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SERVICE FAILURE AND RECOVERY**

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Abstract: Worldwide and throughout the ages, people have been dependent on their physicians and healthcare systems to provide them with accurate, timely and complete information related to their personal health needs. Honesty and transparency are core values considered essential in the normal and wide range of human transactions, and this is especially true in healthcare, where patients and their families place their full trust in their providers and the medical systems. Despite significant advances in science and technology, a large percentage of patients still incur preventable adverse events. Intense worldwide efforts have spotlighted the need to improve patient safety and to reduce errors. “Open disclosure” is an approach that ensures swift and honest discussion of adverse events or harm to the affected patient and the patient’s family, that can allow for an apology to be extended and, where indicated, permit an expeditious resolution to settle the matter and to avoid the need for litigation. It is advanced in this article that the structure of the medical system and its ability to organize around an optimal set of resources, herein referred to by the authors as possessing “full risk integration,” is key to optimizing the opportunities for success in this area. An optimal degree of risk integration for a healthcare system therefore includes: the fewest number of involved malpractice insurance companies, the fewest number of medical employment/independent contractor arrangements, a lessening of fear of financial catastrophe due to a potentially large malpractice payout, an effective and quick incident analysis, a responsive and humane apology management team, and a regulatory and political environment conducive to risk integration. The need for congruent legislation and comprehensive public policy changes to help with the goal of expansion of open disclosure throughout the world is discussed.

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Abstract: This study applies the Technology-Organisation-Environment framework to examine the organizational and market factors affecting Mozambican banks’ adoption of mobile banking. The study is motivated by two factors: 1) about 80% of Mozambicans own mobile phones, while only 13% own bank accounts. Thus, it was necessary to investigate whether Mozambican banks have adopted mobile banking for broader financial service inclusion, and to examine the drivers of the adoption. 2) There are limited studies on mobile banking adoption from a firm’s perspective. We surveyed 112 employees at various service and managerial levels from ten banks in Mozambique’s capital, Maputo. Descriptive statistics revealed that about 90% of the respondents agreed to mobile banking adoption. Structural equation modelling results revealed that financial resources, customer and competitive pressure, and IT vendor support significantly drive the banks’ mobile banking adoption. Top management support and employee capability did not make significant impact. Implications are provided.

Johan W de Jager
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STUDENT CUSTOMER ORIENTATION:
A COMPARISON BETWEEN A SELECTION
OF SOUTH AFRICAN AND INDONESIAN
STUDENTS

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Abstract: Higher education, like any other business, should embrace a customer-oriented approach within the marketing concept as prerequisite for sustainability. This include implementing the marketing concept which may have raised concerns about academic values and integrity. Thus, it is believed that a thorough understanding of guidance on how a customer-oriented concept should be implemented in higher education is crucial. The study addresses the need to study various higher education industry constructs and attempt to identify in which construct(s) the practice of customer-oriented should be applied. A total of 518 students from Southern Africa and Indonesia representing the management faculties in higher education institution (HEI) were selected. The data was processed with SPSS and tested for relationships between each construct as well as to identify which construct influence student satisfaction most. The study contributes in justifying the constructs in which students expect to be served as customers and be approached and identify which constructs they trust the HEI to conduct according to best practices. The study also highlights the construct which effects students' satisfaction. In addition, it also provides insights on how demographics, namely gender and countries contribute to a different emphases of the students' educational experiences. Lastly, the findings give practical implications and insights to HEI management on how to approach the institution from a marketing perspective

Rosemary Matikiti
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Abstract: The main purpose of this study was to identify the precursors of disconfirmation and examine the influence of disconfirmation on customer satisfaction in the airline industry of an emerging economy. The target population was airline travellers who had previously experienced service failure with a South African airline. Data was collected from a total of 300 respondents and analysed using structural equation modelling (SEM). The results revealed that positive disconfirmation is influenced by service recovery expectations and the perceived quality of recovery performance; that recovery expectation is positively related to the perceived quality of recovery performance; that service failure severity influences customer service recovery expectations; and that disconfirmation influences customer recovery satisfaction, which in turn affects customer loyalty. The study recommends that airlines establish in advance their customer expectations after service failure so that they can craft appropriate service recovery strategies.

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EDITORIAL

The World Health Organization and many other healthcare authorities have acknowledged that medical errors are a serious problem in all countries around the globe, and that when medical errors occur, the results for patients can include compromised health status, suffering, and even death. The tragedy of adverse medical events can be compounded for patients and their families in situations where it is sensed that important information has been kept from them as to how and why the negative medical outcomes occurred. There are competing forces on doctors, hospitals and medical systems related to physicians being forthcoming when medical errors occur. The literature has indicated that four broad domains of facilitating factors exist for complete disclosure, and these were identified as: Responsibility to Patient; Responsibility to Profession; Responsibility to Self; and Responsibility to Community. There were also four domains of impeding factors identified, related to disclosing medical errors: Attitudinal Barriers; Helplessness; Uncertainties; and Fears and Anxieties. In this latter category, the practitioner can experience fear of legal or financial liability, fear of professional discipline or loss of reputation, fear of family's anger, fear of admitting actual negligence, fear of looking foolish in front of junior colleagues or trainees, and fear of negative publicity. In countries where lawsuits for medical malpractice are allowed and are common, there can be fear of dire financial consequences as a result of the system of litigation. It is posited that when one or more malpractice insurance carriers are involved in a medical error situation, less transparency can result. The tendency of insurance carriers is to control information and defense strategy, and to influence medical providers to "deny and defend" as opposed to providing complete information, cooperation and transparency with an actual or potential plaintiff in a lawsuit.

