p > 0.05). Moreover, the observed power (1-  $\beta$  = .497) is quite low (Seltman, 2008), which increases the probability of not rejecting the null hypothesis when it is actually false, also referred to as the type II error (Hair, 2019, p.19). The insignificant interaction effect means that perceived FLE empathy does not change the relationship between perceived FLE burnout symptoms and customer satisfaction, leading to a rejection of H3.

		Perceived FLE empathy			
		High	Low		
Perception of FLE burnout symptoms	Absent	1.595	4.650		
	Present	2.633	5.038		

Note: the closer the means are to 7, the lower the level of customer satisfaction. Thus, the closer the means are to 1, the higher the level of customer satisfaction. This is because 1 was displayed as 'totally agree' and 7 as 'totally disagree' because of the display of the survey on mobile phones.

#### NPS as the dependent variable

A measurement of NPS was also included in the survey in order to have a similar measurement of customer satisfaction and one that is related to organizational growth (Reichheld, 2003). NPS scores are computed with a single question. Respondents rate this question on a 0-10 scale, after which three different groups are computed: the promoters (9-10), the passively satisfied (7-8) and the detractors (0-6). The "promoters" are extremely likely to recommend the restaurant whereas the "detractors" are extremely unlikely to recommend the restaurant whereas the "detractors" are extremely unlikely to recommend the restaurant whereas the "detractors" are extremely unlikely to recommend the restaurant. In order to calculate the NPS score, the percentage of detractors is subtracted from the percentage of promoters (Reichheld, 2003). In table 4, an overview is given of the computed NPS scores. It is extremely visible that the net promoter score is highest with high perceived FLE empathy and the absence of perceived FLE burnout symptoms. Besides, the difference



between scenario 1 and 2, and scenario 3 and 4 is enormous, indicating that the perception of high FLE empathy increases NPS extremely. In addition, the difference between scenario 1 and 3 is also remarkable since the presence of perceived FLE burnout symptoms reduces NPS heavily.

	Promoters in %	Passively	Detractors	NPS in %
		satisfied in %	in %	
Scenario 1: high empathy, burnout absent	79.3	17.2	3.5	75.8
Scenario 2: low empathy, burnout absent	9.7	19.4	70.9	-61.2
Scenario 3: high empathy, burnout present	35.6	40.7	23.7	11.9
Scenario 4: low empathy, burnout present	3.1	15.6	81.3	-78.2

Table 4. Overview of NPS scores

Note: NPS is an abbreviation of Net Promoter Score

Apart from these NPS scores, ANOVA is used to compare means (Hair, 2019). Concerning the assumptions of ANOVA, the skewness statistic is .453 with a standard error of .156. The kurtosis statistic is -.998 with a standard error of .311. Therefore,  $Z_{skewness} = \frac{.453}{\sqrt{\frac{6}{243}}} =$ 

2.88 and  $Z_{\text{kurtosis}} = \frac{-.998}{\sqrt{\frac{24}{243}}} = -3.18$ . Since both values exceed the critical value of  $\pm$  2.58, the

distribution is non-normal, thus the assumption of normality is violated (Hair, 2019). In addition, Levene's test of equality of error variances is significant (p < 0.05), indicating a violation of the assumption of homogeneity (Field, 2018). However, the violation of normality and homogeneity is negligible because of the large sample size (N > 200) and because of the robustness of ANOVA (Hair, 2019; Field, 2018). The results of ANOVA show that perceived FLE burnout symptoms significantly affect the probability that respondents recommend the restaurant (F = 16.410, p < 0.01). Although the power is very high (1-  $\beta$  = .981), the effect size is very low ( $\eta^2$  = .064) (Richardson, 2011). Furthermore, the results indicate that there is a strong ( $\eta^2$  = .433), significant effect of perceived FLE empathy on the probability that



respondents recommend the restaurant (F = 182.773, p < 0.01). Besides, the observed power is very high, which reduces the chance of a type II error (1- $\beta$  = 1.000) (Seltman, 2008).

Moreover, it is noteworthy that the interaction effect of perceived FLE burnout symptoms and perceived FLE empathy on the probability that respondents recommend the restaurant is significant (F = 4.483, p < 0.05). However, it has a very small effect ( $\eta^2 = .018$ ) (Richardson, 2011) and the observed power (1- $\beta = .559$ ) indicates a higher chance of a type II error (Hair, 2019).

# Customer loyalty as the dependent variable

In addition to customer satisfaction and NPS, customer loyalty was also included in this research since previous research showed that employees' display of burnout symptoms was not only likely to affect customer satisfaction, but also customer loyalty (Yagil, 2012). The skewness statistic is .470 with a standard error of .156. The kurtosis statistic is -1.038 with a standard error of .311. Therefore,  $Z_{\text{skewness}} = \frac{.470}{\sqrt{\frac{6}{243}}} = 2.99$  and  $Z_{\text{kurtosis}} = \frac{-1.038}{\sqrt{\frac{24}{243}}} = -3.30$ . These

findings show that the results are not normally distributed since both values exceed the critical value of -2.58 (for a significance level of .01) and thus the assumption of normality is violated (Field, 2018). In addition, Levene's Test of Equality of Variances is significant (p < .05), meaning that the assumption of homogeneity is violated (Field, 2018). Although these assumptions are breached, the sample size of N > 200 makes these effects negligible (Hair, 2019) and since ANOVA is a robust test, F remains accurate (Field, 2018). When looking at the output of ANOVA, the effect of perceived FLE burnout symptoms on customer loyalty is significant (F = 13.988, p < 0.01) but the effect is very small ( $\eta^2 = .055$ ) (Richardson, 2011). However, the observed power ( $1 - \beta = .961$ ), means that the chance to find the effect, under the condition that the effect exists, is very high (Richardson, 2011). Moreover, the results show that perceived FLE empathy also significantly affects customer loyalty (F = 221.357, p < 0.01) with a strong effect ( $\eta^2 = .481$ ) (Richardson, 2011). The observed power of this effect ( $1-\beta =$ 



1.000), indicates a very high chance to find an effect if it exists (Richardson, 2011). Furthermore, the interaction effect of perceived FLE burnout symptoms and perceived FLE empathy on customer satisfaction is insignificant (F = 2.209, p > 0.05). The observed power was also very low (1- $\beta$  = .316), indicating a small chance to find the effect if present (Richardson, 2011).

### SERVQUAL as the dependent variable

Furthermore, the empathy dimension of SERVQUAL was also included in the survey (Zeithaml, Berry & Parasuraman, 2002). The skewness statistic is .278 with a standard error of .156. The kurtosis statistic is -1.457 with a standard error of .311. Therefore,  $Z_{skewness} = \frac{.278}{\sqrt{\frac{6}{243}}} =$ 

1.77 and 
$$Z_{\text{kurtosis}} = \frac{-1.457}{\sqrt{\frac{24}{243}}} = -4.64$$
. Since the value of  $Z_{\text{kurtosis}}$  exceeds the critical value of -2.58

(for a significance level of .01), the distribution is flat and therefore non-normal (Hair, 2019). Thus, the assumption of normality is violated. Moreover, Levene's Test of Equality of Variances is significant (p < .05), meaning that the assumption of variances is breached (Field, 2018). However, as stated above, the violation of the assumptions can be negligible because of the large sample size (N > 200) and the robustness of ANOVA (Hair, 2019; Field, 2018). Concerning the output of ANOVA, the data shows that the effect of perceived FLE burnout symptoms on service quality is significant (F = 11.660, p < 0.01). Although the effect is weak ( $\eta^2 = .047$ ) (Richardson, 2011), the observed power is very high ( $1 - \beta = .925$ ), reducing the chance of a type II error (Hair, 2019). In addition, the effect of perceived FLE empathy on service quality is also significant (F = 459.952, p < 0.01). This effect is very strong ( $\eta^2 = .658$ ) (Richardson, 2011), and the observed power is also high ( $1 - \beta = 1.000$ ), indicating a high probability of rejecting the null hypothesis when it should be rejected (Hair, 2019, p.19). ANOVA shows that the interaction effect is insignificant (F = 0.22, p > 0.05) and that the chance to find this effect if it exists is very low ( $1 - \beta = .053$ ) (Richardson, 2011).



## 4.3 Differences for age, gender and education

The differences for age, gender and education are computed with customer satisfaction as the dependent variable. For the output, see appendix I. The most important findings show that respondents aged between 25-34 indicate slightly lower levels of customer satisfaction (M = 2.84) and respondents aged between 50-65 indicate slightly higher levels of customer satisfaction (M = 3.36). In addition, it appears that women (M = 3.55) indicate lower levels of customer satisfaction in comparison to men (M = 3.51). Moreover, the results of ANOVA in appendix J show that, although the differences are minor, perceived FLE burnout symptoms have a greater effect on men (M = 5.14 & M = 2.77) than on women (M = 5.03 & M = 2.48). Furthermore, it is visible that perceived FLE empathy has a bigger effect on women (M = 1.57 & M = 2.48) than on men (M = 1.62 & M = 2.77). Apart from these findings, ANCOVA has been performed to find out if some of the unexplained variance can be attributed to these covariates (Field, 2018). For the tested assumptions and the output of ANCOVA, computed with IBM SPSS Statistics for Apple Mac, version 26 (Field, 2018), see appendix K.

