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THE IMPACT OF PERCEIVED ENJOYMENT ON EMPLOYEE CONTINUANCE INTENTION IN COMPUTER-BASED TRAINING IN THE HOTEL INDUSTRY

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The Impact of Perceived Enjoyment on Employee Continuance Intention in Computer-Based Training in the Hotel Industry

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A thesis submitted in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

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KIMBERLY Y. PETERKIN

ABSTRACT

Training is a fundamental yet often undervalued exercise in hospitality organisations. Several studies have demonstrated its positive impact on staff morale and performance and it has been found to reduce turnover and enhance organisational competitiveness. These merits notwithstanding, various criticisms have been levelled against training, including complex scheduling requirements, exorbitant recurring costs, and inconsistencies in delivery, among other issues. Computer-based training (CBT) was proposed as a solution and lauded for its ability to offer homogenous training anytime, anywhere, at a lower cost. However, due to the differences associated with the use of information technology, new challenges emerged.

There are three important trends regarding computer-based training that form the rationale for this research. They include (a) the issue of perpetually low participation rates; (b) persistent complaints from learners regarding CBT's monotonous and often one-size-fits-all nature; and (c) an increase in the number of organisations utilising CBT despite the aforementioned concerns. Research shows that many companies have authorised the use of CBT, making it an integral part of an employee's job. As CBT becomes more pervasive, its challenges are likely to increase. Given the acceleration in virtualisation owing to the COVID-19 pandemic, the present study is timely.

Several studies purport that the technological competence of users plays a pivotal role in their perceptions and intention. With the passage of time and the exponential increase in digital literacy and the explosion in the patronage of social media and online games, this viewpoint has been called into question. This has led scholars to explore aspects of digital interactions that can offer insights that may lead to solutions. The ability of e-learning platforms to engender a sense of hedonism, thereby increasing continuance intention, is recognised as the contemporary battlefront and forms the basis of this research.

This study addresses certain gaps in the literature. Unlike existing e-learning research, the present study explicates a single determinant of continuance intention, with a focus on perceived enjoyment. It also refrains from accounting for both external and system-related factors simultaneously by highlighting system attributes. Additionally, the study examines e-learning in the context of hospitality, a domain where the topic is under-researched. Moderators that have not been used extensively in e-learning research are furthermore deployed.

Drawing on social cognitive theory, the study tests a model which illustrates that system quality, information quality, learner control, and perceived novelty have a positive impact on perceived enjoyment, which subsequently predicts continuance intention. These hypothesised relationships align with the theory's postulation that human functioning is a product of a reciprocal interplay of intrapersonal, behavioural, and environmental determinants. Three constructs were co-opted from two existing information systems models and the others from empirical studies.

A quantitative analysis was conducted using an online sample of 475 hotel employees from North America, Europe and Asia. Exploratory factor analysis successfully reproduced the dimensions proposed at the outset of the study. Confirmatory factor analysis confirmed the suitability of the model within the hotel computer-based training context. Likewise, structural equation modelling demonstrated that all five direct hypotheses are supported. Of the three moderators – industry tenure, job level and department – the former two were found to partially moderate the relationships among the constructs.

Six practical contributions are tendered for the benefit of managers, learning and development professionals, and system designers. Five theoretical contributions that extend the existing body of knowledge are also provided. The study concludes that CBT platforms can benefit from improvements aimed at enhancing user perceptions of enjoyment.

Keywords: e-learning, computer-based training, hotel, hospitality, perceived enjoyment, continuance intention, post-adoption, structural equation modelling

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CHAPTER 1: INTRODUCTION

This chapter presents the rationale for the study and its research objectives. It first details the developments which led to the need for this inquiry. It then highlights the constraints of traditional training and discusses how they may be addressed by the possibilities provided by computer-based instruction. It goes on to identify shortcomings associated with this mode of training, and proposes concepts that are anticipated to offer a resolution.

1.1 Background to the Study

As technology advances and customers become increasingly demanding, competition among corporations intensifies. The provision of the highest standards of service quality becomes paramount to an organisation's success (Sachdev & Verma, 2004). For hospitality entities, modifications in employee behaviour is the focal point of strategies implemented by management to achieve the desired service orientation (Olsen, Ching-Yick Tse, & West, 1998). One such initiative is training, which is aimed at improving employee job competencies – that is, the skills necessary for performing the duties of a particular role (Zemke, 1982). Training has been shown to improve employee job satisfaction and decrease turnover, as employees are retained over a longer period and their job performance can be enhanced by continuous instruction (Iverson & Deery, 1997). The hospitality industry is no stranger to the need for well-trained staff; however, particular challenges exist (Becton & Graetz, 2001).

Companies in the United States spent 83 billion dollars on training in 2019 (Training Magazine, 2019). One survey notes that in companies that do not offer training to new employees, only 21 percent intend to stay, while the number rose to 62 percent where training is offered (IBM, 2014). Still, training that does not meet certain basic requirements will result in distorted employee perceptions and an unfavourable attitude toward their jobs (Jauhari, 2006). Zhang and Wu (2004) emphasise the utility of training, and the need to use it as a means

of improving the image of the industry to both customers and prospective employees. A 12-year study involving 359 companies found that the amount of training is related to firm growth through its effect on labour productivity (Kim & Ployhart, 2014). This notwithstanding, a Corporate Executive Board survey conducted in 2011 revealed that only a quarter of top managers are satisfied with their company's learning and development initiatives (Beer, Finnström, & Schrader, 2016). This is not surprising as Kalargyrou and Woods (2011) have discussed the impending resentment that stems from compelling overwhelmed employees to acquire or enhance competencies through training. Boella and Goss-Turner (2012) are therefore accurate in describing training efforts in the industry over the last few decades as unsatisfactory. Nevertheless, the fast-paced nature of the industry makes even the best training endeavours difficult to execute (Baum, 2002). Consequently, innovative methods have been devised to counter these barriers (Hsu & Turoff, 2007).

In pursuit of solutions, technological advancements have been applied to training and this has led to computer-based training (CBT) (Lee & Owens, 2004). In a study conducted by the Chartered Institute of Personnel and Development (2020), online learning methods ranked 4th (29%) in 2015, but ranked 2nd (57%) in 2020, right behind on-the-job training (61%); a trend which suggests that it may become number one in the future. Computer-based training platforms generally fall under the domain of a Learning Management System (LMS), which is considered an information system that serves as a compendium of an organisation's intellectual capital (Grace & Butler, 2005). They maintain learner participation records, house course catalogues, record learner data, and generate reports for management purposes (Paulsen, 2002). CBT is now utilised by many hotels; however, the challenges associated with it are a threat to its continued patronage (Lee & Singh, 2016). A recent literature review identified 92 factors associated with e-learning success (Choudhury & Pattnaik, 2020). These elements have varying

levels of impact on employee enthusiasm, how computer-based training is perceived, and the platforms themselves. Some also hold greater implications for their continued usage.

1.1.2 The state of computer-based training

There are three important trends regarding computer-based training that inform the current research. They include (a) the issue of perpetually low participation rates; (b) persistent complaints from learners regarding CBT's monotonous and often one-size-fits-all nature; and (c) an increase in the number of organisations utilising CBT despite the aforementioned concerns.

An examination of training industry publications reveals the extent of the third trend regarding CBT's widespread use. The Association for Talent Development (2019) in its annual survey reports that more than 80 percent of learning and development professionals use a Learning Management System to deploy and oversee technology-delivered instruction within their organisation. An increase in usage was recorded by 70 percent of respondents over the last two years. In an earlier communication, the body repudiated claims that e-learning is on the decline, citing their survey wherein just about 10 percent of participants shared that their company was not currently deploying an e-learning platform. The report further stated that the overall perception of the use of e-learning in the future was exceedingly optimistic (Association for Talent Development, 2017). These statistics are also supported by the Workplace Learning Report published by LinkedIn Learning (2020) which submits that 57 percent of learning and development professionals saw an increase in their online training budget for 2020. Despite this positive outlook, practitioners need to recognise that failure to address the two accompanying trends can adversely affect the successes achieved.

It should therefore be acknowledged that while computer-based training offers organisations several advantages, there are challenges that threaten its significance and

continuity. A reversal of the first trend (i.e., an increase in completion rates) is the ideal outcome. That said, the most common issue associated with computer-based courses is the low number of participants who complete the course (Angelino, Williams, & Natvig, 2007). This figure is usually below that of courses delivered in classrooms (Breslow et al., 2013), making the attrition rate for computer-based instruction historically high (Jacobsen, 2019). MOOCs (massive open online course) are a well-known online course delivery method. Of the thousands who register for these courses, less than 60 percent attend the first lecture (Liyanagunawardena, Parslow, & Williams, 2014). Inquiries by Jordan (2013) reveal completion rates below 10 percent, while Meyer (2012) found dropout rates of 80 to 95 percent for MOOC courses offered by some of the world's top universities. Other accounts involve Coursera's Social Network Analysis class which had just 2 percent of participants earning a basic certificate and less than 0.5 percent with distinction (Khalil & Ebner, 2014). CBT participation among employees in organisations is thought to follow a similar trajectory (Choudhury & Pattnaik, 2020).

In further elaboration of the first trend concerning participation rates, it is noted that in some organisations, the use of some computer systems may be mandated by management. In such cases, these systems are necessary for employees to perform their jobs. Examples include hotel property management systems and airline reservation systems (Nickerson, 1999). In the case of computer-based training platforms, their use may or may not be mandatory. This may explain why there is low patronage of technology-delivered instruction. Welsh, Wanberg, Brown, and Simmering (2003) in their review of technology-delivered courses conclude that in situations where learners do not have a strong rationale for completing a course, completion rates are lower than those for instructor-led courses. They further state that if learners perceive that course completion is optional or does not endow a positive outcome, less than desired completion rates can be expected. According to Belanger, Thornton, and Barr (2013), low

completion rates are due to the significant time investment required of learners, who also have work tasks to achieve. Moreover, entry-level employees demonstrate the lowest levels of interest and report the lowest amount of time dedicated to learning (Skillsoft, 2020). The statistics presented above demonstrate that keeping learners engaged is a challenging task.

In elucidating the second trend, Chen (2010) in her study of e-learning acceptance in organisations report that users were often too busy to utilise the systems, even though they acknowledge that using them improved job outcomes. The author cites a lack of motivation as one reason for these sentiments and encourages investigations into the attributes of these systems as a way of increasing their use. Similarly, Levy (2007) bemoans the quality of such platforms as the reason for learner disengagement. Others recount confusion and frustration on the part of learners who are victims of the often unclear instructions found on these platforms (Hara & Kling, 2001). Martinez (2003) opines that learners who do well in a classroom setting do not automatically flourish in an online environment, as online learning requires mastery of a different skill set. In an earlier publication, Martinez (2002) postulates that in the traditional classroom, learners are dependent on the instructor to perform many activities that online learners have to undertake on their own.

Consequently, the overreliance of online course design on traditional classroom course design poses several challenges (Mitchell, Christine, & Sarah, 2013). Hence, online course designers must keep in mind that the majority of learners have not developed mastery of online learning ability (Hoskins & Van Hooff, 2005). Satisfying these learners and ensuring they are provided with the resources they need to complete online courses is therefore the greatest online learning challenge (Rennie & Morrison, 2013). Researchers have also identified a lack of acceptance, difficulty of use, concerns about usefulness, ineffectiveness, lack of technological know-how, cost, lapses in accessibility, inadequate training, lack of availability, and technical support (Lee & Singh, 2016). This echoes the view that CBT platforms must be

designed so that employees are motivated, equipped, and supported to utilise them despite other priorities that require their attention (Long, Dubois, & Faley, 2009). Most importantly, the disruption of normal life in 2020 owing to the COVID-19 pandemic has forced companies to go digital, with online learning assuming a crucial role (Skillsoft, 2020).

1.1.3 The impact of the COVID-19 pandemic

A monumental increase in the use of e-learning was observed in 2020 (Peñarrubia-Lozano, Segura-Berges, Lizalde-Gil, & Bustamante, 2021), as the COVID-19 pandemic accelerated the inclusion and use of such technologies around the world (Torres Martín, Acal, El Honrani, & Mingorance Estrada, 2021). E-learning has since gained standing as an indispensable corporate training tool (Malureanu, Panisoara, & Lazar, 2021). It is hailed as a dynamic and opportune means of professional development in a climate of uncertainty, and therefore warrants renewed research interest (Li, Ghosh, & Nachmias, 2020). International corporations in the hospitality domain, such as McDonald's, have moved many of their classroom training to their e-learning platform to comply with epidemic measures (Chanana, 2020). E-learning has also contributed immensely to organisational safety initiatives geared toward decreasing the impact of COVID-19 on employees, customers and profits (Slavković, Tošić, & Sretenović, 2022). The pandemic has resulted in organisations investing more in the development of e-learning systems, and their acceptance among employees (Giannakos, Mikalef, & Pappas, 2021). Mikołajczyk (2021) interviewed human resource managers and reported that employees benefited from new e-learning modules aimed at increasing their morale during the downturn. Mo, Hsieh, Lin, Jin, and Su (2021) believe that academicians should seek to sustain these advancements in a post-pandemic world. Scholars also reinforce the aims of the current study by charging that with the emergence of new technologies during

the pandemic progress can be made toward increasing e-learning enjoyment (Quezada, Rivera, Delgadillo, & Cajo, 2021).

Industry think tanks and consultancies have also registered an uptick in the use of e-learning initiatives over the past year owing to the pandemic. Prior, corporate e-learning was reported to use 40% to 60% less time than traditional learning (Brandon Hall Group, 2018), but this was not sufficient to give it the recognition it now receives. A report by Deloitte (2021) reveals a whole host of changes to corporate e-learning since the onset of the pandemic. The consultancy shared that 98 percent of organisations saw more patronage of e-learning systems, with 80 percent having to create new content. The most celebrated outcome was that teams exceeded targets for training hours completed per employee. The Chartered Institute of Personnel and Development (2021) found a 15 percent increase in the number of organisations using this mode of training over the past year and asserts that more than 80 percent of organisations plan to maintain their investment in e-learning technologies following the pandemic. Inquiries also reveal that younger employers were more likely to embrace this movement and all levels of employees up to senior management were involved in e-learning (McKinsey & Company, 2020).

1.2 Problem Statement

Computer-based training participation rates are faltering

The hospitality industry, with its labour-intensive nature and service-driven disposition, is no stranger to the need for innovations that promise competitive advantage (Aynalem, Birhanu, & Tesefay, 2016). CBT has been heralded as the answer to countless training dilemmas that have plagued the industry over the years. That said, there have been several complaints about the monotonous nature of ‘click next’ training, as CBT is often called (Taylor, 2017). As with the success of many organisational policies, the success of e-learning depends

to a large extent on the participation of employees (Wang & Wang, 2004). The majority, if not all, of the hotel computer-based training platforms are at present confronted by low user numbers and slumping completion rates (Weinhardt & Sitzmann, 2019). LinkedIn Learning (2020) reports that the main factor hindering employees from learning is the absence of time to learn while at work, with most learning occurring during weekdays. Welsh et al. (2003) add that completion rates, though problematic, are not an insurmountable obstacle, as research can be used to investigate and solve this problem. Moreover, it is important to increase completion rates to ensure that employee and organisational training goals are met (Sanchez-Gordon, Calle-Jimenez, & Lujan-Mora, 2015). With completion rates concerning technology-delivered instruction being less than desired, the heads of departments of numerous organisations are keen to remedy this deficit (Frankola, 2001).

The quality of CBT platforms is less than satisfactory

Aside from the time and resource constraints that affect employees' use of CBT platforms, there are challenges with the platforms themselves. Practitioners are aware that a well-designed learning platform can encourage learner persistence and boost completion rates. Nevertheless, current designs often lack the qualities that keep learners motivated and help them to complete their modules (Martinez, 2003). In addition, the social interaction or support that is typical of the classroom is absent (Kamsin & Is, 2005); thereby requiring learners to have high levels of self-motivation and self-discipline (Keller & Suzuki, 2004). If these traits are absent, employees may find technology-delivered learning confusing, frustrating, or even intimidating (Cantoni, Cellario, & Porta, 2004). Consequently, while learners should have competencies that are specific to virtual learning environments, this is not always the case (Yaghoubi, Malek Mohammadi, Iravani, Attaran, & Gheidi, 2008). Furthermore, if the software is prone to malfunctions, learners cannot undertake the programme of study effortlessly (Collins, 2003). As a result, corporations have suffered high rates of attrition, with

many employees beginning but not completing their training modules. It is thus evident that even if time and resources are in abundance, the attributes of the platform may negatively affect the learner and render computer-based training initiatives futile.

Computer-based training in hotels is under-researched

It is common knowledge that hospitality organisations are invariably concerned about issues that affect their customers (see Buhalis & Law, 2008; Chiou, Lin, & Perng, 2011; Gross, Gao, & Huang, 2013; Park & Gretzel, 2007), but research into the needs of employees – the backbone of the business – has received less attention (Lee & Singh, 2016). Research emphasis has therefore been on hospitality website appeal for marketing and business transaction purposes (Hashim, Murphy, & Law, 2007; Ip, Law, & Lee, 2011; Law & Hsu, 2006), with investigations into e-learning platforms trailing behind. Moreover, many e-learning platforms are hardly updated (Horton, 2000). Unfortunately, those championing the concerns of CBT platforms in the hospitality industry have yet to emerge en masse. One of the few people, Lee and Singh (2016), found that only a handful of studies examine CBT, how it is used, and the drivers of adoption in the hotel sector. Numerous studies have also discussed user perceptions of websites (see Liu, Li, & Hu, 2013; Phillips & Chaparro, 2009; Wang & Tang, 2003) and e-learning platforms in education (see Alkhalaf, Drew, Alghamdi, & Alfarraj, 2012; Lam, Lee, Chan, & McNaught, 2011; Popovici & Mironov, 2015). However, there is a dearth of studies addressing CBT continuance intention in the hotel industry.

CBT perception among various groups is under-studied

Interestingly, it is not only the employees who use CBT platforms who have aired their grievances. Supervisors and departmental managers also have complaints about CBT (Lee & Singh, 2016). It is pertinent to ascertain the differences, if any, in perceptions among these three groups, as well as others. Numerous studies assert that supervisory/management staff and line staff belong to different organisational cultures and have differences in their points of view,

organisational orientation, personal motivation, engagement levels, and business values (Avery, McKay, & Wilson, 2007; Gelfand, Kuhn, & Radhakrishnan, 1996; Hugenberg & Moyer, 1997). Their perceptions of task complexity, their abilities, and employee development initiatives such as training also differ (Blackman, 2003; Sabado, 2012). This lends credibility to the aim of the present study to ascertain the differences, if any, in perceptions of CBT among various groups in a hotel. If the results reveal differences between or among these groups, there is support for renewed interest in this area of research.

A theory-based approach to CBT continuance intention in hotels is absent

CBT systems are usually crafted based on designers' intuition (Allen, 2011); ignoring theoretical guidance. Nevertheless, it is theorised that CBT continuance intention (behavioural) is dependent on the characteristics of employees (personal) and their interactions with the training platform (environmental). These three pillars form the basis of triadic reciprocal causation, the hallmark of social cognitive theory (Bandura, 1988). The theory predicates a bi-directional interaction among the three, wherein individuals' cognition and behaviour are influenced by their environment and vice versa (Wood & Bandura, 1989). The theory has been used to explain psychosocial functions in numerous fields where learning is involved (Schunk & DiBenedetto, 2020). Because employee interactions with the features of computer-based training platforms require mental processes that exert a strong influence on user behaviour (Johnson & Brown, 2017), social cognitive theory is anticipated to provide a suitable lens through which to examine the subject at hand.

Scholars express that the inclusion of elements such as enjoyment in CBT could solve the aforementioned challenges (Kool & Agrawal, 2016). Enjoyment is thought to result from features inherent to the interface and information capabilities of CBT systems (Agarwal & Karahanna, 2000). In this light, the ability of employees to customise computer-based training instruction through provisions that increase learner control is predicted to have a positive effect

on usage (Honey, 2001). Likewise, the inclusion of platform features that add novelty to the experience is anticipated to produce desirable results. In summary, factors such as website quality, enjoyment, novelty, and learner control could be manipulated to induce a positive user response and reverse the negative trends outlined at the onset of the study.

1.3 Research Objectives

This study aims to shed light on factors that can redress the perpetually low participation and completion rates associated with computer-based training in hotels by focusing on the antecedents of perceived enjoyment and its impact on continuance intention. Based on a detailed literature review, system quality, information quality, learner control, and novelty, are presumed to be the primary factors influencing this trend. First, the study examines the effect of system quality on perceived enjoyment of hotel computer-based training. Second, it assesses the effect of information quality on perceived enjoyment. Third, it examines the impact of learner control on perceived enjoyment. Fourth, it assesses the influence of perceived novelty on perceived enjoyment. Fifth, it examines the effect of perceived enjoyment on continuance intention. Sixth, it compares the CBT perceptions of staff based on industry tenure, job level and department. Additionally, the study seeks to expand the application of social cognitive theory by using it to explain the model relationships. In sum, it is posited that the attributes of computer-based training platforms may or may not elicit enjoyment and this could be the reason employees do not persist to complete their computer-based training.

1.3.1 Research questions

The overarching research question is “What is the impact of website quality, learner control, and novelty on perceived enjoyment, and how does it affect employee continuance intention in computer-based training in hotels?”

In the context of hotel computer-based training, the specific research questions are:

1. To what extent does system quality influence perceived enjoyment?
2. To what extent does information quality influence perceived enjoyment?
3. How does learner control influence perceived enjoyment?
4. How does perceived novelty influence perceived enjoyment?
5. To what extent does perceived enjoyment influence continuance intention?
6. Do the CBT perceptions of staff differ based on industry tenure, job level and department?

1.3.2 Research significance

This study is anticipated to provide academic as well as practical contributions to improve computer-based training in hotels, and by extension the hospitality and tourism industry. Though the use of CBT by hotels is widespread and on the increase (Association for Talent Development, 2017, 2019), it is affected by low participation rates (Aparicio, Bacao, & Oliveira, 2016) and undesirable feedback from learners (Taylor, 2017). This progression suggests that repercussions could be magnified. The study's first aim is therefore to create a model of CBT continuance that is tailored to the hotel industry and provide recommendations to increase user participation and module completion. It does so by focusing on perceived enjoyment, a construct that has been shown to positively affect user intention (Davis, Bagozzi, & Warshaw, 1992); leading to the second contribution.

The operationalisation of perceived enjoyment as a key factor that impacts information systems (IS) success is supported by scholars (Agarwal & Karahanna, 2000; Blythe & Monk, 2018; Cheema, Rizwan, Jalal, Durrani, & Sohail, 2013; Crutzen, Ruiter, & de Vries, 2014). Nevertheless, existing studies include the construct as one of many (see Gan & Li, 2018; Joo, Park, & Shin, 2017), neglecting to zone in on its potency. This study remedies this deficit by operationalising four antecedents that are applicable to CBT platforms. Website quality dimensions such as system quality and information quality are believed to exert overwhelming

influence on learner perceptions and enjoyment (see Huang, 2003; Pe-Than, Goh, & Lee, 2012; Song & Han, 2009; Urbach & Müller, 2012). Moreover, the positive impact of learner control on perceived enjoyment is anticipated to result in incremental benefits (Karim, 2013). Similarly, it is envisioned that perceived novelty will have a desirable effect on perceived enjoyment (Huang, 2017; Merikivi, Nguyen, & Tuunainen, 2016). Additionally, a focus on continuance intention rather than acceptance and adoption has been declared to be more relevant to the lasting success of CBT (Bhattacherjee, 2001a). Accordingly, the structural relationships of the study's model are yet to be examined concurrently in existing research.

Third, this study intends to provide hotel executives with a strong basis for petitioning system designers to enable further manipulation of system characteristics to suit the needs of users. Various researchers assert that it is crucial to consider employee perceptions of training and their learning environments to design and deliver effective training interventions (Berger & Farber, 1986). With this in mind, the present study aims to identify differences in the perceptions and preferences of various groups to elucidate gaps between employee preferences and the existing characteristics of CBT platforms. Such insights will help hoteliers to tailor their training systems to each group by identifying those that may need additional support, or access to advanced settings while using CBT platforms. This study therefore makes the case for a tailored approach to CBT training instead of a one-size-fits-all model. This user-centred approach to learning information systems is likely to increase the participation and completion rates for modules.

Fourth, the COVID-19 pandemic has renewed organisational focus on computer-based training (Chartered Institute of Personnel and Development, 2021), since the associated policies preclude large gatherings in the workplace (Carnevale & Hatak, 2020). Because CBT has assumed a greater role in fulfilling training needs, both employees and their organisations have developed an affinity for it, boosting its prominence as a corporate tool for the future

(Deloitte, 2021). Despite these sentiments, the aforementioned issues surrounding CBT remain unresolved. As more and more companies pledge resources toward the improvement of their e-learning arsenal, complaints regarding its limitations are expected to increase exponentially. It is therefore opportune time to rekindle scholarly research into CBT to increase patronage and completion rates.

The outcomes of the study can have a significant impact on the continuity and success of the hotel industry. It is not far-fetched to state that if employees do not capitalise on CBT, companies will not receive a return on their investment and employees will not benefit from the increased efficiency and effectiveness envisioned (Chang, Chi, & Chuang, 2010). CBT can and should be used to keep hotel employees competent in their job functions and abreast of the latest trends in the field (Calvo & Reio, 2018). User-centred training can draw on the persistence of humans and increase the usage and effectiveness of CBT platforms. To this end, the role of website quality, perceived enjoyment, perceived novelty, and learner control should assume greater research attention.

In summary, there is a need to (a) focus on hedonic variables such as perceived enjoyment as a predictor of continuance intention; (b) emphasise learner control as a determinant of perceived enjoyment; (c) further explore novelty as an antecedent of perceived enjoyment; (d) shed light on the perceptions of different groups of staff; and (e) address the scarcity of studies on continuance intention in CBT in the hotel context.

Even though the deployment of computer-based training in hotels has been projected to increase, it is characterised by low participation rates and poor learner evaluations that stem from multiple shortcomings associated with the platforms. This study proposes an emphasis on factors that can engender enjoyment, including platform quality dimensions, the involvement of elements that promote learner control, and increased perceptions of novelty. Enjoyment is thus projected to positively impact continued usage.

1.4 Definition of Key Terms

Computer-based training: It refers to any purposeful application of web technologies employed in educating learners (Park, Son, & Kim, 2012).

Perceived enjoyment: It refers to the extent to which the activity of using a system is believed to be pleasurable in its own right, aside from any performance consequences that may be expected (Davis et al., 1992).

System quality: This relates to the learner's belief concerning the performance characteristics of web-based learning systems (Chiu, Chiu, & Chang, 2007).

Information quality: It refers to the accuracy, completeness, ease of understanding, and relevance of content featured on web-based learning systems (Chiu et al., 2007).

Perceived novelty: It refers to the degree to which users believe that aspects of a website's attributes are unexpected, surprising, new, and unfamiliar (Huang, 2003).

Learner control: It refers to the degree to which the user of a system can direct his or her own learning experience (Kay, 2001).

Continuance intention: It refers to an individual's desire to use an information system in the future, as opposed to initial use or acceptance (Praveena & Thomas, 2014).

CHAPTER 2: LITERATURE REVIEW

This chapter discusses the themes that underpin the current investigation. It gives an overview of organisational training and computer-based training in general within the hospitality industry. Specifically, it examines concepts such as website quality, perceived enjoyment, perceived novelty, and learner control in e-learning. Each section includes an overview of the concept, its conceptualisation, general application, consequences, operationalisation in the context of e-learning, and its relationship to enjoyment.

2.1 Training in Organisations

Organisations must make training a continuous endeavour for all employees (Sanchez-Gordon et al., 2015). A recent definition of training portrays it as "a planned activity that is used to promote employees' learning of the knowledge, skills and attitudes necessary for their current or future job" (Polo, Cervai, & Kantola, 2018). Training is a subset of organisational learning that begins with the onboarding of employees and continues throughout their tenure with a company. Training is valued for two main contributions to organisational success. It positively impacts staff morale, thereby reducing turnover, and it enhances employee performance, thereby increasing organisational competitiveness (Chow, Haddad, & Singh, 2007; Salas & Cannon-Bowers, 2001). Training is therefore regarded as the only way for an organisation to maintain a cadre of staff whose performance and commitment places the organisation at a competitive advantage (Roehl & Swerdlow, 1999; Storey & Westhead, 1997). Thus, employees have come to expect organisations to offer personal development opportunities that will foster their long-term growth (Buckley & Caple, 2009).

In support of the view that training has a positive effect on an organisation's competitive advantage, scholars argue that employees are an asset whose behaviour is affected by the policies and practices of management. They add that this in turn determines employees'

performance across the various indices that constitute competitive advantage (Kusluvan, Kusluvan, Ilhan, & Buyruk, 2010). Due to the pervasiveness of technology (high-tech) across all industries, companies now rely heavily on human knowledge and skills (hi-touch) to differentiate themselves from competitors (Peña & Villasalero, 2010). To achieve this distinct advantage, training is used as a tool to refine the knowledge and abilities of employees and set them apart from competing entities. This lends credence to the notion that the competitive advantage of an organisation "lies in what it knows, not what it owns" (Vidal-Salazar, Hurtado-Torres, & Matías-Reche, 2012). Baron and Armstrong (2007) concur that human capital is an intangible resource that fosters innovation and renewal and enhances competitiveness. One training executive describes his role as an internal marketer and his job function is to encourage employees to buy into the organisation's dreams by inculcating the unique culture characterised by the organisation's norms and values (Watkins & Marsick, 1992). Additionally, outcomes such as motivation, attitude, and empowerment are positively impacted by such endeavours (Aguinis & Kraiger, 2008). It can therefore be concluded that training is multi-faceted in its contribution to positive organisational outcomes.

Though a commitment to organisational training is viewed as a fundamental aspect of human resource management, it represents an additional demand on organisations and their employees. Training is therefore considered an expensive venture for organisations to engage in. Consequently, were it not for the existence of statutory regulations, changing technologies, quality assurance mandates, the fickle nature of customer satisfaction, and other competitive pressures within the business environment, training in many organisations may be at risk of being side-lined by competing priorities (Pratten, 2003). Devine (2007) states that training is often viewed by hospitality management professionals as a cost rather than a benefit; hence, such initiatives are kept at a minimum. Moreover, since employee turnover is rife in numerous industries, the process of recruitment and training often comes to nought (Jaworski,

Ravichandran, Karpinski, & Singh, 2018). That said, there is an association between the frequency and quality of training and turnover (Stamolampros, Korfiatis, Chalvatzis, & Buhalis, 2019). Kraiger (2003) concludes that successful organisations take a noticeable interest in training and development while unsuccessful ones do not. Given that deficiencies in employee training result in decreased service quality, which leads to poor customer attitudes and has a boomerang effect on employee morale and job performance (Smith, 1976), the importance of training cannot be underestimated.

2.1.1 Training in hospitality organisations

The diverse nature of the tourism and hospitality industry presents unusual challenges for training and development professionals and those with departmental training responsibilities. These challenges range from issues of access and deliverability to issues of timing and need (Becton & Graetz, 2001). Moreover, hospitality organisations are known for hiring staff without prior experience in the industry by focusing on their willingness to learn and their possession of transferrable skills (Devine, 2007). Furthermore, even in cases where new hires are graduates of hospitality programmes, their job readiness may be lacking (Alexander, 2007). This compounds the industry's less than desirable reputation for training (Maxwell, Watson, & Quail, 2004; Pratten, 2003). The situation is further complicated by top managers who are too burdened with day-to-day operations to plan and direct training activities, or who are reluctant to invest in training initiatives due to the customary high employee turnover (Poulston, 2008). Durocher (1990) surmises that while properly trained employees are fundamental to the smooth functioning of hospitality businesses, the challenges and costs of providing training have surpassed the capacity of many companies to do so effectively. This results in inadequately trained workers in back- and front-of-the-house

positions, as well as line managers and supervisors parcelling their time between training and other pressing tasks.

The digital revolution has exacerbated the challenges faced with training in the industry. With technological changes contributing to an uptick in the complexity and velocity of the work environment, contemporary workers are forced to process more information in less time (Kruse & Keil, 2000). This is also a consequence of the rapid rise and decline of products and services which render information and training obsolete in no time. Training managers are therefore faced with the urgency of delivering knowledge and skills more speedily and proficiently, wherever and whenever it is desired (Collins, 2003). Urdan and Weggen (2000) affirm that "in this age of just-in-time production, just-in-time training becomes a critical element to organisational success". It should therefore be acknowledged that these rapid advances in technology have also resulted in a focus on innovation that has brought about new ways of delivering training.

2.2 Computer-based Training

Globalisation has heightened the need for training programmes aimed at preparing employees to meet the needs of an increasingly demanding customer base (Lee & Singh, 2016). This desire to provide consistent, location-flexible, time-independent training at a lower cost (Law, Qi, & Buhalis, 2010), while mitigating information overload and extended training delivery cycle times, has led to the emergence and prevalence of computer-based training (Dečman, 2015). CBT has emerged as a promising alternative and complement to traditional organisational training programmes due to its affordability and comparative effectiveness (Oztekin, Delen, Turkyilmaz, & Zaim, 2013; Salas, Wildman, & Piccolo, 2009).

It is defined as a "computer-based programme that is self-contained, interactive, and often asynchronous, that uses features of learner control coupled with predesigned material,

required responses and feedback to offer self-paced instruction" (Bedwell & Salas, 2010). The authors further describe it as a methodology for providing systematic, structured learning. Scholars also describe CBT systems as e-learning systems since they consist of a wide range of processes and applications that facilitate computer-based learning and other forms of digital learning (Hsia, Chang, & Tseng, 2014). Urdan and Weggen (2000) define e-learning as "the delivery of content via all electronic media, including the internet, extranets, intranets, audio/videotape, satellite broadcast, interactive TV, and CD-ROM". Based on this definition, computer-based training is considered a subset of e-learning. The term 'e-learning' is also used synonymously with technology-based learning (Meyen et al., 2002) and other concepts such as computer-assisted instruction and computer-managed instruction (Biech, 2008). Additionally, it is termed mediated training due to the use of technology in a supporting role (Durocher, 1990).

CBT serves to increase productivity in service firms by improving human capital through training and by automating some organisational training functions through the use of technology (Carliner & Shank, 2016). To facilitate CBT, organisations install training programmes on workplace computers or make them available via the internet (Luor, Hu, & Lu, 2009). Its cost- and time-effective approach to organisational training has contributed greatly to its success. Among companies using learning technologies, a 16 percent increase in customer satisfaction was observed (IBM, 2014). An investment in CBT is thus thought to secure positive job outcomes for employees, which in turn boosts business performance (Luor et al., 2009).

Training in the traditional context is said to consist of reactive and fragmented interventions that are carried out in response to specific training needs (Maxwell et al., 2004). CBT, on the other hand, has empowered organisations to be responsive to an ever-changing work environment that is demanding just-in-time training (Wagner & Flannery, 2004).

Considering the need to maintain a competent workforce with up-to-date skills, employees must be capable of accessing training on demand. CBT has been recognised as one approach that satisfies this requirement for training and it can be delivered at any time and in any location (Carliner & Shank, 2016). It has also been praised for being an antidote to the errors often passed down through on-the-job training or the "buddy system", as information is vetted and delivered in a controlled manner (Durocher, 1990).

Since its inception, CBT has become more popular and is employed in a diverse range of fields, including medicine, to accomplish endeavours such as treating patients with partial blindness (Kasten, Wüst, Behrens-Baumann, & Sabel, 1998), and the training of cardiologists (Dawson, Cotin, Meglan, Shaffer, & Ferrell, 2000). It is used in linguistics to teach English vowels to additional language learners (Wang & Munro, 2004) and in ergonomics to assess driving performance through simulations (Cassavaugh & Kramer, 2009). In organisational settings, CBT has received little attention, with researchers examining the role of computer anxiety (Harrington, McElroy, & Morrow, 1990) and computer self-efficacy (Decker, 1998). They have also investigated other interpersonal factors (Bates, Holton III, Seyler, & Carvalho, 2000) and environmental factors (Cheng, Wang, Moormann, Olaniran, & Chen, 2012) such as learning support (Cheng, Wang, Yang, & Peng, 2011).

Despite the popularity of learning platforms in organisations, most studies have focused on educational contexts (see Al-Samarraie, Teng, Alzahrani, & Alalwan, 2018; Mayer, 2020). Chen (2010) urges researchers to study CBT platforms in organisations due to the numerous benefits they offer. She argues that given the strong connection between the quality of computer-based systems and employee satisfaction, which subsequently affects performance, more studies should examine these relationships. The strong affiliation between human resource practices and business performance is also cited by other scholars as a reason to focus on technology-facilitated training (Baron & Armstrong, 2007). Since information is the lifeline

of the hospitality industry, information technologies present both opportunities and challenges (Collins, 2003).

2.2.1 Computer-based training in hospitality

Few studies have explored CBT in hospitality and tourism. Lee and Singh (2016) found that while hotel managers exhibited positive attitudes toward CBT and could recognise the associated benefits, many were reluctant to invest in it. Their study also showed that managers were more likely to engage in CBT than supervisors and line staff. The study further revealed that the front office, reservations, information technology, and sales and marketing departments were most likely to utilise CBT. Similarly, Moradi, Yahya, Mohamed, and Raisian (2017) found that CBT was often thrust onto employees without the requisite support, and they were not guided in their transition from classroom training to online training. They contend that training and development professionals must play a more active role in encouraging employees to utilise the platforms by underscoring the benefits of participation and providing the necessary support. Chan and Choi (2012) examined the perception of hospitality students towards the use of CBT in hotels based on the assumption that their perceptions will mirror those of future hospitality employees. They discovered that respondents were most concerned about the compatibility of CBT with existing training programmes and organisational culture. They also prioritised the perceived effectiveness of CBT – that is, its ability to improve training performance and job effectiveness.

After analysing a CBT system used by cruise line travel agents, Calvo and Reio (2018) discovered a significant relationship between the platform's usage and job knowledge as well as between platform use and job performance. Kim, Erdem, Byun, and Jeong (2011) investigated the impact of individual characteristics on hotel employees' willingness to use e-learning for soft skills training. Extrinsic motivation was found to influence intention to use e-

learning. Though research into computer-mediated learning is on the ascendancy (see Šumak, Heričko, & Pušnik, 2011), it is evident from the papers reviewed above that there is a lack of studies in the context of the hospitality industry.