There is another way. "Open disclosure" (OD) systems are found in a relatively few locations around the world and they are designed to normalize transparency and the allowance of expressions of remorse after the discovery of adverse medical/clinical events. To this end, the authors identify the following operational elements that should be in place to achieve an optimal open disclosure program within a healthcare system: OD Element 1 - The open disclosure program must specialize in the ability to provide a timely apology, and to operate with complete honesty and humility. OD Element 2 - There must be ownership of an acknowledged mistake, and the physician or another clinical leader must accept responsibility for being the person in charge of a patient's care, and there must be no "finger-pointing." OD Element 3 - The open disclosure program must be intentional, well-organized and properly resourced. OD Element 4 - The open disclosure program must have someone clearly designated to provide oversight over each designated adverse event episode. OD Element 5 - The open disclosure program must have the drive to learn from errors and near-errors and apply lessons throughout the system in a continuous-improvement environment. OD Element 6 - The open disclosure program must strive to drive out fear of consequences on the part of physicians and other providers and ensure peer and institutional support for clinical providers. In three identified healthcare systems within the United States with active open disclosure programs (the VA Medical Center in Lexington, Kentucky, the University of Michigan Health System, and Stanford University), the results have been very encouraging, with decreased overall risk management costs, decreased in-court litigation; increased settlements in quicker time frames; and even decreased claim frequency.

The healthcare organizations that are better-positioned are referred to by the authors as possessing "full risk integration," as compared to most medical organizations that know only partial risk integration. It appears that full risk integration healthcare systems have an advantage in the development and sustainment of an OD approach to risk management and quality improvement. For the first article by Mark Cwiek, George Kikano, Marcia Novaretti, & Jacob Klaus, "full risk integration" represents healthcare organizations that have fewer independent parties to work with and the ability to exert great systemic control. Employment of physicians within a large, financially successful system can be an

important component, as doctors otherwise might fear financial ruin from offering an apology to a patient when a mistake has occurred, and the healthcare system's ownership of a malpractice insurance company (or having the ability to "self-insure") can provide the ability to conduct a quick and complete analysis of risk and culpability, and yet do this in an atmosphere of transparency. The authors provide the following seven factors leading to full risk integration (FRI): FRI Factor 1: Full risk integration requires the fewest number of involved malpractice insurance companies; FRI Factor 2: Full risk integration encourages the fewest number of medical employment and/or independent contractor arrangements; FRI Factor 3: Full risk integration necessitates the mitigation of fear of financial catastrophe due to a potentially large judgment in a court of law; FRI Factor 4: Full risk integration requires an effective and quick incident research and assessment capability; FRI Factor 5: Full risk integration engages a responsive and humane apology management team; FRI Factor 6: Full risk integration ensures that clinical errors remain opportunities to improve the system; and FRI Factor 7: Full risk integration is advantaged in a jurisdiction that has statutes in place that favor the goals of open disclosure.

Cwiek, Kikano, Novaretti & Klaus provide several recommendations for hospital executives and board members seeking full risk integration within a healthcare system. The decision to proceed in this direction should be part of a multi-year strategic plan and the board of directors should identify key steps that need to be taken over time to achieve full risk integration and true open disclosure. "Champions" of this change effort should be identified, including the President and CEO of the organization, as well as the Medical Director and Risk Manager, and each of these champions should be held accountable by the board in terms of goals and objectives to be achieved in an identified time frame. A team of professionals within the organization should be established that can rapidly respond to suspected or actual errors made by caregivers, and to analyze reported incidents quickly and determine if an actual clinical error took place, or if the standard of care appears otherwise to have been met. If sound clinical care was provided, free of demonstrable error, then the clinicians would be supported fully in the defense of the case. If error is indicated, then an apology from the care giver(s) would be forthcoming and the claims appraisal and management functions would be initiated. Should actual clinical error be found, a fair settlement can be discussed with the patient and the patient's family, and if legal counsel has been engaged by the patient, this attorney can be included in the discussions. The goal would be to share information freely, and to engage in fair and realistic offers of compensation. The organization would look at errors in care as opportunities to teach others in the system how to avoid future mistakes, and to continuously bolster the quality improvement function. It is advanced herein that patients and their families would appreciate knowing that as a result of the medical error they experienced, specific improvements in the healthcare system were being made to lessen the likelihood of the same mistake being repeated with future patients.

The authors advocate for various legal and public policy changes in order to advance the aims of open disclosure around the world. In Australia, the goal of open disclosure has been endorsed in various ways, including the declaration of the National Open Disclosure Standard, and the incorporation of open disclosure into the Medical Board of Australia's publication *Good Medical Practice: A Code of Conduct for Doctors of Australia*. Even so, physicians in Australia and Tasmania "have been slow to embrace the practice of OD." There is no single, national statutory requirement for implementation of OD, but there is a mixture of "apology laws" in the various states and territories within Australia. In Canada, most of the provinces and territories have various forms of apology laws in place, which protect against having an apology from a caregiver being used in civil litigation as an admission of fault or liability. There is no national law mandating OD from physicians and hospitals, although disclosure of adverse events is certainly seen as a strong professional and ethical obligation of Canadian health professionals. In the United Kingdom there had been less than successful application of OD under the National Health Service (NHS) constitution, and so a strategy was developed to include OD principles within contractual instruments with NHS healthcare providers starting in 2013. A paradigm-altering approach has been in existence in Denmark since 1992, which approximates similar statutory changes that have been made in Norway, Sweden and New Zealand, in which the medical malpractice litigation system has been replaced

by an administrative process and where a panel of experts determines whether patients can collect compensation for errors made in their healthcare delivery.

The United States is a country of many jurisdictions, including the federal system and the fifty individual states. There is no single, comprehensive legislative development that brings congruence to the development of open disclosure for all these jurisdictions. Thirty-six states and the District of Columbia have “I’m sorry” laws that allow medical providers to make apologies or sympathetic gestures, and most of these states protect an expression of sympathy and not an admission of fault. The authors maintain that the “I’m sorry” apology laws have had some positive effect in recent years with helping remorseful caregivers to explain their regret to the affected patients and their families, but the application of the laws and the various court decisions related to these laws have left uncertainty in the field. This, however, seems to miss the mark. The goal of tort reform legislative law should go beyond apology laws and be toward the development of fully transparent healthcare systems, toward the development of more open disclosure opportunities and organizations that possess full risk integration, and toward fair and expedited settlement of claims.

Mozambique is a country in South Eastern Africa, which recorded an impressive 80% of mobile phone penetration rate by 2014. In the same year, about 87% of the population were however unbanked. With most of Mozambican banks established mainly in a few big cities, many of the citizens living out of the cities are excluded from banking services. Considering that the high percentage of unbanked population own mobile phones, an adoption of mobile banking by the banks can overcome the problem of financial service exclusion.