## 4.4 Manipulation checks

In order to check the effectiveness of the manipulations in this experiment, manipulation checks are performed for both perceived FLE burnout symptoms and perceived FLE empathy. As shown in appendix L, the independent sample t-test indicates that the difference between the means for absence of burnout symptoms (M = 5.14; SD = 1.16) and presence of burnout symptoms (M = 2.61; SD = .97) is significant (t (232) = 18.406, p < 0.001), indicating that the manipulation of perceived FLE burnout symptoms was effective (Hair, 2019). Concerning the manipulation of perceived FLE empathy, the independent sample t-test shows that the difference between the means for high empathy (M = 2.13; SD = 0.95) and low empathy (M = 5.35; SD = 1.31) is significant (t (228) = 22.131, p < 0.001), meaning that the manipulation of perceived FLE empathy was effective (Hair, 2019).



#### 4.5 **Reliability and validity**

## Reliability

Reliability is related to the consistency of a measurement (Heale & Twycross, 2015). The internal consistency of the measurement scales used in this study is assessed through computing Cronbach's alpha (Heale & Twycross, 2015). Regarding the measurement of customer satisfaction, Cronbach's alpha was  $\alpha = .906$  which indicates a good internal consistency (Taber, 2017). This means that the items of the measurement scale all measure one construct, which fosters the reliability of this research and its findings (Taber, 2017).

Besides customer satisfaction (Söderlund, 2017), measurements of customer loyalty (Zeithaml, Berry & Parasuraman, 1996) and SERVQUAL (Zeithaml, Berry & Parasuraman, 2002) were also included in the survey of this research. Concerning the measurement of customer loyalty, Cronbach's alpha was  $\alpha = .964$ , which shows a sufficient internal consistency (Taber, 2017). In addition, the empathy dimension of SERVQUAL shows a Cronbach's alpha of  $\alpha = .956$ , indicating a sufficient internal consistency of the measurement scale (Taber, 2017).

Concerning the manipulation checks of this study, Cronbach's alpha of the manipulation of perceived FLE burnout symptoms is  $\alpha = .840$ , indicating a reliable internal consistency (Taber, 2017). In addition, the manipulation of perceived FLE empathy shows a Cronbach's alpha of  $\alpha = .979$ , which indicates an acceptable internal consistency of the items (Taber, 2017).

#### Validity

Criterion validity is defined as the degree to which the measurement is related to other measurements that assess the same variables (Heale & Twycross, 2015). The criterion validity is measured in two ways: through convergent validity and predictive validity. First, the correlation between customer satisfaction and NPS has been computed because if an instrument is highly correlated with instruments measuring similar variables, convergent validity is high (Heale & Twycross, 2015). Because p < 0.01, the correlation is significant, indicating a high



convergent validity, which enhances criterion validity (Heale & Twycross, 2015). Second, predictive validity is measured through computing the correlation between customer satisfaction and customer loyalty because when the instrument has high correlations with future criterions, predictive validity is high (Heale & Twycross, 2015). Customer loyalty has been used for this since customer satisfaction in turn affects customer loyalty (Kandampully & Suhartanto, 2000). Because p < 0.01, the correlation is significant, indicating a high predictive validity, which improves criterion validity (Heale & Twycross, 2015). For the measures of validity, see appendix M.



## Chapter 5. Conclusion and discussion

This chapter will first provide an answer to the research question, after which both contributions to existing literature and implications for managers will be discussed. Lastly, this chapter will elaborate on limitations and suggestions for further research.

# 5.1 Answer to the research question

This study aims to better understand the effect of perceived FLE burnout symptoms on customer satisfaction and the interaction of perceived FLE burnout symptoms and perceived FLE empathy on customer satisfaction. In this paragraph, an answer to the research question of this study will be formulated by virtue of the sub questions. The research question of this study is: *"How do perceived FLE burnout symptoms affect customer satisfaction and what is the moderating role of perceived FLE empathy?"*.

The main finding of this research is that both perceived FLE burnout symptoms and perceived FLE empathy significantly affect customer satisfaction. Thereby, perceived FLE burnout symptoms negatively affect customer satisfaction, indicating a negative relationship. In addition, perceived FLE empathy positively affects customer satisfaction, suggesting a positive relationship. Besides, it is noteworthy that this effect is very strong, in comparison with the weaker negative effect of perceived FLE burnout symptoms on customer satisfaction.

However, the interaction effect of perceived FLE burnout symptoms and perceived FLE empathy on customer satisfaction is insignificant, indicating that perceived FLE empathy does not change the strength of the relationship between perceived FLE burnout symptoms and customer satisfaction.

Concludingly, perceived FLE burnout symptoms negatively affect customer satisfaction whereas perceived FLE empathy positively affect customer satisfaction, but does not change the relationship between perceived FLE burnout symptoms and customer satisfaction.



### 5.2 Theoretical contributions

The results of this study should be viewed in conjunction with the limited number of attempts in earlier studies to assess the impact of employee burnout on customers' evaluations. However, a few studies do exist and suggest that the relationship is negative (Argentero et al., 2008; Garman et al., 2002; Leiter et al., 1998; Singh, 2000; Yagil, 2006). Building on the theoretical contributions stated in the introduction, this research contributes to theory in three major ways.

First, this research provides managers with a better understanding of the effects of perceived FLE burnout symptoms and perceived FLE empathy on customer satisfaction. The results of this study show that perceived FLE burnout symptoms negatively affect levels of customer satisfaction, which is in line with previous research (Yagil, 2012; Söderlund, 2017). However, it is noteworthy that the perception of FLE empathy has a much stronger, positive effect on customer satisfaction. This contributes to previous literature since most studies address the importance of reducing burnout (KPMG, 2020; Schaufeli et al, 2009). Hence, this study shows that perceived FLE empathy has a much bigger effect, highlighting importance to address the empathic ability of employees. Thus, through improving the empathic ability of employees, levels of customer satisfaction will increase, which results in better future revenues (Fornell, 1992; Gupta et al., 2007).

Second, this study contributes to the employee burnout – customer satisfaction link (e.g., Bitner et al., 1990; Delcourt et al., 2013; Hartline and Jones, 1996; Keh et al., 2013; Smith et al., 1999, Söderlund and Colliander, 2015; Winsted, 2000) since it appears that if customers perceive an employee to be burned-out, their levels of customer satisfaction are lower. However, this effect was expected to be much stronger than it truly is. This might be because customers' perception of FLE burnout symptoms was included in this study instead of the employee perspective, which might suggest that customers' perception of FLE burnout



symptoms has a less strong effect on customer satisfaction than self-assessments of burned-out employees.

Third, this research focused on the perception of FLE burnout symptoms and FLE empathy which is in contrast to previous literature that focused on burnout and empathy from the employees' perspective (Söderlund, 2017). This contributes to previous literature since it is not sure if the expression of burnout symptoms and empathy is perceived by the customer. Through manipulating the perception of customers, it became clear what the effects of burnout symptoms and empathy truly are. However, the interaction effect was non-significant. This might be because the interaction effect is only present when FLEs provide empathy and simultaneously express burnout symptoms instead of when customers perceive both. It could for example be possible that FLEs with a high empathic capability unconsciously conceal their expression of burnout, and that customers perceive such encounters differently. Moreover, based on the fact that there is a negative relation between burnout and empathy (Perry & Eames, 2017), it could be possible that a mediation is present between these constructs and customer satisfaction, instead of a moderation. However, by including the perception of customers instead of the employees' perspective, this research adds to a more general stream of knowledge that recognizes the effect of employees' emotional state on customers' responses to an offer (Söderlund, 2017). Since both perceived FLE burnout symptoms and perceived FLE empathy affect customer satisfaction, it confirms that employees' emotional state affects customers' responses to an offer.

# 5.3 Managerial implications

Building on the managerial implications addressed in the introduction, this research contributes to management in two main ways.

First, as previously stated it is noteworthy that the positive effect of perceived FLE empathy on customer satisfaction is much bigger than the negative effect of perceived



FLE burnout symptoms. This indicates that it is critical for managers to address the empathic ability of their employees and find ways to improve it. Managers are therefore recommended to introduce empathy (Wagaman et al.,2015) or mindfulness trainings (Johnson & Park, 2020). These trainings will improve the empathic ability of employees and in turn enhance levels of customer satisfaction (Wagaman, Geiger, Shockley & Segal, 2015; (Marandi & Harris, 2010; Galante et al., 2016). Moreover, these trainings might simultaneously help managers to prevent their FLEs from burnout. Besides, these insights might help managers to employ their employees effectively, for example by deploying the employees with the highest empathic ability as the ones with the most customer contact.