Saadé and Bahli (2005) assert that the issues associated with technology-based learning now rest with the learner, with many expressing feelings of isolation and demotivation and hence demanding more incentive to utilise such systems. Harris and Cannon (1995) attest that training method impacts training effectiveness and they submit that innovative training technologies could solve the challenges associated with CBT. To this end, Davis et al. (1992) introduced the concept of enjoyment to the information technology realm as a way of creating favourable perceptions among users. Additionally, various researchers have called for more work to evaluate CBT systems (Phillips, McNaught, & Kennedy, 2012). Hence, there is a need for learning information systems in the hotel industry to be assessed for their ability to elicit enjoyment in learners.

2.2.2 The COVID-19 pandemic and training in the hospitality industry

The advent of Covid-19 brought about physical distancing and stay at home mandates which precipitated a sharp drop in the number of people patronising hospitality businesses (Kaushal & Srivastava, 2021). As the pandemic rages on, the industry remains largely unaffected by remote work mandates (Wang, Liu, Qian, & Parker, 2021). This has meant mass lay-offs and high levels of unemployment among industry veterans (Baum, Mooney, Robinson, & Solnet, 2020). Observations have uncovered four revelations concerning the impact of COVID-19 on the industry. First, service provision has become increasingly complex; second, the industry is attracting an increasing number of neophytes; third, employees have become increasingly anxious about job security and career progression; and fourth, despite the marked increase in CBT patronage, long-standing issues remain unresolved.

Since the pandemic, service provision has become increasingly complex, with customer dissatisfaction exacerbated by COVID-19 (Mehta, Kumar, & Ramkumar, 2021). As customers reluctantly comply with health and safety measures, and employees are thrust into evolving roles, organisations are engaging in workforce re-education in a bid to mollify customers and reduce their legal exposure (Derek et al., 2021). One casualty of the pandemic is large organisational gatherings, including those for training purposes. As a result, more and more training is now conducted online (OECD, 2021), and computer-based training usage has increased exponentially (Chartered Institute of Personnel and Development, 2021). It is reported that e-learning systems are being fitted with more modules to counteract the shortfall in face-to-face interactions (Deloitte, 2021).

COVID-19 has triggered an influx of new employees who are new to the industry. With many economies opening up in 2021, recruitment is booming. Despite this, people are reluctant to take up service jobs and veterans are quitting in unprecedented numbers (Hirsch, 2021). The service industry, under which the hospitality industry falls, accounted for the highest percentage of resignations in the United States in the first half of 2021 (Borenstein, 2021). As the industry slowly recovers from the jobs lost during the pandemic, newly employed personnel will need training (Yeh, 2021). With this influx, many of whom are entering the industry for the first time, novice CBT users are to be expected. This includes people from industries with very different qualifications and experience (Lopes, Sargento, & Carreira, 2021), some of whom are who are faced with the realisation that service is a skill, and not an innate quality (Golubovskaya, Robinson, & Solnet, 2017). A large portion of their training is expected to be undertaken online and affirms that COVID-19 has fast-tracked the e-learning trajectory (Almaiah, Al-Khasawneh, & Althunibat, 2020). As such, the concept of enjoyment is key to an ongoing and beneficial relationship between employees and CBT platforms. Enjoyment

should thus be the differentiating factor in the thrust to inculcate new hires in the ways of the industry.

Low levels of employee morale brought on by shifts associated with COVID-19 are a threat to the stability and success of the hospitality industry. Futuristic technology has played a crucial role in keeping employees and guests safe during the pandemic (Hao, Xiao, & Chon, 2020), and robots are even expected to depose employees in the coming decades (Law, Leung, & Chan, 2019). Still, this future is already upon us as hotels have begun to trial the use of kiosks for hotel check-in as is now customary at numerous international airports (Kim & Qu, 2014). It is thought that as such technology proliferates, only the most competent employees will be retained (Tuomi, Tussyadiah, & Stienmetz, 2021). Nevertheless, those interested in climbing the career ladder divulge that on-the-job training is not enough to prepare them for promotion (Mooney, Harris, & Ryan, 2016). Managers do not have the time to mentor each employee who desires exposure to the associated tasks and responsibilities. Furthermore, the industry makes extensive use of part-time employees, many of whom have irregular shifts and are not usually included in regular training; who can also benefit from CBT (Casado-Díaz & Simon, 2016). The astronomical turnover rates which are a by-product of employee dissatisfaction mean that the cycle of recruitment, selection, and training in the industry can place undue strain on department budgets, and management and team morale (Tews, Stafford, & Michel, 2014). Computer-based training is poised to remedy these issues and equip employees with the training they need to remain competitive, make progress throughout their careers, and improve morale (Lee & Singh, 2016).

Despite a renewed interest in CBT, pre-pandemic issues remain unresolved. Threats to the hospitality industry have been brewing long before the pandemic. The industry is traditionally staffed in large part by younger people (Baum, 2019), yet troubling findings have emerged. Goh and Okumus (2020) reveal that emotionally taxing work is not appealing to

generation Z – the newest entrants – and that the stability of the industry is jeopardised by a shrinking workforce. This tech-savvy, digital generation exerts pressure on organisations that are struggling to keep them engaged (Scheuerlein, 2019). Certainly, computer-based training will need to embody high levels of enjoyment or be cast aside as a relic of a bygone era. In an industry that thrives on emotional labour, proper training is thought the reduce the impact of burnout and its consequences on employees (Lee & Ok, 2012), who may require training interventions aimed at coping (Nisar, Haider, Ali, Naz, & Ryu, 2021). Such training can be offered via computer-based training systems, especially considering employee reluctance to participate in mental health initiatives (Moll, 2014). With this said, well-trained staff are more efficient and less likely to be purveyors of service failure. Moreover, such encounters are a click away from infamy via social media (Sigala & Gretzel, 2017). Further research into the antecedents of perceived enjoyment – system quality, information quality, learner control, and perceived novelty – in CBT is thus crucial in finding solutions to the challenges associated with CBT.

2.3 Perceived Enjoyment

Scholars' definitions of enjoyment are often dependent on their discipline. Psychologists define enjoyment as an affective state of pleasure (Lumby, 2011), or as an attitude with affective, cognitive, and behavioural elements (Hall, 2009). In the field of education, Hartley (2006) philosophised that, "Enjoyment is an emotion. It is about how we feel, not about what we think". In sports, Scanlan, Carpenter, Lobel, and Simons (1993) assert that enjoyment is more general than a specific emotion such as pride. Others in leisure studies submit that enjoyment is phenomenologically self-reflective (Podilchak, 1991). Inquiries in the information systems domain have portrayed enjoyment as a stimulant, a transactional element, and a consequence of interactions (Lin, Fernandez, & Gregor, 2012). These definitions suggest

that by simply participating in an activity, one could derive sufficient meaning and value for it to be perceived as independently rewarding (Pratt, Chen, & Cole, 2016). Toward a more specific conceptualisation, authors have often situated enjoyment in the context of their research area (see Davis et al., 1992).

Research done by Lumby (2011) reveals that motivation, learning, and emotion are interconnected. She defines learning as "a more or less permanent change in behaviour potential that occurs as a result of practice". This change can be moral and/or affective, as well as intellectual (Lumby, 2011, p. 251). This association can be illustrated by the view that an enjoyable activity meets the needs of an individual and needs are fundamental to theories of motivation (Lin & Gregor, 2006). The author states that enjoyment can stem from learning as it satisfies certain human needs, but only when the motivation to do so is intrinsic and not through coercion or with material gain in mind. Lumby (2011) reiterates that because learning is dependent on a learner's volition to engage and persist in an endeavour, the task must be deemed as potentially enjoyable. This may provide the motivation to commence an interaction and derive requisite benefits, which may include enjoyment and learning. The author further reasons that a lack of enjoyment can lead to faltering motivation among learners, resulting in failure to learn – that is, not undergoing moral, affective, or intellectual changes. Others uphold that educational settings are brimming with affective experiences that serve to either energise or restrict learner motivation and achievement (Fiedler & Beier, 2014).

To better understand the importance of enjoyment in CBT, one must acknowledge the influence of emotion on learning. Emotions are characterised as episodes that are evoked by a variety of stimuli (Scherer, 2009), of which the individual need not be consciously aware (Pekrun & Linnenbrink-Garcia, 2014). With specific reference to the literature on emotions in achievement settings, enjoyment is portrayed as one of the many emotions reported by learners across various subjects of study (Ainley & Hidi, 2014). It is thus evident that the acquisition of

knowledge can be an exciting and enjoyable process (Csikszentmihalyi, 2014), with the connection between enjoyment and learning being an enduring proposition (see Blunsdon, Reed, McNeil, & McEachern, 2003; Rieber & Noah, 2008). Learning is further conceived as an internal process that offers insights through inference or self-reporting, which is in essence an individual's perception of enjoyment, or a lack thereof, and their belief that this emotion is associated with learning (Lumby, 2011). Castellar, All, De Marez, and Van Looy (2015) elaborate on this relationship by conceiving enjoyment as a precursor, parallel, and the result of learning. In expounding on the hierarchical conceptualisation of enjoyment in students, scholars recognise three levels (Goetz, Frenzel, Hall, & Pekrun, 2008). One's enjoyment of experiences, from top to bottom, can be as broad as enjoyment of life, to school-related enjoyment, and more specifically, to learning-related enjoyment. The present study is concerned with the latter type of enjoyment. Goetz, Hall, Frenzel, and Pekrun (2006) submit that considering the role of positive emotions in education, the antecedents of students' positive emotional experiences are worthy of exploration.

The role of enjoyment as a construct in information systems research is unparalleled. It is especially paramount to investigations into hedonic information systems (Van der Heijden, 2004). Utilitarian systems are productivity-oriented while hedonic systems are pleasure-oriented (Gu, Fan, Suh, & Lee, 2010), with the latter featuring sparsely in the organisational literature. Still, the inclusion of elements of enjoyment in organisational information systems has been shown to elicit feelings of enjoyment in users (Papadopoulos, Stamati, & Nopparuch, 2013). Gerow, Ayyagari, Thatcher, and Roth (2013) concede that intrinsic motivation, such as enjoyment, plays a defining role in user reactions to utilitarian systems. They demarcate the two forms of motivation, opining that if employees believe that a system is capable of "achieving outcomes that are distinct from the activity itself, such as improved job performance, pay, or promotions", they are extrinsically motivated. On the other hand, if

employees interact with a system solely for the purpose of performing the activity, they are said to be intrinsically motivated (Deci, Olafsen, & Ryan, 2017). Consequently, individuals adopt technology not only for the utilitarian benefits derived from its use, but also because it is enjoyable (Teo, Lim, & Lai, 1999). It should be noted that enjoyment has direct as well as indirect effects on users' intention to utilise hedonic, utilitarian, and blended systems (Pratt et al., 2016). Enjoyment has therefore been recognised as a product of a user's experience with a system (Mitchell, Chen, & Macredie, 2005).

For some time, the use of technology was associated with the manufacturing industry, but it is now recognised for its ability to appeal to our feelings and emotions, an effect termed hedonism (Scarpi, 2012). Venkatesh (2000) asserts that a conceptualisation of intrinsic motivation that is specific to information systems is known as perceived enjoyment. It is considered an offshoot of intrinsic motivation, wherein "a behaviour is performed to experience the pleasure and satisfaction inherent in the activity" (Saadé & Bahli, 2005). It is a form of motivation that is inherent to the usage process (Zhou, Li, & Liu, 2015). Accordingly, perceived enjoyment is defined as "the extent to which the activity of using a system is believed to be pleasurable in its own right, aside from any performance consequences that may be expected" (Davis et al., 1992). Perceived enjoyment belongs to a class of constructs known as hedonic factors (Sung & Yun, 2010). This includes perceived fun (Igbaria, Schiffman, & Wieckowski, 1994), playfulness (Moon & Kim, 2001), hedonism (Agarwal & Karahanna, 2000), flow (Trevino & Webster, 1992), and cognitive absorption (Agarwal, Sambamurthy, & Stair, 1997).

Nevertheless, researchers have made a case for perceived enjoyment to be considered as distinctly different from the aforementioned variables (see Blythe & Monk, 2018). It is noteworthy that although enjoyment features heavily in the website user acceptance literature, it possesses distinctive characteristics that distinguish it from foundational concepts such as

usefulness and ease of use (Lin & Gregor, 2006). Early on, Davis et al. (1992) assessed whether employees use computers at work more because they are considered useful or because they are enjoyable to use. They contend that while the perceived usefulness of computers has been linked to usage intention in earlier studies (see Davis, 1989; Davis, Bagozzi, & Warshaw, 1989), the role of enjoyment should be given equal attention. Davis' (1989) study in this regard went on to show that enjoyment had a marked impact on intention while controlling for perceived usefulness. In making the case for a focus on perceived enjoyment in computer usage and technology adoption studies, Davis et al. (1992) assert that in the context of computer usage in the workplace, though usefulness remains a key determinant of intention, enjoyment will account for considerable variance in usage intention than that explained by usefulness on its own. Bruner II and Kumar (2005) reaffirm that while perceived usefulness (a utilitarian aspect) contributes to user adoption, what contributes even more is the "fun" attribute (the hedonic aspect). The enjoyment inherent in the use of information systems – that is, its ability to elicit positive feelings in users – has therefore been widely recognised (see Lin, Gregor, & Ewing, 2008; Van der Heijden, 2004; Wu & Liu, 2007).

Research on the role of enjoyment in employee use of information systems began with Webster (1989). Across disciplines, contented users have been identified as a crucial force in the success and continuance of information systems (Khong & Song, 2003). One study found that over 80 percent of users have reported enjoyable experiences during interactions with websites (Chen, Wigand, & Nilan, 1999). Tussyadiah, Jung, and tom Dieck (2018) emphasise the importance of perceived enjoyment as a pertinent factor in investigating users' postadoption evaluation of information technology. This is evident in the inclusion of perceived enjoyment as a construct in technology adoption models that focus on continued usage due to its positive effect on user perceptions (see Agrifoglio, Black, Metallo, & Ferrara, 2012; Shiau & Luo, 2013; Van der Heijden, 2004; Venkatesh & Brown, 2001). Ahn, Ryu, and Han (2007) affirm that

enjoyment plays an important role in enhancing user attitude and behavioural intention. In recent years, such research has been conducted by Chatzoglou, Sarigiannidis, Vraimaki, and Diamantidis (2009) in a multi-sector investigation, as well as by Lewis and Loker (2014) in examining retail employees, and Tsai, Chao, Lin, and Cheng (2018) in their study of nurses. Hassenzahl (2004) explicates that the pleasure and usability of a particular technology should be considered as two halves of a whole. He adds that the resulting satisfaction is maximised when there is a balanced interplay between the two. The association between website quality and perceived enjoyment is therefore well established (see Chen & Cheng, 2009; Lin, 2010; Song & Han, 2009). It can thus be concluded that perceived enjoyment is a key intrinsic motivation for information system usage which promotes continuance usage by improving the user experience (Zhou et al., 2015).

The recognition of enjoyment by organisations and its presence in their training endeavours is a more recent phenomenon. Organisations have been known to focus on productivity and be averse to anything that seeks to detract from it (Shahin, 2008). In modern times, fun and work are no longer separate for employees, as companies attempt to engender a culture that provides gratifying experiences, regardless of the seriousness of the task, as a means of deepening involvement and satisfaction (Cheng, Shami, Blythe, & Bos, 2009). This suggests that the notion of fun is not new to training, with numerous authors recommending the inclusion of pleasurable elements in order to make training enjoyable for employees (see Chatzoglou et al., 2009; Long, 2007).

Fittingly, Bedwell and Salas (2010) chronicle the resurgence of CBT as a product of the inclusion of gaming elements that seek to project an image of fun-filled instruction into the notoriously monotonous field of education and training. They characterise the movement as a "multidisciplinary integration and application of lessons learned from human factors, multimedia design, and training effectiveness literature". Khong and Song (2003) emphasise

that users' emotional response to information systems usage is a prudent starting point for research into the success of such systems. Malone (1981) in his publication "Toward a theory of intrinsically motivating instruction" was therefore driven to answer two questions: "What makes things fun to learn?" and "How can instruction be designed in a way that captivates and intrigues learners as well as educates them?". In a later publication, Malone (1982) investigated one other question: "How can the features that make computer games captivating be used to make learning – especially learning with computers – interesting and enjoyable?" These early scholarly works confirm the importance of enjoyment in the organisational learning domain and the attempts to uncover its determining factors.

The antecedents of enjoyment have been explored in sports (Crocker, Bouffard, & Gessaroli, 1995; González, Castillo, & Balaguer, 2019), pedagogy (Büssing, Dupont, & Menzel, 2020; Khajavy, Ghonsooly, Hosseini Fatemi, & Frenzel, 2018), academic achievement (Mercan, 2020; Simonton & Garn, 2020), mobile applications (Choi, 2016; Tan, Kim, & Qin, 2018), and gaming (Fabito & Cabredo, 2019; Merikivi et al., 2016). The use of information systems in learning initiatives has also received ample attention (see Mortera-Gutiérrez, 2006; Quinn, 2005; Williams & Williams, 2010). Nevertheless, Merikivi et al. (2016) opine that the factors which make continued usage an enjoyable experience have not been sufficiently investigated in information systems research. Enjoyment in training has been shown to increase employee morale and productivity (Ford, McLaughlin, & Newstrom, 2003). Speier and Venkatesh (2002) performed a comparison between traditional training and a game-based training method and discovered that the latter served to enhance users' intrinsic motivation and resulted in higher levels of enjoyment. The scarcity of studies demonstrates that the antecedents of perceived enjoyment have not been sufficiently investigated in the context of technology-assisted learning, such as hotel computer-based training.

Shneiderman (2004) expresses agreement by foregrounding the virtues of a well-designed information system in inducing positive emotions. Enjoyment is also highlighted as a critical consideration in the design of web-based learning systems (Mitchell et al., 2005). Accordingly, in a computer-based training situation, some learners could be said to work for the joy of the process, not solely the product (completion of training modules) (Turkle, 1984). Over the decades since researchers in human-computer interaction have sought to provide insight into the antecedents and consequences of enjoyment in using computers, patterns have emerged (Pace, 2004). These endeavours reveal that the factors discussed in the subsequent sections have an influence on enjoyment and this ultimately impacts continuance intention.

2.4 Website Quality

Most computer-based training interfaces are web-based (Driscoll, 1999). A website is described as content elements (pages) that are linked to each other and is characterised by hypertext (links) that allow users to initiate and control non-linear searches (Huizingh, 2000). Quality, on the other hand, is generally defined as "the ability of products to be used for their intended purpose" (Kincl & Štrach, 2012). Websites are therefore considered as products and users are regarded as customers (Grigoroudis, Litos, Moustakis, Politis, & Tsironis, 2008). A website is comprised of various attributes, which are defined as the features or aspects of a website (Huang, 2003). The main attribute is its visual design – that is, the balance and emotional appeal of a website expressed through shapes, font type, sound, music, or animation (Rosen & Purinton, 2004).

These characteristics can enhance or hinder usage (Fuller, Vician, & Brown, 2006). This viewpoint is important because when users are required to interact with web interfaces, efficiency is key, and can be the difference between feeling exhausted or accomplished at the end of a task (Garrett, 2010). This notion is supported by Sheth (2003) who declares that the

learners of technology-delivered instruction do not care about the intricacies of the platforms, but are rather interested in how they can be successful in their undertaking. He argues that if any attribute of the platform deters users from achieving their goal, it becomes a concern and is likely to result in dissatisfaction. Tabbers, Kester, Hummel, and Nadolski (2004) concur and submit that interface design is often based on intuition rather than theoretical principles. This often results in frustration and may ultimately lead to the abandonment of the endeavour. Organisations desire a return on their investment in web technologies; consequently, a detailed understanding of the attributes which determine a high-quality user experience is paramount (Kuo, Lu, Huang, & Wu, 2005). Other scholars affirm that it is important to understand why some interfaces are considered pleasing to the user while others fall short (Gajos, Czerwinski, Czerwinski, Tan, & Weld, 2006).

Bai, Law, and Wen (2008) note two approaches to evaluating a web-based platform. This can be done with or without user involvement, with the latter relying on gauging the perceptions of its users. The current study depends on user perspectives in determining the quality of an information system. Consequently, it argues that to evaluate a website, users must have experience using it (Hsu, Chang, Chu, & Lee, 2014). Although users may not possess comprehensive knowledge of the technical aspect of an information system, they are still capable of evaluating it (Srivastava, Teo, & Jiang, 2008). Alkhattabi, Neagu, and Cullen (2010) reiterate that the context and the perspectives of users need to be taken into account concerning quality in e-learning. A high-quality website is perceived as one that encourages the user to visit several times. The associated sensory experience – that is, the "text, pictures, graphics, layout, sound, and motion" – is an important determinant of the valence of the user experience (Rosen & Purinton, 2004). Researchers posit that the proper layout, sizing, colouring, and positioning of these variables are crucial to eliciting positive user perceptions (Michailidou, Harper, & Bechhofer, 2008). Likewise, in their study, Lin et al. (2008) indicate that website

characteristics such as “credibility, currency, correctness, ease of understanding, aesthetic appeal, and emotional impact” are essential to ensuring users are engaged in the experience. Because of the complexity of websites, Shneiderman and Plaisant (2010) advise that website quality should be assessed from a multidimensional perspective.

While the literature is replete with numerous classifications of website quality (see Barnes & Vidgen, 2001; Cyr, 2008; Hoffman & Novak, 2009; Huizingh, 2000; Kim & Niehm, 2009; Loiacono, Watson, & Goodhue, 2002; Tarafdar & Zhang, 2008; Urban, Amyx, & Lorenzon, 2009; Wolfinbarger & Gilly, 2003), the dimensions of Delone and McLean (2003) have received the most research attention (Urbach & Müller, 2012). An earlier version, the information systems model of success (DeLone & McLean, 1992), is pertinent to investigations into website quality. In this regard, DeLone and McLean (1992) in their information systems model of success identify two major dimensions of quality perceptions concerning websites: information quality and system quality. It is therefore customary for users to be asked to consider the aforementioned dimensions in their evaluations (Delone & McLean, 2003). In the current study, the service quality dimension which was added to the modified model, will not be assessed. This is due to the absence of a human service provider in e-learning, who embodies attributes such as courtesy and friendliness (Grigoroudis et al., 2008). The other two website dimensions have been demonstrated to adequately account for such characteristics (Zheng, Zhao, & Stylianou, 2013).

The model has been deployed to assess the success of online learning systems across multiple contexts. Results have shown that because these dimensions may be manipulated, they are capable of influencing user beliefs and behavioural intention (Ahn et al., 2007). Although previous studies have identified various factors that influence the effectiveness of websites used for learning purposes (see Alhabeeb & Rowley, 2018; Chiu et al., 2007; Selim, 2003), the evaluation of their effectiveness in the context of organisational learning is limited. In a

Taiwanese university, the dimensions were found to positively impact user satisfaction and behavioural intention (H.-F. Lin, 2007b). Ramayah, Ahmad, and Lo (2010) shared that the factors were significant predictors of continuance intention, accounting for 59 percent of the variance in a higher education e-learning context. Similarly, Liang and Chen (2009) concluded that websites that score high on system and information quality may induce high levels of return intention in users. These outcomes are important because, as with all information systems, the success of e-learning depends on users' intention to continue patronising the service (Chiu et al., 2007). Toward a renewed focus on designing platforms and courses that keep learners engaged, it is essential to discuss the two quality dimensions (Moshinskie, 2001). Most importantly, these website characteristics have been observed to exert a pronounced effect on users' perceptions of enjoyment (Cyr, Head, & Ivanov, 2006; Lin & Gregor, 2006). Lin et al. (2008) affirm that these dimensions contribute to perceptions of enjoyment.

2.4.1 System quality

A computer system is one medium through which we interact with websites (Stockdale & Borovicka, 2006). The performance of a website is primarily embodied in the functionality of its user interface, which is judged for its quality, hence the concept of system quality (Negash, Ryan, & Igbaria, 2003). Usually, the specifications are decided at the information system development stage before being introduced to users (Ahn et al., 2007). The graphical user interface is most representative of this dimension and is the intermediary between a computer program and the user, consisting of mechanisms that enable the user to interact with it (Tabbers et al., 2004). System quality therefore looks at the functionality of a system as it carries out its intended purpose (Bossen, Jensen, & Udsen, 2013). User perceptions about the technological characteristics, performance, and usability of a website thus form the basis of system quality (Cidral, Oliveira, Di Felice, & Aparicio, 2018; Teo, Lee, & Chai, 2008).

Myriad attributes of system quality have been proposed in the literature. According to Delone and McLean (2003), system quality is embodied in its reliability, availability, response time, usability, and adaptability, which are considered engineering-oriented performance characteristics (Ahn et al., 2007). Nevertheless, using the DeLone and McLean (1992) model as a foundation, researchers have also operationalised other sub-dimensions such as customisation, ease of learning (Gable, Sedera, & Chan, 2008), convenience of access (Sung, Liu, Liao, & Liu, 2009), flexibility (H. F. Lin, 2007), and interactivity (McKinney, Yoon, & Zahedi, 2002). Various researchers have observed that the most common measures gauge the usability and performance attributes of information systems (Urbach & Müller, 2012). Others contend that website design, including its visual appeal, is the primary determinant of system quality (Chiu, Huang, & Yen, 2010; Ramayah et al., 2010). Other scholars also posit that a website's system quality lies in its search facility, multimedia capability, and responsiveness (Weinberg, 2000). It is thus apparent that the variables for system quality will vary depending on the target technology (DeLone & McLean, 2004). Nevertheless, by assessing perceptions of a website's features, insight can be gained into system quality (H.-F. Lin, 2007a).

Researchers emphasise the importance of system quality, because deficiencies result in frustration that negatively impacts users. When a user interacts with an interface, the goal is to accomplish a task with the help of the interface (Gajos et al., 2006). Investigations have shown that a poorly designed and inadequately functioning interface are determining factors in computer-based course completion, with only 30 percent of users being successful (Barolli, Koyama, Durresi, & De Marco, 2006). Pace (2004) also states that an improperly designed interface places a heavy demand on attentional resources and distracts the user's focus from the task being undertaken. He adds that several interface design flaws are thought to interfere with the user experience. Among these are lengthy page response times, cluttered page layout, inconsistent navigation cues, disorganised content, and inappropriate use of colour. The reality

is that the productivity gains offered by digital technologies are often unrealised due to poor user impressions, which often result from mediocre system quality (Davis et al., 1992).

System quality has implications for user perceptions and attitudes. Peters, Işık, Tona, and Popovič (2016) confirm that users prefer systems that have an attractive user interface. Scholars further stress the importance of a responsive system and its connection with user satisfaction (Cao, Zhang, & Seydel, 2005). In this regard, any aspect of a system that performs less than desirable (Kuan, Bock, & Vathanophas, 2008) or requires exponential effort (Liang & Chen, 2009) hurts satisfaction. A properly designed interface allows the user to focus on the content being provided instead of exerting effort on navigation (Pace, 2004). System quality also has a positive impact on user intention (H. F. Lin, 2007). Kuan et al. (2008) believe that a positive first impression of a website's usability will improve user confidence and subsequently lead to continuance intention (Udo, Bagchi, & Kirs, 2010).

System quality is recognised as an important criterion in online learning systems (Lin, 2010). In the context of e-learning, system quality is defined as "the learner's belief concerning the performance characteristics of web-based learning systems or sites" (Chiu et al., 2007). Neal, Perez, and Miller (2004) criticise the tendency for platforms to be nothing more than digital versions of paper materials and for them to attempt to duplicate the classroom experience in terms of instructional design, thereby ignoring the contextual differences of the two approaches. Desirable attributes for e-learning websites include ease of use (Chiu, Hsu, Sun, Lin, & Sun, 2005) and interactivity (Liaw, 2008). Additionally, high system quality is said to afford learners convenience and minimises the time needed to access learning materials (Lin, 2010). Consistent with e-commerce studies, experienced users consider system quality to be the most vital website quality dimension shaping e-learning success (Lin, 2010). System quality therefore plays a critical role in learner behaviour (Ho, Kuo, & Lin, 2010) and has been found to positively impact system usage (Freeze, Alshare, Lane, & Wen, 2019) and

continuance intention (Rostaminezhad, Mozayani, Norozi, & Iziy, 2013). Cho, Cheng, and Lai (2009) further intimate that enhancements in system quality can motivate users and increase completion rates.

Research demonstrates that quality factors can significantly impact perceived enjoyment (Kim, Ahn, & Chung, 2013). System quality is believed to affect user enjoyment (Hwang & Kim, 2007) and poor design is a deterrent to enjoyment (Pace, 2004). Other scholars agree that perceived enjoyment can be enhanced through improvements to a website's visual design and interactive features (Hsu, Hung, & Tang, 2012). System attributes have been shown to have an influence on users' affect and cognition as well as facilitate enjoyment (Pe-Than et al., 2012). Lin et al. (2008) concur with this position and submit that good website design is fundamental to the 'enjoyability' of the web experience. In other words, when system attributes align with the needs of users, the result is enjoyment (Mitchell et al., 2005).

2.4.2 Information quality

Information is defined as "data with recognisable patterns of meaning" (Higgins, 1999). The provision of information is the fundamental goal of a website (Cao et al., 2005) and the primary reason why users visit (Huizingh, 2000). Information quality is a measure of the output of an information system (Pitt, Watson, & Kavan, 1995). It refers to the nature of the content provided by a website (Srivastava et al., 2008) and the effectiveness of information on a website in conveying the meaning intended (Kuan et al., 2008). It is also known as website content and content quality (see Calisir, Altin Gumussoy, Bayraktaroglu, & Karaali, 2014; Chiu et al., 2005). When measuring information quality, both form and content must be considered. Content includes the relevance, accuracy, clarity, and adequacy of information provided, while form entails the quality of format and sequencing. Ahn et al. (2007) add that the type, level of detail, and variety of information must be examined. New content must be

added and existing content must be revised in order to satisfy this requirement (Cao et al., 2005). Information quality also entails information regarding how a website can be used (Hsu et al., 2014) and is an indicator of users' ability to establish an overview of the scope of information found on a website (Bossen et al., 2013). Moreover, a lack of personal involvement means that the quality and presentation of information must be detailed and clearly articulated as service personnel are not physically available to solve inquiries (Webb & Webb, 2004).

Studies have shown that quality information has a positive impact on perceptions and behaviour (Kim & Niehm, 2009). Because users can access information directly from the requisite systems, the need for and awareness of the quality of information provided by organisations has taken on increased significance (Lee, Strong, Kahn, & Wang, 2002). There is no denying the assertion that quality information endows users with the ability to make better decisions (see Rains, 2008; Yi, Stvilia, & Mon, 2012). Hence, organisations must provide the correct information in an appropriate amount, in a timely manner, and in a suitable format via the website's interface (Kuan et al., 2008).

Information quality is identified as a determinant of user satisfaction (Gelderman, 1998; H.-F. Lin, 2007a; Negash et al., 2003; Urbach & Müller, 2012) and has been found to influence continuance intention (Srivastava et al., 2008). This view is reiterated by other scholars who indicate that to ensure repeat visitation, websites must provide appropriate, complete, and clear information (Stockdale & Borovicka, 2006). Delone and McLean (2003) add that content should be perceived as secure to ensure continued usage. Personalisation and the presence of dynamic content also increase positive perceptions of information quality (Stockdale & Borovicka, 2006). Additionally, Liang and Chen (2009) state that information quality has the greatest impact on user relationships and in determining overall user experience (Chau, Au, & Tam, 2000). Hausman and Siekpe (2009) make a similar assessment. The relationship between information quality and system quality must also be emphasised. The two have been theorised

to be closely related because system performance can impact the formatting of information, among other attributes (Xu, Benbasat, & Cenfetelli, 2013). Kuo et al. (2005) add that inadequate navigation and search functions will hinder users in their quest to locate information.

In the context of e-learning, information quality is defined as "the accuracy, completeness, ease of understanding, and relevance of the online course materials" (Chiu et al., 2007). Alkhattabi et al. (2010) assert that content is the most critical factor in e-learning. Learners invest time and effort to acquire knowledge via e-learning and hence scrutinise the quality of a course's content (Chiu et al., 2007). Holsapple and Lee-Post (2006) agree that these perceptions are paramount in an e-learning scenario. Scholarly endeavours reveal that a well-designed user interface can increase learner motivation by possessing information elements that heighten learners' enthusiasm to learn (Méndez, Lorenzo, Acosta, Torres, & González, 2006). H.-F. Lin (2007b) posits that learners are more likely to continue using systems that are characterised by high information quality as this helps them to understand the material being delivered. She also opines that for e-learning websites, the most important function is the presentation of learning content. If a system cannot provide learners with the information they require, it may result in dissatisfaction and could negatively influence their intention (Bai et al., 2008).

Gaining knowledge is an enjoyable experience (Kankanhalli, Tan, & Wei, 2005). Well written content can be perceived as amusing and serve to maintain users' attention, resulting in pleasurable perceptions (Kim & Niehm, 2009). Usefulness and accuracy also enhance perceptions of information quality and may elicit enjoyment (Lee, Sung, & Jeon, 2019). Completeness of information influences the emotional appeal of the website experience and has been found to induce enjoyment (Xie & Barnes, 2008). A combination of easy-to-

understand content and content novelty provides adequate challenge and engenders enjoyment in users (Sherry, 2004).

2.5 Learner Control

Merrill and Twitchell (1994) contend that all instruction involves some degree of learner control, with varying degrees necessary to maximise learning for each individual. This varies on a continuum from maximum program control to maximum learner control (Chung & Davies, 1995). In traditional learning environments, such as those which utilise textbooks, the dissemination of information is controlled by the author (program control). In multimedia environments, information is accessible in a non-linear manner, giving the learner added control over their instruction (learner control) (Hsia et al., 2014). The aforesaid scenarios are constituents of the concept of locus of control. Locus of control is "the expectancy that achievements or failures in life are determined by one's actions (internality) or other forces (externality)" (Miller, Fitch, & Marshall, 2003; Spector, 1988). External locus of control is described as "instruction wherein learners follow a path that is predetermined by the designer without questioning the suitability of the path" (Hannafin, 1984, p. 6). Conversely, internal locus of control is demonstrated when "learners manipulate the path, pace, and/or orientation of the instruction, by electing from among the alternatives provided by the designer" (Milheim & Azbell, 1988, p. 2). Control can also be conceptualised as objective (control or no control) or perceived, with perceived control likely to be influenced by learners' prior experience (Karim, 2013). The above notwithstanding, other researchers propose that control should be categorised as a continuous rather than a categorical variable to allow for more meaningful analyses (Wankel & Blessinger, 2013). In the current study, it is treated as a continuous variable that is subjectively perceived.

Scholars affirm the strong relationship between the provision of choice and human motivation, and between intrinsic motivation and individual choice (Deci, Connell, & Ryan, 1989; Lepper, Corpus, & Iyengar, 2005). This is corroborated by Reeve, Nix, and Hamm (2003) who state that the freedom to choose among alternatives creates a perception of choice and results in intrinsic motivation. Inherent to the discussion on learner control is the idea that when learners are afforded choices, intrinsic motivation is heightened. Lin and Hsieh (2001) agree that motivational theories lend support to the utility of learner control in computer-based instruction. They posit that control enables individuals to make choices that affect outcomes. This engenders intrinsic interest and results in feelings of competence, which give learning greater personal meaning. Likewise, an investigation into the effect of learner control strategies – contextualisation, personalisation, and provision of choices – on intrinsic motivation reveals a positive effect (Cordova & Lepper, 1996).

In theory, learner control has two dimensions, *instructional control* and *scheduling control*, as well as sub-dimensions. Instructional control "allows learners to control the pace, content, sequence, guidance, and design of training content whereas scheduling control allows learners to control the time and location to complete training" (Wankel & Blessinger, 2013). In further elaborating this distinction, instructional control concerns the information that is learnt and how it is presented (Wankel & Blessinger, 2013). Chung and Reigeluth (1992) define each type of instructional control. *Pace control* facilitates the pausing, rewinding, or skipping of material. *Sequence control* means that learners may choose the order in which they view and/or complete training modules. With *content control*, the learner may decide the format in which information is presented, which may include keyword definitions for novice learners or complex diagrams for expert learners. *Advisory/guidance control* governs the format of feedback presented and informs the learner of their progress. *Design control* allows for the customisation of the aesthetic design of the material presented to include colour schemes and

narrator's voice. Karim (2013) discusses the elements of scheduling control. Scheduling control concerns the flexibility afforded to learners regarding the time and location for undertaking training. Regarding *time control*, learners can choose when to peruse course content, but are still subject to course deadlines. For *location control*, learners have the freedom to select where they will access training material. Both types of control foster increased learner engagement. More importantly, these controls accommodate the differences in aptitude possessed by learners (Gay, 1986). The current study will feature both dimensions in a single scale, with no operationalised distinction between the two types of control.

Learner control was first applied to computer-based instruction by Merrill (1975). It is described as "the degree to which an individual is given control over various instructional features during a lesson or training program" (Orvis, Fisher, & Wasserman, 2009). Learners may therefore make decisions over a single aspect of instruction or be given complete control over an entire course of study (Higginbotham-Wheat, 1990). Learner control is a prevailing focus of e-learning research in the educational and organisational training domains (Karim, 2013). E-learning systems are now capable of giving learners access to various types of learning and learning tools (Koh & Kan, 2020). E-learning therefore features instructional methods (techniques) that help learners navigate the content (Clark & Mayer, 2016). This includes control over certain elements of the system as well as the ability to vary the amount of control (Brown, Howardson, & Fisher, 2016). While users of e-learning systems were called students in the past, they are now referred to as learners, and this signals their increased involvement in the learning process (Kay, 2001).

An advantage of computer-based learning systems is that they may afford learners control over the pace, sequence, depth, and style of instruction as part of a learner-centred environment (Gay, 1986). Accordingly, learner control strategies include "pace control, content control, display control, sequence control, internal processing control, and advisement

strategy" (Chung & Reigeluth, 1992). In essence, learners can choose what they view, for how long, and how many times (Lin & Hsieh, 2001). Similarly, learners can choose their learning content, learning location, time of learning, and the type of learning process to employ based on their individual preferences. Increased learner control over the learning environment is therefore an important trait of e-learning (Hsia et al., 2014). Learner control thus embodies "the degree to which a learner can direct his or her own learning experience". Learner control provides opportunities for improvements in learning; consequently, e-learning systems are being designed to give learners increasingly more responsibility and control over every aspect of their learning (Kay, 2001). Santiago and Okey (1990) disclose that learner-controlled instruction is appealing to learners. Behrend and Thompson (2012) investigate the effect of varying degrees of learning control on learning and opine that increased control results in improvements in learning. Scholars who have performed meta-analyses also found that there may be some merit in giving learners a choice in what they learn and how they learn it (Kraiger & Jerden, 2007).