The second study by Helen Inseng Duh & Arsenio Fabiao investigated whether Mozambican banks have adopted mobile banking for broader financial service inclusion. It then applied the Technology-Organisation-Environment (TOE) framework to examine the organizational and market factors impacting on Mozambican banks’ adoption of mobile banking. This was because there were limited studies on mobile banking adoption from a firm’s perspective and the TOE provides factors impacting on firms’ adoption of technology or innovation.

Inseng & Fabiao surveyed 112 employees at various levels and departments, including administration, IT specialists and business analysts from 10 out of the 19 retail banks in Mozambique’s capital, Maputo. Maputo houses most of the banks head offices. The descriptive statistics revealed that about 90% of the respondents agreed to have adopted mobile banking. Findings have shown that banks’ efforts to serve customers electronically through mobile devices can reduce their operating cost. The impact of the organizational and market factors on the mobile banking adoption was tested with structural equation modelling. The results revealed that financial resources, customer and competitive pressure, and IT vendor support significantly drove the banks’ mobile banking adoption. Top management support and employee capability did not make significant impact.

While competition is often viewed negatively, this study revealed that the pressure from competition can be good for the adoption of innovations. The banks in Mozambique do not only have to conform to this competitive pressure, but would also have to excel by formulating and implementing strategies that give them first mover advantages. In addition to the importance of competitive pressure, customers’ pressure, as found in this study, also forces banks to become strategically innovative and socially accepted. This is particularly important to the growing number of young adult customers, who are highly techno-savvy and techno-smart. Thus in this era of digital transformation, when change happens fast, banks in Mozambique and in other countries should not only monitor and conform to changes that happen in the environmental, technological and organizational spheres, they also need to stay abreast with the fast changing lifestyle and socio-demographic characteristics of the growing number of demanding young adult customers.

Technology vendors' support had the greatest impact on Mozambiccan banks' mobile banking adoption. This can be explained from the fact that in Mozambique, most of the banks and technology vendors are foreign based firms with limited presence in the country. Therefore their support are not only deemed limited, but very important. Mozambican banks need to continuously establish good relationships with technology vendors to provide continuous technical support to the organization. The importance attached to the support from technology vendors for technological innovation adoption has also been found to be critical in other studies. The studies have not only found vendor support to be important, but also added that vendor support plays an important role in minimizing or mitigating the lack of internal technical expertise and skills in firms. Even in a developed country like Canada and about internet/e-business acceptance, it has been found that the support from vendors significantly influenced adoption decision. Thus, since firms will be more willing to adopt technology if the support from vendors is available, this factor should be considered in the planning phase of technology adoption.

Given the need for financial resources to invest in technology spaces, this study confirmed that financial resources are critical for an organization to decide on the adoption of new innovations. Other studies have also found financial resources to be significant in motivating managers in manufacturing firms to adopt B2B e-commerce. Inseng & Fabio study's finding also supports a finding in Taiwan which showed that financial resources have positive correlation with the adoption of cloud computing. Thus while management succumb to competitive and customers' pressure to embrace new technologies and innovations, they should remember to budget and make financial resources available to invest in technology. Financial resources would also be needed to develop mutually beneficial innovative marketing communication networks with employees and customers.

Higher education should like any other business embrace a customer-oriented approach within the marketing concept as prerequisite for sustainability. This includes implementing the marketing concept which may have raised concerns about academic values and integrity. Thus, it is believed that a thorough understanding of guidance on how a customer-oriented concept should be implemented in higher education is crucial. The third study by Johan de Jager & Nuri Wulandari is based on an explorative study conducted by Koris and Nokelainen (2015) focussing on Student-Customer Orientation in a European setting. The study focusses on 14 constructs on educational experience in higher education industry. These constructs are divided into two categories of experience. The first part is the experiences related to the Institutional Network and the second part, is the experience related to the Learning Situation Network. The Institutional network include aspects such as Admission, Student Feedback, Graduation, Curriculum Design, Communication with Service Staff and Rigour. The Learning situation network includes, Grading, Class Behaviour, Relational Level of Communication with Teacher, Class Study, Individual Study, Teaching Method and Course Design.

The study addresses the need to study the abovementioned constructs in the higher education industry and attempt to identify in which constructs the practice of customer-oriented should be applied. A total of 518 students from Southern Africa and Indonesia were selected representing the management faculties in higher education institution (HEI). All selected respondents were requested to voluntarily participated to the survey and were issued with a questionnaire. The survey questionnaire was constructed and contains multiple choice questions with 1 to 6 Likert scale measures. The data was processed with SPSS and tested for relationships between each construct as well as to identify which construct influence student satisfaction most. The study contributes in justifying the constructs in which students expect to be served as customers and be approached and identify which of the constructs they trust the HEI to conduct according to best practices. The study amongst others found that students expect that classroom study, relational level and student feedback to be attended and well addressed. Regarding satisfaction, there are two elements that education managers should be paying attention to in any situation. Firstly, there is the classroom behaviour. A conducive classroom situation of other students determines the students' overall

satisfaction for the HEI. Secondly is the course design which has the right balance of theory and practice is found also affecting overall satisfaction of the students.

De Jager & Wulandari study aims to address the issue of contributing to the practical implementation of the marketing concept to the higher educational experience. It has achieved its objective by three means. First by identifying categories or construct where customer-orientation are needed. Second by validating constructs related to satisfaction of the students and third by giving insights on demographic differences of the students using data from two regions/countries, namely, Indonesia and Southern Africa. The study has also contributed to the literature by adding evidence from the Asian and African higher education industry, as well as strengthening similar studies from Estonia on educational experience of HEI.