Second, as stated in the introduction, it is critical for restaurant managers to know the implications of FLE burnout symptoms since little research has been done concerning the perception of customers (Söderlund, 2017). It appears that managers need to address the burnout symptoms from their employees since they negatively affect customer satisfaction (Yagil, 2012; Söderlund, 2017). Although the perception of FLE burnout has small, negative effect on customer satisfaction, managers must be cautious about their employees getting burned-out since more and more employees are suffering from burnout, especially the ones with high customer contact (Cho et al., 2013; Cordes and Dougherty, 1993; Lings et al., 2014; Singh et al., 1994; Singh, 2000; Yagil, 2006; Yavas et al., 2013), and this has been reinforced by the COVID-19 pandemic (Yıldırım & Solmaz, 2020; Choi et al., 2014; Han et al., 2016). Thus, it is still vital for managers to address burnout symptoms as a response to the COVID-19 pandemic (KPMG, 2020), which is not expected to be short-lived (Carnevale & Hatak, 2020). Besides, the implications of burned-out employees are severe since they might share their symptoms with colleagues (Bakker et al., 2007; Maslach & Leiter, 2016), and have a lack of organizational and professional commitment (Miller, Ellis, Zook & Lyles, 1990) which emphasizes the importance to reduce burnout among employees. Moreover, burned-out



employees have a lower empathic ability (Wilkinson, Whittington, Perry & Eames, 2017) while this is important to improve levels of customer satisfaction (Homburg, Wieseke & Botnemann, 2009) and in turn business performances (Marandi & Harris, 2010; Galante et al., 2016) and future revenues (Fornell, 1992; Gupta et al, 2007). In line with Transformative Service Research and in order to improve levels of customer satisfaction, managers could use these insights to provide employees with organizational support (Walters & Raybould, 2007), which mitigates stress levels and reduces burnout symptoms (Mutkins, Brown & Thorsteinsson, 2011).

### 5.4 Limitations and suggestions for further research

The limitations and suggestions for further research are categorized into three main categories in order to enhance readability.

The first category considers the methods used for this research. The Cohen's Kappa values for the inter-rater reliability of the systematic literature review were rather low (Landis & Koch, 1997). This could be caused by not understanding the inclusion and exclusion criteria of each rater properly. It would have been better if all independent raters verbally discussed their research in order to ensure understandability of the criteria and enhance the values of inter-rater reliability. However, through the use of a systematic literature review, bias is minimized and findings are more reliable (Snyder, 2019). Regarding the execution of the scenario-based role-playing experiment, respondents were randomly assigned to one of the four scenarios and efforts have been made to ensure a representative sample. However, since this research includes a non-probability (convenience) sample, results are not generalizable (Seltman, 2008). Moreover, the scenarios included a female waitress since females are perceived to be more empathetic than men (Hoffman, 1977). However, it could also be interesting for managers to look at the effects of a male employee because these might differ. Last, to analyze the results, ANOVA has been used. As a limitation to this research, the assumptions of normality and



homogeneity of variances were not met. However, the sample size of N > 200 makes these violations negligible, together with the robustness of ANOVA (Hair, 2019; Field, 2018). The results of ANCOVA showed that no error variance could be reduced and thus the differences between groups cannot be evaluated more sensitively (Field, 2018). It is recommended for further research to include covariates other than gender, age and education in order to reduce the error variance (Field, 2018).

The second category refers to the focus of this research. This study focused on the perception of customers considering FLE burnout symptoms and FLE empathy since restaurants were closed because of the COVID-19 pandemic. Thereby, it was expected that there is an interaction effect of perceived FLE burnout symptoms and perceived FLE empathy on customer satisfaction, but the results are insignificant. Further research is recommended since the interaction effect might be different when assessing FLE empathy and burnout symptoms from the employee perspective. It is therefore suggested to include these constructs from the employee perspective and have dyadic interactions between employees and customers. Prior to the interaction, employees could answer questions about their level of burnout and capabilities of showing empathy, after which customers have dinner in a restaurant and are asked about their experience. Even with this limitation, the present research contributes to existing literature by addressing a theoretical void through focusing on the perception of customers regarding FLE burnout symptoms and FLE empathy.

The third and final group concerns the empathic ability. The present research concludes with the finding that managers should find ways to improve the empathic ability of FLEs. It might be interesting for future research to find ways on how to improve the empathic capabilities of FLEs and how this increases levels of customer satisfaction. Besides, it is worth mentioning that a limitation of this research is the assumption that each respondent has the same ability to notice and appreciate empathy. However, people might differ in their ability and need



for empathy and this might affect their levels of customer satisfaction (Dymond, 1949). Therefore, it is recommended to conduct further research on the central constructs of the present study, while including the empathic ability of customers and their need for empathy.

Even with these limitations, this research contributes to both existing literature and management through taking a different perspective by focusing on the perception of customers, showing that perceived FLE burnout symptoms negatively affect customer satisfaction but that the positive effect of perceived FLE empathy on customer satisfaction is much stronger, leading to the recommendation of improving the empathic ability of FLEs.



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# Appendices

# A: Operationalization of key concepts

Table 5.	Operationalization	of key concept	3

Table 5. Operationalization of 1	key concepts					
Construct	Definition	Source				
Perceived employee burnout	A customer perceiving an employee suffering from	Maslach et al. (2001)				
symptoms	chronic emotional and cross-personal stress at work,					
	which is conceptualized as a mental syndrome					
	consisting of emotional exhaustion and					
	depersonalization.					
Perceived employee empathy	A customers' perception of an employee sensing the	Rogers (1959)				
	emotional components and meanings of another					
	individual to feel as if one were the person himself, but					
	without losing the 'as if' condition.					
Customer satisfaction	The overall evaluation of both the buying and	(Fornell, 1992; Johnson				
	consumption experience with a particular good or service	and Fornell, 1991).				



# **B:** Inclusion and exclusion criteria

Table 6. Inclusion and exclusion criteria SLR

Inclusion       Journal articles in English or Dutch         Exposure to intervention:         Empathy in relation to customer experience         User experience (consumer)         Customers who have felt/received a form of empathy or expressed a form of empathy         FLEs who have felt/received a form of empathy or expressed a form of empathy         Behavior of customers/employees during customer-FLE interactions         FLEs in the service sector, preferably in the hospitality industry.         Change in the behavior of customers/FLEs during customer-employee interactions in times of         COVID-19         FLEs affecting the customer experience         Customer-employee relationships or interactions         Employee well-being and its relation with business performances         Employee well-being affecting customer experience         Employee well-being affect on empathy of the customer         Employee well-being affected by customer empathy         Job/work stress and its effect on the customer experience and empathy         Front line employees during COVID-19         Customer experience during COVID-19         Studies related to human-human interactions
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Front line employees during COVID-19 Customer experience during COVID-19 Studies related to human-human interactions
Customer experience during COVID-19 Studies related to human-human interactions
Studies related to human-human interactions
Employee well-being can for example consist of: overall quality of an employee's experience
and functioning at work, psychological well-being, social well-being, health, happiness,
relationships.
Setting: service sector, hospitality, during COVID-19 pandemic
Exclusion Journal articles in other languages than English or Dutch
Exposure to intervention:
Studies related to human-computer interactions (HCI)





Irrelevant papers related to subject matters such as mathematics, chemistry, physics and astronomy.



# C: Cohen's Kappa

Cohen's Kappa calculation: 
$$\frac{\Pr(a) - \Pr(e)}{1 - \Pr(e)}$$

Where:

Pr(a) = probability of agreement

### Pr(e) = probability of random agreement

 Table 7. Intercoder reliability team 1

		Rater 1		
		Yes	No	Row
				marginals
Rater 2	Yes	546	265	811
	No	106	11,083	11,189
	Column	652	11,348	12,000
	marginals			

546 + 11,083 = 11,629  
Pr(a): 11,629/12,000 = 0.97  
Pr(e): 
$$\frac{\left(\frac{652x811}{12,000}\right) + \left(\frac{11,348x11,189}{12,000}\right)}{12,000} = 0.89$$
  
Kappa:  $\frac{0.97 - 0.89}{1 - 0.89} = 0.73$ , so the level of agreement is substantial (Landis & Koch, 1977).