Giving learners control affects how they interact with and perceive online training content and this holds implications for behaviour (Karim, 2013). Learner control has been theorised to improve learner attitude (Steinberg, 1977) and have positive effects on learner performance (Fulton, Ivanitskaya, Bastian, Erofeev, & Mendez, 2013). Scheiter and Gerjets (2007) state that because learner control is characterised by high levels of interactivity, it serves to increase learner interest, facilitate adaptive instruction, and aid in the active and constructive processing of information. Kinzie, Sullivan, and Berdel (1988) add that when learners are given control over their learning, they make instructional decisions that enable them to learn better, as they discover the best strategies to employ in various situations. Furthermore, learner control is said to enhance retention and subsequently encourages learners to persist in their studies (Goopio & Cheung, 2020).

The connection between learner control and enjoyment is a nuanced one. As mentioned in the preceding paragraph, intrinsic motivation has been operationalised as the degree to which participants report enjoying an activity, finding it interesting, or being willing to engage in it (Patall, Cooper, & Robinson, 2008). Perceived enjoyment has also been conceptualised in the same manner (see Venkatesh, Morris, Davis, & Davis, 2003). Various scholars submit that individuals tend to enjoy, prefer, and persist in activities that allow them to make choices (Iyengar & Lepper, 1999). Additionally, learners who are most satisfied with the degree of control offered by the training platform report experiencing more enjoyment (Vandewaetere & Clarebout, 2011). Additionally, all e-learning systems are not the same; hence, it has been theorised that a greater degree of control will have a positive impact on perceived enjoyment. A perception of control is therefore considered a component of activities that individuals find to be intrinsically motivating (Kinzie et al., 1988). Hence, learner control is believed to influence enjoyment.

2.6 Perceived Novelty

Novelty can be conceptualised in various ways. Berlyne and Parham (1968) opine that the definition and measurement of the concept is a challenge as the term is used in various fields without special attention to what it embodies. This holds true today. One source in psychology states that novelty involves a comparison of recent and past stimuli (Reeve, 1989). Likewise, experts in information systems purport that it is the difference between present and past experience (Castells, Hurley, & Vargas, 2015). Additionally, novelty is defined as an experience unlike before, or one that deviates from routine (González-Cutre, Sicilia, Sierra, Ferriz, & Hagger, 2016). Novelty is usually perceived during users' search for new stimuli or during their quest for a stimulating experience (Okazaki, Skapa, & Grande, 2008). A stimulus is "any object or event that elicits a sensory or behavioural response" (Gibson, 1960). Scholars

differentiate between two types and functionality of novelty (Jeno, Vandvik, Eliassen, & Grytnes, 2019). They expound that it can be operationalised as interest (intrinsic motivation) and as an innovation (product). Novelty can therefore be the reaction elicited by a product perceived as innovative or a central motivational characteristic of intrinsic motivation. Jeno et al. (2019) further elaborate that intrinsic motivation is the tendency to seek novelty in learning experiences. Other scholars unify the two kinds of novelty by asserting that gaining information about novel stimuli is intrinsically rewarding (Dubey & Griffiths, 2019). Consequently, intrinsic motivation to engage in an activity is dependent on its novelty, with individuals tending to perceive a novel activity as enjoyable and therefore becoming intrinsically motivated to pursue it (Ho, 2012).

Novelty can also be objective or subjective. With the introduction of new technology, novelty is considered an objective reality that is inherent in the characteristics of the product itself rather than a subjective perception that can vary from individual to individual (Wells, Campbell, Valacich, & Featherman, 2010). With older technology, the focus is on individual differences that may stimulate perceptions of novelty. In such cases, perceptions are subjective experiences as novelty is not inherent to a particular stimulus (Förster, Marguc, & Gillebaart, 2010). The information systems literature further states that novelty can refer to experiences or information, or a combination, as in the case of website evaluation where freshness of the content or innovations in technology can bring about the desired perception. Nevertheless, perceived novelty is believed to give the impression that a technology is new, interesting, or evidently different from what individuals have been exposed to, or are aware of, at the time of interacting with the technology (Tokunaga, 2013). As a result, in the case of information technology, novelty is assumed to be mostly positive (Fichman & Kemerer, 1993). In the current study, novelty is considered subjective and is dependent on the degree of an individual's prior exposure to a stimulus.

There has been extensive research into how novelty affects psychological processes (Förster et al., 2010). The relationship between novelty and pleasure was established in the 1970s, with novelty being recognised as having a bearing on how individuals appraise an event. Researchers posit that novelty is viewed as highly desirable and such stimulus is said to elicit positive sensory reactions in individuals. This is due to the excitement and pleasure realised from interactions with new things (Huang, 2003). Moreover, when introduced to a novel stimulus, users experience a feeling of departure from personal norms (Magni, Susan Taylor, & Venkatesh, 2010). Still, the degree of novelty should not be too high or too low, less individuals feel incompetent or simply bored (Bianchi, 1998). Nevertheless, increased exposure to novel stimuli may result in feelings of enjoyment over time and congruence with users' competence is necessary in ensuring an optimal experience (Bornstein, 1989). It has also been observed that perceptions of novelty are strongest in the earlier phases of experiencing new stimulus and diminish with ongoing interaction. This makes incremental adjustments necessary (Förster et al., 2010). If an experience possesses a variety of stimuli, individuals tend to alternate among them (Hirschman, 1980). If not, individuals turn their attention elsewhere (Litman, 2005).

Users of computer systems who desire to depart from the mundane nature of past interactions are in effect in search of novelty, more specifically, technological novelty (Tokunaga, 2013). Technological novelty is characterised by "sudden and unexpected phenomena that occur on the interface that evoke a reaction from the user" (O'Brien & Toms, 2008). Hence, novelty stimulates both positive and negative affective reactions and is associated with reactions such as excitement or fear of the perceived risks of technology usage respectively (Wells et al., 2010). It is further conceptualised as the opposite of familiarity and can simply be a product of a user's lack of experience with a website or its offerings (Huang, 2003). Huang (2003) further explains that novelty refers to "the degree to which users believe

that aspects of a website's attributes are unexpected, surprising, new, and unfamiliar". This definition is relevant to the current study.

Novelty plays a crucial role in website interactions and the resulting emotions, including enjoyment. The emission of novel stimuli in a learning environment is said to create feelings of unfamiliarity and activates arousal states, resulting in heightened interest and further interactions (Tokunaga, 2013). Novelty is associated with feelings such as excitement, fun, relaxation, and entertainment; these being the key indicators of an enjoyable system (Merikivi et al., 2016). These features may involve multimedia modalities or the inclusion of anthropomorphic qualities (Huang, 2003). Various scholars posit that novelty is crucial to ensuring user enjoyment because without it, continued system usage is likely to result in diminished interest (Merikivi et al., 2016). Other researchers affirm that the incorporation of novel website elements can attract users and result in an enjoyable experience (Huang, 2003). Nguyen (2015) adds that novel and surprising features must be incrementally incorporated to introduce variations to users' experiences with information systems and help to maintain their feelings of enjoyment. Similarly, several researchers opine that novelty in online content, in the form of information that is pertinent to users' goals, has the potential to sustain their attention (O'Brien & Toms, 2010). Other scholars concur that it has been shown to enhance learning by promoting exploratory behaviour (Berlyne & Parham, 1968) that leads individuals to allocate more attention to the task at hand (Burke & James, 2008). Novelty has also been identified as a crucial factor in the continuance usage of information systems (Merikivi et al., 2016). An increased focus on innovative features is said to be the key to maintaining novelty (Nguyen, 2015). This notwithstanding, studies examining novelty as a direct determinant of perceived enjoyment are relatively rare.

2.7 Continuance Intention

The push toward the consideration of continuance usage versus acceptance and adoption began at the turn of the century (see Bhattacherjee, 2001b; Davis & Venkatesh, 2004; Limayem & Hirt, 2003). Information systems continuance intention refers to behaviours that reflect the persistent usage of a technology. It is also referred to as post adoption behaviour (Cheung & Limayem, 2005). While user acceptance is a critical determinant of continuance intention concerning technology (Roca & Gagné, 2008), researchers espouse that the long-term success of an information system is more dependent on the continuance behaviour of users than their initial acceptance (Venkatesh, Thong, Chan, Hu, & Brown, 2011). This view is noteworthy because the ineffective use of information systems often contributes to organisational failures due to the crucial role information systems play in business processes (Bhattacherjee, 2001b). The fact is that consistent usage is a greater measure of information system success than adoption and acceptance (Bhattacherjee, 2001b).

Behavioural intention has been confirmed to have a direct impact on system usage (Jong & Wang, 2009). It is a measure of the likelihood of a person carrying out a specified behaviour (Fishbein & Ajzen, 1980). It is customary in technology adoption research to use behavioural intention and continuance intention, rather than actual use, as a dependent variable (Karsten, Mitra, & Schmidt, 2012). In their landmark publication, Venkatesh et al. (2003) affirm that behavioural intention is an accurate predictor of the actual use of technology. DeLone and McLean (2002) also acknowledge that due to the multidimensional nature of use – mandatory compared to voluntary, effective compared to ineffective, informed compared to uninformed – intention to use is proffered as a superior construct to actual use. This is because use is a behaviour that is often difficult to measure whereas intention to use is an attitude. Consequently, continuance intention will be used to operationalise the behavioural intention variable in this study. Understanding continuance behaviour serves to encourage the

development and growth of an information system (Barnes, 2011). Moreover, continued usage suggests that a system is fulfilling the purpose for which it was designed (Kincl & Štrach, 2012). Researchers state that with the proliferation of technology, there is much to be discovered through ongoing explorations of the continuance intention construct (Mouakket, 2015). The uncovering of factors that can increase user continuance is one such stream of inquiry (Esteves, Valogianni, & Greenhill, 2021).

An understanding of the factors that influence a user's intention to continue e-learning is important to both researchers and practitioners (Chiu et al., 2005). For instance, in Lee's (2010) study, students' engagement during e-learning was positively associated with continuance. There is also a strong connection between a user's continuance intention (intention to return) and their positive evaluation of a website's design (Nel, van Niekerk, Berthon, & Davies, 1999). If an employee registers strong intention to use a learning system, they will expend greater effort, making the probability of using the system much greater (Karaali, Gumussoy, & Calisir, 2011). Similarly, if users achieve success and are satisfied with a system, they are likely to use it continuously (Liu & Pu, 2020). Subsequently, users' intention to continue using an e-learning platform is an indicator of the platform's success (Chiu & Wang, 2008) and serves to justify investments (Furneaux & Wade, 2011).

Intrinsic motives are critical determinants of intention to use information systems (Nysveen, Pedersen, & Thorbjørnsen, 2005). Similarly, the role of positive emotions in promoting the association between enjoyable experiences and continuance intention has been well documented (Hoffman & Novak, 2009). If an activity is deemed interesting and provides a desirable level of challenge, the propensity for sustained engagement is heightened (Csikszentmihalyi, 2014). Experiencing positive emotions helps learners to overcome the sense of isolation that is typical of the online environment and motivates them to continue their efforts (Guo, Xiao, Van Toorn, Lai, & Seo, 2016). Likewise, if users form positive affective

evaluations, positive feelings such as enjoyment are generated (Xiaofei, Guo, Ho, Lai, & Vogel, 2021). An increase in emotionally-charged interactions therefore serves to alter continuance usage (Xiaofei et al., 2021). Other scholars confirm that there is a strong relationship between enjoyment and continuance intention (Mouakket, 2015). More specifically, when the need for enjoyment is gratified, users tend to continue usage (Shiau & Luo, 2010). Furthermore, if a dependency exists between a user and an information system, continuance intention is likely to be high (Carillo, Scornavacca, & Za, 2017). When users are persistent, they become more familiar with a system, overcome the challenges associated with use, and are more likely to derive enjoyment (Abuhamdeh & Csikszentmihalyi, 2012). Enjoyment is therefore a strong predictor of users' desire to persist in an endeavour.

2.8 Observations from the Literature

Inquiries in the information systems domain have portrayed enjoyment as a stimulant, transactional element, and consequence of interactions with learning information systems (Lin et al., 2012). Additionally, it is conceived as a precursor, parallel, and result of learning (Castellar et al., 2015). It also has direct and indirect effects on users' intention to utilise hedonic, utilitarian, and blended information systems (Pratt et al., 2016). With that said, it is surprising that with its dynamic repertoire perceived enjoyment is often times treated as unidimensional in modelling. Concerning information systems use, perceived enjoyment has been employed as a mediator (Holdack, Lurie-Stoyanov, & Fromme, 2020; Wang & Lee, 2020), as an antecedent (see Alyoussef, 2021) or among a bevy of variables (Ngubelanga & Duffett, 2021). Examination of the literature reveals a dearth of studies investigating its antecedents. The premise of extant studies is that enjoyment is vital to information systems success but little thought is given to its catalysts (see Teo & Noyes, 2011). Those that have attempted to do so have focused on personality traits and computer skills (see Wang, Lin, &

Liao, 2012) or an assortment of factors (see Maheshwari, 2021). While learner characteristics play a crucial role, systems can be designed to cater to users of varying abilities and learning styles (see Cinquin, Guitton, & Sauzéon, 2019; Özyurt & Özyurt, 2015). Through antecedents such as system quality, information quality, learner control, and perceived novelty, the effects of such characteristics can be minimised or nullified, paving the way for perceived enjoyment to be realised. The proposed study aims to address these shortcomings.

While it has been established that there are multiple determinants of continuance intention, increases in digital literacy have seen computer experience, computer anxiety and computer self-efficacy (see Durndell & Haag, 2002) become less relevant (Mohammadyari & Singh, 2015). There has also been a move away from acceptance and adoption (Venkatesh et al., 2011), as continuance intention has been shown to be most impactful (Bhattacherjee & Lin, 2015). Furthermore, scholars attempts to account for social factors, environmental factors and system factors all at once (see Gan & Li, 2018), may only serve to confound the impact of each. E-learning in higher education (see Baig, Shuib, & Yadegaridehkordi, 2021), and organisations (see Choudhury & Pattnaik, 2020) have examined a multiplicity of concepts. While the handful of studies on e-learning in the hospitality domain have varied foci, continuance intention, which is essential to organisational success has largely been overlooked. Perceived enjoyment has not been illustrated as a direct determinant of continuance intention in the hotel e-learning literature (see Imani & Montazer, 2019), but has been explored in other domains (see Joo et al., 2017; Shiau & Luo, 2013). If emotions such as perceived enjoyment play an integral role in learning it is prudent that contemporary research zones in on its contribution. Such a study could establish a foundation for inquiries into complementary technologies such as virtual reality that could be used to enhance CBT enjoyment. Though theory-based examinations are common in other areas of organisational learning (see Roca & Gagné, 2008), a sparsity has been noted

concerning hotel e-learning. The objective of the current study is to build on the observed limitations in order to enlarge the body of literature.

Finally, while perceived enjoyment features heavily in the information systems literature, fewer studies are focused on e-learning systems. The majority involve websites used for non-learning purposes, as well as non-website based systems (Wu & Lu, 2013). Nevertheless, the operationalisation of the construct and its antecedents in the aforementioned studies will provide well-needed insight into the study being undertaken.

CHAPTER 3: THEORETICAL FRAMEWORK AND MODEL DEVELOPMENT

The previous chapter examined the constructs that constitute the model proposed in this study. This chapter discusses the rationale for the theorised relationships between and among variables by presenting supporting findings and theories from the literature. It ends with the presentation of the conceptual model, showing how the variables are envisioned to interact among themselves.

3.1 Proposed Conceptual Framework

Whetten (1989) offers sound advice as to "What constitutes a theoretical contribution?" The author encourages scholars to elaborate on the "what", "how" and "why" of their research. Continuance intention is the main indicator of the success of an information technology system, and forms the basis for the "what" of this study. While the "how", through perceived enjoyment, is by no means novel, it is the "why" that demonstrates how this study diverges from others, and reinforces its contribution. Despite being identified as one of the main success factors in the patronage of widely popular information technology systems, existing studies tend to include perceived enjoyment among an assortment of variables, possibly confounding its impact. These dimensions will be discussed in detail in the following paragraphs.

In furtherance of the "what", the phenomenon under study is the role of perceived enjoyment in computer-based training continuance intention among the employees of the housekeeping, food and beverage and front office departments in hotels. Studies reveal that employee sentiments regarding CBT are not flattering; hence the dismal participation and completion rates (Weinhardt & Sitzmann, 2019). The purposes for which these systems were introduced – to equip employees with the knowledge and skills necessary to perform their job efficiently, thereby keeping guests satisfied and hotels optimally competitive and profitable (Chow et al., 2007; Salas & Cannon-Bowers, 2001) – are probably not being met. The

investment in these systems is thus not registering the ideal rates of return. Of course, the outcome variable – continuance intention – does not paint the full picture, and so independent variables must be sought after to elucidate the phenomenon.

With hospitality and tourism consisting of several sectors, there are a number of reasons why hotels were chosen for the contextualisation of the study. First, most hotels belong to international groups which own or manage properties all over the world. In this way, it is possible to ensure the validity of the study by surveying employees from a handful of groups. This is done by building checks into the instrument to prevent opportunistic survey taking. In the data collection stage respondents were asked to provide the name of their hotel's system and this was instantly validated by answers pre-programmed during the design stage. Second, these international brands deploy the same CBT systems across the globe, thereby enabling a diverse sample and increasing the validity of the results. Third, the widespread use of CBT systems means that any deficiency is likely present throughout the global network of properties and could impact a large number of users, causing frustration and decreased morale. As a result, it is imperative for scholarly research to assess employee perceptions and disseminate information concerning such shortcomings. Fourth, hotels are business-to-consumer operations, so service failures resulting from a lack of adequate training may amplified across social media and could end in reputational damage (Sigala & Gretzel, 2017). Subsequently, a study that seeks to operationalise concepts that are thought to increase completion and participation rates is beneficial to the success of the industry. Fifth, hotels are leading users of CBT systems. Because it is nearly impossible to conduct mass training due to operational requirements, this means a heavy reliance on CBT, hence, hotel employees are the perfect candidates for this study.

The question of "how" is also a pertinent one. The difference between the current study and others is that it focuses on the interaction between the user and the computer system with

implications for a single antecedent, perceived enjoyment. As shown in Appendix 2, there are myriad antecedents of continuance intention in the context of e-learning systems, however, four were chosen in order to meet Whetten's (1989) comprehensiveness and parsimony criteria. A review of the information systems literature reveals system quality, information quality, learner control and perceived novelty as antecedents of perceived enjoyment which measure distinct aspects of human-computer interactions. System quality gauges the technical aspects, while information quality evaluates the semantic aspects of CBT platforms (Lin, 2010). Learner control dictates the extent to which users can manipulate features of the system, and novelty speaks to features of the interaction which evoke a reaction from the user (Huang, 2003; Kay, 2001). With this assortment running the gamut of users' interactions with CBT platforms, additional factors would only serve to complicate the operationalisation of the study. By focusing on perceived enjoyment, the study aims to reduce the impact of confounding factors. Scholars have concluded that users' interactions with CBT systems influence their behaviour. In a bid to further explore this person-environment-behaviour association, social cognitive theory was adopted as the theoretical lens. Information quality and system quality are designated as environmental factors, while learner control, perceived novelty and perceived enjoyment are specified as personal factors, with continuance intention being the behavioural factor.

While the dependent variable, perceived enjoyment, is less popular in the literature than competing variables such as satisfaction and attitude (see Appendix 2), the "why" of the inquiry will shed light on this divergence. Whetten (1989) asserts that it is the "why" which lends credence to the proposed representation of phenomena. He reasons that "the soundness of fundamental views of human nature, organisational requisites, or societal processes provide the basis for judging the reasonableness of the proposed conceptualisation." Concerning organisational requisites, despite CBT being compulsory in many organisations, this mandate

does not provide enough impetus for employees to engage in it. This is due to human nature; the tendency to choose an exciting activity over a boring one – one that is perceived as enjoyable. It therefore stands to reason that by assessing the enjoyment induced by CBT platforms, it can be determined if a focus on perceived enjoyment is key to solving the challenges associated with CBT continuance intention among hotel employees.

In addressing Whetten's criteria, it should be mentioned that the underlying social and psychological dynamics he speaks about, which are used to justify the selection of these variables, have emerged over time. While this topic is not original, the climate in which it is being investigated has greatly evolved since the 2000s. In addressing the psychological dynamic, employees' lack of engagement was often blamed on their low technological competence and was evident in the operationalisation of concepts such as computer anxiety and computer self-efficacy (Durndell & Haag, 2002). With a drastic shift in digital competence, one would expect the associated issues to diminish, however, the lack of engagement remains a challenge (Giannakos et al., 2021). This points to the need for continued investigations into the phenomenon. Secondly, concerning the social dynamic, COVID-19 has brought CBT to the forefront of the organisational training arsenal as physical distancing measures are put in place to spread the stem of the disease (Slavković et al., 2022). This means that more training is now hosted by CBT systems (Deloitte, 2021) with the more convivial face-to-face training at an all-time low. Third, the pandemic has fuelled the acceptance of and spread of CBT among organisations and their employees, and this is anticipated to continue long after the pandemic is forgotten (Quezada et al., 2021). It should be reiterated that, on their own, the combination of variables chosen to elucidate the phenomenon may appear simplistic, however, it is the aforementioned narrative surrounding their selection which solidifies the contribution of this study. The advent of the COVID-19 pandemic has thrust this mode of training into the spotlight once more (Chartered Institute of Personnel and Development, 2021), and has forced the

research community to delve into its shortcomings with a view to highlighting solutions. The current study seeks to underscore the contribution of perceived enjoyment to continuance intention.

A review of information systems literature was carried out (see Appendix 2). The search terms for the investigation were e-learning and continuance intention. The methodology for all the studies was structural equation modelling. Peer reviewed, first quartile journal articles were considered. In the technology acceptance domain, there are a number of antecedents commonly associated with continuance intention. These include satisfaction (Chang & Ke, 2013; Lee, 2010) and attitude (Lin, Chen, & Fang, 2011; Wu & Zhang, 2014). Satisfaction is defined as "an individual's emotional state following an information technology usage experience" (Bhattacherjee & Premkumar, 2004), while attitude refers to "the degree to which a person has a favourable or unfavourable evaluation of the behaviour in question" (Venkatesh et al., 2003). On the other hand, perceived enjoyment is described as "the extent to which the activity of using a system is believed to be pleasurable in its own right, aside from any performance consequences that may be expected" (Davis et al., 1992). Satisfaction is therefore the overall feeling derived from interaction with technology, perceived enjoyment refers to the degree of pleasantness of the feeling, and attitude is simply the valence of the experience.

Perceived enjoyment has been examined as a distinct construct in technology studies which operationalise satisfaction. It is usually modelled as an antecedent of satisfaction (see Kang & Lee, 2010; Shiau & Luo, 2013). Though satisfaction is an important predictor of continuance intention, it is logical to reason that a user may perceive a usage experience as enjoyable but may not be satisfied with the overall experience. The same goes for attitude; an unfavourable evaluation concerning CBT does not preclude the user from enjoying the experience. Furthermore, satisfaction would not be an appropriate construct as the study does not intend to gauge employees' overall sentiments toward computer-based training, but to test

the direct impact of perceived enjoyment during computer-based training on continuance intention. Again, there are multiple metrics by which the CBT experience may be assessed and this study seeks to zone in on enjoyment. Social variables such as peer support, supervisor support and subjective norms (Ifinedo, 2018) among others are also featured in the literature, but do not inform the current study which centres on system-specific factors.

The gaming addiction literature can shed light on the potency of enjoyment in the continuance intention equation (see Hussain, Williams, & Griffiths, 2015). Excessive use of gaming platforms have been linked to high levels of user enjoyment (Cole & Griffiths, 2007). It stands to reason that perceived enjoyment modelled as a direct determinant of continuance intention would offer insight into increasing user continuance intention. Learning is not inherently fun (Lumby, 2011), and as a result, elements of enjoyment are required in order to increase the likelihood of repeated and prolonged interactions with a medium such as a CBT system (Tsai et al., 2018). Venkatesh (2000), a respected figure in the study of information systems, testifies that perceived enjoyment is a key driver for continuance intention because it facilitates the usage of CBT in the absence of external incentives.

3.1.1 The information systems model of success

The information systems model of success was introduced "as a framework to conceptualise and operationalise information systems success". It consists of two website quality dimensions (see Figure 3.1), system quality and information quality, among other factors (DeLone & McLean, 1992). System quality encompasses technical success and information quality considers semantic success (Lin, 2010). Delone and McLean (2003) advise that each dimension be measured separately as they singularly or jointly affect information system use and user satisfaction. In the context of hotel e-learning, these constructs are expected to explicate the environmental dimension of social cognitive theory.

Most studies on website quality have been carried out in the context of sites used for commercial purposes (Urbach & Müller, 2012). However, Field, Heim, and Sinha (2004) opine that these dimensions may have to be modified in order to suit website task type – for example, transactional versus non-transactional websites or business websites that serve customers versus other businesses. This study will adopt measurement items that have been specifically designed for e-learning purposes. Srivastava et al. (2008) posit that the potency of each factor may vary depending on the purpose for which the website was designed. Delone and McLean (2003) reckon that the level of analysis is also a determinant as their model can be used to evaluate a single system as well as an information systems department. In the current study, users are asked to assess a single system; however, all together, a handful of systems will be under consideration. The model in its entirety has been used to explain the use of e-government systems (Wang & Liao, 2008), online shopping (Chen & Cheng, 2009), and user developed applications (McGill, Hobbs, & Klobas, 2003). For the purposes of this research, system quality and information quality will be co-opted.

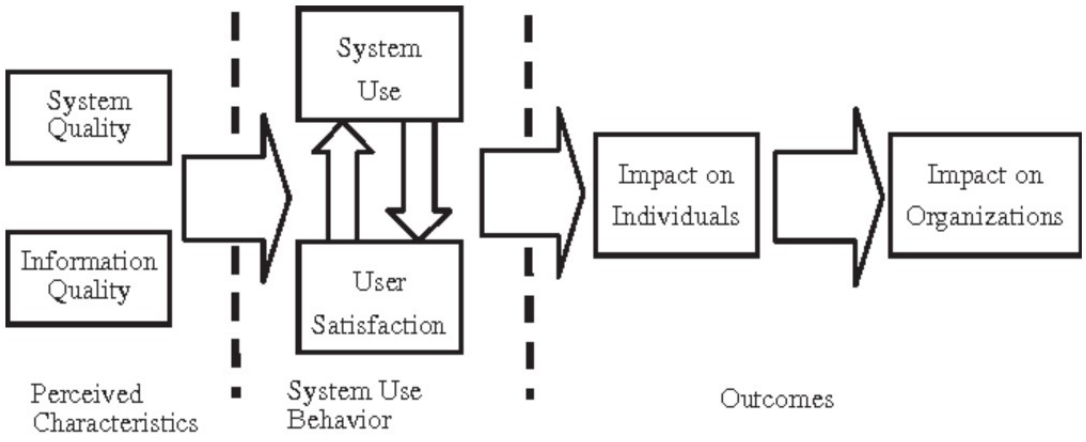


Figure 3.1 The Information Systems Model of Success

Source: DeLone and McLean (1992)

3.1.2 The post-acceptance model of information system continuance

Though attempts were made to conceptualise post-adoption behaviour in information systems (see Bhattacherjee, 2001a; Parthasarathy & Bhattacherjee, 1998), Bhattacherjee (2001b) was the first to propose a model of continuance, with the introduction of the post-acceptance model of IS continuance (PAM) (see Figure 3.2). It was built on the expectation-confirmation theory (see Oliver, 1977), which originated in the field of consumer behaviour (Sørebø & Eikebrokk, 2008). It has also been referred to as the expectation-confirmation model (ECM) of information technology continuance (Thong, Hong, & Tam, 2006). The model is centred on the notion that after the initial acceptance of a technology and the introductory phase of use, users are able to develop an impression of the degree to which the expectations they had at the pre-acceptance stage are confirmed, that is, confirmation (Larsen, Sørebø, & Sørebø, 2009). It also predicates that after extended usage, perceived usefulness and satisfaction will promote users' continuance intention.

The model has been revised to study the continuance intention of wait staff to use a digital transaction system (Sørebø & Eikebrokk, 2008); to conduct a longitudinal laboratory-based study of e-services (Mou, Shin, & Cohen, 2017) and investigate online shopping in Korea (Kim, 2012). It was also applied to study the use of mobile social applications in Taiwan (Hsiao, Chang, & Tang, 2016). In the e-learning context, it has been used to investigate the continuance intention of hospitality management students (Liu, Huang, & Hsu, 2015). In hospitality and tourism research, it has been deployed to the study an online travel community (Casaló, Flavián, & Guinalíu, 2011) and online travel services (Li & Liu, 2014). The variable continuance intention is most essential to the present study, as it is this construct on which the success of CBT systems depends (Bhattacherjee, 2001b).

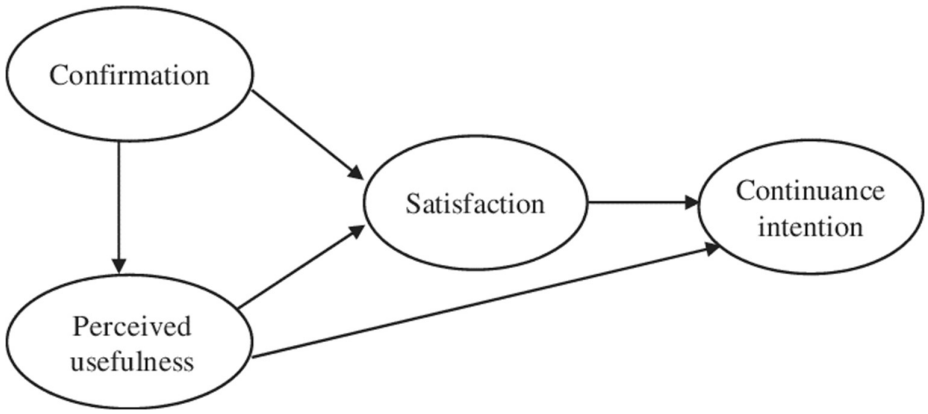


Figure 3.2. The Post-Acceptance Model of Information System Continuance

Source: Bhattacherjee (2001b)

3.1.3 Social cognitive theory

This study adopts social cognitive theory to investigate computer-based training in hotels. Social cognitive theory (Bandura, 1978) is the successor of social learning theory (see Bandura & Walters, 1977), which was introduced by Albert Bandura in the 1970's (Rosenstock, Strecher, & Becker, 1988). It has been applied in mass communication (Bandura, 2001a), personality studies (Bandura, 1999a), and health promotion and disease prevention (Bandura, 1998). It is grounded in the psychology of human agency, whereby individuals influence the course of events through their actions. Agency is the ability of individuals to make and act on decisions that impact their lives (Martin, 2004). This perspective is applicable in scenarios relating to human self-development and adaptation and change, wherein individuals are part of a social system that exerts influence on their personal development and functioning (Bandura, 2012). Bandura (1989) asserts that "people are neither autonomous agents nor simply mechanical conveyers of animating environmental influences. Rather, they make causal contributions to their own motivation and action".

Social cognitive theory is founded on the premise that its interactional causal structure can be conceptualised as triadic reciprocal causation. Thus, "human functioning is a product of

a reciprocal interplay of intrapersonal, behavioural, and environmental determinants" (Bandura, 2001a). Martin (2004) further describes this as a model of self and society, wherein internal personal factors (biological, affective, and cognitive events), behaviour, and environmental factors (social and physical) are determinants that interact and influence each other bi-directionally (see Figure 3.3). Personal factors also comprise the personality or demographic attributes that characterise an individual (Carillo, 2010). This notwithstanding, there is no fixed pattern for reciprocal interaction and the factors do not necessarily possess equal strength. The relative contribution of each determinant depends on the situations, activities, and socio-structural opportunities and constraints. The impact of each varies over time depending on activity domains and situational circumstances (Bussey & Bandura, 1999). In sum, an environment influences an individual's behaviour through their cognitive mechanisms (Wu, Tennyson, & Hsia, 2010).

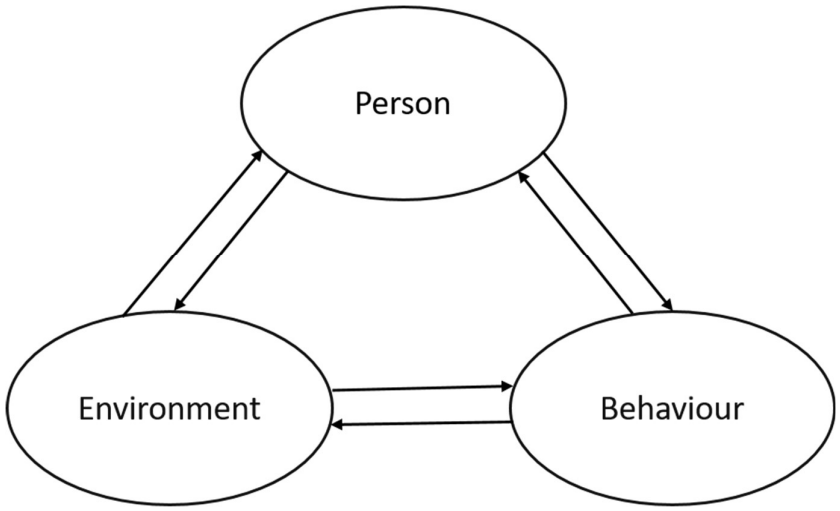


Figure 3.3. Schematisation of triadic reciprocal causation in the causal model of social cognitive theory

Source: Bandura (2001a)

Social cognitive theory hinges on three important elements of behaviour that influence one another: locus of causation, self-regulation, and self-efficacy. It therefore lends itself

readily to social applications (Bandura, 2012). In relation to locus of causation, that is the internal versus external attributions of occurrences, Speirs and Martin (1999) submit that a causal factor exerts its influence over time, and it thus takes a while to experience a reciprocal effect. Self-regulation serves to "expand freedom of action and enable people to serve as causal contributors to their own life course by selecting, influencing and constructing their own circumstances" (Zimmerman & Schunk, 2003). Self-efficacy is "the belief in one's capabilities to exercise control over one's level of functioning and execute courses of action to obtain a given goal". It mediates cognitive development and functioning as well as motivational and affective processes (Torre & Durning, 2015). Bandura (2012) concludes that individual motivation and the associated performance attainments are influenced by material incentives, as well as by social and self-evaluative ones that are related to personal standards.

While locus of causation, self-regulation, and self-efficacy are important elements of social cognitive theory, studies grounded in the theory routinely gloss over these intricacies (Carillo, 2010). A review of the associated quantitative research reveals that these three dimensions are rarely operationalised simultaneously, or even referred to specifically in the conceptual framework or findings sections of empirical studies (Carillo, 2010). Similarly, the current study will not examine these three aspects, but will focus on triadic reciprocal causation. Consequently, though the constructs in the model do not specifically align with these elements, self-paced learning such as CBT is known to involve them in varying degrees, and an introduction to social cognitive theory is incomplete without them (Wan, Wang, & Haggerty, 2008). Nevertheless, unlike most studies, the model integrates all three aspects of the person-environment-behaviour triad by having its constructs operationalise each dimension. Most crucially, the model addresses outcome expectations.

Individuals utilise their motor, sensory, and cerebral systems as tools to accomplish tasks and achieve goals that endow their lives with direction and a sense of meaning (Bandura,

1989). Because situations are constantly changing, individuals assess their value, organise and execute actions they believe will produce beneficial effects, and make adjustments accordingly (Bandura, 1999b). Usually, external influences have an effect on behaviour through cognitive processes rather than directly. These cognitive factors determine how individuals interpret occurrences in their environment, the meaning they attach to them, the effect they will have on their motivation and emotions, and how this information will be deployed in organising future courses of action (Bandura, 2001a).

With its foundations in social psychology, social cognitive theory focuses on individual learning (Carillo, 2010). In the field of education, social cognitive theory considers learning and performance as inherently social since the interaction between and among individuals and their environment is influential. Each learning situation is considered unique, leading to various learning and performance outcomes and experiences (Torre & Durning, 2015). Educational psychologists posit that as per social cognitive theory, individuals are endowed with the skill and will to learn (Martin, 2004). Because learning is influenced by individuals' experiences, the consequences of their actions and those of others provide opportunities for learning, and this is used to form cognitive strategies and behavioural routines. Consequently, positive outcomes serve as reinforcement and negative ones are a cue for adjustment (Wan et al., 2008).

In the information systems domain, social cognitive theory is seen as a reputable and empirically supported model that enables the comprehension and prediction of human behaviour and the identification of ways in which this behaviour may be positively modified (Wu et al., 2010). Piccoli, Ahmad, and Ives (2001) affirm that a web-based learning system is considered an "environment" for the application of the theory. The interaction between users and computers (the environment) gives individuals the opportunity to gain knowledge and enhance their digital skills (cognition), suggesting a reciprocal relationship between the cognitive characteristics of individuals and their skills and behaviours (Wan et al., 2008).

Social cognitive theory has been used to explain how e-learning outcomes are affected by psychological processes (Wan et al., 2008); determine student learning satisfaction in an e-learning environment (Wu et al., 2010), and clarify the influence of self-regulated learning strategies on e-learning outcomes (Santhanam, Sasidharan, & Webster, 2008).

Compeau and Higgins (1995) declare that social cognitive theory is appropriate for investigating computer-based instruction as it has proven theoretically robust in explaining the learning process within individuals. Furthermore, Wan (2010) asserts that in contrast to behaviourism, which posits that learning is an overt change in behaviour, social cognitive theory emphasises the cognitive processes involved. Moreover, the theory incorporates the influence of environmental factors on the learning process and has been used extensively in information systems research. Personal process components of the triad such as agency, cognitions, goal setting, self-efficacy, social comparisons, and attributions prove useful in explaining user interactions with their environment (Schunk & DiBenedetto, 2020) and will be briefly considered in the discussion section.

In their review of information systems research grounded in social cognitive theory, Carillo (2010) found that seven types of interactions among personal, environmental, and behavioural determinants were investigated by researchers. Most studies examined mediating effects – for example, environmental factors that influence personal factors, which then go on to influence behaviour. Other studies simply considered person-behaviour interactions. Personal factors can be affective or cognitive (e.g. stress versus self-efficacy), environmental factors are classified as social or situational (e.g. peer support versus system characteristics), and behavioural factors are categorised on the basis of performance, usage, or adoption. The most common dependent variable was behavioural intention, with continuance intention receiving little attention. The present study will add to the body of knowledge on the scant continuance intention literature.