The main purpose of the forth study by Rosemary Matikiti, Mercy Mpinganjira & Mornay Roberts-Lombard was to identify the precursors of disconfirmation and examine the influence of disconfirmation on customer satisfaction in the airline industry of an emerging economy. The study also investigated the influence of recovery satisfaction on customer loyalty in the airline industry as well as the influence of service failure severity on recovery expectation. In this competitive environment organisations strive to find ways of satisfying customers even after service failure. Service failures are inevitable in service organisations and if not well addressed can result in negative disconfirmation, which will eventually lead to dissatisfaction. In order to test the applicability of the expectancy-disconfirmation theory, data were collected from airline travellers who had previously experienced service failure with a South African airline. Data was collected from a total of 300 respondents and analysed using structural equation modelling (SEM).

The results obtained revealed that recovery expectations and the perceived quality of recovery performance influence positive disconfirmation and recovery expectation is positively related to the perceived quality of recovery performance. It was also revealed that service failure severity influences customer service recovery expectations; and that disconfirmation influences customer recovery satisfaction, which in turn affects customer loyalty. In terms of research findings Matikiti, Mpinganjira & Roberst-Lombard propose the recommendations below:

- Airlines should focus more on how to satisfy dissatisfied customers and retain loyal customers through offering service recovery strategies which surpass the customers' expectations.
- Airlines should strive to offer quality service delivery which will minimise failures. When a service failure has already occurred, airlines should provide quality recovery performance which sticks in the minds of the customers, thereby erasing their memories about the service failure.
- Airlines should strive to establish in advance what their customers normally expect so that they can use this information when crafting a service recovery strategy. This would assist them to perform to the expectation of their customers, thereby reducing the gap between customer expectation and actual recovery performance.
- Airlines should make sure that the best service providers also become members of the recovery team to ensure quality of recovery performance. They would assist in providing the best recovery performance, which would satisfy customers so that they become loyal to the company.

The results of the study by Matijiti, Mpinganjira, & Roberts-Lombard support the underlining aspect of the Expectancy-Disconfirmation theory that recovery expectation influences customer disconfirmation which in turn influences customer recovery satisfaction. Airlines are recommended to establish in advance their customer expectations after service failure so that they can craft appropriate service recovery strategies as well as to reduce severe service failures.

Nick Delener, Ph.D.
Editor-in-Chief

NOTE FROM THE EDITORS

As an interdisciplinary indexed journal, *The Journal of Global Business and Technology (JGBAT)* serves academicians and practitioners in the fields of global business and technology management and their related areas. JGBAT is also an appropriate outlet for manuscripts designed to be of interest, concern, and applied value to its audience of professionals and scholars.

Readers will note that our attempt to bridge the gap between theory and practice has been successful. We cannot thank our reviewers enough for having been so professional and effective in reiterating to contributors the need to provide managerial applications of their research. As is now obvious, the majority of the articles include a section on managerial implications of research. We wish to reiterate once again our sincere thanks to JGBAT reviewers for having induced contributors to answer the “so what?” question that every *Journal of Global Business and Technology* article is required to address.

Thank you for your interest in the journal and we are looking forward to receiving your submissions. For submissions guidelines and requirements, please refer to the Manuscript Guidelines at the end of this publication.

Nick Delener, Ph.D., Editor-in-Chief
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INTERNATIONAL IMPLICATIONS OF OPEN DISCLOSURE OF MEDICAL ERRORS, AND THE SUPERIORITY OF FULL RISK INTEGRATION

Mark Cwiek, George Kikano, Marcia Novaretti and Jacob Klaus

ABSTRACT

Worldwide and throughout the ages, people have been dependent on their physicians and healthcare systems to provide them with accurate, timely and complete information related to their personal health needs. Honesty and transparency are core values considered essential in the normal and wide range of human transactions, and this is especially true in healthcare, where patients and their families place their full trust in their providers and the medical systems. Despite significant advances in science and technology, a large percentage of patients still incur preventable adverse events. Intense worldwide efforts have spotlighted the need to improve patient safety and to reduce errors. “Open disclosure” is an approach that ensures swift and honest discussion of adverse events or harm to the affected patient and the patient’s family, that can allow for an apology to be extended and, where indicated, permit an expeditious resolution to settle the matter and to avoid the need for litigation. It is advanced in this article that the structure of the medical system and its ability to organize around an optimal set of resources, herein referred to by the authors as possessing “full risk integration,” is key to optimizing the opportunities for success in this area. An optimal degree of risk integration for a healthcare system therefore includes: the fewest number of involved malpractice insurance companies, the fewest number of medical employment/independent contractor arrangements, a lessening of fear of financial catastrophe due to a potentially large malpractice payout, an effective and quick incident analysis, a responsive and humane apology management team, and a regulatory and political environment conducive to risk integration. The need for congruent legislation and comprehensive public policy changes to help with the goal of expansion of open disclosure throughout the world is discussed.

Keywords: Open Disclosure, Medical Malpractice, Patient Safety, Medical Errors, Quality Improvement, Public Policy, Full Risk Integration.

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Introduction: The Worldwide Scope and Cost of Medical Errors

In recent years, many organizations of great influence, including the World Health Organization (WHO), The Joint Commission, and myriad international governmental agencies, have put an urgent spotlight on the need to reduce medical errors in all countries around the world (Palmer, 2018). It is estimated that across the world as many as 1 in 4 patients are harmed while receiving primary and ambulatory health care and that in “low and middle-income countries” 134 million adverse events occur each year in hospitals, leading to 2.6 million deaths annually due to unsafe care (World Health Organization Patient Safety Programme, 2019). The publication of the seminal “To Err is Human” by the Institute of Medicine in 2000 estimated that as many as 98,000 annual deaths in the USA could be attributed to avoidable medical errors, and this inspired worldwide efforts to develop more effective patient safety programs (Kohn, Corrigan, & Donaldson, 2000).

As it turns out, the number of annual preventable deaths in the United States now is estimated to be much higher than originally projected, due to the growing realization that there is an endemic problem of underreported medical errors, for various reasons. Johns Hopkins Medicine conducted a large study that medical errors would rank as the third leading cause of deaths in the USA, with an estimation that more than 250,000 Americans die each year from adverse medical events (Makary & Daniel, 2016). The Johns Hopkins study indicates that medical error in healthcare facilities is the third leading cause of death in the United States, behind only heart disease and cancer (Cha, 2016). According to the study, medical errors would be reported at a greater rate officially if death certificates captured additional information beyond what is required in the use of International Classification of Disease (ICD) code set related to cause of death, including system and human factors. In this report, it was indicated that two large studies occurred (one in New York and the other in Colorado and Utah) which revealed that adverse events occurred in 3.7% and 2.9% of the respective hospitalizations. Further, it was shown that greater than half of these events occurred as a result of a preventable medical error (Makary & Daniel, 2016).