 Table 8. Intercoder reliability team 2

		Rater 1		
		Yes	No	Row
				marginals
Rater 2	Yes	185	298	483
	No	358	11,511	11,869
	Column	543	11,809	12,352
	marginals			

$$185 + 11,511 = 11,696$$

$$Pr(a): 11,696/12,352 = 0,95$$

$$Pr(e): \frac{(\frac{543x483}{12,352}) + (\frac{11,809 \times 11,869}{12,352})}{12,352} = 0.92$$

Kappa:  $\frac{0.95 - 0.92}{1 - 0.92} = 0.38$ , so there is a fair

level of agreement (Landis & Koch, 1977)

80



### D: Scott's Pi

The formula for Scott's Pi is as follows (Craig, 1981):

$$\pi = \frac{Po - Pe}{1 - Pe}$$

Where:

Po = the relative observed agreement among researchers

Pe = the hypothetical probability of chance agreement

The results for team 1 are shown in table 5 and 6.

Table 9. Data of team 1

Coder 1											
Coder 2			Resea	archer 1	Rese	archer 2	Resea	archer 3	Resea	archer 4	Total
			Yes	No	Yes	No	Yes	No	Yes	No	
	Researcher 1	Yes	130	61							191
		No	20	2,912							2,932
	Researcher 2	Yes			141	58					199
		No			17	2,849					2,866
	Researcher 3	Yes					133	74			207
		No					39	2,649			2,688
	Researcher 4	Yes							142	72	214
		No							30	2,673	2,703
	Total		150	2,973	158	2,907	172	2,723	172	2,745	12,000



	Marginal for	Marginal for	Sum of	Product of	Joint marginal	JMP
	coder 1	coder 2	marginals	marginals	proportion	squared
Yes	150	191	314	28,650	0.026	0.0007
No	2,973	2,932	5,905	8,716,836	0.492	0.2421
Yes	158	199	357	31,442	0.030	0.0009
No	2,907	2,866	5,773	8,331,462	0.481	0.2314
Yes	172	207	379	35,604	0.033	0.0011
No	2,723	2,688	5,411	7,319,424	0.451	0.2033
Yes	172	214	386	36,808	0.032	0.0010
No	2,745	2,703	5,448	7,419,735	0.454	0.2061
	Yes No Yes No Yes No Yes No	Marginal         for           coder 1         coder 1           Yes         150           No         2,973           Yes         158           No         2,907           Yes         172           No         2,723           Yes         172           No         2,745	Marginal         for         Marginal         for           coder 1         coder 2         coder 2           Yes         150         191         191           No         2,973         2,932         193           Yes         158         199         193           No         2,907         2,866         193           Yes         172         207         193           No         2,723         2,688         193           Yes         172         207         100           No         2,723         2,688         100           Yes         172         214         100           No         2,745         2,703         100	Marginal         for         Marginal         for         Sum         of           coder 1         coder 2         marginals         marginals<	Marginal         for         Marginal         for         Sum         of         Product         of           coder 1         coder 2         marginals         marginals         marginals         marginals         marginals           Yes         150         191         314         28,650         28,050           No         2,973         2,932         5,905         8,716,836         31,442           Yes         158         199         357         31,442         31,442           No         2,907         2,866         5,773         8,331,462         35,604           Yes         172         207         379         35,604         35,604           No         2,723         2,688         5,411         7,319,424         36,808           Yes         172         214         386         36,808         36,808           No         2,745         2,703         5,448         7,419,735         36,808	MarginalforMarginalforSumofProductofJoint marginalcoder 1coder 2marginalsmarginalsmarginalsproportionYes15019131428,6500.026No2,9732,9325,9058,716,8360.492Yes15819935731,4420.030No2,9072,8665,7738,331,4620.481Yes17220737935,6040.033No2,7232,6885,4117,319,4240.451Yes17221438636,8080.032No2,7452,7035,4487,419,7350.454

Table 10. Scott's Pi for team 1

Total Joint Marginal Proportion squared = Pe = 0.88663

Po = 11,629/12,000 = 0.97

(0.97-0.89) / (1-0.89) = 0.73 which means substantial agreement (Landis & Koch, 1977).

The results for team two are depicted in table 7 and 8.

			Coder 1								
Coder 2			Resea	archer 1	Resea	archer 2	Resea	archer 3	Resea	archer 4	Total
			Yes	No	Yes	No	Yes	No	Yes	No	
	Researcher 1	Yes	49	47							96
		No	86	2,906							2,992
	Researcher 2	Yes			35	38					73
		No			78	2,937					3,015
	Researcher 3	Yes					50	101			151
		No					95	2,842			2.937
	Researcher 4	Yes							51	112	163
		No							99	2,826	2,925
	Total		135	2,953	113	2,975	145	2,943	150	2,938	12,352

Table 11. Data of team 2

Coding		Marginal for	Marginal for	Sum of	Product of	Joint marginal	JMP
category		coder 1	coder 2	marginals	marginals	proportion	squared
Researcher 1	Yes	135	96	213	12,960	0.017	0.0003
	No	2,953	2,992	5,945	8,835,376	0.481	0.2316
Researcher 2	Yes	113	73	186	8,249	0.015	0.0002
	No	2,975	3,015	5,990	8,969,625	0.485	0.2352
Researcher 3	Yes	145	151	296	21,895	0.024	0.0006
	No	2,943	2,937	5,880	8,643,591	0.476	0.2266
Researcher 4	Yes	150	163	313	24,450	0.025	0.0006
	No	2,938	2,925	5,863	8,593,650	0.475	0.2253

Table 12. Scott's Pi for team 2

Total Joint Marginal Proportion squared = Pe = 0.92

Po = 11,700/12,352 = 0.95

(0.95-0.92) / (1-0.92) = 0.38 which means fair agreement (Landis & Koch, 1977).



#### E: Scenario's

Display of employee burnout symptoms is displayed in bold and perceived employee empathy is shown in italic.

### Scenario 1: Display of burnout symptoms = absent - Perceived employee empathy = high

Imagine you are the customer, visiting a restaurant during COVID-19 with your partner. You have been stuck at home for a long time and you are finally going to celebrate your anniversary with a dinner at a full-service restaurant. The dining room is appealing and the seating is comfortable. It looks very clean and staff is dressed professionally. You have also read some good reviews about the service of this restaurant. As you arrive you are greeted by a waitress who welcomes you with an enthusiastic joyful smile to the restaurant. She was very prepared and orderly as she immediately proceeded to hand you the necessary COVID-19 forms to fill in and finds you a table. After you hand in the registration form, she proceeds to seat you at a table of her choosing. You pause and explain that you have a health complication and are worried about catching COVID-10 preferring the secluded seat next to the window. The waitress explains that the restaurant has a seating policy she is following. You reply that you have been stuck at home for a long time, that this is the first time out of the house, and that you were really looking forward to celebrate your anniversary safely during dinner. Appreciating an exception if possible. The waitress responds "I understand your concerns, my mother is also at high risk, I will speak to my manager to see what we can do to make it a nice and safe celebration". You watch as the waitress appeals your request to the manager in a committed fashion. When she returns, she remarks: "it took a bit of convincing, but we can make an exception for you". You take a seat at the secluded table noticing the restaurant getting very busy. After 5 minutes the waitress eventually makes her way to your table smiling as she prepares to take your order. You ask: "Sorry, I have too many requests today, but is it possible to have this dish without any truffle? I am allergic to that". The waitress replies that she would



gladly ask the chef if it is possible. Another 5 minutes go by before the waitress comes back and says "I informed the chef of your allergy and it is no problem to change the dish, but please be aware the taste will not be as intended". You agree. The dishes you ordered tasted great and were served nicely on time. As you pay the bill, the waitress asks if you felt safe throughout your experience, wishes you a happy anniversary and invites you back for the next one.

### 2. Display of burnout symptoms = absent - Perceived employee empathy = low

Imagine you are the customer, visiting a restaurant during COVID-19 with your partner. You have been stuck at home for a long time and you are finally going to celebrate your anniversary with a dinner at a full-service restaurant. The dining room is appealing and the seating is comfortable. It looks very clean and staff is dressed professionally. You have also read some good reviews about the service of this restaurant. As you arrive you are greeted by a waitress who welcomes you with an enthusiastic joyful smile to the restaurant. She was very prepared and orderly as she immediately proceeded to hand you the necessary COVID-19 forms to fill in and finds you a table. After you hand in the registration form, she proceeds to seat you at a table of her choosing. You pause and explain that you have a health complication and are worried about catching COVID-19 preferring the secluded seat next to the window. The waitress explains that the restaurant has a seating policy she is following. You reply that you have been stuck at home for a long time, that this is the first time out of the house, and that you were really looking forward to celebrate your anniversary safely during dinner. Appreciating an exception if possible. The waitress responds: "Sorry, but unfortunately this is restaurant *policy*". You do not feel very comfortable but take a seat at the table, noticing the restaurant getting very busy. After 5 minutes the waitress eventually makes her way to your table, smiling, as she prepares to take your order. You ask: "Sorry, I have too many requests today, but is it possible to have this dish without any truffle? I am allergic to that". The waitress replies that the menu items are set and that it is not possible to modify them. You consider suggesting to



the waitress to ask the chef but quickly choose something else. The food was good, the dishes were served nicely on time and the order was complete.