3.1.4 The conceptual model

The information systems model of success asserts that system quality and information quality are the primary determinants of system use and user satisfaction. Studies have recognised perceived enjoyment as an antecedent of user satisfaction derived from using a system (see Kang & Lee, 2010; Shiau & Luo, 2013). The second model, the post-acceptance model of information system continuance, emphasises the superiority of continuance intention over initial acceptance, since such systems have been in use for decades, and digital literacy is at the highest it has ever been (Buchholz, DeHart, & Moorman, 2020). It hinges on repeat patronage driven by contented/satisfied users, or satisfaction. Finally, social cognitive theory centres on the bi-directional interaction between the person, their environment, and behaviour.

Social cognitive theory is able to integrate both the information systems model of success and the post-acceptance model of information system continuance. The former speaks to the environment, that is the system and information quality of CBT systems, while the later accounts for behaviour, that is continuance intention. Social cognitive theory completes the triangle by honing in on the intrapersonal factors, specifically perceived novelty (cognitive), learner control (cognitive) and perceived enjoyment (affective). Relevant constructs from the three models are thus interconnected. The model contributes to knowledge by testing four determinants of perceived enjoyment which can be attributed to the features of CBT systems.

To construct the model, with reference to the information systems model of success, the two website quality variables – system quality and information quality – and their relationship with perceived enjoyment will be assessed. The impact of learner control and perceived novelty on perceived enjoyment will also be considered. To date, no model has examined these structural relationships concurrently. The conceptual model (see Figure 3.4) therefore proposes that perceived enjoyment in computer-based training is influenced by learner control and perceived novelty in addition to the two dimensions of website quality,

which then goes on to impact continuance intention. The model subscribes to the tenets of social cognitive theory as it illustrates that an individual's interactions with the outside environment – system and information quality (situational) of computer-based training platforms – and their mental processes – learner control (cognitive) and perceptions of novelty and enjoyment (affective) – can affect behaviour, that is, continuance intention (use) (Wu et al., 2010). The model thus focuses solely on system-related factors.

Conceptual model to investigate the role of website quality, learner control, perceived enjoyment, and perceived novelty in explaining computer-based training continuance intention

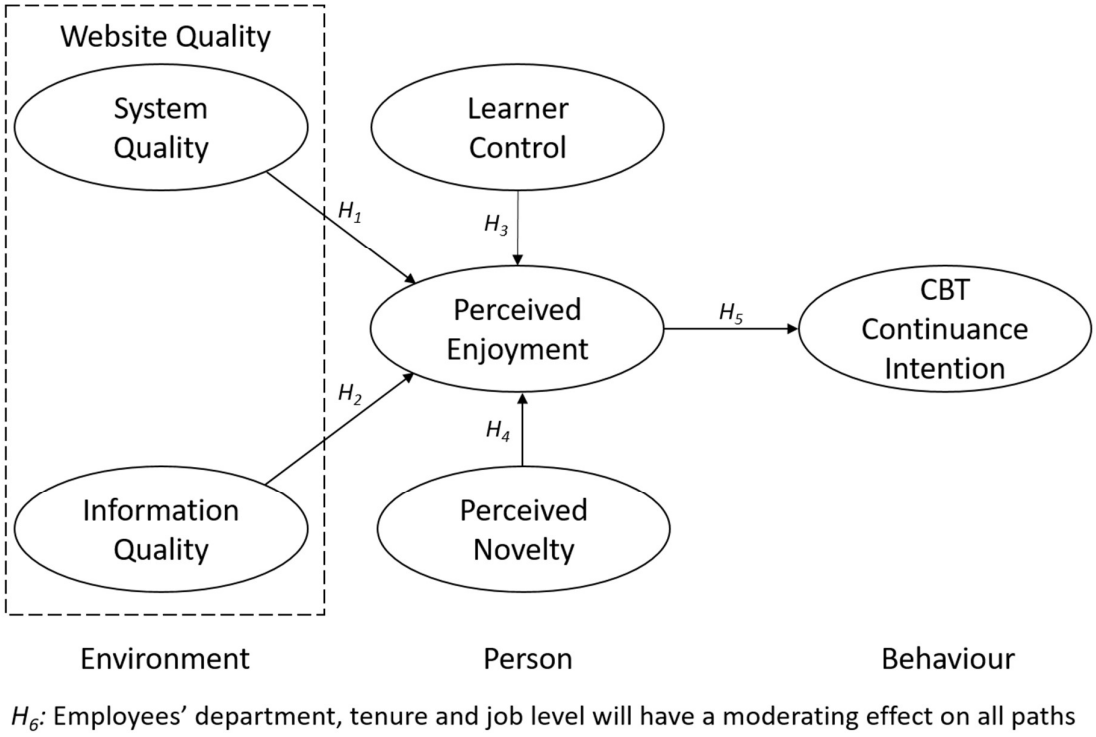


Figure 3.4. Conceptual Model

Source: Author's own illustration

3.2 Hypotheses Development

In this section, e-learning and other information systems studies that support the relationships between the constructs discussed in the literature review will be presented, culminating in the formulation of hypotheses.

3.2.1 System quality and perceived enjoyment

Although website design does not represent system quality in its entirety, numerous scholars affirm that it epitomises the essence of this quality dimension (see Ahn et al., 2007; H.-F. Lin, 2007a; Ramayah et al., 2010; Tabbers et al., 2004). In relation to information systems, Kim et al. (2013) state that users may embrace a technology because it possesses a high entertainment value. They hypothesise that system quality has a significant effect on perceived enjoyment and conclude that the inclusion of an affective and intrinsically relevant factor such as enjoyment in technology acceptance studies promotes a holistic understanding of user behaviour. Yang, Li, Kim, and Kim (2015) concur that entertainment is a key factor in creating positive perceptions about a website. Following their inquiry into the quality attributes of social shopping websites, they submit that website design plays a crucial role in enhancing both the usage and enjoyment of information systems. In this regard, Webster and Ho (1997) detail the positive effect of web interface elements on user engagement and enjoyment. They opine that these features can impact user perception of the task to be undertaken.

Al-Debei (2014) also affirms that system quality is a determinant of perceived enjoyment. He shares that system quality is comprised of various functions and features, all of which impact users. Lin et al. (2008) acknowledge that poor website usability, will affect users' experience of a web interface, thereby having a negative impact on perceived enjoyment and decreasing the chance of further use. Their research, which created a scale for measuring the enjoyment of web experiences, determined that the likelihood of enjoyment is more probable

for a well-designed website than a poorly-designed one. In an earlier study, Lin and Gregor (2006) drew conclusions on how 'learning for enjoyment' can be encouraged through website design. In exploring mobile social tourism shopping, Hew, Leong, Tan, Lee, and Ooi (2018) found that system quality has a significant impact on perceived enjoyment.

For information-seeking activities such as CBT, a visually appealing interface has been demonstrated to have a significant positive effect on the experience of users (Peters et al., 2016). Website characteristics are therefore recognised to play a central role in influencing a user's experience of enjoyment (Chung & Tan, 2004). It can thus be surmised that well-designed information systems are thought to rank high in perceived enjoyment (Pace, 2004); consequently, these enjoyable systems are associated with increased usage (Webster & Martocchio, 1992). Based on the above, it is postulated that:

H_1: System quality will have a direct positive influence on perceived enjoyment.

3.2.2 Information quality and perceived enjoyment

Website attributes can be deployed strategically to incite enjoyment in users (Huang, 2003). Pe-Than et al. (2012) endorse this assertion in their study which attests that players' perceptions of information quality influence their enjoyment in an information-sharing game. Song and Han (2009), in the context of mobile software application usage, also confirm the relationship between information quality and perceived enjoyment. They promote the inclusion of enjoyable elements through a focus on content. Alkhattabi et al. (2010) explore information quality in the context of e-learning systems in order to ascertain its key dimensions from the users' perspective. They identify 14 dimensions of information quality in e-learning systems that influence a positive user experience. Other studies also establish that information quality has a pronounced impact on perceived enjoyment concerning internet protocol television use (see Shin, 2009). In the tourism domain, Kim et al. (2013), in their study of tour information

systems, concur that information quality has a significant effect on perceived enjoyment. It is therefore posited that:

H_2: Information quality will have a direct positive influence on perceived enjoyment.

3.2.3 Learner control and perceived enjoyment

In a study on a variety of instructional methods, including e-learning, Karim (2013) notes that learner control results in increased levels of enjoyment. In exploring audience engagement in multimedia presentations, Webster and Ho (1997) recognise that the degree of control that a user is able to exert over an activity greatly influences their enjoyment. Vandewaetere and Clarebout (2011) investigate the effects of learners' perceptions of learner control by comparing the learning outcomes and motivation of those that received additional instruction on learner control with others that did not. The experiment consisted of three groups: no learner control, learner control, and learner control with instruction. The findings show that the two latter groups experience increased perceptions of enjoyment compared to the former. These results are not unexpected, as computer-based instruction has been lauded as the perfect medium for achieving optimal individualisation in the instructional process (Campanizzi, 1978) and eliciting feelings of enjoyment among users (Gomez, Wu, & Passerini, 2010). Sampayo-Vargas, Cope, He, and Byrne (2013) advise that by varying the level of difficulty, enjoyment and learning can be improved. Based on the foregoing, this study supposes that:

H_3: Learner control will have a direct positive influence on perceived enjoyment.

3.2.4 Novelty and perceived enjoyment

In a study of online mobile gaming in Japan, Okazaki (2008) identifies novelty and perceived enjoyment as the most influential among seven proposed drivers of user engagement. Similarly, research on casual mobile games recognises novelty as a driver of perceived

enjoyment (Nguyen, 2015). Tokunaga (2013) proposes that "novelty perceptions of a technology increase the likelihood of experiencing flow", a similar construct to perceived enjoyment. The results of various studies validate the veracity of the aforementioned proposition. Huang's (2017) study on the effect of social media information on user intention concludes that novelty positively influences perceived enjoyment. Merikivi et al. (2016) in exploring continuance intention associated with mobile games also reveal that novelty has a positive effect on perceived enjoyment. These investigations are reinforced by Wells et al. (2010) who contend that further research is needed on novelty as a potential predictor of user intention. Against this backdrop, it is hypothesised that:

H_4: Novelty will have a direct positive influence on perceived enjoyment.

3.2.5 Perceived enjoyment and continuance intention

Emotional experiences have been theorised to generate positive or negative beliefs that influence the attitudes of individuals (Fishbein & Ajzen, 1975). Davis et al. (1992) were the first to propose that enjoyment has an impact on behavioural intention. Following their study, perceived enjoyment as a predictor of intention to use information systems has been extensively explored (Shiau & Luo, 2013). With regard to mobile chat services, perceived enjoyment is identified as a reliable predictor of usage intention (Nysveen et al., 2005). Similarly, Hong and Tam (2006) acknowledge that perceived enjoyment is the most influential factor in explaining behavioural intention pertaining to mobile data services. Perceived enjoyment was also recognised as a predictor of agents' intention to use animated interfaces at work (Serenko, Bontis, & Detlor, 2007). Song and Han (2009) agree that users' perceived enjoyment will affect their intention to use mobile software applications. Likewise, in their study of tour information services, Kim et al. (2013) concluded that perceived enjoyment has a significant effect on usage intention. They also mentioned a connection between frequency of use of an information

system and perceived enjoyment. Shiau and Luo (2013) concur that whenever users engage in an activity to derive enjoyment from it, continuance intention is likely to increase. They affirm that while users may not utilise an information system for entertainment, an enjoyable experience has desirable effects.

During investigations into mobile application usage, enjoyment was found to have a direct impact on continuance intention (Lu, Liu, & Wei, 2017). In their examination of continuance intention to use an information system, Teo et al. (1999) found perceived enjoyment to be positively related to frequency of internet usage as well as its daily use. They opine that individuals are likely to engage in a specific behaviour if it leads to fun and enjoyment. This suggests that employees may continue to utilise computer-based training in the workplace because they find its use to be enjoyable. In the e-learning context, Cheng (2012) investigated its usage among the employees of technology companies in Taiwan and noted that perceived enjoyment has a statistically significant relationship with usage intention. Other studies have also confirmed the positive impact of enjoyment on user intention (see Chin & Gopal, 1995).

In hospitality and tourism, perceived enjoyment was identified as a determinant of online travel purchases from third-party travel web sites (Powley, Cobanoglu, & Cummings, 2004). Perceived enjoyment has also been shown to influence traveller intention to share their experience on social media (Kang & Schuett, 2013) and to influence hotel employees who pursue soft skills training using e-learning (Kim et al., 2011). In exploring the use of virtual reality in travel planning, Disztinger, Schlögl, and Groth (2017) observe that perceived enjoyment has a positive effect on behavioural intention. A positive relationship has also been found in research on travel information search (Chung & Koo, 2015). Additionally, the studies of Ayeh, Au, and Law (2013) and Haugstvedt and Krogstie (2012) validate the relationship

between perceived enjoyment and intention. This connection between perceived enjoyment and behavioural intention is the basis for proposing that:

H_5: Perceived enjoyment will have a direct positive influence on continuance intention.

3.2.6 Moderators

A moderation effect "is a causal model that stipulates when or for whom an independent variable will strongly or weakly influence a dependent variable" (Wu & Zumbo, 2007). In the current study, three moderators are hypothesised to determine the strength of the relationships among the study variables. In relation to employees, the moderators include: (a) industry tenure (length of service), (b) their job level, and (c) the department to which they belong. Hence, based on the aforementioned studies, it is inferred that these variables can moderate the relationship between perception and intention. The following paragraphs will expose the underlying psychological, economic, and social dynamics that justify the selection of these factors as moderators of the proposed causal relationships (Whetten, 1989).

3.2.6.1 The moderating effect of industry tenure

Tenure is defined as "the length of employment in an organisation" (Ng & Feldman, 2010). In Bandura, Adams, and Beyer's (1977) study, they conclude that cognition is affected by time and personal experiences, alluding to differences in perception that may arise due to tenure. Perkins and Hill (1985) agree that what is initially discerned as an interesting activity could later be perceived as monotonous. Tenure has been explored as a moderator of various relationships in the organisational context. This includes stressor-strain relations (Bradley, 2007), the relationship between psychological climate and affective commitment (English, Morrison, & Chalon, 2010), and the relationship between autonomy and job satisfaction (Denton & Kleiman, 2001). The possible impact of employee tenure on e-learning perceptions is underexplored.

Job tenure moderates employee perceptions of various relationships in the workplace (Chen & Kao, 2012). There is a positive association between tenure and performance (Wagner III, Ferris, Fandt, & Wayne, 1987), with tenure speculated to affect different performance behaviours in different ways (Ng & Feldman, 2010). Employees with greater tenure are thought to have increased opportunity for promotion, as well as higher status, and power (Dobrow, Ganzach, & Liu, 2018). Tenure moderates the relationship between psychological climate and affective commitment (English et al., 2010); between perceived behavioural integrity and trust in supervisors and the relationship between employee job satisfaction and intention to quit (Boğan & Dedeoğlu, 2017); and between leader member exchange and job performance (Kim, Liu, & Diefendorff, 2015). Considering this track record, it is anticipated that tenure will have an effect on employee perceptions of CBT enjoyment. Thus, it is stipulated that:

H_{6A}: Employees' industry tenure will have a moderating effect on all paths.

3.2.6.2 The moderating effect of job level

Job level is the hierarchical position of a role within an organisation (Clinton & Guest, 2013). All organisations have some type of hierarchy (Crespi-Vallbona & Mascarilla-Miro, 2018) and the resultant job positions have distinct characteristics that are anticipated to influence employees' personal and organisational outcomes by impacting their psychological states (Simonet & Castille, 2020). Research suggests that employees at higher levels in an organisation usually report more positive perceptions of work (Baird & Mainstone, 1976). Among employees belonging to various job levels, scholars have investigated turnover (Gangai, 2013; Wasmuth & Davis, 1983), organisational climate (Datta & Singh, 2018; Zhang & Liu, 2010), and training success (Zhao, Zhan, & Namasivayam, 2004).

There a number of job characteristics that have been shown to vary across job level (Carlopio & Gardner, 1995). In this regard, it is known to exert an effect on work related

attitudes and perceptions concerning areas such as influence and power (Hrebiniak, 1974), as well as employee involvement in their organisation (Adams, 1977). This may be attributed to the difference in workload demands between supervisory and non-supervisory staff (Stellman, Klitzman, Gordon, & Snow, 1987). Sawyer (1988) adds that favourable perceptions increase as employees progress along the organisational hierarchy. This is corroborated by Patterson, Warr, and West (2004) who disclose that managers' assessments of their company tend to be significantly more positive than those of other staff. Consequently, this study proposes that:

H_{6B}: Employees' job level will have a moderating effect on all paths.

3.2.6.3 The moderating effect of department

The work unit or department to which an employee belongs is responsible for shaping their perception (Duchon & Plowman, 2005). According to Jung and Yoon (2012), there are contrasts between back-of-the-house and front-of-the-house roles that may contribute to differences among employees. Several studies have examined the operational departments in a hotel, including housekeeping, front office, and food and beverage (see Faulkner & Patiar, 1997; Wasmuth & Davis, 1983). A study of hotel employees found differences in job-related motivation among different departments (Siu, Tsang, & Wong, 1997). Based on employees' department, studies have examined differences in job satisfaction (Strand & Dore, 2009), organisational voice behaviour (Li & Sun, 2015), communicative behaviours (Lee, 2017), and attitude toward marketing culture (Webster, 1991).

A "micro-climate" is a distinct set of circumstances associated with work in a particular department and is theorised to have a strong influence on employees' attitudes, values and behaviours (Martin, Jones, & Callan, 2006). Pentland, Recker, and Wyner (2017) uncovered evidence of this in the well-defined way in which duties are transferred among people across different departments. Likewise, Reed (2021) revealed differences in the amount of emotional

labour required, and Buller and McEvoy (1989) found a significant difference between departments concerning their acceptance of a new performance appraisal system. Similarly, differences between the competence of departments as it relates to their use of computer software was also noted (Ekizoglu, Tezer, & Bozer, 2010). For the current study, 5 departments are featured, however, for moderation analysis, they will be divided into two groups: operations and support, in order to facilitate more meaningful analyses. Herewith, it is anticipated that:

H_{6C}: Employees' department will have a moderating effect on all paths.

Putting it all together, a study on turnover in hotels considered employees' department, tenure and job level. It concluded that housekeeping employees were most likely to quit, managers were least likely to leave their jobs, and employees with higher tenure were most likely to resign (Rose, 1991). In light of the above, a comparison of employee CBT perceptions and preferences across different groups in hotels is expected to reveal differences.

3.2.7 Summary of hypotheses

The structural relationships among the six constructs will be analysed in the context of hotel employees (see Figure 3.4).

H_1: System quality will have a direct positive influence on perceived enjoyment.

H_2: Information quality will have a direct positive influence on perceived enjoyment.

H_3: Learner control will have a direct positive influence on perceived enjoyment.

H_4: Perceived novelty will have a direct positive influence on perceived enjoyment.

H_5: Perceived enjoyment will have a direct positive influence on continuance intention.

H_{6A}: Employees' industry tenure will have a moderating effect on all paths.

H_{6B}: Employees' job level will have a moderating effect on all paths.

H_{6C}: Employees' department will have a moderating effect on all paths.

CHAPTER 4: METHODOLOGY

This chapter provides an overview of the methodological procedures of the research. It begins with a discussion of the research paradigm and proceeds to explain the research design. The pre-data collection procedures are described in order to set the stage for the data collection and analysis. This includes the sampling technique utilised and the methods used to operationalise the proposed model and its hypotheses. The results of the pilot study are also detailed here.

4.1 Research Design

Research design is the systematic planning of research to permit valid conclusions (Smith, 2000).

4.1.1 Post positivism

The research philosophy adopted in this thesis is post positivism. It describes an approach to knowledge as well as an assessment of the nature of reality. Hence, it is both an epistemological and ontological position (Given, 2008). It is an offshoot of positivism and thus seeks to correct some of the criticisms levelled against positivism's overtly quantitative orientation, while retaining a focus on quantitative methods (Teddlie & Tashakkori, 2009). Post positivism moves away from the positivist notion of the existence of an external reality that is capable of being fully understood. Post positivists contend that although reality can be discerned, any understanding gained is speculative (Howell, 2012). Knowledge in this belief system is by no means considered conclusive, verifiable, or independent of human prejudices, but rather, is socially and individually constructed, giving way to the appropriation of meaning and the creation of knowledge (Reimer, 1996). It prescribes a methodological pluralism approach, which dictates that a study's research method should be determined by its research questions (Barbara, 1993). Accordingly, any knowledge gained from post positivist inquiry is

founded on methodical observation and the measurement of the objective reality believed to exist in the world (Creswell, 2009). Theory and practice are ineluctably intertwined, with the researcher's commitment to and motivation for the research considered indispensable to the endeavour. This abandons the idea that there is a predetermined approach to inquiry (Ryan, 2006). In some instances, new understandings emerge and challenge the theory on which the inquiry was built (Mackenzie & Knipe, 2006). The post positivist researcher operates under the ontological assumption that objective reality exists but any understanding gained is based on probability. Consequently, it is believed that knowledge is generalisable and while the aim is to maintain objectivity, bias may not be avoidable (Hoare, 2011).

The current research therefore begins with the proposal of hypotheses based on theory, followed by the drawing of conclusions, analysis of supporting arguments, and their comparison with existing theories to ascertain whether the arguments confirm and/or advance the existing theories. The conclusions are empirically tested and if the results are consistent, the theory is corroborated. However, if the results are found to be inconsistent, the hypotheses are rejected or modified (Blaikie & Priest, 2019; Gratton & Jones, 2014). The study's hypotheses seek to confirm as well as expand the scope of the theories in order to affirm their relevance to computer-based training in hotels. Given the post positivist perspective adopted and in order to maintain some semblance of objectivity, while leaving room for interpretation, the instrument employed is the questionnaire. The instrument comprises a collection of scales that have been empirically shown to elicit valid measurements of the concepts under study.

4.1.2 Measurement of variables

The items for each construct and their requisite sources are presented in the sections below. The items were modified to suit the context of computer-based training systems. The scales adapted to operationalise the research were an assortment of 5- and 7-point scales. The

literature was consulted in order to decide the superior scale and achieve congruence during measurement. Though recent research found that when confronted by a 5-point scale, respondents tend to avoid the most extreme alternatives (Tsekouras, 2017), numerous studies have reported higher reliabilities for 5-point scales (Jenkins & Taber, 1977; Lissitz & Green, 1975; McKelvie, 1978). A study by Dawes (2008) reveals no meaningful differences in mean scores, standard variation, skewness or kurtosis when the two types of scales are compared. Following their simulation study, Weathers, Sharma, and Niedrich (2005) add that when the number of scale points are considered, there is no pronounced impact on reliability or response accuracy. A 5-point Likert scale was selected because it is best suited for employee samples due to its conciseness, increased response rate and response quality (Babakus & Mangold, 1992). Similarly, Devlin, Dong, and Brown (1993) tout the superiority of a 5-point scale for measuring quality and reducing respondent frustration. Hayes (1992) also supports the use of a 5-point scale to assess perceptions. Considering the aforementioned findings, a 5-point scale was deemed the instrument of choice for soliciting feedback from hotel employees. Moreover, Maddox (1985) supports the use of this scale in tourism research owing to its dependable convergent and discriminant validity.

4.1.2.1 System quality

The items in Table 4.1 were designed to assess learners' beliefs regarding the performance characteristics of the computer-based training platform (Liang & Chen, 2009). All seven items were adapted from Wang, Wang, and Shee (2007). Respondents were required to choose one answer from a 5-point Likert scale ranging from 1 signifying strongly disagree to 5 indicating strongly agree, with the descriptors at either end of the scale.

Table 4.1 Items measuring system quality

Variables for System Quality

1.	The platform is always available
2.	The platform is easy to use
3.	The platform is user-friendly
4.	The platform provides interactive features for users
5.	The platform provides high-speed information access
6.	The platform has attractive features that appeal to users
7.	The platform provides personalised information presentation

Note: Items adapted from Wang et al. (2007) with α = .90

4.1.2.2 Information quality

The items in Table 4.2 were designed to evaluate the nature of the content provided by the computer-based training platform (Srivastava et al., 2008). All six items were adapted from Wang et al. (2007). Respondents were required to choose one answer from a 5-point Likert scale ranging from 1 signifying strongly disagree to 5 indicating strongly agree, with the descriptors at either end of the scale.

Table 4.2. Items measuring information quality

	Variables for Information Quality
1.	The platform provides information that is exactly what you need
2.	The platform provides information you need at the right time
3.	The platform provides information relevant to your job
4.	The platform provides sufficient information
5.	The platform provides information that is easy to understand
6.	The platform provides up-to-date information

Note: Items adapted from Wang et al. (2007) with α = .91

4.1.2.3 Learner control

The items in Table 4.3 were designed to assess the degree to which an individual is given control over various instructional features during a lesson or training programme (Orvis et al., 2009). All eight items were adapted from Karim and Behrend (2014) and Zhang, Yin, Luo, and Yan (2017). Respondents were required to choose one answer from a 5-point Likert scale ranging from 1 signifying strongly disagree to 5 indicating strongly agree, with the descriptors at either end of the scale.

Table 4.3. Items measuring learner control

	Variables for Learner Control
1.	I had control over the visual aids and tutorials on the training platform
2.	I had control over the content of the training platform
3.	I was able to adjust the presentation of the training platform
4.	I had control over the topics that were included
5.	I had control over when I took the training
6.	I had control over when I had to start the training
7.	I was able to start the training at any time
8.	I had control over where I took the training

Note: Items adapted from Karim and Behrend (2014) with $\alpha = .90$ for 1 - 4 and .77 for 5 - 8

4.1.2.4 Perceived novelty

The items in Table 4.4 were designed to measure the degree to which an individual finds the platform attributes to be unexpected, surprising, new, and unfamiliar (Huang, 2003). The first four items were originally adapted from Huang (2003) and the last item was added by Nguyen (2015) who found it to be valid. Respondents were required to choose one answer from

a 5-point Likert scale ranging from 1 signifying strongly disagree to 5 indicating strongly agree, with the descriptors at either end of the scale.

Table 4.4. Items measuring perceived novelty

Variables for Perceived Novelty
1. The platform is imaginative
2. The platform is surprising
3. The platform is innovative
4. The platform is new
5. The platform is fresh

Note: Items adapted from Huang (2003) with α = .67. An adapted 5-item scale by Nguyen (2015), with the addition of "fresh" recorded α = .90.

4.1.2.5 Perceived enjoyment

The items in Table 4.5 were designed to measure the degree to which an individual finds the use of the system to be enjoyable. All four items were adapted from Fang, George, Shao, and Wen (2016). Respondents were required to choose one answer from a 5-point Likert scale ranging from 1 signifying strongly disagree to 5 indicating strongly agree, with the descriptors at either end of the scale.

Table 4.5. Items measuring perceived enjoyment

Variables for Perceived Enjoyment
1. I find the platform to be interesting
2. I find the platform to be entertaining
3. I find the platform to be enjoyable
4. I find the platform to be pleasant

Note: Items adapted from Fang et al. (2016) with α = .94

4.1.2.6 Continuance intention

The items in Table 4.6 were designed to ascertain an individual's intention to continue using an information system as opposed to initial use or acceptance. All three items were adapted from Venkatesh et al. (2003). Respondents were required to choose one answer from a 5-point Likert ranging scale from 1 signifying strongly disagree to 5 indicating strongly agree, with the descriptors at either end of the scale.

Table 4.6. Items measuring continuance intention

	Variables for Continuance Intention
1.	I will use the platform on a regular basis in the future
2.	I will frequently use the platform in the future
3.	I will strongly recommend others to use the platform

Note: Items adapted from Roca and Gagné (2008) with $\alpha = .76$

4.1.3 Sampling

The sample for this study is based on three geographical locations and seven hotel groups which confirmed the use of computer-based training for their employees. The unit of analysis is defined as a full-time employee who belongs to the housekeeping, front office, food and beverage, sales and marketing, and finance and accounting departments, who is at least 18 years, and who has experienced the company's online training platform. These department were chosen in order to reflect and compare the perspectives of those in operations and support roles. It was anticipated that employees would have interacted with the training platform at least once. Three levels of employees – line staff, supervisors, and management – were considered for this study.

There are two types of sampling procedures: probability and non-probability. In probability sampling, the possibility of each element to be selected from the population is

known to the researcher. Conversely, in non-probability sampling, elements are not selected in relation to the incidence in the population. Consequently, the probability of being selected cannot be determined (O'Dwyer & Bernauer, 2013). Given the study's sampling requirements as mentioned above, non-probability sampling, more specifically, purposive sampling was employed. Purposive sampling concerns the selection of units in accordance with the study's objectives (Teddlie & Yu, 2007). Quota sampling was also used in order to achieve the minimum sample for multigroup analysis. Quotas of at least 100 respondents were required for industry tenure, job level and department.

Kelly (2009) notes that there is no standard answer to the question of "how does one estimate an appropriate sample size?" Worthington and Whittaker (2006) recommend a sample size of 300 for factor analysis, and cite the work of Gorsuch (1983) who advises respondent-to-item ratios between 5:1 and 10:1, and Comrey (1973) who provides a sample size range starting from 50 (very poor) to 1000 (excellent). VanVoorhis and Morgan (2007) submit that researchers that follow the suggestion of Pedhazur and Schmelkin (1991) to utilise 50 respondents per factor should proceed with caution. Other scholars assert that in order to determine the sample size of a study, one must consider the size of the population, the level of precision desired, the margin of error, confidence interval, variability, and confidence level (Cochran, 1977). Blair, Czaja, and Blair (2013) also support the use of the statistical approach to arrive at the desired sample size. Scholars such as Krejcie and Morgan (1970) put forward a simple method, advocating for a sample size that ranges from 384 for a population of one million, to 370 for a population of 10,000, to 278 for a population of 1000. In general, the commonly held view is that the higher the sample size, the more acceptable it is. Hair, Anderson, Babin, and Black (2010) suggest an item to response ratio of 10 to 1, with 15 to 1 recognised as being ideal for most kinds of multivariate analyses. In the present study, there

are 33 items across six constructs. Accordingly, a set of 450 responses is the minimum requirement, with an allowance of 5 percent to cater for response errors, giving a total of 475.

4.1.4 Data collection

A market research firm was contracted to source participants for the study. This partnership was beneficial as the firm hosts a panel of hospitality employees residing in various regions around the world. Moreover, the niche area of study made it impractical for the researcher to undertake this task manually. In order to mitigate the duplication of respondents between the pilot test and main survey, a multi-layered approach was employed. The first layer consisted of instructions to send invitations to a unique set of panellists for each round, and the second layer involved a cross check of IP addresses. No duplications were found and thus unique sampling units were engaged for each survey.

The survey consisted of 33 core items (Appendix 1). Section one consists of eight screening questions. Section two asks respondents to indicate their level of agreement with the items and section three contains demographic questions. Data was collected at the individual level and distribution covered countries in three geographical locations – North America, Europe and Asia – in order to increase the generalisability of the study's results. Accessing a wider market research panel would prove too costly. Quota sampling was used to achieve a balanced distribution of respondents. In the literature, span of control – the number of subordinates reporting to a supervisor in the hotel industry – was ideally considered to be 7 to 1, but that notion has evolved to involve considerations such as hotel star rating which impact staffing ratios (O'Fallon & Rutherford, 2010). This statistic provides the justification for the following quotas. With a sample of 475 recommended for the main survey and a multigroup analysis requirement of 100 responses for each group (Kline, 2015), a quota of roughly 60

percent for line staff (285), 20 percent supervisory staff (95), and 20 percent (95) management staff was instituted.

4.1.5 Data analysis

Quantitative data analysis involves the conversion of data into information (Oflazoglu, 2017) by summarising it, describing the relationships among variables, and making inferences about the population (Treiman, 2014). There are several software packages that perform the statistical analyses necessary to achieve the aforementioned purpose (Muijs, 2010). In this thesis, descriptive statistics were generated and exploratory factor analysis was performed using Statistical Package for the Social Sciences (SPSS). Analysis of Moment Structures (AMOS) was used for structural equation modelling (SEM), path analysis, and confirmatory factor analysis (CFA) (Blunch, 2012).

Descriptive statistics were used to describe the sample by representing the scores or observations from individual variables in summary form, using simple illustrations such as frequency distributions (Terre-Blanche, Durrheim, & Painter, 2006). Confirmatory factor analysis was used to test the goodness-of -fit of the measurement model and to assess the reliability and validity of the constructs. Covariance-based SEM was also used in this study. It is predicated on various assumptions, including the multivariate normality of data, minimum sample size, reflective constructs, and a strong theoretical knowledge of the tested model (do Valle & Assaker, 2015).

4.1.6 Pre-test

Testing is imperative to instrument validation (Pett, Lackey, & Sullivan, 2003). Blair et al. (2013) assert that a pre-test should precede a pilot test. A pre-test cannot assess certain considerations, such as screening eligibility rates, due to its customary small size. It is designed to check the capability of an instrument to provide accurate data and to ensure validity and

reliability. It does so by confirming that the necessary constructs have been represented, and that the format of the questionnaire and its clarity are appropriate (Cargan, 2007). Ruel, Wagner, and Gillespie (2015) recommend the use of both expert- and respondent-driven pre-tests to ensure that respondents understand the concepts being studied.

The pre-test survey was distributed to two faculty members at the School of Hotel and Tourism Management at the Hong Kong Polytechnic University, one Director of Learning and Development from a Middle Eastern hotel group, five PhD students and 33 employees from hotels in the Middle East, the Philippines, India and Africa. Respondents took less than 10 minutes on average to complete the survey. Minor modifications were made to reflect the feedback obtained. Debriefing was carried out with the expert group as advocated by Blair, Czaja, and Blair (2014). The sample size for the pre-test was considered adequate as Ornstein (2013) asserts that pre-tests for previously tested items require no more than 25 respondents. The results were statistically analysed and the questionnaire was revised for clarity, correct sequencing and completeness.

4.1.7 Pilot testing

Pilot testing is used to uncover potential flaws and refine an instrument prior to data collection for the main survey (Bickman & Rog, 2008). It can also be designed to ascertain qualities such as ease of understanding by providing an open ended channel for respondents to provide feedback (David & Sutton, 2004). The pilot test was conducted among the desired target audience and the results confirm that the layout, length, and wording of the questionnaire yielded data that is suitable for analysis (Thomas, 2004). Statistical Package for the Social Sciences (SPSS) version 26 was used to generate descriptive statistics, examine internal consistency, and establish construct validity. Analysis of Moment Structures (AMOS) version 26 was used to construct the measurement and structural model in order to test the hypotheses.

4.1.7.1 The measurement scale

This study utilises six measurement scales, all of which were adopted from existing studies. Jöreskog and Sörbom (1989) support the elaboration of simple models for confirmatory factor analysis. A five-point Likert scale, ranging from "strongly disagree" to "strongly agree" was utilised. Maddox (1985) supports the use of this scale in tourism research owing to its dependable convergent and discriminant validity. Slight adjustments were made to the wording of each statement to suit the context of this research. For example, the statement "The e-learning system is user-friendly" (Wang et al., 2007) was modified to "The platform is user-friendly". This was done to make the items more relatable to employees and to ensure contextual congruence among the different scales used in the study. A 33-item scale, consisting of six constructs, was used to ascertain information regarding hotel employees' experience with computer-based training. They were derived from previous literature and include system quality (seven) (Wang et al., 2007), information quality (six) (Wang et al., 2007), learner control (eight) (Karim & Behrend, 2014; Zhang, Yin, et al., 2017), perceived novelty (five) (Huang, 2003; Nguyen, 2015), perceived enjoyment (four) (Fang et al., 2016), and continuance intention (three) (Venkatesh et al., 2003), respectively. The use of pre-existing scales is highly recommended by researchers who attest to the benefits of using scales with sound measurement qualities and their ability to reveal how one's results differ from or agree with previous findings (Bell, Bryman, & Harley, 2018).

4.1.7.2 Sampling

A non-probability sampling method was employed for the study. Kerlinger (1966) acknowledges that this type of sampling is sometimes necessary. The specific non-probability sampling method utilised was purposive sampling. This sampling technique ensures that respondents possess the characteristics required to fulfil the objectives of the study (Kelly,

Bourgeault, & Dingwall, 2010). This can be achieved using screening questions that confirm whether a respondent is familiar with the subject matter (Campbell et al., 2020).

The accuracy and reliability of a study's findings largely depend on its sample size (Yang, Park, & Hu, 2018). In the current study, the sample size of 475 hotel employees – representing in excess of 10 cases for each indicator – is considered acceptable (Finney & DiStefano, 2006). The desired sample size was between 10 (330) and 15 (495) responses per item. Moreover, the sample size far exceeds the minimum recommended size of 150 (Wang & Wang, 2012) and will enable multigroup analysis on the various sub-samples present (Assaker & Hallak, 2013; Byrne, 2004).

4.1.7.3 Data collection

Van Selm and Jankowski (2006) identify various benefits of online surveys, including the capacity to check for non-completion, requiring completion of a section before proceeding to the next, and varying the order of questions. Respondents for the study were recruited with the help of a reputable marketing research firm that has a panel of thousands of members and a sub-panel of hospitality employees. Quota sampling was used to ensure a balance of participants from three geographical regions, and three job levels. The three regions are North America, Europe, and Asia. They were selected in order to solicit varied perspectives regarding computer-based training and the widespread presence of international hotel groups. Line staff, supervisors, and managers were surveyed. These quotas were implemented to increase the transferability of the study results and to facilitate multigroup analysis. Due to the online nature of the survey, the option to "force responses" eliminated missing data. A total of 489 responses were supplied for the main survey. On average, the survey took less than 10 minutes to complete and is in line with the 33 item-length of the survey. In keeping with the length of the survey one attention check was deemed sufficient. It was designed to fit the length and structure

of those in the sequence, and was thus adequately disguised. The question read: “I will select disagree for this question about the system”.