In this regard, focusing for a moment on the South American country of Brazil can be particularly enlightening. Brazil is a country of over 210 million people, and all inhabitants (citizens and non-citizens alike) are entitled to full healthcare services through the public health system as a matter of constitutional right since 1988 (Novaretti, Cwiek, & Barbosa, 2017). At this time, there is no national, systematic gathering of information on medical adverse events in Brazil, but targeted studies have been conducted that help to show the scope of medical error problems that exist there. In a study of five Brazilian states, it was shown that approximately seventy percent of filed complaints against doctors came from public sector patients and approximately thirty percent came from private sector patients (Gomes, 2017). In the state of Sao Paulo over a seven-year period, the number of physicians reported each year for suspected professional negligence increased from 2,023 physicians in 2000 to 3,569 physicians in 2006 (Cordero, et al., 2014). In a survey conducted in four tertiary hospitals in the Southeast Region of Brazil, 695 inpatient admissions were examined, and it was determined that medical adverse events occurred at a rate of 12.8 percent, and of these adverse events, 43% were deemed preventable. The authors concluded that approximately 1.3 adverse events occur for every 10 hospital admissions in Brazil, and more than 60% of the patients with an adverse event experienced prolonged hospital stays – resulting in an enormous squandering of healthcare and financial resources (Mendes, Pavao, Martins, & Travassos, 2018).

It is estimated that the annual cost of mistakes (or “preventable events”) made in healthcare delivery in the United States ranges between \$17 billion and \$29 billion (Kavaler & Alexander, 2014). Adding to the financial strain of hospitals, the federal Medicare program for the elderly since 2007 no longer compensates for the extra costs that may arise from treating many preventable errors, infections and injuries that occur during hospital inpatient stays. State Medicaid programs for the indigent and

private insurers have followed this pattern over the years (Cwiek, Kikano, Klaus, Novaretti, & Weil, 2017). Projecting these numbers to the wider international community, the worldwide astronomical costs and the tolled tragic human consequences due to avoidable medical errors stagger the imagination.

Healthcare Delivery: Mistakes, Risks, And Reality

Healthcare is a uniquely *human* enterprise, with service consequences that can either add to the joy and comfort of the patient being served or conversely, that can contribute to one's pain, suffering, and even death. Hospitals, physicians, and other healthcare providers cannot long survive without the steady inflow of revenues and they must keep an eye on proper management of expenses. Whether not-for-profit or for-profit, hospitals and doctors exist in a medico-business world where assets must be protected, and prudence dictates the need to secure insurance to guard against a wide variety of risks, including malpractice claims, general liability and other business risks. It is a prudent business practice that frivolous malpractice claims against doctors and hospitals be defended, but that leaves the door open on how claims with merit should be handled.

In the most common format for how patient injuries are handled by malpractice insurance companies, doctors and hospitals continue to use the “deny and defend” approach, in which litigation occurs in an adversarial and prolonged process (Boothman, Blackwell, Campbell, Commiskey, & Anderson, 2009). Physician and attorney Professor William Sage notes:

When health care goes awry and a patient sues, liability insurers representing individual physicians defend or settle most claims. Physician defendants are happiest if few claims arise, fewer claims are validated by verdict or settlement, and still fewer claims are publicized. Accordingly, the prudent insurer and its counsel urge secrecy, dispute fault, deflect responsibility, and make it as slow and expensive as possible for plaintiffs to continue the fight.

As a result, claims involving serious injury (the only category for which litigation is a realistic option) often take five or more years to resolve, with predictable consequences. Information about the cause of injuries is denied patients and families for prolonged periods, compensation is unavailable when it is most needed, and quality feedback to providers is attenuated to the point of uselessness. Delay also exacerbates volatility in premiums by increasing legal uncertainty and making malpractice insures more dependent on investment income for profitability. The contrast between this fragmented, dilatory, adversarial environment and the Institute of Medicine's (IOM's) futurist vision of a safe, effective, patient-centered, timely, efficient, and equitable health care system based on institutional quality improvement could hardly be more stark (Sage, 2004).

Admitting Medical Error: Dynamic Tensions and Competing Considerations

A survey of more than 10,000 physicians indicated that 19% of these doctors found it acceptable at times to cover up or avoid revealing a mistake if that mistake would not cause harm to the patient, while another 20.9% of the respondents indicated, “it depends.” The numbers change when the mistake is more grievous and would likely or potentially harm the patient. In this case, 1.6% of the physicians indicated that it was acceptable to withhold the truth, while 3.5% of the respondents indicated that it depended on the circumstances (Medscape, 2010). A recent commentary on this study indicated the probable actual percentage of doctors who could be tempted to avoid revealing a clinical mistake is probably higher, and that the reasons why physicians might hide their own mistakes or cover for a

colleague can include fear of retaliation, losing the respect of superiors or peers, lacking time to submit the requisite paperwork, and so forth. The authors assert:

But the problem isn't bad people in healthcare; it's the good people working in a system where they're not feeling safe to report errors. And when there's lack of trust in a system, problems escalate (Paulin, Marash, & Ortega, 2018).

An important study developed a useful taxonomy of facilitating and impeding factors related to the pressures that exist for physicians in disclosing medical errors (Kaldjian, Jones, Rosenthal, Tripp-Reimer, & Hills, 2006). Four broad domains of facilitating factors were identified: Responsibility to Patient (including the desire: to communicate honestly with patients of explain the circumstances of an error, to show respect for patients, and to facilitate further medical care for harmed patients); Responsibility to Profession (including the desire: to share lessons learned from errors, to serve as a role model in disclosing errors or breaking bad news, and to strengthen inter-professional relationships and build inter-professional trust); Responsibility to Self (including the desire: to be accountable for one's actions, to be courageous or altruistic, to treat others as one would like to be treated, to empathize and apologize, and to alleviate guilt of pursue forgiveness); and Responsibility to Community (including the desire: to enhance the health of future patients, to sustain patients' trust in the medical profession, to help patients be more realistic about medicine's imperfections, and to help patients understand the complex causes of errors).