### 3. Display of burnout symptoms = present - Perceived employee empathy = high

Imagine you are the customer, visiting a restaurant during COVID-19 with your partner. You have been stuck at home for a long time and you are finally going to celebrate your anniversary with a dinner at a full-service restaurant. The dining room is appealing and the seating is comfortable. It looks very clean and staff is dressed professionally. You have also read some good reviews about the service of this restaurant. As you arrive you are greeted by a waitress who welcomes you. She looks drained and from the bags under her eyes it seems that she has not been sleeping well for a long time but still tries to hold a smile. She spends a few minutes lost having trouble remembering where she left the COVID-19 registration forms for you to fill in and where she was supposed to seat you. After you hand in the registration form, she proceeds to seat you at a table of her choosing. You pause and explain that you have a health complication and are worried about catching COVID-19 preferring the secluded seat next to the window. The waitress explains that the restaurant has a seating policy she is following. You reply that you have been stuck at home for a long time, that this is the first time out of the house, and that you were really looking forward to celebrate your anniversary safely during dinner. Appreciating an exception if possible. The waitress responds "I understand your concerns, my mother is also at high risk, I will speak to my manager to see what we can do to make it a nice and safe celebration". You watch as the waitress appeals your request to the manager in a committed fashion. When she returns, she remarks: "it took a bit of convincing, but we can make an exception for you". You take a seat at the secluded table noticing the restaurant getting very busy. After 5 minutes the waitress eventually makes her way to your table as she prepares to take your order. You ask: "Sorry, I have too many requests today, but is it possible to have this dish without any truffle? I am allergic to that". The waitress in



response seems very withdrawn and finds it difficult to gather her thoughts. She asks you to clarify again what you want. Confusingly, you restate your question. *The waitress replies that she would gladly ask the chef if it is possible*. Another 5 minutes go by before the waitress comes back and says: *"I informed the chef of your allergy and it is no problem to change the dish, but please be aware the taste will not be as intended"*. You agree. The dishes you ordered tasted great and were served nicely on time. As you pay the bill, *the waitress asks if you felt safe throughout your experience, wishes you a happy anniversary and invites you back for the next one*.

### 4. Display of burnout symptoms = present - Perceived employee empathy = low

Imagine you are the customer, visiting a restaurant during COVID-19 with your partner. You have been stuck at home for a long time and you are finally going to celebrate your anniversary with a dinner at a full-service restaurant. The dining room is appealing and the seating is comfortable. It looks very clean and staff is dressed professionally. You have also read some good reviews about the service of this restaurant. As you arrive you are greeted by a waitress who welcomes you. She looks drained and from the bags under her eyes it seems that she has not been sleeping well for a long time but still tries to hold a smile. She spends a few minutes lost having trouble remembering where she left the COVID-19 registration forms for you to fill in and where she was supposed to seat you. After you hand in the registration form, she proceeds to seat you at a table of her choosing. You pause and explain that you have a health complication and are worried about catching COVID-10 preferring the secluded seat next to the window. The waitress explains that the restaurant has a seating policy she is following. You reply that you have been stuck at home for a long time, that this is the first time out of the house, and that you were really looking forward to celebrate your anniversary safely during dinner. Appreciating an exception if possible. The waitress responds: "Sorry, but unfortunately this is restaurant policy". You do not feel very comfortable but take a seat at the



table, noticing the restaurant getting very busy. After 5 minutes the waitress eventually makes her way to your table. You ask: "Sorry, I have too many requests today, but is it possible to have this dish without any truffle? I am allergic to that". **The waitress in response seems very withdrawn and finds it difficult to gather her thoughts. She asks you to clarify again what you want.** Confusingly, you restate your question. *The waitress replies that the menu items are set and that it is not possible to modify them.* You consider suggesting to the waitress to ask the chef but quickly choose something else. The food was good, the dishes were served nicely on time and the order was complete.



# **Model construct Measurement items** 1) How satisfied or dissatisfied are you with **Customer satisfaction** the service in this restaurant? Fornell et al. (1992), Söderlund (2017) 2) To what extent does the service in this restaurant meet your expectations? **Net Promoter Score** 3) How likely is it that you would Reichheld (2003) recommend this restaurant to a friend or colleague? **Customer loyalty** 4) I would like to come back to this restaurant Zeithaml, Berry & Parasuraman (1996) in the future 5) I would recommend this restaurant to my friends or others 6) I would say positive things about this restaurant to others **Empathy dimension of SERVQUAL** 7) This waitress gives you individual Zeithaml, Berry & Parasuraman (2002) attention 8) This waitress has your best interest at heart 9) This waitress understands your specific needs Manipulation check Employee's display of 10) The waitress' batteries appear to be flat burnout symptoms 11) The waitress is a cold person Söderlund (2017) 12) The waitress is revoked **Manipulation check Perceived employee** 13) The waitress tried to empathize with my empathy feelings during the service encounter

## F: Measurement items included in questionnaire



Collier, Barnes, Abney & Pelletier (2018)

- 14) The waitress tried to see the experience through my perspective
- 15) The waitress tried to understand my point of view during the experience

16) The waitress put herself in my shoes

## **Demographics**

What is your age? (adopted from Wall & Berry, 2007)

- o 18-24
- o 25-34
- o 35-49
- o 50-65
- Older than 65

How do you describe yourself? (adapted from Reisner et al., 2014)

- o Female
- o Male
- o Different

What is your level of education? (adopted from Barber, Goodman & Goh, 2011)

- o High school diploma
- Vocational/technical school (MBO)
- o Undergraduate degree (bachelor)
- o Graduate degree (master)
- o Postgraduate (PhD)
- o Different



# **G:** Assumptions of ANOVA



# Normality - Normal Q-Q plot of customer satisfaction

Figure 5: Q plot of customer satisfaction



Figure 7: Q plot of customer loyalty

Normal Q-Q Plot of Beantwoord alstublieft onderstaande vraag – Hoe waarschijnlijk is het dat u dit restaurant zou aanbevelen aan een vriend of collega?







Figure 8: Q plot of SERVQUAL



### Homogeneity – Levene's Test of Equality of Error Variances

### Table 13. Homogeneity of customer satisfaction

### Levene's Test of Equality of Error Variances<sup>a,b</sup>

		Levene statistic	df1	df2	Sig.
Customer	Based on mean	3.729	3	239	.012
satisfaction					
	Based on median	2.943	3	239	.034
	Based on median and with adjusted	2.943	3	230.090	.034
	df				
	Based on trimmed mean	3.923	3	239	.009

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: Customer satisfaction

### b. Design: Intercept + EMPATHY + BURNOUT + EMPATHY \* BURNOUT

### Table 14. Homogeneity of NPS

Levene's Test of Equality of Error Variances<sup>a,b</sup>

		Levene statistic	dfl	df2	Sig.
NPS	Based on mean	15.580	3	239	.000
	Based on median	15.236	3	239	.000
	Based on median and with adjusted df	15.236	3	218.767	.000
	Based on trimmed mean	15.626	3	239	.000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

- a. Dependent variable: NPS
- b. Design: Intercept + EMPATHY + BURNOUT + EMPATHY \* BURNOUT



#### Table 15. Homogeneity of customer loyalty

		Levene statistic	df1	df2	Sig.
Customer	Based on mean	17.836	3	239	.000
loyalty					
	Based on median	13.839	3	239	.000
	Based on median and with adjusted df	13.839	3	206.363	.000
	Based on trimmed mean	17.692	3	239	.000

Levene's Test of Equality of Error Variances<sup>a,b</sup>

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

c. Dependent variable: Customer loyalty

d. Design: Intercept + EMPATHY + BURNOUT + EMPATHY \* BURNOUT

### Table 16. Homogeneity of empathy dimension of SERVQUAL

Levene's Test of Equality of Error Variances<sup>a,b</sup>

		Levene statistic	df1	df2	Sig.
SERVQUAL	Based on mean	13.345	3	239	.000
	Based on median	9.404	3	239	.000
	Based on median and with adjusted df	9.404	3	182.588	.000
	Based on trimmed mean	12.136	3	239	.000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: SERVQUAL

b. Design: Intercept + EMPATHY + BURNOUT + EMPATHY \* BURNOUT



## **H: Results ANOVA**

# Dependent variable: customer satisfaction

### Table 17. Analysis of variance results

Dependent variable: Customer satisfaction							
Source of Variation	Type III	df	Mean Square	F	Sig.	Partial Eta	Observed
	Sum of					Squared	power <sup>b</sup>
	Squares						
Corrected Model	489.978 <sup>a</sup>	3	163.323	106.511	.000	.574	1.000
Intercept	2925.343	1	2925.343	1920.182	.000	.889	1.000
EMPATHY	455.260	1	455.260	295.603	.000	.556	1.000
BURNOUT	30.116	1	30.116	20.188	.000	.076	.993
EMPATHY * BURNOUT	5.856	1	5.856	4.189	.051	.016	.497
Error	364.108	239	1.529	1.523			
Total	3876.500	243					
Corrected Total	854.076	242					

a. R Squared = .574 (Adjusted R Squared = .568)

b. Computed using alpha = .05

### Table 18. Customer satisfaction means

		Perceived em	ployee empathy
		High	Low
Employee display of burnout symptoms	Absent	1.595	4.645
	Present	2.610	5.039