4.1.7.4 Data screening

Van Selm and Jankowski (2006) state that a screened sample can be derived by soliciting relevant data to ascertain the suitability of the respondent. A cover letter informed respondents about the purpose of the research and their rights as participants. Any identifiable information was removed from the survey in order to reduce bias, prevent opportunistic survey-taking, and guarantee the effectiveness of the screening process (Levenson, 2014). Respondents’ eligibility to participate in the survey was validated using eight screening questions and they were screened out at various stages (Aaker, Kumar, Day, & Leone, 2009). They had to identify the relevant industry (1 correct option out of 10 choices), sector (1 out of 7), hotel group (7 out of 13), department (5 out of 14), and region (3 out of 8). In addition to confirming their participation in computer-based training during the last 12 months, the respondents had to provide the correct name of the platform used by their particular hotel group. These hotel groups were chosen after contact with human resource departments in various parts of the world confirmed the use of computer-based training. The names of the platforms were also supplied and were inputted to include variations that were automatically validated by the system before a respondent could proceed. This step aided in the identification of the desired participants, but also resulted in a lengthy data collection time.

A total of 225 responses were received for the pilot phase of the research. Hair et al. (2010) affirm that a ratio of five observations for each item (33) is adequate; hence, a total of 165 is required. Prior to analysis, data must be scrutinised for errors that if left untreated could invalidate the results of the study (Terre-Blanche et al., 2006). A data quality check confirmed the usability of the data. No disingenuous responses (e.g., straight line answering) were

identified. Similarly, there were no missing responses as forced choice was used to increase the usability of each response (Lavrakas, 2008). Outliers are points in a data set that are markedly different from others and although their handling has generated much contention, their retention has often proven to be innocuous (Aguinis, Gottfredson, & Joo, 2013). Outliers are thought to have an adverse effect on fit indices (Kline, 2015); hence, boxplot analysis was used to identify 12 outliers, which were then deleted. A total of 213 responses remained.

4.1.7.5 Demographic characteristics of respondents

Table 4.7 outlines the profile of the respondents. Due to the quota requirements associated with multiple group analysis, characteristics such as job level, department and region were anticipated to be within a certain range. The demographic characteristics requested were gender, age, highest education, length of experience, type of hotel, hours worked per week, length of exposure to CBT, and self-rated CBT competence. There was an equal number of males and females, with the largest age group comprising individuals between 35 and 44 years. Most respondents possessed an undergraduate degree (78%), more than five years of experience in the hospitality industry (88%), and between one and three years of experience with CBT (77%). The majority (90%) rated their CBT competence at the expert level. Just over half of the respondents were employees of 5-star hotels, with most (88%) working more than 40 hours per week.

Table 4.7. Profile of respondents in the pilot survey

Characteristics	Category	Percentage
Gender	Male	49.3
	Female	50.7
Age	24 years or less	8.6
	25 - 34 years	22.8
	35 - 44 years	36.6
	45 - 54 years	20.0
	55 or more years	12.0
Highest Education	Undergraduate	77.7
	Postgraduate	22.3
Length of Experience	1 to 5 years	12.0
	More than 5 years	88.0
Type of hotel	3-3.5 stars	24.0
	4-4.5 stars	25.7
	5 stars	50.3
Hours worked per week	40 or less hours	12.0
	41-49 hours	82.9
	50-59 hours	5.1
Length of CBT exposure	less than 1 year	1.7
	1-3 years	76.6
	4-5 years	21.7
CBT Competence	Beginner	1.1
	Intermediate	8.0
	Expert	90.9

4.1.7.6 Normality testing

Descriptive statistics, particularly the mean, standard deviation, skewness, and kurtosis, were obtained for each factor. A normality check revealed that the data was negatively skewed. This is often the case in tourism research with subjective data concerning attitudes and perceptions (Mikulić & Ryan, 2018). In the presence of skewed data, scholars advise the scrutinisation of univariate skewness and kurtosis (Curran, West, & Finch, 1996). These showed positive values and were within the recommended range, confirming that the distribution was normal (see Table 4.8). Means, standard deviation and standard error were also featured. Multicollinearity was assessed using linear regression. Values for tolerance of

less than .2 and variance inflation factor (VIF) much larger than 1.0 suggest the presence of multicollinearity (Mansfield & Helms, 1982). The construct perceived novelty, registered the lowest tolerance value of .662 and the highest VIF score of 1.51. These results suggest that multicollinearity does not pose a problem for the dataset.

Table 4.8. Item normality test

(n=213)

Item	Mean	S.D.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	S.E.	Statistic	S.E.
The platform is always available	3.63	0.67	-0.83	0.16	1.50	0.33
The platform is easy to use	3.62	0.76	-1.04	0.16	1.60	0.33
The platform is user-friendly	3.55	0.70	-0.45	0.16	0.36	0.33
The platform provides interactive features for users	3.63	0.75	-1.15	0.16	1.84	0.33
The platform provides high-speed information access	3.56	0.76	-1.03	0.16	1.35	0.33
The platform has attractive features that appeal to users	3.52	0.76	-0.82	0.16	1.09	0.33
The platform provides personalised information presentation	3.52	0.76	-1.00	0.16	1.86	0.33
The platform provides information that is exactly what you need	3.53	0.86	-0.83	0.16	0.69	0.33
The platform provides information you need at the right time	3.59	0.80	-0.49	0.16	0.31	0.33
The platform provides information relevant to your job	3.53	0.83	-0.65	0.16	0.77	0.33
The platform provides sufficient information	3.53	0.90	-0.60	0.16	0.36	0.33
The platform provides up-to-date information	3.50	0.77	-0.47	0.16	0.25	0.33
I had control over the visual aids and tutorials on the training platform	3.79	0.74	-0.88	0.16	2.00	0.33
I was able to adjust the presentation of the training platform	3.74	0.78	-0.85	0.16	1.68	0.33
I had control over the topics that were included	3.84	0.83	-1.16	0.16	2.19	0.33
I had control over when I had to start the training	3.75	0.79	-0.80	0.16	1.53	0.33
I had control over where I took the training	3.66	0.73	-0.84	0.16	1.57	0.33
The platform is imaginative	3.80	0.77	-1.12	0.16	2.45	0.33
The platform is surprising	3.83	0.72	-0.93	0.16	2.05	0.33
The platform is innovative	3.74	0.76	-0.93	0.16	1.72	0.33
The platform is new	3.79	0.74	-0.62	0.16	0.85	0.33
The platform is fresh	3.83	0.75	-1.04	0.16	2.69	0.33
I find the platform to be interesting	3.60	0.70	-0.74	0.16	1.16	0.33
I find the platform to be entertaining	3.58	0.68	-0.50	0.16	0.57	0.33
I find the platform to be enjoyable	3.59	0.71	-1.04	0.16	1.59	0.33
I find the platform to be pleasant	3.54	0.69	-0.42	0.16	0.41	0.33

I will use the platform on a regular basis in the future	4.09	0.82	-1.33	0.16	2.94	0.33
I will frequently use the platform in the future	4.10	0.82	-1.36	0.16	3.06	0.33
I will strongly recommend others to use the platform	4.07	0.83	-1.37	0.16	3.05	0.33

4.1.7.7 Exploratory factor analysis

In order to identify the underlying dimensions in the measurement items, exploratory factor analysis was conducted using principal component method with varimax rotation and Kaiser normalisation. Principal component is a theoretic approach that produces a group of factors that best account for variations in a data set (Allen, Allen, & Rao, 2000). Principal component analysis was selected because the constructs have been co-opted from various models and the aim is to extract the maximum variance in order to support the viability of the new model. Varimax was chosen because of the use of pre-existing scales and the objective to develop a factor structure wherein each item loads highly on just a single factor. Moreover, the intention is to suppress the presence of a general factor and reveal the indicators related to each stipulated indicator (Kim & Mueller, 1978).

To be included in the analysis, an item had to register an eigenvalue of 1.0 or greater, with a factor loading and communality exceeding .5. This cut-off was instituted to ensure the statistical as well as practical significance of each inclusion (Hair, Black, Babin, Anderson, & Tatham, 2006). A scree plot showed two inflection points with a sharp drop off after eigenvalue 1, just after the 6th factor. After deleting four items – IQ5, LC2, LC5, LC7 – for failing to adhere to the criterion, the factors converged into six groups as desired, with eigenvalues between 1.5 and 8.2 (see Table 4.9). The 6-factor solution explains 64 percent of the variance in continuance intention. The factors were labelled system quality, information quality, perceived enjoyment, learner control, perceived novelty, and continuance intention in accordance with their pre-determined characteristics. All but one of the Cronbach's alphas were above .8; hence, the factors are considered reliable (Allen, Titsworth, & Hunt, 2008). The

adequate KMO value of .87 (Williams, Onsman, & Brown, 2010) and a significant Bartlett's test of sphericity (.000) with a $\chi 2/df$ of 3228/406 corroborate the soundness of the factor analysis (Tabachnick, Fidell, & Ullman, 2007).

Table 4.9. Factor analysis

Items	Factor Loadings	Communalities	Mean
System Quality variance explained: 28.36 eigenvalue: 8.22 Cronbach's alpha= 0.88 grand mean= 3.57			
SQ1: The platform is always available	0.71	0.63	3.63
SQ2: The platform is easy to use	0.77	0.65	3.62
SQ3: The platform is user-friendly	0.63	0.50	3.55
SQ4: The platform provides interactive features for users	0.75	0.60	3.63
SQ5: The platform provides high-speed information access	0.78	0.65	3.56
SQ6: The platform has attractive features that appeal to users	0.76	0.64	3.52
SQ7:The platform provides personalised information presentation	0.79	0.65	3.52
Information Quality variance explained: 8.44 eigenvalue: 2.45 Cronbach's alpha= .84 grand mean= 3.53			
IQ1: The platform provides information that is exactly what you need	0.69	0.58	3.53
IQ2: The platform provides information you need at the right time	0.70	0.59	3.59
IQ3: The platform provides information relevant to your job	0.75	0.63	3.53
IQ4: The platform provides sufficient information	0.80	0.69	3.53
IQ6: The platform provides up-to-date information	0.82	0.69	3.50
Learner Control variance explained: 11.03 eigenvalue: 3.20 Cronbach's alpha= .86 grand mean= 3.76			
LC1: I had control over the visual aids and tutorials on the training platform	.66	.54	3.79
LC3: I was able to adjust the presentation of the training platform	.83	.80	3.74
LC4: I had control over the topics that were included	.74	.63	3.84
LC6: I had control over when I had to start the training	.82	.78	3.75
LC8: I had control over where I took the training	.74	.56	3.66
Perceived Novelty variance explained: 6.26 eigenvalue: 1.82 Cronbach's alpha= .85			

Items	Factor Loadings	Communalities	Mean
grand mean= 3.80			
PN1: The platform is imaginative	0.74	0.65	3.80
PN2: The platform is surprising	0.77	0.72	3.83
PN3: The platform is innovative	0.68	0.61	3.74
PN4: The platform is new	0.71	0.56	3.79
PN5: The platform is fresh	0.65	0.63	3.83
Perceived Enjoyment variance explained: 5.20 eigenvalue: 1.51 Cronbach's alpha= .83 grand mean= 3.58			
PE1: I find the platform interesting	0.75	0.70	3.60
PE2: I find the platform entertaining	0.80	0.68	3.58
PE3: I find the platform enjoyable	0.74	0.63	3.59
PE4: I find the platform pleasant	0.69	0.62	3.54
Continuance Intention variance explained: 5.00 eigenvalue: 1.45 Cronbach's alpha= .76 grand mean= 4.09			
CI1: I will use the platform on a regular basis in the future	0.82	0.72	4.09
CI2: I will frequently use the platform in the future	0.81	0.72	4.10
CI3: I will strongly recommend others to use the platform	0.66	0.58	4.07

4.1.1.1 Contributions of the pilot study

The results of the pilot study contributed in meaningful ways to the design of the main study. First, during the EFA four items were found to be outside cut off ranges. Nevertheless, these were retained as it was expected that with a higher sample size, the results may vary. However, EFA performed on the main data set saw these same four items dropped, in addition to two items. This reinforces the validity of the pilot study results. Second, the pilot study indicated that the items would load unto the desired factors and so there was no need to consider alternative scales. Third, it confirmed that the information given to the researcher by the human resource managers of the hotel groups surveyed during the design stage was indeed correct concerning their use of CBT systems and their requisite names, which participants had to successfully supply as part of the screening process. Fourth, a substantial number of potential respondents were screened out at this stage due to their inability to provide the desired

information. This question was purposefully included to reduce opportunistic survey taking and may be one reason for the lengthy data collection time. Fifth, the pilot test return time was indicative of the less than desired hit rate and prepared the researcher for the long time it would take to achieve the desired number of responses. Sixth, the pilot test consisted of 213 valid responses. The robustness of the results reinforced the researcher's decision to use an item to response ratio of approximately 15 to 1 for the main study. A larger sample size would further protract the time to fulfil the quota. Seventh, the clarity and comprehensive of the items were also established, as an open-ended question at the end of the survey did not uncover any issue. Eight, the pilot test demonstrated that the average completion time was within the anticipated range of 10 minutes or less. Ninth, it revealed that skewness and kurtosis values were likely to fall within the required range. Finally, reliability checks using Cronbach's alpha revealed that the items displayed internal consistency and were measuring the intended construct.

CHAPTER 5: RESULTS

Chapter five presents the analysis of the main survey. It begins with the demographic profile of respondents, followed by a presentation of the results of the confirmatory factor analysis, structural equation modelling, hypothesis testing, and moderation analysis. Following Hallak, Assaker, and Lee (2013), the analysis involves four main steps: (a) exploratory factor analysis, (b) confirmatory factor analysis, (c) structural equation modelling, and (d) multigroup invariance analysis.

5.1 Descriptive Statistics

Table 5.1 presents the demographic characteristics of respondents, including gender, age, length of industry experience, hotel classification, hours worked each week, duration of exposure to CBT, and CBT competence. Males made up 50.3 percent of respondents, with the 35-44 years old age group accounting for the largest percentage (39.8%). Most respondents were educated to the undergraduate level (79.8%), had five or more years of industry experience (73.9%), and work in a 5-star hotel (44.6%) for more than 40 hours each week (90%). The majority had been exposed to CBT for more than a year (99%) and considered themselves experts (92.6%).

Table 5.1. Profile of respondents in the main survey

Characteristics	Category	Percentage
Gender	Male	50.3
	Female	49.7
Age	24 years or less	8.5
	25 - 34 years	19.2
	35 - 44 years	39.8
	45 - 54 years	19.4
	55 or more years	13.1
Highest Education	Undergraduate	79.8
	Postgraduate	20.2
Length of Experience	1 to 5 years	26.1
	More than 5 years	73.9
Hotel classification	3-3.5 stars	27.7

Characteristics	Category	Percentage
	4-4.5 stars	27.7
	5 stars	44.6
Hours worked per week	40 or less hours	10.0
	41-49 hours	80.6
	50-59 hours	9.4
Length of CBT exposure	less than 1 year	0.10
	1-3 years	82
	4-5 years	17.9
CBT Competence	Beginner	0.5
	Intermediate	6.9
	Expert	92.6

5.2 Exploratory Factor Analysis

Exploratory factor analysis was carried out for the main survey as items that were deleted at the pilot stage were retained with the anticipation that a large sample size could improve the results. Furthermore, the seven scales originate from different studies, and the contexts are slightly different. For example, the "e-learning system" referred to by Wang et al. (2007) was modified to "platform" for the current study. EFA was carried out to ensure the appropriateness of the instrument despite the modifications.

To determine the underlying dimensions, exploratory factor analysis was performed using principal component analysis and varimax rotation. Principal component analysis extracts eminent patterns in a matrix by grouping complementary scores and loadings (Wold, Esbensen, & Geladi, 1987). Principal component analysis was used because the constructs have been co-opted from various models and the aim is to extract the maximum variance in order to support the viability of the new model. The research employs pre-existing scales. The varimax rotation method was used since it produces a factor structure in which each item loads highly on only one factor, thereby suppressing the presence of a common factor (Kim & Mueller, 1978).

A scree plot registered two points of inflection, with a noticeable dip after eigenvalue 1, with six factors present above this level. The number of desired factors was specified and the patterns of correlations among the items were analysed. Cut-off criteria such as eigenvalues greater than 1.0 and factor loadings and communalities above .5 were used to determine the final line-up of factors (Hair et al., 2006). Six items – SQ3, IQ1, IQ5, LC2, LC5, and LC7 – were deleted due to communality scores below .5. Eigenvalues fell between 3.50 and 5.2. Also, the number of items per construct was considered optimal. All constructs had at least three items, with half containing the highly desirable figure of ≥ 5 (Flynn, Kramer, & Laher, 2019). The factors conformed to those in the literature and were labelled system quality, information quality, learner control, perceived novelty, perceived enjoyment, and continuance intention.

Table 5.2 shows that the six factors explain 62.82 percent of the total variance. System quality accounts for the largest percentage (22%) while continuance intention accounts for the smallest (6%). The factor loadings range from .677 to .842, higher than the >.4 threshold stipulated by statisticians (Kline, 2014). The Cronbach's alphas were all satisfactory, ranging from .76 to .86, exceeding the lower limit of 0.60 (Field, 2013) and indicating high internal consistency for the items comprising each factor (Mulaik, 2009). Communalities were between .52 and .76, with means spanning 3.50 to 4.11. The KMO value of .850 was deemed very good (Williams et al., 2010) as a value close to one indicates that the analysis will produce distinct and robust factors (Field, 2013). A significant Bartlett's test of sphericity (.000) with a $\chi 2/df$ of 5422/351 gave assurance that factor analysis is appropriate for the data (Tabachnick et al., 2007).

Table 5.2 Exploratory factor analysis

Items	Factor Loadings	Communalities	Mean
System Quality variance explained: 22.27 eigenvalue: 6.012 Cronbach's alpha= 0.86 grand mean= 3.61			
SQ1: The platform is always available	.68	.55	3.50

Items	Factor Loadings	Communalities	Mean
SQ2: The platform is easy to use	.73	.58	3.66
SQ4: The platform provides interactive features for users	.76	.59	3.64
SQ5: The platform provides high-speed information access	.81	.67	3.61
SQ6: The platform has attractive features that appeal to users	.75	.58	3.57
SQ7:The platform provides personalised information presentation	.84	.72	3.51
Information Quality variance explained: 7.14 eigenvalue: 1.93 Cronbach's alpha= .76 grand mean= 3.65			
IQ2: The platform provides information you need at the right time	.72	.55	3.76
IQ3: The platform provides information relevant to your job	.72	.54	3.52
IQ4: The platform provides sufficient information	.81	.67	3.63
IQ6: The platform provides up-to-date information	.77	.62	3.69
Learner Control variance explained: 11.273 eigenvalue: 3.044 Cronbach's alpha= .85 grand mean= 3.77			
LC1: I have control over the visual aids and tutorials on the training platform	.74	.56	3.79
LC3: I am able to adjust the presentation of the training platform	.84	.76	3.77
LC4: I have control over the topics that are included	.75	.59	3.70
LC6: I have control over when I start the training	.84	.75	3.84
LC8: I had control over where I took the training	.70	.52	3.83
Perceived Novelty variance explained: 8.71 eigenvalue: 2.36 Cronbach's alpha= .84 grand mean= 3.81			
PN1: The platform is imaginative	.77	.65	3.81
PN2: The platform is surprising	.78	.65	3.84
PN3: The platform is innovative	.72	.58	3.80
PN4: The platform is new	.74	.58	3.80
PN5: The platform is fresh	.73	.64	3.63
Perceived Enjoyment variance explained: 7.72 eigenvalue: 2.08 Cronbach's alpha= .799 grand mean= 3.61			
PE1: I find the platform interesting	.77	.64	3.62
PE2: I find the platform entertaining	.79	.64	3.61
PE3: I find the platform enjoyable	.76	.61	3.60
PE4: I find the platform pleasant	.73	.72	3.58
Continuance Intention			

Items	Factor Loadings	Communalities	Mean
variance explained: 5.71 eigenvalue: 1.54 Cronbach's alpha= .77 grand mean= 4.09			
CI1: I will use the platform on a regular basis in the future	.72	.72	4.11
CI2: I will frequently use the platform in the future	.79	.71	4.09
CI3: I will strongly recommend others to use the platform	.77	.65	4.07

5.2.1 Data normality

Normality concerns the extent to which the distribution of data in a survey conforms to that of a normal distribution (Hair et al., 2006). To check the normality of the data, skewness and kurtosis values were generated for the items. Normality also displays the mean, standard deviation, and standard error. Due to the impracticality of detecting multivariate non-normality (Kline, 2015), univariate normality was assessed. Positive or negative values for skewness and kurtosis indicate some deviation from normality (Hair et al., 2010), with acceptable values of skewness falling between −3 and +3 and kurtosis within the range of −10 to +10 for SEM (Griffin & Steinbrecher, 2013). Nevertheless, the robustness of SEM as an analytical method means that small deviations do not imply that the assumptions have been violated (Ryu, 2011). Table 5.3 confirms that all values are within the range for normal distribution. Analysis reveals that the univariate normality assumption for all variables was met.

Multicollinearity was assessed through tolerance and variance inflation factor (VIF). Values of less than .2 and exceedingly larger than 1.0 respectively suggest that multicollinearity may be present (Mansfield & Helms, 1982). Linear regression was performed in SPSS to produce the requisite values. The independent variables were system quality, information quality, learner control, and perceived novelty whereas perceived enjoyment was used as the dependent variable. Both the lowest tolerance value of .84 and the highest VIF score of 1.19

belonged to the construct perceived novelty. Therefore, multicollinearity was not an issue in the dataset.

Harman's single factor test was used to detect common method bias. An exploratory factor analysis with all 6 factors, revealed a variance of 19.41 for the first factor, far less than the 50 percent threshold recommended in the literature (Podsakoff & Organ, 1986). This result suggests that common method bias is not an issue.

Table 5.3 Descriptive statistics for items in the main study

Items	Mean	S.D.	Skewness S.E. = .112	Kurtosis S.E. = .224
System Quality				
SQ1: The platform is always available	3.65	.69	-1.04	1.74
SQ2: The platform is easy to use	3.66	.73	-1.05	1.83
SQ4: The platform provides interactive features for users	3.64	.77	-1.25	2.17
SQ5: The platform provides high-speed information access	3.61	.75	-1.10	1.75
SQ6: The platform has attractive features that appeal to users	3.57	.76	-0.80	1.01
SQ7: The platform provides personalised information presentation	3.50	.75	-0.90	1.37
Information Quality				
IQ2: The platform provides information you need at the right time	3.76	0.68	-0.69	1.23
IQ3: The platform provides information relevant to your job	3.52	0.79	-0.48	0.37
IQ4: The platform provides sufficient information	3.63	0.81	-0.65	0.87
IQ6: The platform provides up-to-date information	3.69	0.77	-0.68	0.95
Learner Control				
LC1: I have control over the visual aids and tutorials on the training platform	3.79	0.72	-1.15	2.88
LC3: I am able to adjust the presentation of the training platform	3.78	0.71	-1.01	2.53
LC4: I have control over the topics that are included	3.84	0.76	-1.16	2.58
LC6: I have control over when I start the training	3.74	0.73	-0.83	1.88
LC8: I had control over where I took the training	3.71	0.70	-0.80	1.72
Perceived Novelty				
PN1: The platform is imaginative	3.81	0.72	-1.17	2.87
PN2: The platform is surprising	3.84	0.69	-0.97	2.34
PN3: The platform is innovative	3.80	0.70	-1.15	2.79
PN4: The platform is new	3.80	0.72	-0.85	1.73
PN5: The platform is fresh	3.80	0.69	-1.04	2.74
Perceived Enjoyment				
PE1: I find the platform interesting	3.63	0.65	-0.60	1.11
PE2: I find the platform entertaining	3.61	0.68	-0.51	0.61
PE3: I find the platform enjoyable	3.60	0.70	-0.87	1.37
PE4: I find the platform pleasant	3.58	0.68	-0.39	0.43

Items	Mean	S.D.	Skewness S.E. = .112	Kurtosis S.E. = .224
Continuance Intention				
CI1: I will use the platform on a regular basis in the future	4.11	0.76	-1.30	3.25
CI2: I will frequently use the platform in the future	4.09	0.83	-1.42	3.20
CI3: I will strongly recommend others to use the platform	4.07	0.79	-1.28	2.98

Min = 1, Max = 5 for all variables

5.3 Confirmatory Factor Analysis

The measurement model was estimated using confirmatory factor analysis (CFA) in order to test the model's convergent and discriminant validity (Lin, 2008) as well as verify the factor model which emerged during EFA. The model specifies the causal relationships between measures and shows how each variable is operationalised through its indicators (Nunkoo, Ramkissoon, & Gursoy, 2013).

5.3.1 The measurement model

The goodness-of-fit was assessed with several indices, namely the chi-square test/degrees of freedom test (CMIN/df), Tucker-Lewis index (TLI), the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and root mean square residual (RMR). For RMSEA, values between .05 and .10 suggest a fair fit (MacCallum, Browne, & Sugawara, 1996). The RMR presents a good fit if it is less than or equal to 0.05 as stipulated by statisticians (Hair et al., 2010). The CFI and TLI values of >.9 are acceptable according to Hu and Bentler (1999).

The indices in Table 5.4 were adopted based on the recommendations of Hair et al. (2006). Mulaik et al. (1989) assert that GFI and NFI less than .90 are acceptable in smaller samples. The values derived for each index suggest that the measurement model is valid for measuring what it was designed for (Hox, Moerbeek, & Van de Schoot, 2017). All items had a coefficient α above 0.3 and so were retained for further analysis (Bollen & Long, 1993).

Table 5.4. Fit indices for the main study measurement model

Fit index	Recommended value	Observed value	Source
Normed Chi-square (χ^2/df)	<3	1.47	Hair et al. (2010)
Comparative Fit Index (CFI)	>.9	.97	Bentler (1990)
Tucker Lewis Index (TLI)	>.9	.97	Bentler (1990)
Root Mean Square Error of Approximation (RMSEA)	<0.8	.03	Hair et al. (2010)
Goodness-of-fit index (GFI)	>0.90	.94	Hair et al. (2010)
Normed Fit Index (NFI)	>0.90	.92	Bentler and Bonett (1980)

All standardised paths were above .30 and were thus considered meaningful (Hoe, 2008). With degrees of freedom totalling 296, an $\chi 2$ of 437.22, and an associated p-value of .00, the model was suitable for further evaluation (Bentler, 1990). For goodness-of-fit, two absolute fit indices (RMSEA = 0.03, GFI = .94), two incremental fit indices (NFI = 0.92, CFI = 0.97), and a ratio of $\chi 2$ to degrees of freedom (1.47) were utilised. The model was determined to have an adequate fit as the values were near the stipulated thresholds (Hair et al., 2010).

5.3.1.1 Construct reliability and validity

Quantitative research aims to "explore variations in observed values among units of analysis and the correlates and causes of variation" (Bryman & Cramer, 2004). Vogt (2010) notes that survey researchers are mainly concerned with two tasks: whom and how many persons to survey and how to phrase questions to elicit their response. These activities border on representativeness and validity, sampling and measurement, and external validity and internal validity. Additionally, it is imperative to minimise measurement error in empirical research, hence the need for validity and reliability (Viswanathan, 2005). Other scholars submit that it is crucial to assess measurement procedures for their propensity to avoid systematic and random sources of error. In other words, there is a need to ensure the reliability and validity of the data collection instrument (Rubin & Babbie, 2012).

Reliability analysis is used to evaluate the stability and consistency of the measured items which are made up of latent constructs (Ko & Stewart, 2002). Reliability is assessed by computing average variance extracted (AVE) and composite reliability (CR) (Bagozzi & Yi, 1988). Cut-off values are 0.50 for AVE and 0.70 for CR and Cronbach's alpha (Fornell & Larcker, 1981). Cronbach's alpha ascertains the internal consistency of a scale from zero to one (Nunnally & Bernstein, 1994). All the values in the present study are acceptable as they range from .76 to .86. Table 5.5 shows that all these measures are above the threshold and signal the reliability of the reflective items.

Convergent validity reflects the extent to which the items for each construct can be used to measure the same construct (Chin, 1998). Convergent validity was assessed according to the average variance extracted (Gefen, Straub, & Boudreau, 2000). Table 5.6 illustrates that all standardised factor loadings and SQ AVE (square root of average variance extracted) values exceeded the 0.5 cut-off point, confirming convergent validity (Hair et al., 2006). Furthermore, at the .95 confidence level, all t-values are greater than the critical level of 1.96 (Bagozzi, Yi, & Phillips, 1991).

Discriminant validity is the degree to which constructs are significantly different from each other (Nusair & Hua, 2010). If the correlation between a pair of constructs is less than the square root of AVE of each construct, discriminant validity can be confirmed (Chin, 1998; Fornell & Larcker, 1981). Table 5.6 demonstrates that all the square roots of AVEs on the main diagonal are greater than the pairwise correlations between constructs on the off diagonal. This signals that all indicators are better explained by their respective constructs than by other constructs (Hair et al., 2010). The results show that with regard to the respective constructs, the scales are viewed as valid and reliable measures.

Table 5.5. CFA results for the measurement model

(n=475)

Construct		Estimate	Standard Error	t-value	p-value	Std. Factor loading	AVE	CR
System Quality	SQ1	0.91	0.08	12.12	***	0.70	.50	.71
	SQ2	1.02	0.08	12.87	***	0.74		
	SQ4	1.04	0.08	12.72	***	0.72		
	SQ5	0.99	0.06	15.52	***	0.70		
	SQ6	0.95	0.07	13.21	***	0.67		
	SQ7	1	-	-	-	0.71		
Information Quality	IQ2	1.25	0.15	8.32	***	0.92	.51	.72
	IQ3	0.89	0.24	3.69	***	0.56		
	IQ4	1.14	0.11	10.01	***	0.70		
	IQ5	1				0.64		
Learner Control	LC1	1.09	0.09	12.36	***	0.75	.51	.71
	LC3	1.1	0.05	23.04	***	0.77		
	LC4	1.06	0.08	12.96	***	0.69		
	LC6	1				0.68		
	LC8	0.94	0.08	12.18	***	0.67		
Perceived Novelty	PN1	1				0.72	.51	.71
	PN2	0.97	0.07	14.07	***	0.73		
	PN3	0.95	0.07	13.65	***	0.70		
	PN4	0.85	0.06	13.68	***	0.62		
	PN5	1.04	0.07	14.82	***	0.78		
Perceived Enjoyment	PE1	1				0.72	.50	.71
	PE2	1	0.08	12.68	***	0.69		
	PE3	1.07	0.08	13.07	***	0.72		
	PE4	1.02	0.08	12.8	***	0.70		
Continuance Intention	CI1	1.13	0.09	12.37	***	0.76	.55	.74
	CI2	1.26	0.1	12.43	***	0.79		
	CI3	1				0.66		

Note: χ^2 (296)=437.22 (p=.000); CFI=0.97; TLI=0.97; RMSEA=0.03; GFI=0.94; NFI=0.92; ***= <0.001

Table 5.6. Correlations, reliability, AVE, standard deviation and mean

	SQ	IQ	LC	PN	PE	CI
SQ	1					
IQ	.11(.03)	1				
LC	.15(.06)	.16(.02)	1			
PN	.30(.13)	.26(.12)	.30(.13)	1		
PE	.20(.10)	.23(.13)	.27(.09)	.36(.12)	1	
CI	.16(.03)	.22(.10)	.24(.05)	.45(.19)	.34(.09)	1
CR	0.86	.80	.84	.84	.84	.78
AVE	0.50	.51	.51	.51	.50	.55
SQ AVE	.70	.72	.71	.71	.71	.74
Mean	3.61	3.65	3.77	3.81	3.61	4.09
Std. Dev.	0.57	0.58	0.57	0.55	0.53	0.66

Note: All correlations are significant at 0.01. System quality (SQ), Information quality (IQ), Learner control (LC), Perceived Novelty (PN), Perceived enjoyment PE), Continuance Intention (CI).

5.4 Structural Equation Modelling

Structural equation modelling is a statistical methodology that combines factor analysis and path analysis (Byrne, 2013). It simultaneously estimates the relationships between observed and latent variables represented in the measurement model (Reisinger & Turner, 1999) and the relationships among the latent variables illustrated in the structural model (Lindberg & Johnson, 1997).

Following the recommendation of Anderson and Gerbing (1988), a covariance-based structural equation modelling approach was employed using IBM SPSS AMOS 26. This analysis method is appropriate since the study aims to assess the overall fit of the proposed model in order to test and confirm existing theory (Wunderlich, 2013). It involves model specification, identification, estimation, evaluation, and modification (Thakkar, 2020). The parameters for the structural model were estimated using maximum likelihood estimation.

5.4.1 Hypothesis testing: Direct effects

Following confirmation that the models were valid and reliable, the path relationships among the different constructs were tested. A review of the structural model shows that the t-values of the standardised coefficients are statistically significant, lending support to the five direct hypotheses proposed at the outset of the study (See page 92). The results attest that system quality, information quality, learner control, and perceived novelty are significant predictors of the perceived enjoyment experienced when using computer-based training systems. The significance of the path loadings (see Figure 5.1) illustrates the outcome of the hypotheses. The results support H_1, H_2, H_3, and H_4, indicating that system quality (β=0.10), information quality (β=0.12), learner control (β=0.17) and novelty (β=0.23) are significant predictors of user perceived enjoyment. Further, H_5 demonstrates the importance of perceived enjoyment (β=.41) in influencing continuance intention. All model fit indices are acceptable;

hence, the structural model presents a good fit with the data ($\chi 2 = 482.17$, df = 300, CMIN/df = 1.61, p = 0.00; NFI = 0.91; GFI = 0.93; CFI = 0.96; TLI = 0.96; RMSEA = 0.04).

Hypothesis one states that system quality will have a direct positive influence on perceived enjoyment. Accordingly, the path coefficient between system quality and perceived enjoyment was examined and was found to be statistically significant ($\beta=0.10$, $t=2.07$, $p<0.05$). This suggests that employees who believe that their CBT platforms rank high for system quality are likely to exhibit high levels of perceived enjoyment.

Hypothesis two proposes that information quality will have a direct positive influence on perceived enjoyment. Accordingly, the path coefficient between information quality and perceived enjoyment was evaluated and was considered to be statistically significant ($\beta=0.12$, $t=2.06$, $p<0.05$). This indicates that employees who perceive their computer-based training system to have high levels of information quality are more likely to report matching levels of perceived enjoyment.

Hypothesis three postulates that learner control will have a direct positive influence on perceived enjoyment. Accordingly, the path coefficient between learner control and perceived enjoyment was examined and was observed to be statistically significant ($\beta=0.17$, $t=3.11$, $p<0.001$). This means that employees who feel that the system affords them the desired degree of control are likely to experience perceived enjoyment.

Hypothesis four supposes that perceived novelty will have a direct positive influence on perceived enjoyment Accordingly, the path coefficient between perceived novelty and perceived enjoyment was scrutinised and was deemed to be statistically significant ($\beta=0.23$, $t=4.04$, $p<0.001$). This implies that employees who sense that computer-based training systems embody elements of novelty are likely to derive enjoyment from their use.

Hypothesis five stipulates that perceived enjoyment will have a direct positive influence on continuance intention. Accordingly, the path coefficient between perceived enjoyment and

continuance intention was assessed and was found to be statistically significant (β=0.41, t=6.04, p<0.001). This suggests that employees who find computer-based training systems to be enjoyable are likely to be persistent in using them.

5.4.2 Hypothesis testing: Indirect effects

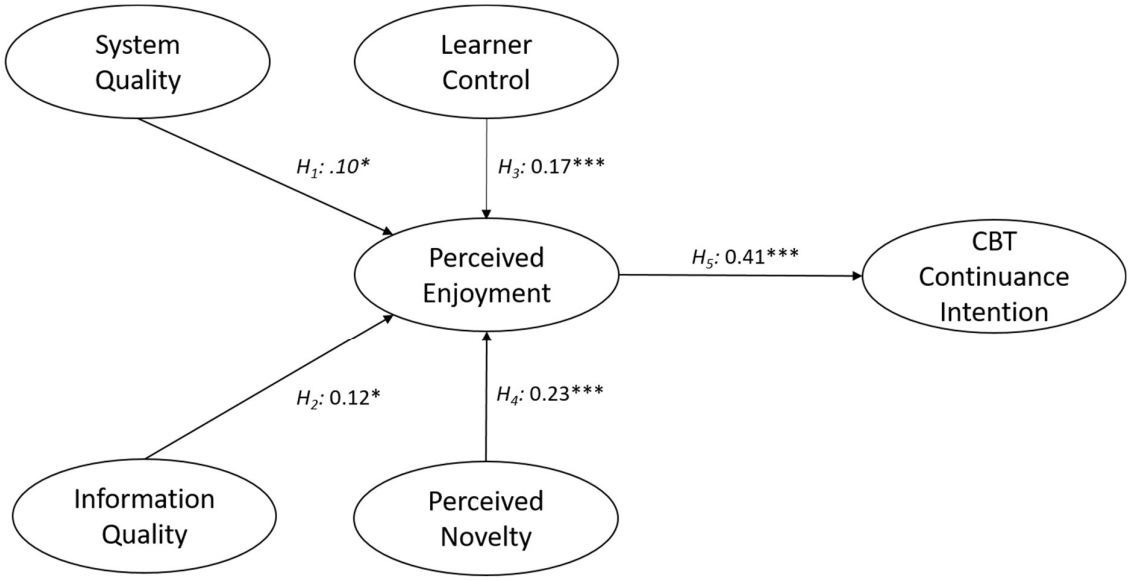
The role of a mediator is to "understand the mechanism through which a predictor influences an outcome by establishing "how" or "why" an independent variable predicts an outcome variable" (Baron & Kenny, 1986). Table 5.7 shows a significant indirect effect for all four paths. Perceived enjoyment mediates the relationships between system quality (β system quality → perceived enjoyment → continuance intention = 0.017, p <0.01), information quality (β information quality → perceived enjoyment → continuance intention = 0.017, p <0.01), learner control (β learner control → perceived enjoyment → continuance intention = 0.023, p <0.01), and perceived novelty (β perceived novelty → perceived enjoyment → continuance intention = 0.028, p <0.001), and, continuance intention. It can be concluded that perceived enjoyment has a significant mediating role within the proposed model.