The study likewise identified four domains of impeding factors related to disclosing medical errors: Attitudinal Barriers (including: perpetuating perfectionism and blaming and humiliating those involved with errors, being arrogant and proud, placing self-interests before patient interests, and allowing competition with peers to inhibit disclosure); Helplessness (including: lacking control of what happens to information once disclosed, lacking confidentiality or immunity after disclosure, lacking collegial and collegial support after disclosure, believing error reporting systems penalize those who are honest, and lacking feedback after reporting errors or a sense of ownership of the quality improvement process); Uncertainties (including: being uncertain about how to disclose, being uncertain about which errors should be disclosed, being uncertain about the cause of an adverse event, and disagreeing with a supervisor or trainee about whether an error occurred); and Fears and Anxieties (including: fear of legal or financial liability, fear of professional discipline or loss of reputation, fear of family's anger, fear of admitting actual negligence, fear of looking foolish in front of junior colleagues or trainees, and fear of negative publicity). In addition, the practitioner can feel the toxic conditions of personal failure, loss of self-esteem, and the threat to one's identity as a healer (Kaldjian et al, 2006).

There can be great uncertainties related to the practice of medicine. Physicians can be on staff at different hospitals, each with their own expectations and norms for dealing with adverse outcomes and reporting. There can be basic questions related to whether an error has occurred, and disagreement between clinicians on this score is not uncommon. The profession struggles with the paradox of medical complication versus error, and this dilemma has been described by a medical student with the following observations:

There's a risk that you're going to cause a pneumothorax when you do a thoracentesis.... But if I am the one that causes that pneumothorax, is it because I was an idiot? Do I say, "You know, I collapsed your lung, I'm really sorry, I made a mistake" or do I just present it as, "It's one of the risks, you signed informed consent." I really struggle with how you even define some of the errors (Kaldjian et al, 2006).

Traditionally, the tendency within healthcare has been to “deny and defend” when a medical error is alleged by a patient, and too often the matter becomes adversarial and devolves to the arena of plaintiffs’ and defendants’ attorneys (Boothman & Hoyler, 2013). The patient-turned-plaintiff often feels neglected, deprived of information and even abandoned by the caregivers involved, and a sense of needing to strike back through legal action can arise. Trust and effective communication can be forsaken to the agendas set by malpractice insurance carriers and aggressive attorneys. When this occurs, the overall system of healthcare suffers.

Another Way: Open Disclosure

In contrast to the tendency to withhold certain information when medical errors occur, efforts are being made to normalize transparency and the allowance of expressions of remorse after the discovery of adverse medical/clinical events within various healthcare systems. “Open disclosure” (OD) has been defined in Australia as the process of “open discussion of incidents that result in harm to a patient while receiving health care” (Australian Commission, 2013). Although Australian health ministers resolved to implement OD in healthcare settings throughout all of Australia in 2008, physicians have been slow to adopt this approach because of the uncertainty of doctors’ legal and professional obligations and concern about medicolegal risk (Finlay, Stewart, & Parker, 2013). In Canada and the United States, some programs link open disclosure of medical errors with discussions of compensation and restitution, but this is not uniform (Wu, Boyle, Wallace, & Mazor, 2013).

The systemic implementation of various elements and principles of open disclosure can be found in the literature under various names, such as the Disclosure, Apology, and Offer (DA&O) model (Bell, Smulowitz, Woodward, Mello, Duva, Boothman, & Sands, 2012), “transparency and disclosure” (Phillips-Bute 2013), “early offer” programs (Steinman, 2013), “communication-and-resolution” programs (Shostek, 2017) and the “Michigan Model” (Michigan Medicine, 2018). The authors have chosen to utilize the “open disclosure” (OD) label for purposes of this article.

The authors maintain that the following operational elements should be in place in order to achieve an optimal open disclosure program within a healthcare system:

OD Element 1 - The open disclosure program must specialize in the ability to provide a timely apology, and to operate with complete honesty and humility. The benefits of transparency to clinicians and patients include an improved care experience, avoidance of adversarial situations between patients and clinicians, consistency in messaging and behavior, and an ability to engage in effective shared decision making (National Patient Safety Foundation, 2015).

OD Element 2 - There must be ownership of an acknowledged mistake, and the physician or another clinical leader must accept responsibility for being the person in charge of a patient’s care, and there must be no “finger-pointing.” Research has indicated that when a lead physician has open communication with the patient and his family after an error has occurred, there is a greater sense of being treated as equals and higher satisfaction with the process overall (Watson, Angus, Gore, & Farmer, 2014).

OD Element 3 - The open disclosure program must be intentional, well-organized and properly resourced. An optimal system involves a commitment from the organization to disclosure, apology and early compensation when warranted “even when these are clearly not in the insurer’s interest;” providing ample staff resources to conduct incident reporting with greater speed and certainty;

training of staff and the development of standard operating procedures; and effective marketing and branding of the program (Mello et al, 2014).

OD Element 4 - The open disclosure program must have someone clearly designated to provide oversight over each designated adverse event episode. Further, having visible internal champions within the organization as well as committed executive leadership are essential (Shostek, 2017).

OD Element 5 - The open disclosure program must have the drive to learn from errors and near-errors and apply lessons throughout the system in a continuous-improvement environment. Organizations that are successful with process improvement have a systemic culture of learning from mistakes and an obvious commitment from executive leadership to this mission (Pozgar, 2018).

OD Element 6 - The open disclosure program must strive to drive out fear of consequences on the part of physicians and other providers and ensure peer and institutional support for clinical providers. The biggest barrier has been reported to be that of fear: fear of litigation, fear of loss of status among peers, fear of shame, fear of becoming the “second victim,” fear of embarrassment, self-doubt and distress, fear of reporting requirements related to the National Practitioner Databank, and fear of loss of license (Wu et al., 2013).