# Dependent variable: NPS

Table 19.	Analysis	of variance	results
	1 11111 1 010		1.000000

Dependent variable: NPS							
Source of Variation	Type III	df	Mean Square	F	Sig.	Partial Eta	Observed
	Sum of					Squared	power <sup>b</sup>
	Squares						
Corrected Model	1109.067 <sup><i>a</i></sup>	3	369.689	67.597	.000	.459	1.000
Intercept	5314.002	1	5314.002	971.660	.000	.803	1.000
EMPATHY	999.586	1	999.586	182.773	.000	.433	1.000
BURNOUT	89.748	1	89.748	16.410	.000	.064	.981
EMPATHY * BURNOUT	24.516	1	24.516	4.483	.035	.018	.559
Error	1307.090	239	5.469				
Total	7925.000	243					
Corrected Total	2416.156	242					

Note: NPS is an abbreviation for Net Promoter Score

### Table 20. NPS means

		Perceived em	ployee empathy
		High	Low
Employee display of burnout symptoms	Absent	1.724	6.419
	Present	3.576	7.000



# Dependent variable: customer loyalty

Table 21. Analysis of variance results

Dependent variable: Customer loyalty							
Source of Variation	Type III	df	Mean Square	F	Sig.	Partial Eta	Observed
	Sum of					Squared	power <sup>b</sup>
	Squares						
Corrected Model	374.876 <sup>a</sup>	3	124.959	79.023	.000	.498	1.000
Intercept	2436.631	1	2436.631	1540.902	.000	.866	1.000
EMPATHY	350.032	1	350.032	221.357	.000	.481	1.000
BURNOUT	22.120	1	22.120	13.988	.000	.055	.961
EMPATHY * BURNOUT	3.493	1	3.493	2.209	.139	.009	.316
Error	377.931	239	1.581				
Total	3267.222	243					
Corrected Total	752.807	242					

a. R Squared = .498 (Adjusted R Squared = .492)

b. Computed using alpha = .05

### Table 22. Customer loyalty means

		Perceived em	ployee empathy
		High	Low
Employee display of burnout symptoms	Absent	1.546	4.188
	Present	2.390	4.552



### Dependent variable: empathy dimension of SERVQUAL

Dependent variable: SERVQUAL							
Source of Variation	Type III	df	Mean Square	F	Sig.	Partial Eta	Observed
	Sum of					Squared	power <sup>b</sup>
	Squares						
Corrected Model	666.970 <sup>a</sup>	3	222.323	157.382	.000	.664	1.000
Intercept	2962.893	1	2962.893	2097.420	.000	.898	1.000
EMPATHY	649.746	1	649.746	459.952	.000	.656	1.000
BURNOUT	16.472	1	16.472	11.660	.001	.047	.925
EMPATHY * BURNOUT	.031	1	.031	0.22	.882	.000	.053
Error	337.620	239	1.413				
Total	4081.333	243					
Corrected Total	1004.591	242					

#### Table 23. Analysis of variance results

Note: SERVQUAL is an abbreviation for Service Quality

a. R Squared = .664 (Adjusted R Squared = .660)

b. Computed using alpha = .05

Table 24. SERVQUAL means

		Perceived em	ployee empathy
		High	Low
Employee display of burnout symptoms	Absent	1.586	4.882
	Present	2.130	5.380



### I: Differences for age, gender and education

### Age differences

The differences for age are computed with customer satisfaction as the dependent variable. The data shows that respondents aged between 25-34 indicate slightly lower levels of customer satisfaction and respondents aged between 50-65 indicate slightly higher levels of customer satisfaction, see table 5. In addition, values differ mostly with respondents aged above 65.

	Mean	Ν	Std. Deviation
Age 18-24	3.4239130	46	1.61921583
Age 25-34	3.8432836	67	1.76285099
Age 35-49	3.4528302	53	1.90965198
Age 50-65	3.3591549	71	2.09622637
Age > 65	3.4166667	6	2.20037876
Total	3.5267490	243	1.87862722

Table 25. Age differences for customer satisfaction

Note: the closer the means are to 7, the lower the level of customer satisfaction. Thus, the closer the means are to 1, the higher the level of customer satisfaction. This is because 1 was displayed as 'totally agree' and 7 as 'totally disagree' because of the display of the survey on mobile phones.

### Gender differences

The mean differences for gender are also computed with customer satisfaction as the dependent variable. Table 6 shows that women indicate slightly lower levels of customer satisfaction in comparison to men.

	Mean	Ν	Std. Deviation
Men	3.5088496	113	1.85763663
Women	3.5503876	129	1.90890692
Different	2.5000000	1	
Total	3.5267490	243	1.87862722

Table 26. Gender differences for customer satisfaction



Note: the closer the means are to 7, the lower the level of customer satisfaction. Thus, the closer the means are to 1, the higher the level of customer satisfaction. This is because 1 was displayed as 'totally agree' and 7 as 'totally disagree' because of the display of the survey on mobile phones.

Moreover, the results of ANOVA in appendix I show that, although the differences are minor, perceived FLE burnout symptoms have a greater effect on men (M = 5.14 & M = 2.77) than on women (M = 5.03 & M = 2.48). In other words, the perceived FLE burnout symptoms decrease the level of customer satisfaction stronger for men than for women. Furthermore, it is visible that perceived FLE empathy has a bigger effect on women than on men because both values of high empathy, either with the absence or presence of perceived FLE burnout symptoms, were lower for women (M = 1.57 & M = 2.48) than for men (M = 1.62 & M = 2.77), indicating a higher level of customer satisfaction.

### Educational differences

Table 27 shows that respondents with a high school diploma indicate higher levels of customer satisfaction, whereas respondents with an undergraduate degree indicate lower levels of customer satisfaction. However, there are large differences between the number of respondents which might declare these differences.

	Mean	Ν	Std. Deviation
High school	2.2142857	7	1.60356745
Vocational/technical school (MBO)	3.5243902	41	1.94920246
Undergraduate degree (Bachelor)	3.6349206	126	1.85085137
Graduate degree (Master)	3.4393939	66	1.89841057
Postgraduate (PhD)	3.2500000	2	2.47487373
Different	5.5000000	1	
Total	3.5267490	243	1.87862722

 Table 27. Educational differences for customer satisfaction



# J: ANOVA – gender differences

Dependent variable: custon	ner satisfaction	Men		Women
EMPATHY	BURNOUT	Mean	Std.	Mean
			Deviation	
1,00000 Low empathy	1,00000 Burnout absent	4.4500000	1.37307859	4.8281250
	2,00000 Burnout present	5.1428571	1.50835416	5.0285714
	Total	4.7844828	1.46931202	4.9328358
2,00000 High empathy	1,00000 Burnout absent	1.6206897	.88292505	1.5689655
	2,00000 Burnout present	2.7692308	1.08840038	2.4848485
	Total	2.1636364	1.13469912	2.0564516
Total	1,00000 Burnout absent	3.0593220	1.83144174	3.2786885
	2,00000 Burnout present	4.0000000	1.77508969	3.7941176
	Total	3.5088496	1.85763663	3.5503876

Table 28.	Mean	differences	for	gender
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#### **K: ANCOVA assumptions and output**

Within an experiment there is always some variance that cannot be explained (Field, 2018). It might be that some of this unexplained variance can be attributed to other measured variables, the covariates. If the error variance can be reduced, it allows to evaluate the differences between group means more sensitively (Field, 2018). In this experiment, the covariates are gender, age and education.

### **Covariate 1: gender**

Before interpreting the outcome of the ANCOVA, the assumptions were tested. The skewness and kurtosis statistic and the Kolmogorov-Smirnov test indicated that the assumption of normality was violated (Field, 2018). However, for sample sizes of 200 or more (N = 243), these effects may be negligible (Hair, 2019). Moreover, scatterplots indicated that the relation between the covariate gender and the dependent variable customer satisfaction was linear (Field, 2018). Finally, the covariate 'gender' has equal effects on customer satisfaction since the interactions that include the covariate are non-significant (p > .05), indicating that the assumption of homogeneity of regression slopes is met (Hair, 2019; Field, 2018).