Table 5.7 Results of the direct paths for the structural model

(n=475)

Hypothesis	Relationship	Standardised coefficient	t-value	p-value	Decision
H_1	System quality → Perceived enjoyment	.10	2.07*	.04	Accepted
H_2	Information quality → Perceived enjoyment	.12	2.06*	.04	Accepted
H_3	Learner control → Perceived enjoyment	.17	3.11***	.001	Accepted
H_4	Perceived novelty → perceived enjoyment	.23	4.04***	.001	Accepted
H_5	Perceived enjoyment → Continuance intention	.41	6.04***	.001	Accepted
β system quality → perceived enjoyment → continuance intention = 0.017*					
β information quality → perceived enjoyment → continuance intention = 0.017*					
β learner control → perceived enjoyment → continuance intention = 0.023*					
β perceived novelty → perceived enjoyment → continuance intention = 0.028*					
Note: χ^2 (300)=482.17 (p=.000); CFI=0.96; TLI=0.96; RMSEA=0.04; GFI=0.93; NFI=0.91; *p<0.05, **p<0.01*** *p*<0.001					

Figure 5.1. Results of the direct paths for the structural model, main survey



H6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * *p*<0.05, ** *p*<0.01, *** *p*<0.001

5.4.3 Hypothesis testing: Moderating effects

The moderating effect of employees' industry tenure, job level and department on the relationship among the study variables was examined. For department, employees from the

front office, housekeeping, and food and beverage were categorised as “operations”, while those from sales and marketing, and, accounting and finance were categorised as “support” (Faulkner & Patiar, 1997). For tenure, those with more than five years of experience were described as ‘long tenure’ and those with five years of experience or less were described as ‘short tenure’ (Gibson & Klein, 1970). For job level, respondents identified themselves as line staff, supervisory staff (including team leaders), or managers (Chan & Hawkins, 2012). The number of responses for each group was adequate to perform multigroup invariance analysis (Kline, 2015).

Measurement invariance is one method of detecting measurement bias. This is important because researchers need to ensure that measurement scales are not affected by factors not under consideration (Millsap, 2012). The establishment of measurement invariance across groups is required in order to conduct comparisons across those groups (Vandenberg & Lance, 2000). It determines “whether an instrument has the same psychometric properties across heterogeneous groups” (Chen, 2007, p. 465). A measurement instrument violates the invariant assumption “when two individuals from different populations who are identical on the construct score differently on it” (Schmitt & Kuljanin, 2008). In other words, if the comparisons of the means of the latent factors (e.g. attitudes and behaviours) are to be considered meaningful, the measurement structures associated with each factor and their requisite items should be stable, that is “invariant” (Van De Schoot, Schmidt, & De Beuckelaer, 2015). The purpose of this comparison is to estimate a model’s invariance across populations in order to establish the validity of the theoretical construction the model seeks to represent (Gana & Broc, 2019).

First, the chi-square (χ^2) difference test was used to determine whether the measurement models was invariant – that is, whether the χ^2 value did not show a significant difference (Yoo, 2002). This was followed by structural invariance to ascertain differences in the constructs

across groups (Wang & Wang, 2019). This procedure was repeated for the three moderators (industry tenure, job level and department). The strength of the relationships among perceived enjoyment and its antecedents and between perceived enjoyment and continuance intention is expected to vary under different conditions.

5.4.3.1 Measurement invariance for tenure

Invariance analysis enables the examination of the differences between the long and short tenure groups. Table 5.8 shows that full metric invariance was not supported because in both data sets, no significant chi-square differences existed between the free model and the full metric invariance model ($\Delta\chi^2$ (df)>$\chi^2_{.01}$ (22)=47.4; $\Delta\chi^2$ (df)>$\chi^2_{.01}$ (22)=33.92).

Because the metric invariance assumption was violated, a partial metric invariance model that involves the modification of the non-invariant factor loadings between groups was fitted (Kwok, Cheung, Jak, Ryu, & Wu, 2019). Three items were released (PN4, CI2, CI3) and all other measurement items were constrained for the invariance. Finally, the invariance constraints across the two groups with the released three-item invariance constraints were supported ($\Delta\chi^2$ (df)>$\chi^2_{.01}$ (19)=24.1; $\Delta\chi^2$ (df)>$\chi^2_{.01}$ (19)=30.14).

Table 5.8 Measurement invariances for the long tenure and short tenure groups

Models	Long tenure and Short tenure groups		
	χ2/df	$\Delta\chi$2/df	CFI (RMSEA)
Free	834.40/592	-	.95(.03)
Full metric invariance of CFA	881.8/614	47.4/22[a]	.95(.03)
Partial metric invariance of CFA	858.5/611	24.1/19[b]	.95(.03)

Note: long tenure (n=351), short tenure (n=124)
[a] Chi-square test of difference: $\Delta\chi^2$ (df)>$\chi^2_{.01}$ (22)=33.92; hence, full metric invariance is not supported.
[b] Chi-square test of difference: $\Delta\chi^2$ (df)<$\chi^2_{.05}$ (19)=30.14; hence, partial metric invariance is supported (with three items of invariance constraints released).

5.4.3.2 SEM results of the long tenure and short tenure groups

For each group, a separate SEM analysis was conducted. Table 5.9 and Table 5.10 present the moderating effect of tenure on the relationship between the study variables. All parameter estimates were viable and statistically significant for both groups. Figure 5.2 and Figure 5.3 illustrate that 3/5 paths are significant for the long tenure group and 2/5 paths are significant for the short tenure group. Figure 5.4 illustrates the comparison between the groups. The common significant relationship is perceived enjoyment to continuance intention.

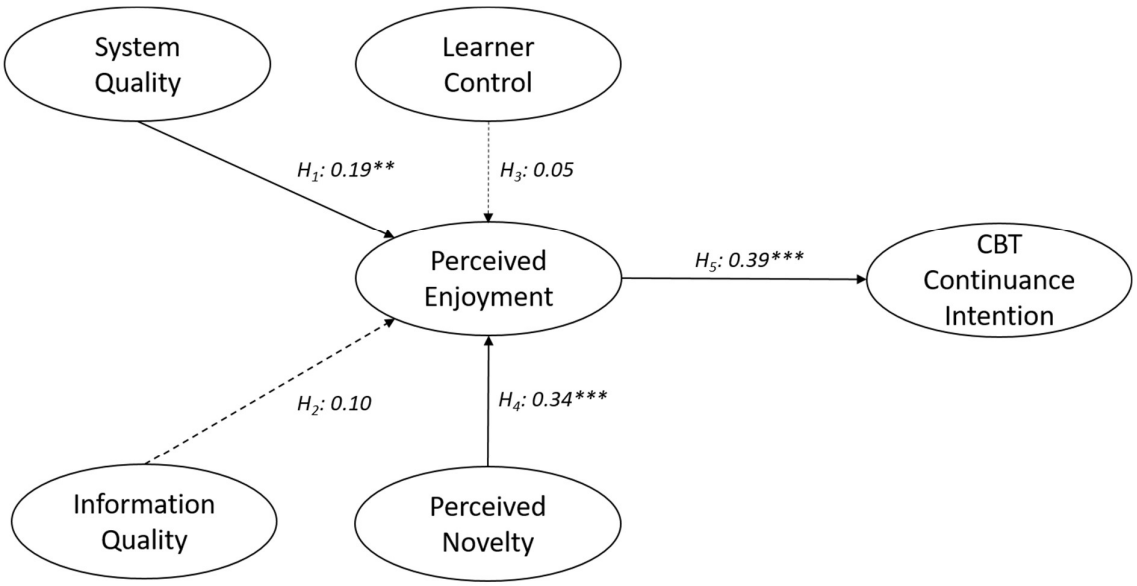
Table 5.9 Results of the SEM analysis for the long tenure group

(n=351)

Hypothesis	Relationship	Standardised coefficient	t-value	p-value
H_1	System quality → Perceived enjoyment	.19	2.78**	.01
H_2	Information quality → Perceived enjoyment	.10	1.49	.14
H_3	Learner control → Perceived enjoyment	.05	.65	.51
H_4	Perceived novelty → Perceived enjoyment	.34	4.18***	.00
H_5	Perceived enjoyment → Continuance intention	.39	5.21***	.00

Note: χ^2 (301)=452.18 (p=.000); CFI=0.96; TLI=0.95; RMSEA=0.04; GFI=0.91 NFI=0.88; * p<0.05, ** p<0.01, *** p<0.001

Figure 5.2 Results of the direct paths for the structural model (long tenure group)



H_6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * p<0.05, ** p<0.01, *** p<0.001

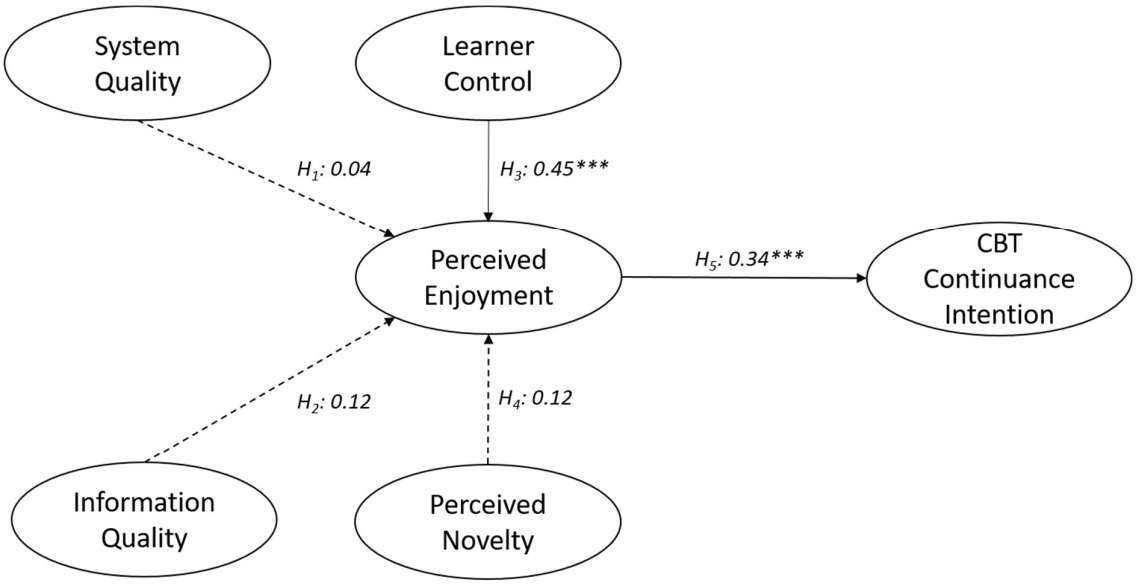
Table 5.10 Results of the SEM analysis for the short tenure group

(n=124)

Hypothesis	Relationship	Standardised coefficient	t-value	p-value
H_1	System quality → Perceived enjoyment	.04	0.43	.67
H_2	Information quality → Perceived enjoyment	.12	1.03	.30
H_3	Learner control → Perceived enjoyment	.45	3.97***	.00
H_4	Perceived novelty → Perceived enjoyment	.12	1.11	.27
H_5	Perceived enjoyment → Continuance intention	.34	3.30***	.00

Note: χ^2 (301)=436.16 (p=.000); CFI=0.93; TLI=0.91; RMSEA=0.06; GFI=0.81; NFI=0.80; * p<0.05, ** p<0.01, *** p<0.001

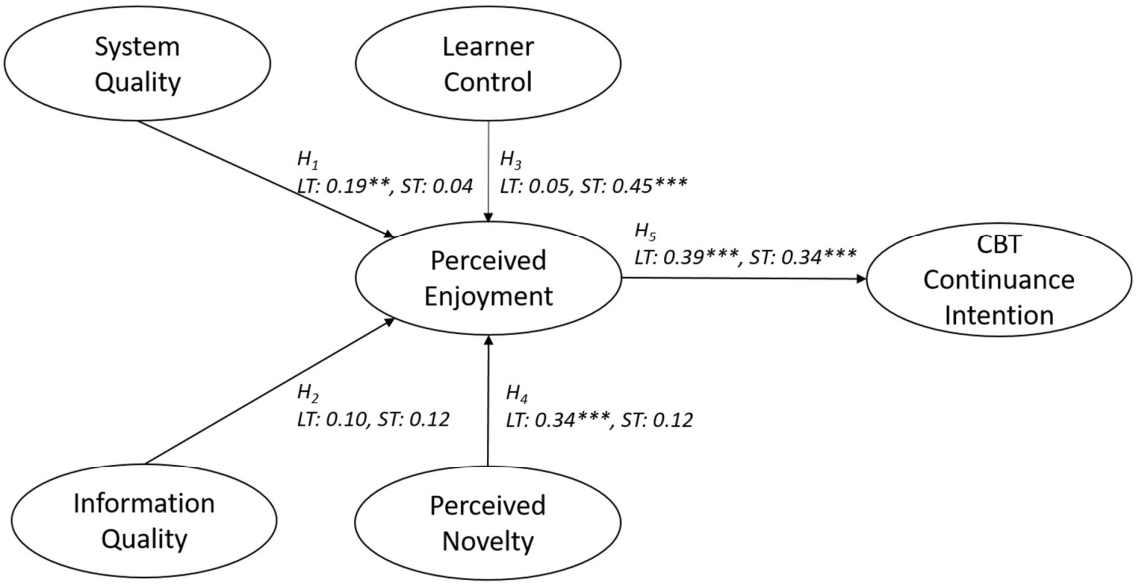
Figure 5.3 Results of the direct paths for the structural model (short tenure group)



H6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * p<0.05, ** p<0.01, *** p<0.001

Figure 5.4 Results of the direct paths for the structural model (long tenure and short tenure)



H6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * $p<0.05$, ** $p<0.01$, *** $p<0.001$, LT = Long tenure group, ST = Short tenure group

5.4.3.3 Structural invariance for tenure

A partial metric invariance model and the full path invariance model were generated for tenure in order to test structural invariance. In the latter, all causal paths were made invariant for all groups. The fit indices for both models were deemed satisfactory. A chi-square difference test was then conducted to ascertain the equality of the path coefficients. Table 5.11 compares the chi-square difference for the partial metric invariance model and the full path invariance model and reveals that full metric invariance was not supported ($\Delta\chi 2$ (df)>$\chi 2.01$ (5)=17.98).

Table 5.11 Structural invariances for the long tenure and short tenure groups

Models	$\chi 2$	df	$\Delta\chi 2$/df	CFI	TLI	RMSEA
Partial metric invariance	905.57	619	-	0.95	0.94	0.03
Full path invariance	923.55	624	17.98/5	0.94	0.94	0.03

Note: long tenure (n=351), short tenure (n=124)

[a] Chi-square test of difference: $\Delta\chi^2$ (df)>$\chi^2_{.05}$ (21)=11.07; hence, full metric invariance is not supported.

5.4.3.4 Invariance test for the paths for tenure

Table 5.12 presents the results of invariance testing for the paths between the long tenure and short tenure groups. Paths were examined individually for the paired groups and across the three groups. Cross-group invariance tests revealed significant differences between the long tenure and short tenure groups. Specifically, the path coefficient from system quality to perceived enjoyment was significant, with the value being significantly greater for the long tenure group. For learner control to perceived enjoyment, the value was significantly greater for the short tenure group, and for perceived novelty to perceived enjoyment, the value was greater for the long tenure group.

Table 5.12 Results of invariance testing for the long tenure and short tenure groups

Hypothesis	Relationship	Long tenure and Short tenure groups	
		χ^2/df	$\Delta\ \chi$2/df
	Free model	881.2/600	-
H_1	System quality → Perceived enjoyment	884.3/601	3.1/1*
H_2	Information quality → Perceived enjoyment	881.5/601	0.3/1
H_3	Learner control → Perceived enjoyment	892.9/601	11.7/1***
H_4	Perceived novelty → Perceived enjoyment	885.8/601	4.6/1**
H_5	Perceived enjoyment → Continuance intention	881.5/601	0.3/1

Note: For the source of significant differences:-
* ($\Delta\ \chi^2$ /df >$\Delta\ \chi^2$ 0.1 (1)= 2.701)
** ($\Delta\ \chi^2$ /df >$\Delta\ \chi^2$ 0.05 (1)= 3.842)
*** ($\Delta\ \chi^2$ /df>$\Delta\ \chi^2$ 0.01 (1)= 6.635)

5.4.3.5 Measurement invariance for job level

The invariance of the model across the line staff, supervisory, and management groups was tested in order to examine the moderating effect of job level in the hotel CBT experience. Table 5.13 shows that full metric invariance was supported because in all three group data sets, no significant chi-square differences existed between the free model and the full metric invariance model for the line staff and supervisory groups, line staff and management groups, and supervisory and management groups ($\Delta\chi^2$ (df)<$\chi^2_{.01}$ (19)=22.83; $\Delta\chi^2$ (df)<$\chi^2_{.01}$ (19)=21.72; $\Delta\chi^2$ (df)<$\chi^2_{.01}$ (19)=17.77).

Table 5.13 Measurement invariances for line staff, supervisory, and management groups

Models	Line staff and supervisory groups			Line staff and management groups			Supervisory and management groups		
	$\chi 2/df$	$\Delta \chi 2/df$	CFI (RMSEA)	$\chi 2/df$	$\Delta \chi 2/df$	CFI (RMSEA)	$\chi 2/df$	$\Delta \chi 2/df$	CFI (RMSEA)
Free	747.11/592	-	.94(.03)	750.28/592	-	.94(.03)	748.71/592	-	.94(.03)
Full metric invariance of CFA	769.94/611	22.83/19[a]	.94(.03)	772.00/611	21.72/19[b]	.94(.03)	766.48/611	17.77/19[c]	.94(.03)

Note: line staff (n=247), supervisory (n=114), management (n=112)
[a]Chi-square test of difference: $\Delta\chi^2$ (df)$<\chi^2_{.01}$ (19)=36.19; hence, full metric invariance is supported.
[b]Chi-square test of difference: $\Delta\chi^2$ (df)$<\chi^2_{.01}$ (19)=36.19; hence, full metric invariance is supported.
[c]Chi-square test of difference: $\Delta\chi^2$ (df)$<\chi^2_{.01}$ (19)=36.19; hence, full metric invariance is supported.

5.4.3.6 SEM results of the line staff, supervisory, and management groups

Separate SEM analyses were conducted for each group. Table 5.14, Table 5.15, and Table 5.16 present the moderating effect of job level on the relationship between the study variables. All parameter estimates were viable and statistically significant for both groups. Figure 5.5, Figure 5.6, and Figure 5.7 illustrate that 3/5, 3/5, and 3/5 paths are significant for line staff, supervisory, and management staff respectively. Figure 5.8 compares the groups. The common significant relationship is perceived enjoyment to continuance intention.

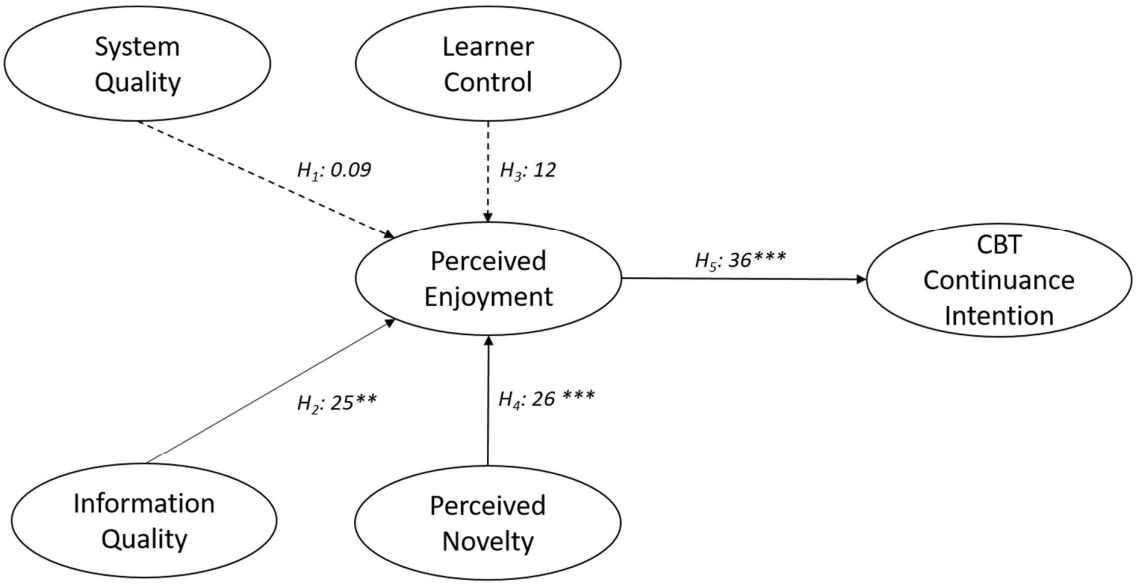
Table 5.14 Results of the SEM analysis for the line staff group

(n=247)

Hypothesis	Relationship	Standardised coefficient	t-value	p-value
H_1	System quality → Perceived enjoyment	.09	1.14	.25
H_2	Information quality → Perceived enjoyment	.25	2.59**	.01
H_3	Learner control → Perceived enjoyment	.12	1.41	.16
H_4	Perceived novelty → Perceived enjoyment	.26	3.19***	.00
H_5	Perceived enjoyment → Continuance intention	.36	4.44***	.00

Note: χ^2 (300)=391.01 (p=.000); CFI=0.97; TLI=0.96; RMSEA=0.03; GFI=0.90; NFI=0.88; * p<0.05, ** p<0.01, *** p<0.001

Figure 5.5 Results of the direct paths for the structural model (line staff group)



H_6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * p<0.05, ** p<0.01, *** p<0.001

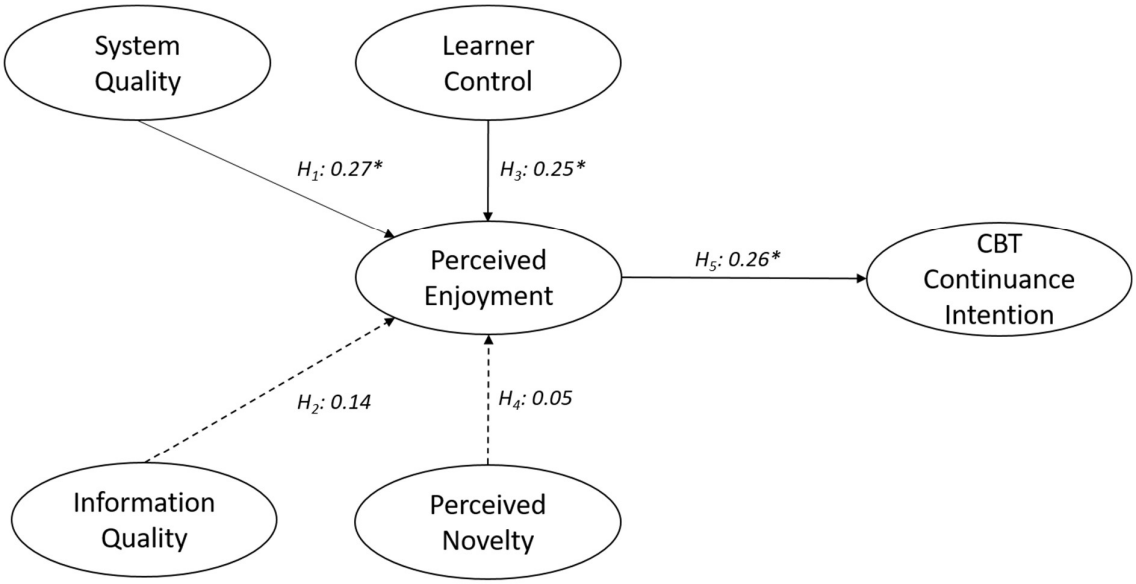
Table 5.15 Results of the SEM analysis for the supervisory group

(n=114)

Hypothesis	Relationship	Standardised coefficient	t-value	p-value
H_1	System quality → Perceived enjoyment	.27	2.15*	.03
H_2	Information quality → Perceived enjoyment	.14	1.39	.16
H_3	Learner control → Perceived enjoyment	.25	2.24*	.03
H_4	Perceived novelty → Perceived enjoyment	.05	.40	.69
H_5	Perceived enjoyment → Continuance intention	.26	2.29*	.02

Note: χ^2 (300)=385.30 (p=.000); CFI=0.94; TLI=0.92; RMSEA=0.05; GFI=0.77; NFI=0.81; * p<0.05, ** p<0.01, *** p<0.001

Figure 5.6 Results of the direct paths for the structural model (supervisory group)



H_6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * p<0.05, ** p<0.01, *** p<0.001

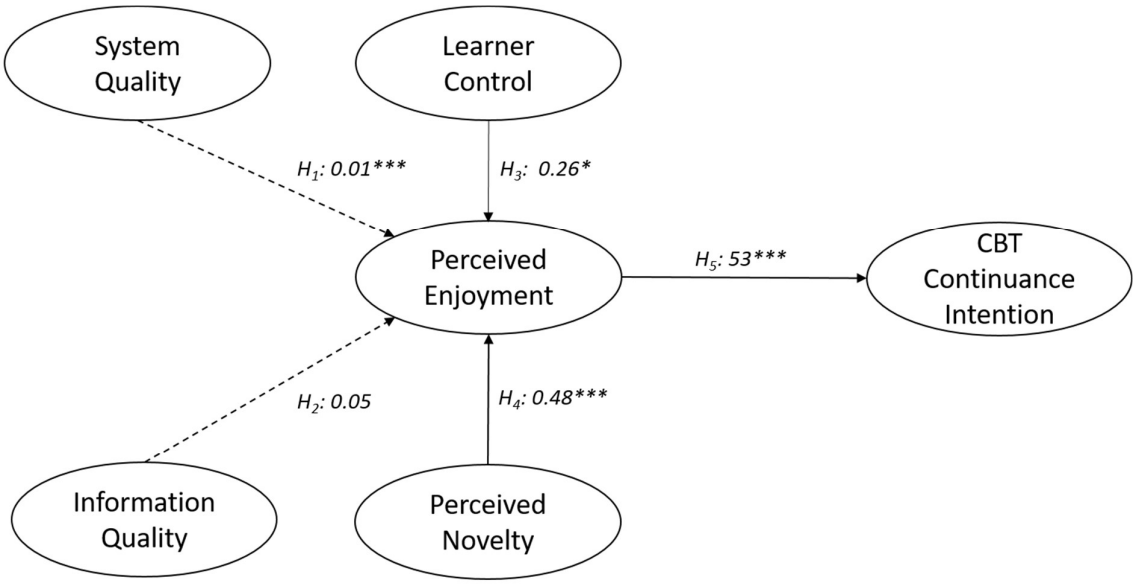
Table 5.16 Results of the SEM analysis for the management group

(n=112)

Hypothesis	Relationship	Standardised coefficient	t-value	p-value
H_1	System quality → Perceived enjoyment	.01	0.06	.95
H_2	Information quality → Perceived enjoyment	.05	0.71	.48
H_3	Learner control → Perceived enjoyment	.26	2.02*	.04
H_4	Perceived novelty → Perceived enjoyment	.48	3.33***	.00
H_5	Perceived enjoyment → Continuance intention	.53	3.81***	.00

Note: χ^2 (300)=399.68 (p=.000); CFI=0.91; TLI=0.90; RMSEA=0.05; GFI=0.79; NFI=0.74; * p<0.05, ** p<0.01, *** p<0.001

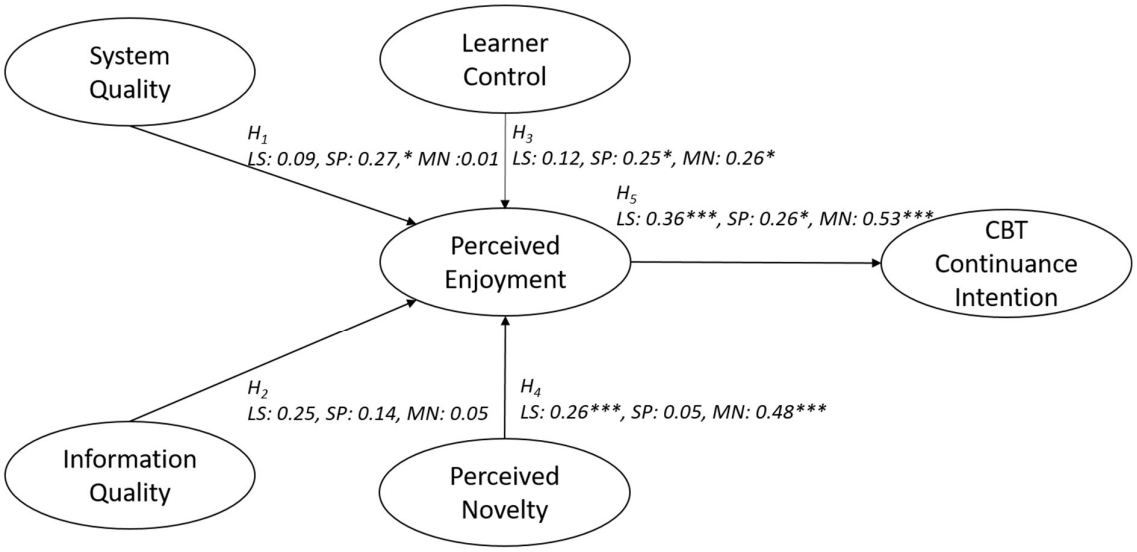
Figure 5.7 Results of the direct paths for the structural model (management group)



H6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * p<0.05, ** p<0.01, *** p<0.001

Figure 5.8 Results of the direct paths for the structural model (line staff, supervisory, and management)



H6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * $p<0.05$, ** $p<0.01$, *** $p<0.001$, LS = Line staff group, SP = Supervisory group, MN = Management group

5.4.3.7 Structural invariance for job level

A partial metric invariance model and the full path invariance model were generated for job level in order to test structural invariance. In the latter, all causal paths were made invariant for all groups. The fit indices for the three models were deemed satisfactory. A chi-square difference test was then conducted to ascertain the equality of the path coefficients. Table 5.17 compares the chi-square difference for the partial metric invariance model and the full path invariance model and reveals that full metric invariance was not supported for the line staff and supervisory groups ($\Delta\chi^2$ (df)$>\chi^2_{.01}$ (5)=11.09) or the supervisory and management groups ($\Delta\chi^2$ (df)$>\chi^2_{.01}$ (5)=8.86). However, it was supported for the line staff and management groups ($\Delta\chi^2$ (df)$<\chi^2_{.01}$ (5)=12.79).

Table 5.17 Structural invariances for the line staff, supervisory, and management groups

	Models	χ2	df	Δ χ2/df	CFI	TLI	RMSEA
Line staff and supervisory groups	Full metric invariance	776.99	600	-	0.96	0.95	0.03
	Full path invariance	788.08	605	11.09/5[a]	0.96	0.95	0.03
Line staff and management groups	Full metric invariance	791.46	600	-	0.95	0.95	0.03
	Full path invariance	800.32	605	8.86/5[b]	0.95	0.94	0.03
Supervisory and management groups	Full metric invariance	784.99	600	-	0.93	0.91	0.04
	Full path invariance	797.78	605	12.79/5[c]	0.92	0.91	0.04

Note: line staff (n=247), supervisory (n=114), management (n=112)
[a] Chi-square test of difference: $\Delta\chi^2$ (df)>$\chi^2_{.05}$ (5)=11.07; hence, full metric invariance is not supported.
[b] Chi-square test of difference: $\Delta\chi^2$ (df)<$\chi^2_{.05}$ (5)=11.07; hence, full metric invariance is supported.
[c] Chi-square test of difference: $\Delta\chi^2$ (df)>$\chi^2_{.05}$ (5)=11.07; hence, full metric invariance is not supported.

5.4.3.8 Invariance test for the paths for job level

Table 5.18 presents the results of invariance testing for the paths between line staff and supervisory groups and between supervisory and management groups. Paths were examined individually for the paired groups and across the three groups. Analysis of the line staff and supervisory groups revealed a significant difference in the path coefficient from information quality to perceived enjoyment, with the value being significantly greater for the line staff. A closer look at the supervisory and management groups also showed a significant path leading from perceived novelty to perceived enjoyment, with the management group recording a significantly higher value.

Table 5.18 Results of invariance testing for the line staff, supervisory, and management groups

Hypothesis	Relationship	Line staff and supervisory		Supervisory and management	
		χ^2/df	Δ χ2/df	χ^2/df	Δ χ2/df
	Free model	776.99/600	-	784.99/600	-
H_1	System quality → Perceived enjoyment	777.7/601	0.71/1	787.0/601	2.01/1
H_2	Information quality → Perceived enjoyment	783.6/601	6.61/1**	787.4/601	2.41/1
H_3	Learner control → Perceived enjoyment	777.6/601	0.51/1	785.6/601	0.61/1
H_4	Perceived novelty → Perceived enjoyment	777.7/601	0.71/1	788.0/601	3.01/1*
H_5	Perceived enjoyment → Continuance intention	777.6/601	0.61/1	787.0/601	2.01/1

Note: line staff (n=247), supervisory (n=114), management (n=112). For the source of significant differences:-
* ($\Delta \chi^2$ /df >$\Delta \chi^2$ 0.1 (1)= 2.701)
** ($\Delta \chi^2$ /df >$\Delta \chi^2$ 0.05 (1)= 3.842)
*** ($\Delta \chi^2$ /df>$\Delta \chi^2$ 0.01 (1)= 6.635)

5.4.3.9 Measurement invariance for department

The invariance of the model across the operations and support groups which comprise department, was tested in order to examine the moderating effects of employee department on the hotel CBT experience. Table 5.19 shows that full metric invariance was supported. Significant chi-square differences were recorded between the free model and the full metric invariance model for the operations and support groups ($\Delta\chi^2$ (df)<$\chi^2_{.01}$ (21)=32.67; $\Delta\chi^2$ (df)<$\chi^2_{.01}$ (21)=38.93). To test full metric invariance, factor loadings must be equal across groups. This was achieved and signifies that a one-unit increase in the latent constructs (e.g. system quality) has the same implication across the groups being compared, in this case, the operations and support groups (Van De Schoot et al., 2015).

Table 5.19 Measurement invariances for the operations and support groups

Models	Operations and Support groups		
	χ2/df	Δ χ2/df	CFI (RMSEA)
Free	843.57/592	-	.95(.03)
Full metric invariance of CFA	872.05/613	32.67/21[a]	.95(.03)

Note: operations (n=276), support (n=199)
[a] Chi-square test of difference: $\Delta\chi^2$ (df)>$\chi^2_{.01}$ (21)=38.93; hence, full metric invariance is supported.

5.4.3.10 Structural invariance for department

A partial metric invariance model and the full path invariance model were generated for department in order to test structural invariance. In the latter, all causal paths were made invariant for all groups. The fit indices for both models were deemed satisfactory. A chi-square difference test was then conducted to ascertain the equality of the path coefficients. Table 5.20 compares the chi-square difference for the full metric invariance model and the full path invariance model and reveals that full metric invariance was supported ($\Delta\chi^2$ (df)>$\chi^2_{.01}$ (5)=1.73).

Table 5.20 Structural invariances for the operations and support groups

Models	χ2	df	Δ χ2/df	CFI	TLI	RMSEA
Full metric invariance	891.73	600	-	0.95	0.94	0.03
Full path invariance	893.46	605	1.73/5	0.95	0.94	0.03

Note: operations (n=276), support (n=199)
[a]Chi-square test of difference: $\Delta\chi^2$ (df)<$\chi^2_{.01}$ (5)=15.08, thus the full structural invariance is supported, and paths across the two groups are not different.

5.4.3.11 SEM results of the operations and support groups

Separate SEM analyses were conducted for each group. Table 5.21 and Table 5.22 present the moderating effect of employee department on the relationship between the study variables. All parameter estimates were viable and statistically significant for both groups. Figure 5.9 and Figure 5.10 illustrate that 4/5 paths are significant for the operations group and 3/5 paths are significant for the support group. Figure 5.11 illustrates the comparison between the groups. The common significant relationships are learner control to perceived enjoyment, and perceived novelty to perceived enjoyment, with perceived enjoyment to continuance intention exhibiting the strongest relationship.