Positive results have been reported from some organizations that have adopted all or most of the elements of the open disclosure approach. One of the early initiators of full transparency, the VA Medical Center in Lexington, Kentucky, reported that it determined in a 13-year internal study it went to trial only three times and negotiated 170 settlements with an amazing average cost of only \$36,000 per case, compared to the experience of VA hospitals nationwide of \$98,000 per case pre-trial, \$248,000 per case at trial and \$413,000 for cases trial court judgment (Curtis, 2010).

In a study designed to review the results of the University of Michigan Health System comparing its malpractice claims six years before and six years after implementation of the disclosure and apology approach, the rate of new claims new claims dropped from 7.03 per 100,000 patient encounters to 4.52; lawsuits dropped from 2.13 to 0.75; and time to restitution decreased from 1.36 years on average to 0.95 years (Kachalia, Kaufman, Boothman, Anderson, Welch, Saint, and Rogers, 2010). Additional benefits accrued, including a decrease in cost rates due to total liability, patient compensation, and legal fees. Anecdotal evidence also suggested the program has had a positive effect on physician morale and the institution’s culture of patient safety has been enhanced (Boothman and Hoyler, 2013). Three principles have guided the University of Michigan Health System since 2001, in what has become known as the “Michigan Model:” 1) Patients harmed by unreasonable care should be made whole quickly and fairly; 2) caregivers must be supported when care was reasonable; and 3) the university (healthcare system) must learn from its mistakes (Adams, 2015).

Stanford University initiated what it calls the PEARL program (Process for Early Assessment and Resolution of Loss) and after its first forty months in operation was able to report a 36% decrease in claim frequency and a 32% average reduction in annual insurance premiums (Adams, 2015).

Full Risk Integration VS. Partial Risk Integration

There are a few healthcare organizations that have reported successes related to the development and implementation of an open disclosure approach to handling medical errors. This said, not many organizations at present in the United States are well-situated for complete success in this area, especially considering the practical realities faced by the typical community hospital and medical staff models. The

healthcare organizations that are better-positioned are referred to by the authors as possessing “full risk integration,” as compared to most medical organizations that know only partial risk integration.

It appears that full risk integration healthcare systems may have an advantage in the development and sustainment of an OD approach to risk management and quality improvement. For purposes of this paper, “full risk integration” represents healthcare organizations that have fewer independent parties to work with and the ability to exert great systemic control. Employment of physicians within a large, financially successful system can be an important component, as doctors otherwise might fear financial ruin from offering an apology to a patient when a mistake has occurred (Cwiek et al 2017). Likewise, the healthcare system’s ownership of a malpractice insurance company (or having the ability to “self-insure”) can provide the ability to conduct a quick and complete analysis of risk and culpability, and yet do this in an atmosphere of transparency (Boothman, 2009). In organizations utilizing the open disclosure approach, allowing the plaintiff’s attorney to take part in discussions over a possible settlement of the claim, along with family members and individuals from the healthcare team is not unusual (Mello, 2014).

The factors leading to full risk integration (FRI) are described below.

FRI Factor 1: Full risk integration requires the fewest number of involved malpractice insurance companies. In the typical community hospital situation, each independent medical staff member is required to maintain a malpractice insurance policy, and in a situation where multiple co-defendants are involved (such as a surgeon, an anesthesiologist, operating room personnel and the hospital itself), the various malpractice insurance companies seek first to mitigate their own losses, sometimes at the cost of the other co-defendants. The development of a self-insured model within a hospital system can be an advantage in realizing this goal (Mello et al, 2014).

FRI Factor 2: Full risk integration encourages the fewest number of medical employment and/or independent contractor arrangements. The more independent practitioners involved in a medical error situation, the more likely that positioning, self-interest, and loss of control of the process will occur. Organizations that both employ physicians and provide medical malpractice liability insurance to these doctors can have a large advantage in this regard (Mello et al, 2014). The closed staff model also can provide an advantage toward this end (Kachalia et al, 2010).

FRI Factor 3: Full risk integration necessitates the mitigation of fear of financial catastrophe due to a potentially large judgment in a court of law. The fear of increased individual liability is very real to many physicians, and the system optimally mitigates this exposure, such as through the development of a captive (self-insured) approach that covers the various providers (Bell et al, 2012).

FRI Factor 4: Full risk integration requires effective and quick incident research and assessment capabilities. The system needs to determine as rapidly as possible whether there was a genuine error that occurred, or merely a bad outcome, as even in the best of situations medical delivery cannot guarantee a positive outcome (Boothman et al, 2009).

FRI Factor 5: Full risk integration engages a responsive and humane apology management team. Disclosure communication training should be reinforced within the healthcare facility, and by professional societies and malpractice insurers (Shostek, 2017).

FRI Factor 6: Full risk integration ensures that clinical errors remain opportunities to improve the system. Full risk integration can bridge the gap between standard risk management programs and the goals of continuous quality improvement and ultimately can decrease the rate of adverse events as the

culture of transparency and enhanced patient safety methodology is embraced throughout the organization (Mello et al, 2014).

FRI Factor 7: Full risk integration is advantaged in a jurisdiction that has statutes in place that favor the goals of open disclosure. Open disclosure is enhanced when legislation has been passed that includes various tools of tort reform, especially a mandatory pre-suit notice period and enhanced expert witness foundation requirements (Kachalia et al, 2015).

While the open disclosure approach may be more challenging to implement and maintain in hospitals and clinics that do not possess full risk integration, there are malpractice insurance carriers that permit healthcare providers a so-called “limited reimbursement” model (Cwiek et al, 2017). The limited reimbursement approach allows providers to negotiate a quick maximum payout up to a certain amount, such as \$30,000. Waiver of medical bills by the providers is encouraged. Compensation in such a model is typically allowed for such things as out-of-pocket expenses and loss of time. However, unlike the full OD approach adopted by integrated systems and discussed above, the limited reimbursement approach is disallowed (by the insurance carrier) whenever one or more of the following events occur: any attorney involvement by the plaintiff; the filing of a notice of complaint (initiating litigation); the filing of a complaint to a state medical board; or the filing of a complaint with a regulatory agency. Particularly noteworthy, it is indicated that investigation of the standard of care and true systemic quality improvement over time is far more likely to occur in the integrated OD system, as compared to the limited reimbursement model (Mello, 2014).