The ANCOVA indicated that gender was not significantly related to customer satisfaction, F(2, 234) = 1.437, p > .05, partial  $\eta^2 = .453$  (Field, 2018).

### Normality

#### Table 29. Normality

	EMPATHY			Statistic	Std. Error
CUSTOMER	1,00000 Low	Mean		4.8452381	.12375915
SATISFACTION	empathy				
		95% Confidence	Lower Bound	4.6003034	
		Interval for Mean			
			Upper Bound	5.0901728	
		5% Trimmed Mean		4.9087302	
		Median		5.0000000	
		Variance		1.930	



	Std. Deviation		1.39010298	
	Minimum		1.00000	
	Maximum		7.00000	
	Range		6.00000	
	Interquartile Range		2.00000	
	Skewness		656	.216
	Kurtosis		.125	.428
2,00000 High	Mean		2.1068376	.10786713
empathy				
	95% Confidence	Lower Bound	1.8931932	
	Interval for Mean			
		Upper Bound	2.3204820	
	5% Trimmed Mean		1.9878917	
	Median		2.00000000	
	Variance		1.361	
	Std. Deviation		1.16676140	
	Minimum		1.00000	
	Maximum		7.00000	
	Range		6.00000	
	Interquartile Range		1.75000	
	Skewness		1.431	.224
	Kurtosis		2.645	.444

 Table 30. Tests of normality - Empathy

		Kolmogorov-Smirnov <sup>a</sup>				Shapiro-Wilk		
	EMPATHY	Statistic	df	Sig.	Statistic	df	Sig.	
CUSTOMER	1,00000 Low	.211	126	.000	.937	126	.000	
SATISFACTION	empathy							
	2,00000 High	.195	117	.000	.844	117	.000	
	empathy							

a. Lilliefors Significance Correction

	Kolmog	gorov-Sm	irnov <sup>a</sup>	S	hapiro-Wi	ilk
BURNOUT	Statistic	df	Sig.	Statistic	df	Sig.



CUSTOMER	1,00000	.154	120	.000	.887	120	.000
SATISFACTION	Burnout						
	absent						
	2,00000	.143	123	.000	.940	123	.000
	Burnout						
	present						

a. Lilliefors Significance Correction

# Homogeneity of Regression

Table 32. Homogeneity of Regression - Gender

Tests of Between-Subjects Effects									
Dependent variable: Customer satisfaction									
Source	Type III	df	Mean	F	Sig.	Partial Eta			
	Sum of		Square			Squared			
	Squares								
Corrected Model	493.660 <sup>a</sup>	7	70.523	45.983	.000	.578			
Intercept	319.273	1	319.273	208.174	.000	.470			
EMPATHY*BURNOUT	72.905	3	24.302	15.845	.000	.168			
EMPATHY*Q6_Gender	2.704	1	2.704	1.763	.186	.007			
BURNOUT*Q6_Gender	.929	1	.929	.606	.437	.003			
EMPATHY*BURNOUT*Q6_Gender	.002	1	.002	.002	.969	.000			
Error	360.417	235	1.534						
Total	3876.500	243							
Corrected Total	854.076	242							

a. R Squared = .578 (Adjusted R Squares = .565)







Figure 9: Linearity Gender - Empathy



Figure 10: Linearity Gender - Burnout



# Output ANCOVA - Gender

### Table 33. Output ANCOVA - Gender

Tests of Between-Subjects Effects									
Dependent Varia	able: Customer	Satisfaction							
Source		Type III	df	Mean	F	Sig.	Partial	Noncent.	Observerd
		Sum of		Square			Eta	Parameter	Power <sup>g</sup>
		Squares					Squared		
Intercept	Hypothesis	227.434	1	227.434	129.348	.000	.831	129.348	1.000
	Error	46.331	26.350	1.758 <sup>a</sup>					
EMPATHY	Hypothesis	454.345	1	454.345	336.528	.035	.997	336.528	.850
	Error	1.350	1	1.350 <sup>b</sup>					
BURNOUT	Hypothesis	32.814	1	32.814	16.640	.153	.943	16.640	.251
	Error	1.972	1	1.972°					
Q6_Gender	Hypothesis	6.595	2	3.298	1.437	.351	.453	2.874	.159
	Error	7.961	3.470	2.294 <sup>d</sup>					
EMPATHY *	Hypothesis	5.145	1	5.145	20.327	.139	.953	20.327	.276
BURNOUT									
	Error	.253	1	.253 <sup>e</sup>					
EMPATHY *	Hypothesis	1.350	1	1.350	5.335	.260	.842	5.335	.144
Q6_Gender									
	Error	.253	1	.253 <sup>e</sup>					
BURNOUT*Q	Hypothesis	1.972	1	1.972	7.792	.219	.886	7.792	.173
6_Gender									
	Error	.253	1	.253 <sup>e</sup>					
EMPATHY*B	Hypothesis	.253	1	.253	.167	.683	.001	.167	.069
URNOUT*Q6									
_Gender									
	Error	353.927	234	1.513 <sup>f</sup>					

a. .142 MS(Q6\_Gender) + .009 MS(EMPATHY\*Q6\_Gender) + .009 MS(BURNOUT \* Q6\_Gender) + .009 MS(EMPATHY \* BURNOUT \*Q6\_Gender) + .823 MS(Error)

b. MS(EMPATHY\*Q6\_Gender)

c. MS(BURNOUT\*Q6\_Gender)

 d. .512 MS(EMPATHY\*Q6\_Gender) + .512 MS(BURNOUT\*Q6\_Gender) - .500 MS(EMPATHY\*BURNOUT\*Q6\_Gender) + .475 MS(Error)

e. MS(EMPATHY\*BURNOUT\*Q6\_Gender)

f. MS(Error)

g. Computed using alpha = .05



#### **Covariate 2: age**

For the covariate age, the assumptions of ANCOVA needed to be tested once again. The skewness and kurtosis statistic and the Kolmogorov-Smirnov test indicated that the assumption of normality was violated (Field, 2018). However, as indicated above, for sample sizes of 200 or more (N = 243), these effects may be negligible (Hair, 2019). In addition, the scatterplots showed that the relation between the covariate age and the dependent variable customer satisfaction was linear (Field, 2018). Finally, the covariate 'age' has equal effects on customer satisfaction since the interactions that include the covariate are non-significant (p > .05), indicating that the assumption of homogeneity of regression slopes is met (Hair, 2019; Field, 2018).

The ANCOVA showed that age was not significantly related to customer satisfaction,

F (4, 224) = 1.212, p > .05, partial  $\eta^2 = .963$  (Field, 2018).

Homogeneity of Regression

Tests of Between-Subjects Effects										
Dependent variable: Customer satisfaction										
Source	Type III	df	Mean	F	Sig.	Partial Eta				
	Sum of		Square			Squared				
	Squares									
Corrected Model	497.057 <sup>a</sup>	7	71.008	46.740	.000	.528				
Intercept	418.770	1	418.770	275.646	.000	.540				
EMPATHY*BURNOUT	50.034	3	16.678	10.978	.000	.123				
EMPATHY*Q5_Age	1.257	1	1.257	.827	.364	.004				
BURNOUT*Q5_Age	5.242	1	5.242	3.451	.064	.014				
EMPATHY*BURNOUT*Q5_Age	.000	1	.000	.000	.986	.000				
Error	357.019	235	1.519							
Total	3876.500	243								
Corrected Total	854.076	242								

Table 34. Homogeneity of Regression - Age

a. R Squared = .582 (Adjusted R Squares = .570)



# Linearity



Figure 11. Linearity Age - Empathy

Graph



Figure 12: Linearity Age - Burnout

# Output ANCOVA - Age

### Table 35. Output ANCOVA - Age

Tests of Between-Subjects Effects									
Dependent Variable: Customer Satisfaction									
Source	Type III	df	Mean	F	Sig.	Partial	Noncent.	Observerd	
	Sum of		Square			Eta	Parameter	Power <sup>g</sup>	
	Squares					Square			
						d			