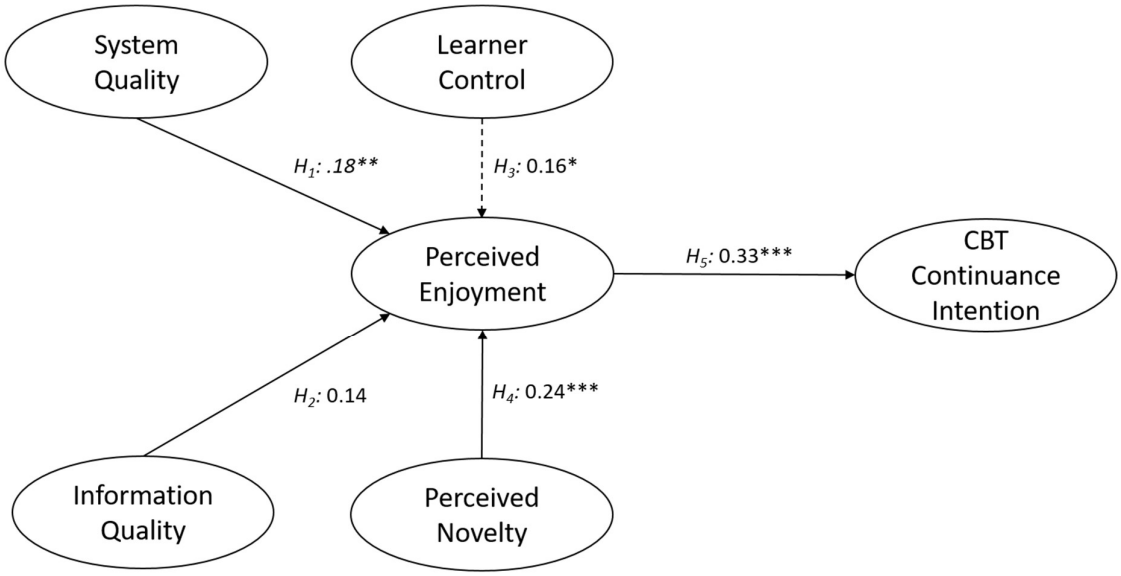
Table 5.21 Results of the SEM analysis for the operations group

(n=276)

Hypothesis	Relationship	Standardised coefficient	t-value	p-value
H_1	System quality → Perceived enjoyment	.18	2.44**	.01
H_2	Information quality → Perceived enjoyment	.14	1.80	.07
H_3	Learner control → Perceived enjoyment	.16	2.30*	.02
H_4	Perceived novelty → Perceived enjoyment	.24	2.99***	.00
H_5	Perceived enjoyment → Continuance intention	.33	4.07***	.00

Note: χ^2 (300)=439.11 (p=.000); CFI=0.95; TLI=0.94; RMSEA=0.04; GFI=0.90; NFI=0.87; * p<0.05, ** p<0.01, *** p<0.001

Figure 5.9 Results of the direct paths for the structural model (operations group)



H_6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * p<0.05, ** p<0.01, *** p<0.001

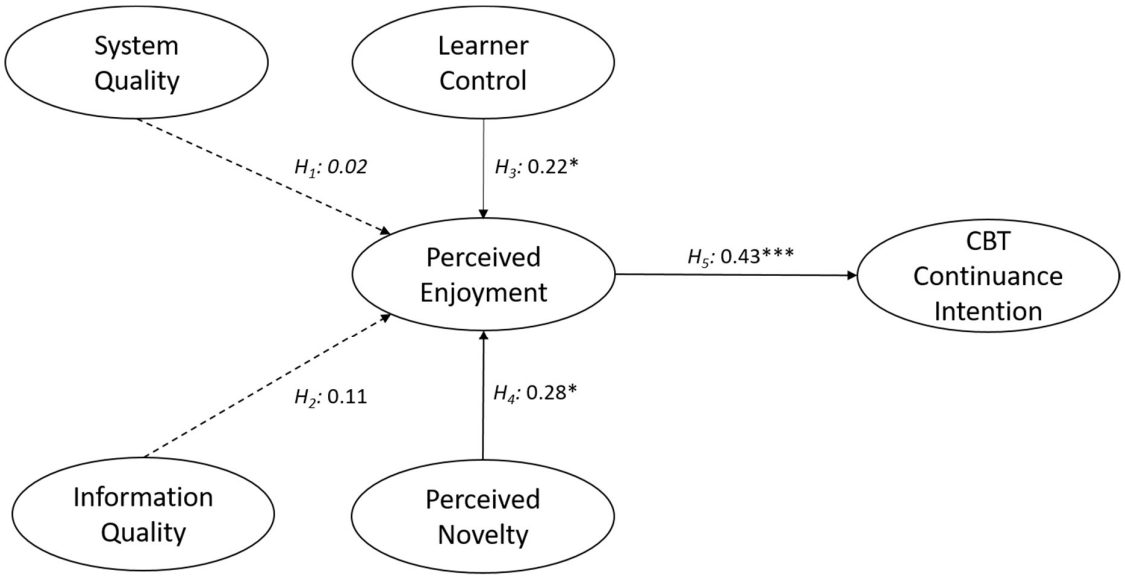
Table 5.22 Results of the SEM analysis for the support group

(n=199)

Hypothesis	Relationship	Standardised coefficient	t-value	p-value
H_1	System quality → Perceived enjoyment	.02	0.17	.86
H_2	Information quality → Perceived enjoyment	.11	1.10	.27
H_3	Learner control → Perceived enjoyment	.22	2.11*	.03
H_4	Perceived novelty → Perceived enjoyment	.28	2.41*	.02
H_5	Perceived enjoyment → Continuance intention	.43	4.39***	.00

Note: χ^2 (300)=452.51 (p=.000); CFI=0.94; TLI=0.92; RMSEA=0.05; GFI=0.86; NFI=0.83; * p<0.05, ** p<0.01, *** p<0.001

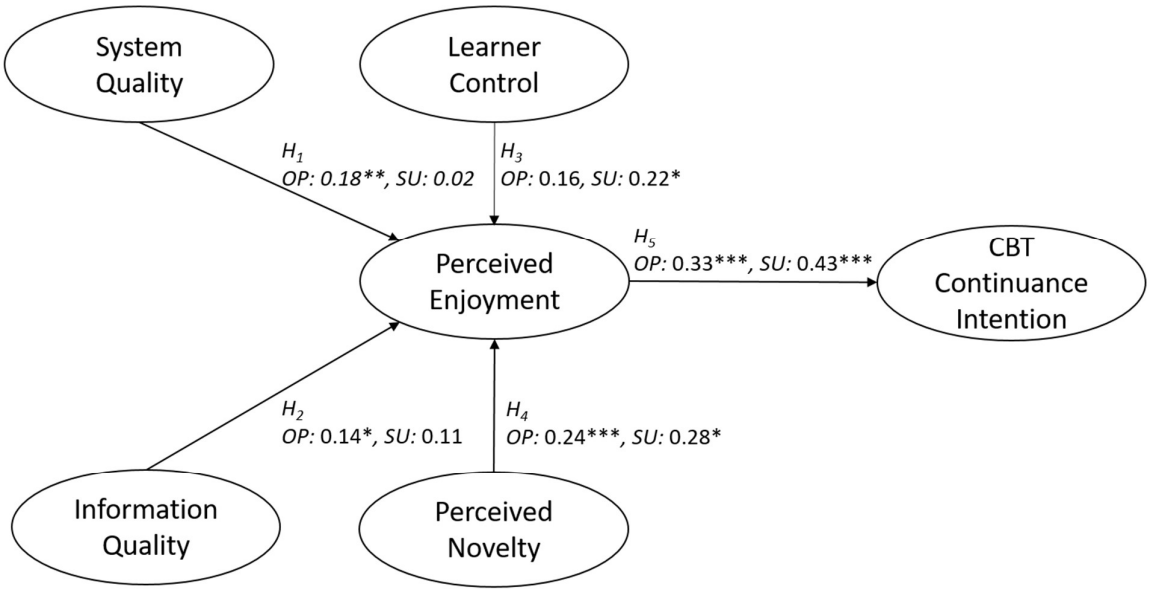
Figure 5.10 Results of the direct paths for the structural model (support group)



H_6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * p<0.05, ** p<0.01, *** p<0.001

Figure 5.11 Results of the direct paths for the structural model (operations and support)



H6: Employees' department, tenure and job level will have a moderating effect on all paths

Note: * $p<0.05$, ** $p<0.01$, *** $p<0.001$, OP = Operations group, SU = Support group

Table 5.23 sums up the results of the moderation analysis and shows that tenure and job level are partial moderators of the relationships between perceived enjoyment and its antecedents.

Table 5.23 Summary of moderation analysis

Variable	Relationship	Greater
Tenure (p.m.)	System quality → Perceived enjoyment	Long tenure > Short tenure
	Learner control → Perceived enjoyment	Short tenure> Long tenure
	Perceived novelty → Perceived enjoyment	Short tenure> Long tenure
Job level (p.m.)	Information quality → Perceived enjoyment	Line staff > Supervisory
	Perceived novelty → Perceived enjoyment	Supervisor > Management

Note: p.m. signifies partial moderation

CHAPTER 6: DISCUSSION

This chapter situates the findings of the study within the literature and is organised according to the objectives outlined in Chapter 1. It entails a discussion of how the results apply to the context of hotel CBT, align with social cognitive theory, and relate to previous studies.

6.1 Objective one: Examine the effect of system quality on perceived enjoyment

Perceptions play a crucial role in e-learning (Büyüközkan, Ruan, & Feyzioğlu, 2007) and are key to an information system's success (Aljukhadar & Senecal, 2015). Considering that user perceptions of website quality are based on features that meet their needs (Li, Peng, Jiang, & Law, 2017), some scholars opine that the best way to gauge the quality of CBT systems is by soliciting employee perceptions (Agrawal, Agarwal, & Agrawal, 2017). It can be inferred from this assertion that interactions with technology are capable of inciting hedonic outcomes such as enjoyment (Nah, Eschenbrenner, & DeWester, 2011). Hypothesis one therefore proposes that system quality will have a direct positive influence on perceived enjoyment. This hypothesis was supported (β=0.10, t=2.07, p=0.05). Various studies confirm that the functionality embodied in system quality is the most influential factor in determining the success of hotel websites (Li et al., 2017), taking precedence over other attributes (Chang, Chen, & Lan, 2012). The results imply that such systems enjoy a favourable reception from users (Gorla, Somers, & Wong, 2010) and this extends to hotel websites used for computer-based training. McKnight, Lankton, Nicolaou, and Price (2017) assert that if all aspects of system quality are considered adequate, employees are more than likely to perceive the process of learning as efficient and pleasant.

Hotel employees are known to have busy shifts with very few breaks (Lee, Back, & Chan, 2015; Zhao, Mattila, & Ngan, 2014). When they get a chance to access the system, they are most times already exhausted. The system should therefore be responsive and easy to

manoeuvre; otherwise, frustration will quickly set in. Also, hotel workers are often drawn from socially disadvantaged groups who may have lower education levels (Mansour & Tremblay, 2016). Hence, there is a need for hotels to ensure that their platform interface is intuitive, lest it prevents employees from accessing crucial information, such as those relating to chemical safety in the housekeeping department. For employees in sales and marketing, and, finance and accounting, computers are an essential tool in performing their jobs and many of them are familiar with various information systems. Hence, they are likely to become disinterested with basic page setups such as the notorious "click next" format (Taylor, 2017). This is where the benefit of learner control can have a favourable impact on system quality by allowing employees to determine the interface setup that suits their level of competence (Abraham & Chengalur-Smith, 2019).

Self-efficacy is a central tenet of social cognitive theory which is impacted by system quality (Yan et al., 2017). Efficacy appraisal is a cognitive process wherein individuals leverage various sources to assess their self-efficacy. Performance accomplishments are dependable sources as they demonstrate what a learner is capable of accomplishing (Bandura, 1977). Persons who feel competent in their learning interactions feel that success is imminent, whereas feelings of ineptitude lead individuals to feel incapable (Usher & Schunk, 2017). An employee's very first interaction with a hotel's CBT system will determine his or her perceived self-efficacy as it relates to this mode of training. Because system quality dictates the ease of the interaction between the learner and the platform, it is a key determinant of perceived self-efficacy. If the features of a system do not pose a challenge to the skills that a person possesses, then perceived self-efficacy will be high. A highly desired accomplishment would be success in navigating beyond the landing page and quickly locating a particular module. With that said, if the system is responsive to the learner's request (environmental), this increases their self-efficacy (personal), and they eagerly and consistently pursue CBT modules (behavioural).

The results of hypothesis testing confirm that high-performing systems are stylish, responsive, and easy to use (Ashfaq, Yun, Yu, & Loureiro, 2020); attributes which are highly important to employees (Robbins & Stylianou, 2003). Furthermore, they are a prerequisite for positive emotions (Lin, 2008) and lead to positive attitudes (Merikivi et al., 2016), a heightened propensity to experience enjoyment (Baek & Touati, 2017), and an increase in the desire to participate in online experiences (Jiménez-Barreto & Campo-Martínez, 2018). Various scholars confirm that pleasurable interactions positively influence users' attitudes and behaviours and they provide an intrinsic motivation for system use (Tsao, Hsieh, & Lin, 2016). Several researchers also affirm that high quality system features are indispensable in attracting users as they support continued system usage and lead to higher value creation (Peters et al., 2016). Further, Aren, Güzel, Kabadayı, and Alpkan (2013) assert that if users experience difficulties while using the systems, they will be perceived as less enjoyable. It is therefore evident that the design of such systems evokes positive tension that motivates employees to persist in their e-learning endeavours (Tseng & Tsai, 2010).

The results of the study indicate that system designers have long transitioned from simply converting printed material to an interactive medium with the expectation that it will be effective in e-learning (see Hamid, 2001). It is now established that CBT systems are created from the perspective that they should be designed for online learning (Svensson, 2004). Research shows that by conducting orientation exercises aimed at equipping users with knowledge of how the CBT platform works, organisations can increase positive perceptions regarding system quality (Pappas, 2019). Bowman (2012) agrees that by preparing users to interact in a computer-mediated environment that differs significantly from the traditional learning format, organisations ensure that such systems are highly rated (Bowman, 2012). The current study also confirms that system quality has a more pronounced effect on perceived

enjoyment than information quality (Kim et al., 2013). This finding supports Al-Debei's (2014) study, which found that system quality is a better predictor of enjoyment.

6.2 Objective two: Assess the effect of information quality on perceived enjoyment

High quality information is indispensable to system success (Efiloğlu Kurt, 2019). Alkhattabi et al. (2010) argue that content is the most critical factor in e-learning. In an environment where a large amount of information is available, users place a high value on the attributes of high quality information (Chen & Chang, 2018). This optimal presentation of information is known to arouse a positive affective state (Martínez-López, Esteban-Millat, Argila, & Rejón-Guardia, 2015). Accordingly, hypothesis two postulates that information quality will have a direct positive influence on perceived enjoyment. This hypothesis was accepted (β=0.12, t=2.06, p=0.05). Thus, the accuracy, content, clarity, relevance, and sufficiency of information provided by such systems influence user perceptions (Aparicio, Bacao, & Oliveira, 2017). The results suggest that CBT systems are not perceived to suffer from the most commonplace informational deficiencies (Gorla et al., 2010).

Hotel workers tend to suffer from burnout, which results in decreased performance (Liang, 2012). It is thus imperative that when they find the time for online training, they engage with information that is not only well-presented, but also useful to all aspects of their job, including customer interactions, operational procedures, and products and services (Yang & Wan, 2004). Generally, hotels suffer loses each year due to discrepancies in knowledge transfer (Shamim, Cang, & Yu, 2017). In this regard, CBT systems can serve as a convergence point for important information. For the food and beverage department this can take the form of a quiz on the new menu, and for housekeeping there can be an interactive activity to train employees on the new room setup. Employees in many properties are entitled to just one day off each week (Kucukusta, Denizci Guillet, & Lau, 2014). Hence, modules should be written

in easy to understand language to enable employees to quickly comprehend the concepts being imparted (Armstrong & Sadler-Smith, 2008). Additionally, the application of learner control to the information quality dimension can enable employees to curate their own knowledge and have greater feelings of control. These strategies can positively influence hotel employees' perceptions toward CBT (Navimipour & Zareie, 2015).

According to social cognitive theory, people work toward a desired future by adopting goals and evaluating their progress toward them. Satisfaction results when individuals achieve or surpass their goals (Bandura, 1988). Research also shows that learners are more motivated to pursue goals they consider to be difficult yet achievable, than those they perceive as too difficult or easy (Schunk & DiBenedetto, 2020). Information quality plays an important role in influencing the goals set by learners. The use of bite-sized modules is likely to improve employee perceptions that modules can be completed quickly. There can be a single module on telephone etiquette or this can be divided into two or three smaller modules. Separate modules on answering the call, handling the call, and ending the call can be undertaken during different sittings. Having 50 modules (bite-sized) instead of 20 (regular-sized) may seem daunting, but what is more intimidating is having to interrupt one's train of thought because time is insufficient. If an employee is able to complete one module per sitting they are more likely to dedicate short, frequent amounts of time, instead of awaiting a large chuck of time which rarely comes. It is therefore crucial for CBT information to be set up to aid employees as they attempt to set and accomplish realistic goals.

When users obtain information from websites, they evaluate its quality and this informs their attitudes and actions (Ghasemaghaei & Hassanein, 2019). Similarly, how content is presented determines how enjoyable and pleasant users will rate the CBT experience (Al-Fraihat, Joy, Masa'deh, & Sinclair, 2020). Chen (2017) states that feelings of enjoyment are realised when users perceive a system's information provision to be impactful. Prior empirical

research in the e-learning context affirms that information quality favourably influences learners' beliefs regarding a system (Almaiah & Alismaiel, 2019) and exerts a significant positive effect on perceived enjoyment (Cidral et al., 2018). Similarly, such feelings reinforce learners' perceptions of a system's importance, heightening their desire to use a system (Al-Samarraie et al., 2018) and increasing their willingness to return to the site several times (Shim & Jo, 2020).

Poor information quality is a barrier to usage (Song, Migliaccio, Wang, & Lu, 2017) and is often the cause of information system failure (Al-Fraihat et al., 2020). Inappropriate content may lead to information overload and negatively impact user interaction with a system (Christudas, Kirubakaran, & Thangaiah, 2018). This should be averted as the effectiveness of organisational actions and the decisions from which they result depends on information quality (Alsabawy, Cater-Steel, & Soar, 2016). Information should therefore be easy to grasp (Shahzad, Hassan, Aremu, Hussain, & Lodhi, 2020). In technology-integrated learning environments, content should be designed in a manner that induces enjoyment in users (Joo et al., 2017). It is crucial to design features that bolster users' cognitive processes (Peters et al., 2016). This can be achieved by diversifying content in order to combat the propensity for learning to be viewed as monotonous and repetitive (Slesar, 2020). Alkhattabi et al. (2010) convey that the optimal experience is one wherein content does not distract learners, but increases their interest in learning. Ramayah et al. (2010) reason that if the content provided by a system is inadequate, inaccurate, or incomprehensible, users will not have a favourable view as it relates to perceived enjoyment, and this will result in reduced usage intention. Other researchers concur that users are more likely to experience enjoyment when their information seeking endeavours are devoid of challenges (Bechwati & Xia, 2003). Therefore, it is important for CBT systems to be scrutinised in order to identify and remedy constraints that are likely to affect employees' use.

6.3 Objective three: Examine the impact of learner control on perceived enjoyment

Rust and Kannan (2003) opine that websites can influence positive user affect through increased control. It can thus be asserted that a learner's emotional state (i.e. perceived enjoyment) follows positive perceptions of learner control. According to Dabholkar and Bagozzi (2002), both constructs are integral components of situations wherein users interact with technology on a one-to-one basis. Pekrun and Perry (2014) reinforce the connection between the two concepts by stating that enjoyment "is an emotional state that results when an activity is positively valued and sufficiently controllable by the learner". Consequently, hypothesis three posits that learner control will have a direct positive influence on perceived enjoyment. The results show that a positive path exists ($\beta=0.17$, $t=3.11$, $p=0.001$), implying that users can adapt learning materials to suit their own cognitive needs (Tabbers & de Koeijer, 2010). Mayer (2020) also submits that high perceived learner control leads to enjoyment in e-learning.

For many roles in a hotel, on-the-job training is the favoured mode of knowledge transfer (Frash Jr, Antun, Kline, & Almanza, 2010). If given the freedom, employees would elect to forego e-learning modules they consider unnecessary. Hence, for each module, a concise version can be made available to suit the needs of specific workers. Also, hotel work is a continuum (Brien, Thomas, & Brown, 2017), ranging from highly practical tasks like beverage making to conceptual ones like creating an annual departmental budget. Catering to the diverse learning needs of employees through learner control is beneficial to their morale (Urick, 2017). Consequently, each module should include a variety of optional auditory, visual, and kinaesthetic activities to satisfy employees who choose to immerse themselves in the learning material. Jacobsen (2019) urges learning managers to conceptualise "continuance" from the viewpoint that employees can "drop-in" and take whichever modules they deem necessary instead of describing them as "drop outs" if they do not complete their modules. It

is crucial for CBT to be offered in such a way that employees feel they have control over when, what, and how much they learn rather than being coerced into compliance.

A central premise of social cognitive theory is that individuals strive for a sense of agency. This is the belief that one can exert a great degree of influence over their environment (Bandura, 1989). Agency is exercised through intentionality and forethought (Bandura, 2001b). Learner control enables user to act on these by enabling them to tailor the features of the system to suit their skills and abilities. If hotel employees are capable of deciding which components of a module are useful to their learning, this increases their perception of agency. Watching a compulsory video on salting the rim of a martini glass may not prove useful to even the most junior member of the bartending staff, as these skills are learnt on the job and techniques vary among individuals. Nevertheless, an optional infographic showing the evolution of bartending could be attractive for those wishing to impress guests with knowledge of the history of their profession. This sense of control is essential to enhanced perceptions of CBT enjoyment.

Educational psychologists acknowledge that while learner control elements vary, there are core controllable instructional factors that have been proven to consistently have a positive effect (Carter, 2009), by maximising positive emotions in learners (Niemiec, Sikorski, & Walberg, 1996). These factors serve as catalysts for positive perceptions and help learners to see CBT as an aspect of their job to be enjoyed (Kapp, Valtchanov, & Pastore, 2020). Accordingly, e-learning systems that provide interactive content control are more successful due to their propensity to engender deeper feelings of involvement concerning outcomes (Lange, 2018). Fang and Zhao (2010) add that enjoyment manifests when there is a connection between the characteristics of the user and the attributes of the technology. This means that if users are capable of manipulating CBT attributes, learning will become more appealing, resulting in an increase in enjoyment that will subsequently lead to improved learning outcomes (Corbalan, Kester, & Van Merriënboer, 2006). Moreover, when users feel they are in control,

they experience an increased sense of freedom and engage in discovery and exploration (Nah et al., 2011) by repeatedly and willingly investing their time and energy (Peters et al., 2016). This view is reiterated by Vorderer, Hartmann, and Klimmt (2003) who state that the higher the levels of learner control made available to users, the higher the probability of success.

Employees bring different levels of educational and work experience to their jobs (Grobelna, 2019) and to the CBT experience. It has been argued that learners make the best decisions for themselves when they have a profound awareness of their learning preferences and shoulder the greatest responsibility for their educational outcome (Cohen, Shimony, Nachmias, & Soffer, 2019). Hence, it is imperative for CBT in organisations to emphasise the potency of learner control, which is heavily dependent on users' perception of personalisation (Lange, 2018). The inclusion of learner control has given e-learning systems the ability to respond to the diverse needs of learners and to mitigate cognitive overload (Navimipour & Zareie, 2015). This is crucial as effective learning is most likely to occur when a minimal amount of time and effort is invested in order to acquire a competence (Chang, 2016). With this in mind, CBT platforms must be designed to accommodate the desire of employees to modify the pace of training, and empower them to forego or incorporate in-depth explanations of concepts (Landers & Reddock, 2017), as well as the sequence in which they appear (Clark & Mayer, 2016). This opportunity for learners to direct the learning process in accordance with their desire is an essential component for CBT success (Yilmaz, 2017).

6.4 Objective four: Assess the influence of perceived novelty on perceived enjoyment

Humans have an innate desire to seek novel stimuli (Morosan & DeFranco, 2016). Hence, novelty plays an important role in learning (van Kesteren, Ruiter, Fernández, & Henson, 2012) and information technology usage (Veugelers & Wang, 2019). Novelty induces physiological differences that evoke reactions from users (O'Brien & Toms, 2010). This strong

emotion is highly affective (Wells et al., 2010) and enjoyment is an example (Kool & Agrawal, 2016). Because perceptions of novelty differ based on individuals and the type of technology, researchers recommend contextual research (Mani & Chouk, 2017). Hypothesis four supposes that perceived novelty will have a direct positive influence on perceived enjoyment in hotel CBT. The analysis reveals that novelty has a positive significant influence on enjoyment (β=0.23, t=4.04, p=0.001). This suggests that novelty does not detract from the purpose for which a system exists and it also implies that users consider CBT to be distinct from their routine or usual experience (Mitas & Bastiaansen, 2018). Furthermore, the positive significant influence on enjoyment means that users perceive the systems to be simple (Kyriakou, 2016). Other researchers have confirmed that novelty is positively related to users' perceived enjoyment (Nguyen, 2015) and is an antecedent of behaviour (Skavronskaya, Moyle, & Scott, 2020).

Hotel work is characterised by competing tasks that must be completed simultaneously (Karatepe, 2008). This leaves employees with little energy for non-pressing tasks, especially those they consider to be uninteresting (Choi, Mohammad, & Kim, 2019). Employees may have mobile phones at their disposal while working to facilitate communication with their superiors (Ragsdale & Hoover, 2016). These phones may also be used to access social media and play games, and have been identified as a productivity damper (Chaudhry et al., 2016). Considering the entertaining nature of these diversions, employees are likely to postpone CBT. Consequently, such systems must match the level of enjoyment that games and social media offer by employing novel elements. Instead of using simple multiple choice quizzes to train front office staff on the correct check-in sequence, gaming elements and novel ideas such as simulation should be incorporated into the training. Employees readily recommend fun activities to their friends (Chen, Wen, & Wu, 2021). Hence, when they have a positive

perception of CBT, they are likely to encourage their colleagues to undertake such programmes, thereby increasing the expected enjoyment.

Social cognitive theory dictates that cognitions – a component of personal influences – enable processes that initiate and sustain motivational outcomes (Usher & Schunk, 2017). Cognition is one's ability to acquire, process, store, and retrieve information (Khera & Rangasamy, 2021). When one chances upon a novel stimulus a variety of brain reactions follow. Improvements in perception, motivation, and learning are the result of the effect of novelty on human cognition (Schomaker & Meeter, 2015). Novelty can therefore play a key role in aspects of CBT where high levels of cognition are required. Safety is an underappreciated yet vital training topic in hotels. As such, it is not sufficient for employees to simply pass the associated quiz. Retaining the information is crucial, as lapses in safety can have dire repercussions for life and property. It is not very often that a chef uses a fire extinguisher on the job. Novel and entertaining methods of knowledge transferral are required if employees are expected to spontaneously recall and apply what was learnt during CBT.

Novelty is an affective subjective belief that is essential to information systems research, meaning that reactions occur because individuals perceive stimuli as completely new or simply appearing in unfamiliar combinations (Wells et al., 2010). Because novelty has a positive effect on memory (van Kesteren et al., 2012), it heightens enjoyment. Leroux (2018) opines that even CBT systems that record average perceptions of novelty can be effective in inducing perceived enjoyment if other system attributes are considered to be at desirable levels. Similarly, Barto, Mirolli, and Baldassarre (2013) affirm that novelty arouses interest, motivates exploratory behaviour, and drives learning. Systems are also capable of sustaining the attention of users if novel content is aligned with their goals (O'Brien & Toms, 2010).

Because repeated stimuli are often catalysts for feelings of monotony (Poppenk, Köhler, & Moscovitch, 2010), novelty is a necessity if an experience requires ongoing interaction

between the stimulus and the user (Gallagher, 2012). Nevertheless, scholars caution that attempts to overhaul CBT systems through the inclusion of novel features may encounter the resistance customarily associated with such initiatives and which originates from individuals who take comfort in familiar approaches (Veugelers & Wang, 2019). This is because novelty and complexity are intertwined (Schmoch, Beckert, & Schaper-Rinkel, 2019). Challenges are positively perceived and considered pleasurable when they match an individual's skills and competencies (Merikivi et al., 2016). It is also worth noting that while novel experiences boost user experience in the short-term, they quickly lose their effect (Liebold, Bowman, & Pietschmann, 2020). It is therefore crucial to initiate reviews of CBT platforms in order to strengthen the relationship between novelty and enjoyment. Vogel et al. (2006) recommend the inclusion of games and other interactive components, which by their novel nature yield cognitive gains for learners. Bouty and Gomez (2015) reiterate this view, stating that novelty is an essential foundation for value creation in organisations.

6.5 Objective five: Examine the effect of perceived enjoyment on continuance intention

The emotional or psychological state induced by system usage is one reason to persistently engage with technology (Merikivi et al., 2016). Giao, Vuong, and Quan (2020) conceptualise perceived enjoyment as a behaviour-based affective reaction that stems from intensive interaction with a website and is linked to an increase in knowledge and learning (Nah et al., 2011). Various studies argue that users who experience pleasure have higher revisit intention (Sharma, Hamari, Kesharwani, & Tak, 2020). For this reason the present study examines the impact of enjoyment on continuance intention in CBT. Hence, hypothesis five predicts that perceived enjoyment will have a direct positive influence on continuance intention. Hypothesis testing confirms this association (β=0.41, t=6.04, p=0.001). The findings align with those of previous studies wherein learners report enjoyment as one reason to pursue

an online course (Jung, Kim, Yoon, Park, & Oakley, 2019). Various scholars conclude that continued usage is strongly driven by enjoyment (Merikivi et al., 2016) and serves as an indicator of its success (Zheng et al., 2013). Other studies have also arrived at this conclusion (see Kim et al., 2013; Lin et al., 2012), lauding enjoyment's contribution to improved user experiences (Zhou et al., 2015). Tussyadiah et al. (2018) stress the importance of enjoyment and continuance intention in investigating users' postadoption evaluation of information technology.

Hotels must recognise and understand the specific needs of their employees if they are to make progress in lowering the traditionally high turnover in the industry (Lee et al., 2015). CBT training should thus represent meaningful and identifiable work (Lee & Ok, 2016), if kitchen stewards, laundry attendants and other staff are expected to persist in this venture despite feeling overwhelmed by their tasks. If concierge feel entertained and edified after a module, they will be excited to apply their knowledge behind the counter and CBT stands a chance of making a lasting impact. Conversely, the propensity for hotels to skimp on training has dire consequences (Jaworski et al., 2018). CBT platforms are lagging behind as far as the technological developments aimed at increasing user engagement are concerned (Johnson & Randall, 2018). In this regard, the hotel industry is highly competitive, with scores of new properties being opened each year. The best companies are said to share a "strong culture of continuous improvement in which training and development is an integral part of everyday work life" (Tracey et al., 2014). Enjoyment in training is essential if workers are to gain a competitive edge through CBT. Training increases employee confidence in customer-facing environments (Dhar, 2015) and can give hotels a competitive advantage. If employees perceive CBT as an enjoyable activity, they feel motivated to continue interacting with the platform; this being a positive outcome for all parties.

Social cognitive theory speaks to causal attribution as an integral fixture of the personal component of triadic reciprocal causation. This is defined as the explanation or reason that individuals give for outcomes they experience (Foll, Rascle, & Higgins, 2006). The attributions which people assign to successful and failed activities affect their motivation and performance (Weiner, 1986). These attributions have a greater bearing on people who believe the resources they possess are insufficient to undertake a task (Bandura, 1991), and go on to affect their cognitions, emotions and future outcomes (Albert & Luzzo, 1999). If employees do not believe that CBT platforms rank high in enjoyment, and perceive them as boring, they are likely to offer this as an excuse for their lack of participation. It is therefore crucial for platforms to engender enjoyment, in order for employees to attribute their persistence to this key characteristic.

Positive affective-motivational states of learners, including enjoyment, are essential to computerised-learning success (Brom et al., 2017) due to their powerful effect on continuance intention (Ashfaq et al., 2020). In these instances, the usage process is often deemed enjoyable, pleasant, and fun (Gallego, Bueno, & Noyes, 2016), and leads to a higher propensity to persevere toward a completion goal (Zong, Yang, & Bao, 2019). Mouakket (2015) acknowledges that users who experience enjoyment are prime candidates in a company's quest to champion new technology initiatives. Hsieh and Tsao (2014) add that users' positive experience with a system can result in modifications in user behaviour, which subsequently have a positive impact on their organisation. These emotions are heightened when they are accompanied by the belief that the technology provides additional benefits (Huang, 2020). When users frequently, actively, and completely become engaged in using a system, they are likely to share their experience (Peters et al., 2016). Positive intention regarding continuance is thus commensurate with the intention to recommend it to others (Giao et al., 2020), which serves to encourage further usage.

Because learning is only possible if employees are willing to engage and persist in their CBT endeavours (Lumby, 2011), the importance of enjoyment cannot be overemphasised. In the absence of an enjoyable experience, users may give up using a technology (Zhou, 2011). The learning environment should therefore be conducive to their needs (Huang, 2020). Specifically, during the development stage, CBT designers should recognise the importance of thoughtfully designing the elements which have been shown to positively impact perceptions. Designers of CBT platforms can achieve this by incorporating adequate levels of challenge (Abuhamdeh & Csikszentmihalyi, 2012). It is through the continued usage of e-learning systems that the transfer of knowledge, skills, and attitudes is expected (Chen, 2010). Companies therefore derive immense benefit from the continued use of technology (Nascimento, Oliveira, & Tam, 2018). Recent research underscores the propensity for CBT systems to not only retain usership, but also to sustain high levels of user participation (Garcia-Madariaga, Virto, López, & Manzano, 2019).

6.6 Objective six: Compare the CBT perceptions of staff based on department, job level and tenure

Training is often the setting for an employee's first interaction with an organisation (Lawson, 2015) and is significantly related to their work attitudes (Lam, Lo, & Chan, 2002). Perceptions surrounding it tend to vary in accordance with the characteristics of employees (Rodrigues, Almeida, Figueiredo, & Lopes, 2019). By examining these peculiarities, insights can be gained to improve training outcomes (Santos & Stuart, 2003). Consequently, hypothesis six poses the following question: "Do the CBT perceptions of staff differ based on industry tenure, job level and department?" The analysis reveals that job level and tenure partially moderate the model relationships; however, department did not have a significant effect.

Hotels host a diverse group of workers (McGinley, Hanks, & Line, 2017). Some are new to the job market while others are industry veterans. Some are highly educated and others are adequately qualified (Chan & Hawkins, 2012). If CBT is to be perceived as enjoyable by all hotel employees, it cannot be "one-size-fits-all". The results shed light on groups of employees who are more likely to appreciate a higher, or lower level, of specific system attributes. CBT systems must therefore be designed to enable users and system managers to vary these settings according to the profile of employees. A simple orientation quiz could help determine the optimal level of each attribute for individual learners. An undergraduate intern may be new to the industry, but advanced in technological competence. Accordingly, they may desire a complex interface, but may prefer information to be presented in simple terms to facilitate a detailed understanding of new concepts.

An important component of the environmental processes associated with the triadic nature of social cognitive theory is social comparison. It is behaviour through which individuals subjectively assess themselves, and is therefore socially defined (Festinger, 1954). During learning interactions learners are likely to subconsciously measure their performance against the perceived performance of others. They are also guided by what they believe is expected of them (Wheeler, 2000). The environment in which hotel employees coexist enables social comparison. An employee's identification with a particular department, tenure and job level is thus accompanied by implicit expectations. Supervisor are aware of their status as role models and may persist in their CBT endeavour despite feeling overwhelmed. Those in accounting and finance may wish to reinforce the common view that members of their profession are thorough by completing modules on schedule. Similarly, newer employees may be of the view that seasoned employees excel at CBT, and will therefore endeavour to emulate them by prioritising the modules assigned.

6.6.1 Industry tenure

Tenure, also known as length of service, has been observed to influence employee attitudes and behaviour (Punjaisri & Wilson, 2011). Gibson and Klein (1970) were among the first scholars to theorise a relationship between job attitudes and tenure. Following their study, numerous researchers have found support for the moderating influence of tenure on the relationships between employee perceptions, attitudes, and behaviours (Norris & Niebuhr, 1984). A few studies have been conducted in the hotel industry that investigate tenure as a moderator of employee perceptions, attitudes, and behaviours (see Kara, Uysal, & Magnini Vincent, 2012; Santa Cruz, López-Guzmán, & Cañizares, 2014; Sarker, Crossman, & Chinmeteepituck, 2003).

In considering the moderating effect of employees' tenure on the model relationships, three partial moderations emerged. First, when the relationship between system quality and perceived enjoyment was examined, those with long tenure had a higher perception (t-value=2.78) compared to those with short tenure (t-value=0.43). Self and Dewald (2011) also confirm tenure as a predictor of employee attitudes in the hospitality context. This result is not surprising because as tenure increases, employees become more familiar with their role, of which e-learning is often a component, and they usually exhibit higher levels of performance (Steffens, Shemla, Wegge, & Diestel, 2014). This confirms that employees become very familiar with a system due to extensive exposure and form more positive perceptions (Richler, Wilmer, & Gauthier, 2017). Lengthier organisational socialisation also means that employees amass the competencies needed to perform effectively (Kryscynski, 2020), including the navigation of CBT systems. Moreover, the longer employees stay in an organisation, the higher their firm-specific knowledge and skills (Lee, 2015), including those associated with navigating an e-learning platform. The finding also supports previous studies which conclude that over time employees' perceptions are expected to change (Ju & Li, 2019).

Second, the evaluation of the relationship between learner control and perceived enjoyment reveals that employees with short tenure had a higher perception (t-value=3.97) compared to those with long tenure (t-value=0.65). Employees with short tenure may be less familiar with the system and hence have a greater appreciation for the ability to control aspects of their instruction (Hasler, Kersten, & Sweller, 2007). Similarly, new employees are usually more enthusiastic and have more incentive to be engaged in all aspects of their work (Bradt & Vonnegut, 2009). When exposed to unfamiliar experiences such as CBT, the urge to explore and discover can make employees probe the features of a system (Nah et al., 2011) and have fulfilling interactions through the manipulation of learner control features. As Sarker's (2003) study demonstrates, new employees are more likely to have positive perceptions.

Third, upon assessing the relationship between perceived novelty and perceived enjoyment, employees with long tenure had a higher perception (t-value=4.18), compared to those with short tenure (t-value=1.11). New employees have been shown to have less exposure to training (Jaworski et al., 2018). In order for them to perceive something as novel, it should not be too difficult or too easy (Dang, 2020). Hence, it is expected that those with shorter tenure will be less familiar with CBT systems and could find its use somewhat difficult, while those with long tenure are more adept at using it and would have a higher perception. Crawford, Leonard, and Jones (2011) who studied the influence of worker tenure on their information technology competence confirm these findings. These results can also be explained by the fact that ongoing exposure to a stimulus results in increased liking (Liao, Yeh, & Shimojo, 2011), with those with longer tenure having greater contact and thus possessing more favourable views. Novelty can also serve as a source of enjoyment for those with longer tenure and exposure to a system, as interest levels are maximal when novel and familiar elements are present simultaneously (Teigen, 1987).

6.6.2 Job level

"Roles at different job levels within an organisation present different challenges, responsibilities and demands" (Clinton & Guest, 2013), with managerial and non-managerial work being qualitatively different in areas such as complexity, uncertainty, responsibility, and resource endowment (Ye, Cardon, & Rivera, 2012). Similarly, employees at each level subscribe to different organisational cultures as well as possess distinct viewpoints, organisational orientation, personal motivation, engagement levels, and business values (Avery et al., 2007). Previous studies have explored job level as a moderator in the hotel context (Jung & Yoon, 2012). Employees with different job levels have been found to have varying levels of engagement (Kim, Ra, Park, & Kwon, 2017).

In considering the moderating effect of employees' job level on the model relationships, two partial moderations emerged. A closer look at the relationship between information quality and perceived enjoyment shows that line staff (t-value=2.59) had a higher perception than supervisory staff (t-value=1.39). Line staff are eager to develop their job competencies in readiness for promotion (Dobele & Rundle-Theile, 2015); hence, the information provided through CBT is beneficial. Additionally, line staff are usually required to possess a wider range of knowledge than supervisors, whose primary role is coordination (Chae, Park, & Choi, 2019). Nevertheless, employees in supervisory positions are expected to be more knowledgeable as they have climbed through the ranks (Mesrie, Diener, & Clark, 2018); hence, they may demonstrate less appreciation for the information provided by CBT systems. This view is supported by De Clercq, Haq, and Azeem (2019) who confirm that employees at higher job levels are more competent owing to their increased knowledge.