Intercept	Hypothesis	1390.689	1	1390.689	1149.692	.000	.975	1149.692	1.000
	Error	35.195	29.096	1.210 <sup>a</sup>					
EMPATHY	Hypothesis	160.683	1	160.683	127.321	.000	.709	127.321	1.000
	Error	65.987	52.286	1.262 <sup>b</sup>					
BURNOUT	Hypothesis	10.006	1	10.006	5.415	.035	.271	5.451	.584
	Error	26.975	14.597	1.848 <sup>c</sup>					
Q5_Age	Hypothesis	3.454	4	.863	1.212	.802	.963	4.850	.116
	Error	.132	.185	.712 <sup>d</sup>					
EMPATHY *	Hypothesis	6.680	1	6.680	2.726	.195	.469	2.726	.219
BURNOUT									
	Error	7.576	3.092	2.451 <sup>e</sup>					
EMPATHY *	Hypothesis	3.182	4	.795	.352	.832	.254	1.407	.081
Q5_Age									
	Error	9.337	4.128	$2.262^{\mathrm{f}}$					
BURNOUT*	Hypothesis	8.812	4	2.203	.972	.509	.487	3.890	.141
Q5_Age									
	Error	9.294	4.103	2.265 <sup>g</sup>					
EMPATHY*	Hypothesis	7.421	3	2.474	1.634	.182	.021	4.902	.426
BURNOUT*									
Q5_Age									
	Error	339.120	224	1.514 <sup>h</sup>					

a. .502 MS(Q5\_Age) + .003 MS(EMPATHY\*Q5\_Age) + .003 MS(BURNOUT \* Q5\_Age) + .023 MS(EMPATHY \* BURNOUT \*Q5\_Age) + .468 MS(Error)

b. .396 MS(EMPATHY\*Q5\_Age) + .034 MS(EMPATHY\*BURNOUT\*Q5\_Age) + .570 MS(Error)

c. .434 MS(BURNOUT\*Q5\_Age) + .037 MS(EMPATHY\*BURNOUT\*Q5\_Age) + .530 MS(Error)

- d. 1.024 MS(EMPATHY\*Q5\_Age) + 1.021 MS(BURNOUT\*Q5\_Age) .802 MS(EMPATHY\*BURNOUT\*Q5\_Age) - .243 MS(Error)
- e. .976 MS(EMPATHY\*BURNOUT\*Q5\_Age) + .024 MS(Error)
- f. .779 MS(EMPATHY\*BURNOUT\*Q5\_Age) + .221 MS(Error)
- g. .783 MS(EMPATHY\*BURNOUT\*Q5\_Age) + .217 MS(Error)
- h. MS(Error)
- i. Computed using alpha = .05

## **Covariate 3: education**

For the covariate education, the assumptions of ANCOVA had to be tested once again. The skewness and kurtosis statistic and the Kolmogorov-Smirnov test indicated that the


assumption of normality was violated (Field, 2018). However, similar to the covariates gender and age, these effects may be negligible because of the large sample size (N = 243) (Hair, 2019). Furthermore, the scatterplots showed that there is a linear relation between education and customer satisfaction (Field, 2018). Last, the assumption of homogeneity of regression slopes is met since the interactions including the covariate are non-significant (p > .05) (Hair, 2019; Field, 2018).

The results of ANCOVA indicated that education was not significantly related to customer satisfaction, F (5,226) = .459, p > .05, partial  $\eta^2$  = .423 (Field, 2018).

### Homogeneity of Regression

Table 36. Homogeneity of Regression - Education

Tests	Tests of Between-Subjects Effects								
Dependent variable: Customer satisfaction									
Source	Type III	df	Mean	F	Sig.	Partial Eta			
	Sum of		Square			Squared			
	Squares								
Corrected Model	492.232ª	7	70.319	45.669	.000	.576			
Intercept	144.727	1	144.727	93.993	.000	.286			
EMPATHY*BURNOUT	46.351	3	15.450	10.034	.000	.114			
EMPATHY*Q7_Education	.662	1	.662	.430	.513	.002			
BURNOUT*Q7_Education	.002	1	.002	.001	.969	.000			
EMPATHY*BURNOUT*Q7_Education	.401	1	.401	.260	.610	.001			
Error	361.844	235	.1540						
Total	3876.500	243							
Corrected Total	854.076	242							

a. R Squared = .576 (Adjusted R Squares = .564)







Figure 13: Linearity Education – Empathy



Figure 14: Linearity Education - Burnout





Graph

# **Output** ANCOVA - Education

Tests of Between-Subjects Effects									
Dependent Varia	ble: Customer	Satisfaction							
Source		Type III	df	Mean	F	Sig.	Partial	Noncent.	Observerd
		Sum of		Square			Eta	Parameter	Power <sup>g</sup>
		Squares					Squared		
Intercept	Hypothesis	402.334	1	402.334	313.401	.000	.575	313.401	1.000
	Error	297.252	231.54	1.284 <sup>a</sup>					
			7						
EMPATHY	Hypothesis	196.367	1	196.367	214.804	.000	.815	214.804	1.000
	Error	44.480	48.656	.914 <sup>b</sup>					
BURNOUT	Hypothesis	21.547	1	21.547	147.486	.000	.400	147.486	1.000
	Error	32.277	220.93	.146°					
			0						
Q7_Education	Hypothesis	1.131	5	.226	.459	.791	.423	2.296	.083
	Error	1.542	3.131	.493 <sup>d</sup>					
EMPATHY *	Hypothesis	6.666	1	6.666	8.036	.068	.734	8.036	.482
BURNOUT									
	Error	2.417	2.914	.829 <sup>e</sup>					
EMPATHY *	Hypothesis	1.117	3	.392	.403	.756	.166	1.209	.094
Q7_Education									
	Error	5.903	6.065	.973 <sup>f</sup>					
BURNOUT*Q	Hypothesis	.008	2	.004	.005	.995	.005	.011	.050
7_Education									
	Error	1.509	2	.755 <sup>g</sup>					
EMPATHY*B	Hypothesis	1.509	2	.755	.474	.623	.004	.948	.127
URNOUT*Q7									
_Education									
	Error	359.776	226	1.592 <sup>h</sup>					

a. .193 MS(Q7\_Education) + .007 MS(EMPATHY\*Q7\_Education) + .011 MS(BURNOUT \* Q7\_Education)
+ .023 MS(EMPATHY \* BURNOUT \*Q7\_Education) + .766 MS(Error)

b. .534 MS(EMPATHY\*Q7\_Education) + .045 MS(EMPATHY\*BURNOUT\*Q7\_Education) + .422 MS(Error)

c. .911 MS(BURNOUT\*Q7\_Education) + .089 MS(Error)



- d. .622 MS(EMPATHY\*Q7\_Education) + .457 MS(BURNOUT\*Q7\_Education) + .444 MS(EMPATHY \* BURNOUT \*Q7\_Education) + .336 MS(Error)
- e. .911 MS(EMPATHY\*BURNOUT\*Q7\_Education) + .089 MS(Error)
- f. .739 MS(EMPATHY\*BURNOUT\*Q7\_Education) + .261 MS(Error)
- g. MS(EMPATHY\*BURNOUT\*Q7\_Education)
- h. MS(Error)
- i. Computed using alpha = .05

## L: Manipulation checks

Table 38. Group statistics Manipulation Burnout

	BURNOUT	Ν	Mean	Std. Deviation	Std. Error Mean
Manipulation	1,00000	120	5.1416667	1.16329043	.10619340
Burnout	Burnout absent				
	2,00000	123	2.6070461	.97232424	.08767152
	Burnout present				

Table 39. Independent Samples Test

		Levene'	s Test f	for Equali	t-test for Equality of Means				
		Varianc	Variances						
		F	Sig.	t	df	Sig. (2-	Mean	Std. Error	
						tailed)	difference	Difference	
Manipulation	Equal variances	7.576	.006	18.446	241	.000	2.53462060	1.3740487	
Burnout	assumed								
	Equal variances			18.406	231.568	.000	2.53462060	.13770742	
	not assumed								

### Table 40. Group statistics Manipulation Empathy

	EMPATHY	Ν	Mean	Std. Deviation	Std. Error Mean
Manipulation	1,00000 Low	126	5.3551587	1.31047822	.11674669
Empathy	empathy				
	2,00000 High	117	2.1260684	.94665013	.08751784
	empathy				



### Table 41. Independent Samples Test

		Levene's Test for Equality of					t-test for Equality of Means	
		Varianc	es					
		F	Sig.	t	df	Sig. (2-	Mean	Std. Error
						tailed)	difference	Difference
Manipulation	Equal variances	11.812	.001	21.874	241	.000	3.22909035	.14762312
Empathy	assumed							
	Equal variances			22.131	227.535	.000	3.22909035	.14590805
	not assumed							

# M: Validity – correlations

		Customer satisfaction	NPS
NPS	Pearson Correlation	1	.854**
	Sig. (2-tailed)		.000
	Ν	243	243
Customer satisfaction	Pearson Correlation	.854**	1
	Sig. (2-tailed)	.000	
	Ν	243	243

Table 42. Correlation NPS and Customer satisfaction

\*\* Correlation is significant at the 0.01 level (2-tailed)

## Table 43. Correlation Customer satisfaction and Customer loyalty

		Customer satisfaction	Customer loyalty
Customer satisfaction	Pearson Correlation	1	.894**
	Sig. (2-tailed)		.000
	Ν	243	243
Customer loyalty	Pearson Correlation	.894**	1
	Sig. (2-tailed)	.000	
	Ν	243	243

\*\* Correlation is significant at the 0.01 level (2-tailed)