The analysis of the relationship between perceived novelty and perceived enjoyment reveals that management staff (t-value=.3.33) had a higher perception than supervisory staff (t-value=0.05). This is not unexpected as scholars argue that stimuli which are considered familiar

are perceived as pleasurable because they can be mentally processed with ease (Kirillova, Fu, & Kucukusta, 2020). Because managers champion employee learning and have been exposed to such initiatives as they climb the ranks (Lyons & Bandura, 2020), they are expected to have more positive perceptions than their subordinates. Task difficulty is also another determining factor influencing favourable perceptions (Chung, Choi, & Du, 2017). Supervisors tend to be overwhelmed with work (Burton, Hoobler, & Scheuer, 2012) and so may find interactions with CBT systems more demanding, leading to a lower perception than their superiors. Clinton and Guest (2013) concur that compared to managers, employees at lower job levels are exposed to fewer human resource initiatives due to the expense and time associated with their deployment at those levels.

6.6.3 Department

The analysis reveals the absence of a moderating effect for department. Commonalities among employees as a whole, and hospitality employees as a subset may explain the lack of an effect. Rouibah, Hamdy, and Al-Enezi (2009) assert that employees from various functional areas have reported dissatisfaction with technology. Similarly, Buckley and Caple (2009) state that poor attitudes toward training is pervasive. In this regard, employees across the board have considered training as boring (Lawson, 2015), time consuming (Noe & Kodwani, 2018), and tiring (Kolfschoten, de Vreede, & Pietron, 2011). Cleary, Sayers, Lopez, and Hungerford (2016) add that in general, employees are boredom averse; hence, they are more likely to choose an exciting task. Furthermore, they are known to neglect job responsibilities (e.g., CBT) that they do not perceive to be an integral part of their role (Hill & Huq, 2004). With specific reference to the present study, it is well documented that the stressful nature of the hospitality industry transcends departments (Tsaur & Tang, 2012). It is characterised by long and irregular

hours that take a toll on employees' vitality (Blomme, Sok, & Tromp, 2013). This may contribute to the reluctance of employees to dedicate time to training.

Honing in on the two groups – operations and support – it is also possible to speculate on the reasons for the absence of an effect. Upon closer examination, the sample for the current study is revealed to be a highly educated one, with more than half possessing an undergraduate qualification. This departs from other studies wherein hotel staff have lower education levels (see Brien, Anthonisz, & Suhartanto, 2019; Cheng & O-Yang, 2018; Luo, Qu, & Marnburg, 2013). The technological competencies gained during higher studies may thus explain the absence of a significant difference between the perceptions of the operations and support employees as both are on par. In terms of role, the majority of operations staff are deemed blue collar (manual labour) workers, while support staff are often considered white collar (clerical) workers. It can be expected that differences may arise due to this distinction, however, a study comparing the motivation levels among blue collar and white collar workers found no significant difference (Emmert & Taher, 1992). The authors simply posit that this could be due to the "nature" of white collar jobs. Likewise, while operations employees are known to engage in more manual labour, support staff perform more overtime hours (Cohen & Kleiner, 2004) resulting in burnout across both groups, leading to less than desired perceptions about the pertinence of CBT. Overwork has been shown to have adverse effects on worker engagement (Mazzetti, Schaufeli, Guglielmi, & Depolo, 2016). Similarly, while support staff have more access to computers (Li, 2014), they also have never-ending tasks which compete for their time (Tan, Sim, Goh, Leong, & Ting, 2020), and like their operations peers, this makes it difficult to pursue computer-based training. Finally, hotel staff on a whole have voiced that the most important tasks are learnt on the job (Lee & Bugler, 2017), therefore the knowledge and skills featured in CBT modules may be less sought after.

In conclusion, the results of the study closely align with those in the literature. The preceding section enriches the discussion on computer-based training in hotels, and the hospitality and tourism industry at large. Additionally, the principles of social cognitive theory afford an appropriate lens to interpret the study's findings. The results of the moderation analysis illustrate that employee CBT interactions depend on the individual needs of employees, their experiences and expectations.

CHAPTER 7: CONCLUSION AND IMPLICATIONS

Understanding the use of technology is important for both theory and practice (Peters et al., 2016). Because the utilisation of computer-based training has increased rapidly (Training Magazine, 2019), there is a need to continually assess the factors associated with its success (Liu & Arnett, 2000). As such, this study addresses some of the deficiencies revealed in recent evaluations of CBT research (Rodrigues et al., 2019). The chapter begins with an overview of the thesis, followed by the theoretical and practical contributions of the study, guidance for hoteliers and doctoral students, its limitations and considerations for future research, and a brief conclusion.

7.1 Overview of the Thesis

This thesis consists of seven chapters. It aims to solidify the importance of perceived enjoyment on continuance intention in the technology-assisted learning domain by focusing on its antecedents: system quality, information quality, learner control, and perceived novelty. It centres on computer-based training in an organisational context by soliciting the perceptions of hotel employees with the help of pre-existing scales. The moderating influence of employees' industry tenure, job level and department is also explored.

The introductory chapter provides information on the advantages and disadvantages associated with organisational training. It illustrates that although computer-based training was anticipated to solve the challenges associated with traditional training, it has developed shortcomings of its own. Based on existing literature, the study discusses three important trends regarding computer-based training that form the rationale for the research. They include (a) the issue of perpetually low participation rates; (b) persistent complaints from learners regarding CBT's monotonous and often one-size-fits-all nature; and (c) and an increase in the number of organisations utilising CBT in spite of these constraints. Ineffective use of information systems

often contributes to organisational failures due to the crucial role they play in business processes. With technological competence no longer a hindrance to participation, more relevant factors must be pursued in reversal of the first two trends. Scholarly work points to perceived enjoyment as a defining factor in this endeavour, leading to the research questions addressed in this probe. The study serves to examine the under-researched and nuanced hospitality domain by shedding light on the perceptions among various groups in order to contribute to the practical and theoretical advancement of this area of inquiry. The unexpected emergence of a global pandemic (COVID-19) and its impact on human interactions reinforce the significance of this investigation.

Chapter two reviews the literature. It recognises the challenges associated with training in organisations and in the hotel industry specifically, and how these have evolved since COVID-19. The growing importance of focusing on the attributes of CBT systems in order to engender enjoyment in learners and increase continuance intention is illustrated. Enjoyment is conceptualised as "the extent to which the activity of using a system is believed to be pleasurable in its own right, aside from any performance consequences that may be expected" (Davis et al., 1992). The construct serves to address learner accusations concerning the monotonous and impersonal nature of such systems. The study is centred around four system attributes which are theorised to be the determinants of enjoyment: system quality, information quality, learner control, and perceived novelty. For each determinant, the chapter provides an overview that entails its conceptualisation, general application, consequences, operationalisation in the context of e-learning, and its relationship to enjoyment. Continuance intention is envisaged as the by-product of perceived enjoyment and the solution to declining participation rates.

Chapter three draws on the information systems model of success and the post-acceptance model of information system continuance to formulate a conceptual framework for

the study. Three constructs are co-opted from the aforementioned models and the other three from empirical studies. The chapter employs social exchange theory to explain how the environment (system quality and information quality), users' cognition (learner control), and affect (perceived novelty and perceived enjoyment) determine behaviour (continuance intention). These six constructs are used to formulate five direct hypotheses and three moderating hypothesis for structural equation modelling. The four system attributes are proposed to affect perceived enjoyment, which subsequently predicts continuance intention. Industry tenure, job level and department are theorised to vary the strength of the model relationships. Toward the development of hypotheses, the chapter draws on the existing literature to justify the proposed relationships among the constructs.

Beginning with a discussion on the post positivist paradigm, Chapter four details the methodological procedures of the study. The measurement scales used to ascertain the extent to which respondents agree with the statements concerning the attributes of the CBT platform are itemised here. A pre-test was conducted to establish the veracity of the instrument and led to minor modifications. This was followed by a pilot test of an estimated 200 respondents. The study utilises an online survey and an 8-item screening tool to arrive at a purposive sample. This resulted in the elimination of respondents at various stages of the process and ensured a wide cross-section of respondents in order to enhance the generalisability of the results. Respondents hail from North America, Europe, and Asia. Employees from the front office, housekeeping, and food and beverage departments were designated as operations staff, while their colleagues from sales and marketing, and, accounting and finance were described as support personnel. Various hotel groups were contacted regarding their usage of computer-based training for employees. Participants originate from the seven hotels that reported using CBT extensively.

Chapter five presents the results of the main survey. It starts off with the demographic profile of the participants. Normality tests reveal satisfactory skewness and kurtosis values. For the exploratory factor analysis, principal component method with varimax rotation and Kaiser normalisation was deployed. After applying established cut-off criteria using eigenvalues, factor loadings, and communalities, the 33 items were reduced to 27 and they conformed to the dimensions outlined at the outset of the study. Further, treatment of outliers produced 475 usable responses from a total of 489. Half of the constructs had five or more items remaining after EFA. Confirmatory factor analysis demonstrates that the model is a viable fit for the data as all fit indices emerged within an acceptable range. Convergent and discriminant validity were also confirmed. All direct hypotheses were found to be positive following structural equation modelling. The moderating effects of industry tenure, job level and department on the structural path model were assessed through multigroup invariance analysis. There are five paths where tenure and job level act as partial moderators.

The findings of this research are discussed in Chapter six. They are arranged according to the study objectives and situated within the literature. The results of the direct hypotheses align with the existing literature as well as the principles of social cognitive theory, thereby lending credence to the arguments advanced in this study. A credible explanation was offered for the insignificance of department as a moderator. The findings strongly support the value of perceived enjoyment and the need to manipulate system attributes, in order to achieve higher hotel computer-based training participation and completion rates among employees.

Chapter seven begins by extolling the academic and practical contributions of the study, providing guidance for hoteliers and doctoral students, and unveiling the limitations of the study and recommendations for future research. Five academic contributions were derived that build on the existing body of knowledge. They include (a) the contextual novelty of the study; (b) the depth of understanding offered by the choice of moderators; (c) the operationalisation

of contemporary and focused constructs to address theoretical deficiencies; (d) the unparalleled exploration of the factors influencing enjoyment as a catalyst for heightened continuance intention; and (e) the expansion of social cognitive theory to elucidate a niche domain.

For the benefit of managers, learning and development professionals, and system designers, six practical contributions were highlighted. They indicate that stakeholders must (a) recognise the potency of CBT in allaying the fears of CEOs concerning "the availability of key skills"; (b) emphasise elements of personalisation in designing CBT systems in an effort to cater to the diverse needs of specific groups; (c) solicit and act upon user feedback to effect improvements in perceptions; (d) display urgency in remedying the low support for information relevance which could negatively affect other sentiments; (e) uncover the reasons underlying employee hesitancy in recommending CBT to others despite being more receptive to its use; and (f) convert employee support for CBT into equal enthusiasm for other technological and organisational initiatives. Additionally by incorporating low resource-high impact concepts such as: (a) the illusion of choice; (b) behaviour modelling; and (c) foregrounding, perceptions of enjoyment can be heightened.

The limitations cum suggestions for future research include: the possibilities offered by a comparative study; the merits of a longitudinal study; the need for objective measures of behaviour; the equitable distribution of education level and CBT competence across the sample; the desirability of updated scales to account for the evolution of CBT systems; the use of quotas to ameliorate the educational distribution of the sample; the prospects offered by additional moderators; the need to explore innovative e-learning elements (e.g. virtual reality) that can enhance enjoyment; and how a longitudinal inquiry into incremental improvements that impact CBT system perceptions could be a game changer.

7.2 Contributions of the Study

For organisations, retaining the right people and enhancing their skills is key to gaining a competitive edge (Aspøy, 2020). Based on the findings of the study, several contributions arise. These will be useful to hoteliers, learning and development professionals, and system designers by way of enhancing the CBT experience.

7.2.1 Academic contributions

First, though the concept of e-learning has been extensively explored (Choudhury & Pattnaik, 2020), this study extends the scope of such studies. While e-learning in hotels (see Chan & Choi, 2012; Lee & Singh, 2016) and organisations (see Marjanovic, Delić, & Lalic, 2016; Ozturan & Kutlu, 2010) has been investigated, the present study makes a distinct contribution to the literature. Using validated scales, it tests the applicability of the various constructs in the hotel context and enhances scholarly knowledge of e-learning by investigating perceived enjoyment and continuance intention in this understudied area. Because the hotel environment has distinct characteristics that present unique challenges for employees undertaking CBT (Zhao, Ghiselli, Law, & Ma, 2016), context-specific research is indispensable. On this basis, the interaction between the respondents – hotel employees – and concepts examined differ from that of previous studies. Accordingly, the implications have been tailored to the hotel environment and are more likely to yield greater impact (Karyda, Kiountouzis, & Kokolakis, 2005).

Second, this study offers a deeper understanding of the relationships between perceived enjoyment and its antecedents, as well as between perceived enjoyment and continuance intention, by demonstrating that tenure and job level are partial moderators in the hotel CBT scenario. Although these moderators are not new in organisational research (Lee, 2017; Miao, Humphrey, & Qian, 2017), their presence is dwarfed by the use of gender, age, computer

experience, and voluntariness in information systems research (Venkatesh et al., 2003). While some moderators like job level have been employed in e-learning inquiries (Agrawal et al., 2017), the others have received less attention. Through moderation analysis, the study establishes that employee demographics can positively influence employee attitudes and subsequently their behaviour. It also illustrates that employees' tenure and job level should receive further consideration.

Third, surveys into CBT systems tend to focus on a variety of factors, some of which are external and others that have become irrelevant. Scholarly inquiry in the 1990s and 2000s were dominated by concepts such as computer anxiety and computer self-efficacy, which were believed to be the main hindrances to technology acceptance and consequently continuance intention (see Beckers & Schmidt, 2003; Cazan, Cocoradă, & Maican, 2016; Celik & Yesilyurt, 2013; Korobili, Togia, & Malliari, 2010). With smart phones now considered an integral part of human existence, technological competence is no longer a defining factor (Wang, Xiang, & Fesenmaier, 2014); yet, CBT patronage remains low (Choudhury & Pattnaik, 2020). A review of the literature reveals that the majority of studies focus on multiple determinants of continuance intention, including external ones like perceived usefulness (see Cheng, 2012; Lee, 2010; Lin et al., 2011), instead of emphasising system variables as recommended by Mitchell et al. (2005). The aforementioned deficiencies have been successfully addressed in the current study by zoning in on perceived enjoyment, a factor of contemporary importance that is directly related to CBT systems.

Fourth, this is one of the first studies to focus on more than two antecedents of perceived enjoyment that are attributed to the CBT system itself. The fact is, enjoyment is multifaceted, and a thorough operationalisation of its antecedents is required to reinforce its importance. While some studies have operationalised perceived enjoyment as a variable in e-learning systems research, studies that focus on the antecedents of enjoyment are rare. Equally scarce,

are studies wherein perceived enjoyment is the main determinant of continuance intention. The most common antecedents of continuance intention have been recognised as satisfaction (Guo et al., 2016; Hsu & Lin, 2020), perceived usefulness (Chiu et al., 2007; Zhang, Liu, Yan, & Zhang, 2017), perceived ease of use (Yang, Shao, Liu, & Liu, 2017; Yuen & Ma, 2008), and attitude (Lin et al., 2011; Wu & Chen, 2017). Because users expect some element of pleasure to be involved with the use of technology (Antón, Camarero, & Rodríguez, 2013), this study assesses the interrelationship between the functional features of a system (the antecedents) and enjoyment (Antón et al., 2013). The results confirm the usefulness of this approach.

Fifth, in the information systems domain, social cognitive theory is seen as a reputable and empirically supported model that enables the comprehension and prediction of human behaviour and the identification of ways in which this behaviour may be positively modified (Wu et al., 2010). While social cognitive theory has been applied to e-learning (Compeau & Higgins, 1995; Wan et al., 2008; Wu et al., 2010) and to hospitality research (Etehadi & Karatepe, 2019; Jeong, Lee, & Nagesvaran, 2016; Wang, Hung, & Huang, 2019), it has not been applied to hotel e-learning. The research model was designed to operationalise the three tenets of social cognitive theory. It successfully illustrates that an individual's interactions with their environment – system and information quality (situational) of computer-based training platforms – and their mental processes – learner control (cognitive) and perceptions of novelty and enjoyment (affective) – are capable of affecting behaviour, that is, continuance intention (behaviour) (Wu et al., 2010). Together, these features induce pleasant feelings within the users of such systems. The study advances the theory by recognising perceived enjoyment as one affective type of intrapersonal factor – along with its antecedents – which can be elicited by the features of a CBT system, and consequently exerts a positive effect on user continuance intention; completing the social cognitive theory triad. Moreover, the parsimonious nature of the model highlights the singular role of perceived enjoyment in furthering CBT continuance

intention in a digital age where humans have a distinct preference for engaging in fun activities. Empirical testing of the proposed model found all paths to be significant in the hypothesised directions. This confirms the theory's assertion that "human functioning is a product of a reciprocal interplay of intrapersonal, behavioural, and environmental determinants" (Bandura, 2001a).

7.2.2 Practical contributions

An organisation's primary source of competitive advantage is its employees, and e-learning is the most effective way to disseminate information to them in an increasingly volatile environment (Iris & Vikas, 2011). As Garrison (2011) notes, given that approaches to learning and intention are determined by the educational environment, practical enhancements are indispensable to CBT success.

First, the present study demonstrates that employees have a favourable perception of computer-based training as a tool for organisational learning. This is reassuring as the "availability of key skills" was among the top three concerns of CEOs in PwC's (2019) 22nd Annual Global CEO Survey. In the 2020 edition, that amounted to 74 percent of CEOs being in agreement (PwC, 2020). They identified "significant retraining and upskilling" as the top solution. With the majority of organisations utilising e-learning (Chartered Institute of Personnel and Development, 2020), a sizeable portion of the retraining and upskilling initiatives are expected to take place virtually. As a result, organisations aiming to increase participation and completion rates for computer-based training will find the insights adduced in this thesis useful. Nichols (2008) describes e-learning as "pedagogy empowered by digital technology". Falconer (2006) adds that e-learning technologies can play a crucial role in encouraging and facilitating organisational learning on a whole. It is therefore imperative for organisations to ensure that technology does not hinder learning. This research demonstrates

that organisations should focus on improvements to the four CBT attributes, which have been identified as important determinants of perceived enjoyment and consequently continuance intention.

Second, personalisation is confirmed as an important prerequisite for enjoyable training. Specifically, industry tenure and job level are important considerations when tailoring the features of a system to suit employees. Kamvysi, Gotzamani, Andronikidis, and Georgiou (2014) agree that user requirements should be at the forefront when designing products and services. Because hotel employees hail from different backgrounds and possess various levels of technological skill, CBT systems must cater to the needs of novices as well as advanced users, while keeping both content (Agrawal et al., 2017). Personalisation allows employees to tune the features of the system to suit their abilities, thereby giving them an adequate level of challenge (Kurilovas, Kubilinskiene, & Dagiene, 2014). Learning and development professionals should acknowledge the importance of personalisation in computer-based training by focusing on inclusions that reflect enjoyment (Al-Maghrabi, Dennis, & Halliday, 2011). Research confirms that personalisation in e-learning enhances the effectiveness of such systems in facilitating employee learning (Christudas et al., 2018) and increases quality perceptions (Chang & Ke, 2013).

Third, detailed analysis of perceptions regarding information quality reveal that employee belief that CBT information is relevant to their jobs is least supported. This finding has implications that extend beyond the platforms themselves. Hotels are responsible for providing their employees with information they can use to make decisions. A hotel's performance is shown to be impacted by its information technology expenditure (Hua, Huang, Medeiros, & DeFranco, 2020). Likewise, information quality plays a role in the financial performance of organisations (Kim, Lee, Wang, & Mirusmonov, 2015). It is crucial to note that misinformation is at the root of service failure and consequently negative employee

perceptions (Saeed & Abdinnour-Helm, 2008). Nieves, Quintana, and Osorio (2014) submit that high levels of employee knowledge, skills, and abilities constitute a valuable asset to organisational innovation. Hence, equipping employees with knowledge through CBT systems can decrease the spread of misinformation. Hotel CBT systems, though rarely updated, are therefore crucial to information provision (Klašnja-Milićević, Vesin, Ivanović, Budimac, & Jain, 2016). This study reinforces the urgency for hotels to dedicate more resources to maintaining information relevance in CBT systems.

Fourth, a closer look at the findings point to the need for user feedback to be solicited and acted upon. Employees' intention to continue computer-based training received the strongest support; however, other perceptions were rated moderately less favourably. Commercial website have full time website managers who are tasked with solving usability issues in order to enhance customer satisfaction and increase retention (Hsu, Chen, & Kumar, 2018). The recurring evaluation and improvement of e-learning systems deserves equal attention (Tudevdagva, 2020). While it may not be feasible for hotels to implement such a role for their e-learning platforms, it is imperative that feedback on CBT platform usability is collected and remedied on a regular basis to reduce user frustration and drive continuance intention.

Fifth, in-depth analysis reveals that while employees are keen to persist in their CBT endeavours, they are more reluctant to recommend it to others. This alludes to the view that CBT compliance is driven in large part by mandates. More executive-level support for CBT may be useful in encouraging employees to become more engaged in this type of training. Considering that organisational change is most effective when initiated by leadership (Burnes, Hughes, & By, 2016), learning and development professionals must enlist the support of hotel executives. They should explain to employees the extent to which training can give them a competitive edge, not just at the organisational level, but also at the individual level (Dhar,

2015). They should convey that by investing time to complete modules, employees are preparing themselves not only to become better at their current jobs, but also to obtain the knowledge necessary to grow in their careers (Cohen, 2017). Research has also established a connection between formal training and the likelihood of promotion (Christian, Janssen, Yang, & Backes-Gellner, 2013). CBT involvement should therefore be taken into account by management when employees are being considered for promotion. With the need to maximise training budgets (Fleuren, de Grip, Kant, & Zijlstra, 2020), this heightened interest from employees will justify an annual budget, or increased budget, that is dedicated to CBT improvement.

Sixth, scholars attest that user evaluations of a system can influence overall perceptions of an organisation (Kuan et al., 2008). This may extend to CBT platforms, many of which are now mandated for use by employees (Yoo, Han, & Huang, 2012). Poor evaluations signal that the training offered by their hotels is substandard (Hudson et al., 2018), with fallout for similar work-related attitudes (Fletcher, 2016). Since COVID-19 has accelerated the switch to online training as the preferred medium for the foreseeable future (Agarwal, 2021), any repercussion could be magnified. On the other hand, acclamatory sentiments regarding training could positively affect other aspects of employees' relationships with an organisation (Ehrhardt, Miller, Freeman, & Hom, 2011). It is therefore imperative for hotels to pay attention to perceptions regarding computer-based training systems. A high quality CBT system can engender positive feelings in employees and earn their support for similar initiatives such as the introduction of technology in other areas of organisational life.

7.2.3 Recommendations for hoteliers

Following on the practical contributions, three low resource-high impact recommendations are also offered for the consideration of hotel executives. These do not

require costly changes to the CBT systems themselves, however, knowledge of these concepts can aid stakeholders in furthering the enjoyment associated with CBT and increase continuance intention. While enjoyment depends primarily on user interactions with CBT systems, by incorporating: (a) the illusion of choice; (b) behaviour modelling; and (c) foregrounding, perceptions of enjoyment can be heightened.

First, the concept of the illusion of choice – which is linked to learner control, an antecedent of perceived enjoyment – can empower employees and increase completion rates. It is a psychological mental model which states that "humans are happy if they believe they have control over their own actions and can exercise free will" (Clarke, 2018). For example, if there are 10 modules to be completed by an employee, then managers or human resource professionals can add another 10, and ask the employee to choose. These could be modules taken by other departments. The extra 10 should function as distractors and be ones that the employee is unlikely to select, for example, complex topics, lengthy topics, or uninteresting topics. When employees perceive that they are being afforded a choice, they are likely to carry out the desired behaviour.

Two, behaviour modelling can improve perceptions. It is a process that aims to initiate the replication of specific actions by demonstrating a response and a consequence (Bandura, 1969). Decker and Nathan (1985) charge that if the person demonstrating the behaviour is of high status the learner is more likely to replicate the behaviour. Supervisors and managers are encouraged to conduct demonstrations wherein CBT is portrayed as an enjoyable endeavour. This is especially effective and beneficial to employees who are new to the work environment, or have very little exposure to CBT systems. This familiarisation session can increase positive perceptions about system use and consequently lead to favourable sentiments regarding enjoyment.

Three, foregrounding serves to emphasise the enjoyment which stems from CBT. This concept is prominent in the literary field and speaks to patterns that stand out (Leech, 2014). Subsequently, the aim is for CBT to be interspersed in conversations between organisational members within and outside the workplace. Department leadership should mention CBT in informal exchanges and gatherings. This gives the perception that it is of personal importance. It can also be discussed in team meetings in order to reinforce its significance. Additionally, by proclaiming its personal and professional benefits leaders can boost CBT perceptions. Consequently, even amongst themselves line staff may mimic this by talking about CBT. When it becomes a topic of frequent conversation, it is likely that employees will want to increase their interactions with the system.

7.2.4 Recommendations for doctoral students

A wise person once said, “The product of your PhD is not a thesis, it is you”. A PhD is a life changing experience that births a new person. By the end of the journey, the candidate has grown immensely in all facets of their existence, and is equipped to solve complex issues in their respective field. For those undertaking quantitative theses, the forthcoming advice may be beneficial.

The earliest stages are most crucial. Those collecting data via survey should prepare a draft for review by their confirmation/proposal committee. Unlike other academics and industry personnel who will provide feedback at the pre-test stage, they are intimately familiar with the study. Accordingly, they will be able to judge whether the instrument accurately represents its objectives.

Prior to the pre-test stage, self-tests should be conducted. The screening questions should be designed to prevent respondents from returning to previous questions. One must ensure that the “force response” option is checked or risk missing data. Most important, it is

prudent to leave an open-ended field at the end of the survey to gain additional feedback concerning the instrument.

It is recommended that pilot and main surveys to be carried out by market research companies are prepared as soon as possible considering the bidding process. Market research companies have a standard return time of two weeks, however, candidates seeking access to niche samples may encounter lengthy distribution times and increased data collection costs. A low eligibility rate per 100 invitations is the primary reason.

While scholars often recommend simpler models for structural equation modelling to improve the model fit, there are drawbacks. By soliciting responses to a diverse set of variables, candidates are able to provide greater insight into the issue at hand. Select variables can be analysed in the thesis, while sub-studies can be derived for publication by examining other combinations.

Candidates with hypothesis-based studies could benefit from elaborating a hypothetical results table prior to data collection. The goal is to determine if the literature is able to support the hypotheses if accepted or provide sufficient justification if rejected. This helps the candidate to embrace the fact that rejected hypotheses are a worthy contribution to the literature if adequately supported.

7.3 Limitations and Future Research

The contributions of the study notwithstanding, it has shortcomings that provide a basis for future research in a field that has received little scholarly attention despite ongoing challenges. The following suggestions for future research are aimed at improving the robustness of inquiry into e-learning in organisations in a bid to provide clear directions to industry practitioners.

First, the cross-sectional nature of the survey has inherent limitations concerning causality. As employees progress in tenure and move up the organisational hierarchy, their perceptions are likely to evolve. Accordingly, a longitudinal study is needed to gauge the relationship between perceived enjoyment and continuance intention over time. This will enable researchers to draw more reliable conclusions.

Second, while subjective measures of perception are widely accepted in academia, the utilisation of a more objective measure of behaviour is required in order to increase the accuracy of the study results. For future research, scholars can obtain data on actual CBT usage instead of self-reported continuance intention. This can be done by partnering with hotel learning and development departments since they are privy to this type of user information.

Third, an online panel was used in the survey. While quotas were implemented to ensure a favourable mix of respondents, the analysis reveals a highly educated sample that has extensive industry experience. This may have contributed to the skewness of the data. Upcoming studies stand to benefit from a more even distribution of respondents across the spectrum. The results of moderation analysis may also differ with a change in these parameters.

Fourth, to remedy the skewness in employee CBT competence levels, future research can include a more equitable distribution by assigning quotas to this question in the screening section. Research shows that users are more likely to experience enjoyment if their skill level matches the complexity of the platform (Merikivi et al., 2016). A change in the spread of this variable may therefore impact respondent perceptions and lead to different outcomes.

Fifth, since the attributes of CBT systems may have evolved over time, the measurement scales should be updated. A qualitative study can be used to derive themes, followed by the development of new scales. Similarly, qualitative studies can be conducted to garner an in-depth understanding of other antecedents that may be associated with the perceived enjoyment of CBT systems.

Sixth, future studies can explore the moderating role of other variables. Usage characteristics (frequency of use), employee demographics (educational level), situational characteristics (time allotted for CBT), and organisational characteristics (hotel star rating) may prove influential as far as employee perceptions of hotel CBT systems are concerned. It will be useful for researchers to examine these variables.

Seventh, a comparative study on the perspectives of employees from different countries can analyse the effects of cultural background on employee perceptions. Kim, Lee, and Jang (2017) have called for the operationalisation of this variable and recent studies have demonstrated that it has an influence on employee attitudes and behaviour (Schalk & van der Linden, 2021).

Eighth, LinkedIn Learning (2020) reports that the top technologies expected to influence online learning over the next five years include artificial intelligence/machine learning for training personalisation, virtual/augmented reality, live streaming, gamification, and chat bots. Future studies can account for the impact of these technologies on perceived enjoyment and/or CBT continuance intention.

Ninth, Christudas et al. (2018) postulate that e-learning platforms will be more efficient with the inclusion of regular quality assurance initiatives. Such improvements should progress in tandem with the advancement of technology (Nikolić et al., 2018). By designing a series of studies to ascertain how incremental improvement of CBT systems influences employee perceptions, a deeper understanding of the factors that influence employee enjoyment of CBT will be gained.

7.4 Concluding Remarks

This study has achieved its aim of assessing the importance of perceived enjoyment and its antecedents in hotel computer-based training continuance intention. It has confirmed the

impact of employee characteristics on their perceptions through the use of moderators. It has also revealed that although the study results demonstrate that such training systems are enjoyable, there is an urgent need for hotels to invest in their enhancement. The increased virtualisation of training precipitated by the COVID-19 pandemic provides an impetus for further studies in this area.

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APPENDICES

9.1 Main survey questionnaire

Appendix 1. Main survey questionnaire

Section 1: Screening Questions

The following questions are designed to assess your eligibility to participate in this survey, and may take up to 60 seconds. Please select one answer for each question.

1. Which industry are you employed to?

□ Agriculture
□ Education
□ Finance
□ Health Services
□ Hospitality
□ Information Technology
□ Manufacturing
□ Real Estate
□ Transportation
□ Others

2. Which sector are you employed to?

□ Hotels
□ Meetings and events
□ Motels and other lodging
□ Restaurants and bars
□ Sports and recreation
□ Travel and transportation
□ Others

3. Have you participated in computer-based training during the last 12 months?

□ Yes
□ No
□ Not sure

4. Which hotel group are you employed to?

□ Accor
□ Best Western
□ Choice
□ Four Seasons
□ Hilton
□ Hyatt
□ Intercontinental
□ Jinjiang
□ Mandarin Oriental
□ Marriott
□ OYO
□ Wyndham
□ Other

5. Please type the name of your hotel's computer-based training platform here. This must be correctly validated by the system before you can proceed.

6. To which department do you belong?

□ Accounting and Finance
□ Engineering and Maintenance
□ Executive Office
□ Food and Beverage
□ Front Office
□ Gift Shop
□ Housekeeping and Laundry
□ Human Resources
□ Information Technology
□ Purchasing
□ Sales and Marketing
□ Security
□ Spa and Recreation
□ Others

7. In which region is your hotel located?

□ Africa
□ Asia
□ The Caribbean
□ Central America
□ Europe
□ North America

□ Oceania □ Others

8. What is your position level?

□ Line staff □ Manager

□ Supervisor/team leader

Dear Sir/Madam,

We are conducting a study which seeks to understand your perceptions of the computer-based training platform used in your workplace. Your involvement is valuable and highly appreciated. Please be assured that the information you provide will be treated confidentially and used for academic purposes only.

Your participation in this study is completely voluntary, and you may withdraw at any time. The survey takes approximately 11 minutes to complete, and consists of three sections. You are asked to complete all questions. Thank you for your contribution.

Yours sincerely,

The Research Team

Section 2: Main Survey

Be mindful that the survey contains attention checks. Please indicate your level of agreement with the following statements by selecting the corresponding number: 1 = “Strongly Disagree” to 5 = “Strongly Agree”. Select one answer for each statement.

Part 1

To what extent do you agree with the statements concerning the performance characteristics of the online training platform?

1.	The platform is always available	1	2	3	4	5
2.	The platform is easy to use	1	2	3	4	5
3.	The platform is user-friendly	1	2	3	4	5
4.	The platform provides interactive features for users	1	2	3	4	5
5.	The platform provides personalised information presentation	1	2	3	4	5
6.	The platform has attractive features that appeal to users	1	2	3	4	5
7.	The platform provides high-speed information access	1	2	3	4	5

Part 2

To what extent do you agree with the statements concerning the nature of the content provided by the training platform?

1.	The platform provides information that is exactly what you need	1	2	3	4	5
2.	The platform provides information you need at the right time	1	2	3	4	5
3.	The platform provides information relevant to your job	1	2	3	4	5
4.	The platform provides sufficient information	1	2	3	4	5
5.	The platform provides information that is easy to understand	1	2	3	4	5
6.	The platform provides up-to-date information	1	2	3	4	5

Part 3

To what extent do you agree with the statements concerning the degree of control given to you over various instructional features on the platform?

1.	I have control over the visual aids and tutorials on the training platform	1	2	3	4	5

2. I have control over the content of the training platform 1 2 3 4 5
3. I have control over the topics that are included 1 2 3 4 5
4. I am able to adjust the presentation of the training platform 1 2 3 4 5
5. I have control over when I take the training 1 2 3 4 5
6. I have control over when I start the training 1 2 3 4 5
7. I am able to do the training at any time 1 2 3 4 5
8. I had control over where I took the training 1 2 3 4 5

Part 4

To what extent do you agree with the statements concerning the degree to which you find the platform attributes to be unexpected, surprising, new, and unfamiliar?

1. The platform is imaginative 1 2 3 4 5
2. The platform is surprising 1 2 3 4 5
3. The platform is innovative 1 2 3 4 5
4. The platform is new 1 2 3 4 5
5. The platform is fresh 1 2 3 4 5

Part 5

To what extent do you agree with the statements concerning the degree to which you find using the training platform to be enjoyable?

1. I find the platform interesting 1 2 3 4 5
2. I find the platform entertaining 1 2 3 4 5
3. I find the platform enjoyable 1 2 3 4 5
4. I find the platform pleasant 1 2 3 4 5

Part 6

To what extent do you agree with the statements concerning your intention to continue using the training platform?

1.	I will use the platform on a regular basis in the future	1	2	3	4	5
2.	I will frequently use the platform in the future	1	2	3	4	5
3.	I will strongly recommend others to use the platform	1	2	3	4	5

Section 3: Demographic Information

1. Your gender

□ Male □ Female

2. Your age

□ 24 or less □ 45-54

□ 25-34 □ 55 or more

□ 35-44

3. Highest level of formal education completed

□ Primary □ Undergraduate

□ High School □ Postgraduate

□ Diploma

4. Length of experience in the industry

□ 1 to 5 years □ More than 5 years

5. Star rating of the hotel you are employed to

□ less than 3 stars
□ 3-3.5 stars
□ 4-4.5 stars
□ 5 stars

6. Average work hours per week

□ 40 or less hours
□ 41-49 hours
□ 50-59 hours
□ 60 or more hours

7. Length of exposure to computer-based training

□ less than 1 year
□ 1-3 years
□ 4-5 years
□ 5 years or more

8. Your computer-based training competence level

□ Beginner
□ Intermediate
□ Expert

9.2 A selection of studies on continuance intention in e-learning

Appendix 2. A selection of studies on continuance intention in e-learning

Variables *	Title	Authorship	Study Context/Sample	Findings
Satisfaction Perceived usability Usability disconfirmation Perceived quality Quality disconfirmation Perceived value Value disconfirmation	Usability, quality, value and e-learning continuance decisions	Chiu et al. (2005)	189 Taiwanese university students	Satisfaction positively influences continuance intention
Attitude Quality attributes Cumulative satisfaction Perceived usefulness Perceived ease of use Frequency of negative critical incidents	e-Learning continuance intention: Moderating effects of user e-learning experience	Lin et al. (2011)	256 students from Cyber University in Taiwan	All hypotheses were supported
Satisfaction Subjective norm (interpersonal influence, external influence) Perceived usability (perceived usefulness, cognitive absorption, perceived ease of use) Perceived control (computer self-efficacy, internet self-efficacy) Confirmation	Understanding e-learning continuance intention: An extension of the Technology Acceptance Model	Roca, Chiu, and Martínez (2006)	172 learners of online courses offered by the United Nations System Staff College or the International Training Centre of the International Labour Organisation	Satisfaction positively influences continuance intention

Variables *	Title	Authorship	Study Context/Sample	Findings
Perceived quality (information quality, service quality, system quality)				
Perceived playfulness Perceived usefulness Perceived ease of use Perceived autonomy support Perceived competence Perceived relatedness	Understanding e-learning continuance intention in the workplace: A self-determination theory perspective	Roca and Gagné (2008)	166 employees of 4 United Nations agencies	Perceived playfulness positively influences continuance intention
Satisfaction Attitude Subjective norm Perceived behavioural control Confirmation Perceived usefulness Perceived ease of use Perceived enjoyment Concentration	Explaining and predicting users' continuance intention toward e-learning: An extension of the expectation–confirmation model	Lee (2010)	363 students of continuing education programmes at National Pingtung University in Taiwan	Satisfaction positively influences continuance intention
Attitude Perceived usefulness Perceived ease of use System quality (reliability, accessibility) Information quality (accuracy, completeness) Social motivations (sociality, altruism)	Empirical study on continuance intentions towards E-Learning 2.0 systems	Wu and Zhang (2014)	214 e-learning panellists of a market research firm	Attitude positively influences continuance intention
Satisfaction Perceived value System quality Information quality	Exploring the determinants of e-learning systems	Chang (2013)	302 students who used an e-learning system in an academic library at a	Satisfaction positively influences continuance intention

Variables *	Title	Authorship	Study Context/Sample	Findings
Service quality	continuance intention in academic libraries		university in Eastern Taiwan	
Attitude Perceived usefulness Perceived ease of use Task technology fit (individual-technology fit, task-technology fit) MOOC's feature (openness, reputation) Social motivation (social recognition, social influence)	Continuance intention to use MOOCs: Integrating the technology acceptance model (TAM) and task technology fit (TTF) model	Wu and Chen (2017)	252 Chinese who were members of a MOOCs group in Tencent QQ (a social media platform)	Attitude positively influences continuance intention

*In order of proximity to the outcome variable continuance intention