Recommendations for Hospital Executives and Board Members Seeking Full Risk Integration

The decision to attain full risk integration in a healthcare organization should be reached as part of a multi-year strategic plan. Governance, through the board of directors, should identify key steps that need to be taken over time to achieve full risk integration and true open disclosure. “Champions” of this change effort should be identified, including the President and CEO of the organization, as well as the Medical Director and Risk Manager, and each of these champions should be held accountable by the board in terms of goals and objectives to be achieved in an identified period.

It would be imperative to have a team of professionals within the organization that could rapidly respond to suspected or actual errors made by caregivers, including doctors, nurses, therapists, and so forth. It would be important to analyze reported incidents quickly and determine if an actual clinical error took place, or if the standard of care appears otherwise to have been met. If sound clinical care was provided, free of demonstrable error, then the clinicians would be supported fully in the defense of the case. If an error is indicated, then an apology from the caregiver(s) would be forthcoming and the claims appraisal and management functions would be initiated. Should an actual clinical error be found, a fair settlement can be discussed with the patient and the patient’s family, and if legal counsel has been engaged by the patient, this attorney can be included in the discussions. The goal would be to share information freely, and to engage in fair and realistic offers of compensation. The organization would look at errors in care as opportunities to teach others in the system how to avoid future mistakes, and to continuously bolster the quality improvement function. It is advanced herein that patients and their families would appreciate knowing that as a result of the medical error they experienced, specific improvements in the healthcare system were being made to lessen the likelihood of the same mistake being repeated with future patients.

A hospital system seeking to promote open disclosure of medical errors, as described in this article, would be best achieved in an environment of full risk integration. Most hospitals have a mixture of independent medical staff members as well as employed practitioners. The independent physicians typically are required pursuant to the medical staff bylaws to procure malpractice insurance at least at a required minimum level of coverage, and they are free to secure this coverage from an insurance company of their own choosing. This sort of arrangement, although common, gives rise to many uncontrolled variables, and uncontrolled variables create hurdles to achieving coordinated and complete disclosure of medical errors, as well as the rapid settlement of claims.

There are strategies that a hospital system can develop to support the use of one liability insurance company for the hospital and the physicians. One strategy would be to have the hospital contract with an organized Independent Physician Association (IPA) that is completely owned and controlled as a corporation by member physicians (Miller, 2017), as long as there were but a single liability carrier insuring the malpractice risk of the member physicians. A second strategy would be the formation of a Physician-Hospital Organization (PHO) (Farnham, 2018), which would be jointly owned and governed by the hospital and the engaged physicians, and which could provide a mechanism for a common group policy for malpractice insurance through one insurance company.

A third strategy relates to a growing trend over the past several years of hospitals in the United States employing physicians directly, largely attributed to various regulatory forces as well as economic realities and lifestyle choices of physicians (NEJM Career Choices, 2014). By the end of 2016, a full forty-two percent of all U.S. were employed by hospitals, up from twenty-five percent in 2012 (Haefner, 2018). The extension of this trend could help organizations seeking to attain full risk integration, as insuring employed physicians typically is the responsibility of the employer (in this case, the hospital system), and this could lead to fewer malpractice insurance companies being involved. Expanding on this concept, the development of a captive liability insurance company or a self-insured model could become a key goal for the healthcare system. This would allow for the hospital and physicians to be covered under one entity, and thus eliminating another source of uncontrolled variables. Another option, short of owning a captive liability insurance function, the healthcare system might consider taking the lead in reaching a favorable contractual arrangement for coverage with a single liability carrier that could provide malpractice coverage for the hospital and all or most of its physicians.

Leadership in the healthcare organization should be active in the process of lobbying for changes in legislative law that support the aims of full risk integration and open disclosure. Statutory and public policy changes can be accomplished through involved membership with professional associations, such as the American Hospital Association, the American Medical Association, state hospital associations, state medical societies, and so forth. Further, lobbying efforts by large healthcare organizations can help to spread the message directly to state and federal lawmakers through vigorous informational efforts with elected officials from the home jurisdictions. The general goals of tort reform and the “I’m sorry laws” as discussed in the next section can be elevated to the pursuit of full disclosure and rapid, fair settlement of claims, through the realization of full risk integration within healthcare organizations.

Legislative and Public Policy Changes Needed For Expansion of Open Disclosure

The authors recommend that comprehensive and cohesive legislative changes occur in countries around the world, including the United States, to facilitate the practice of open disclosure between medical practitioners, hospitals, and their patients. In Australia, the goal of open disclosure has been endorsed in various ways, including the declaration of the National Open Disclosure Standard, and the

incorporation of open disclosure into the Medical Board of Australia's publication *Good Medical Practice: A Code of Conduct for Doctors of Australia*. Even so, physicians in Australia and Tasmania "have been slow to embrace the practice of OD." There is no single, national statutory requirement for implementation of OD, but there is a mixture of "apology laws" in the various states and territories within Australia (Finlay et al, 2013).

In Canada, most of the provinces and territories have various forms of apology laws in place, which protect against having an apology from a caregiver being used in civil litigation as an admission of fault or liability. There is no national law mandating OD from physicians and hospitals, although disclosure of adverse events is certainly seen as a strong professional and ethical obligation of Canadian health professionals. The healthcare accrediting body Accreditation Canada includes within its program of Required Organizational Practices the necessity of disclosure of adverse events and the requirement of support mechanisms for patients, family and service providers (Wu et al, 2013).

In the United Kingdom, there had been less than successful application of OD under the National Health Service (NHS) constitution, and so a strategy was developed to include OD principles within contractual instruments with NHS healthcare providers starting in 2013. The strategy maintains that non-implementation of OD principles would constitute contract breach, complete with enumerated consequences including reduced funding, remedial action and mandatory review (Finlay et al, 2013).

A medical commentator in Ireland decried "a perennially dysfunctional health system" in the country's recent scandals involving breast cancer and cervical checks, and the failure of national labs to report results appropriately to treating physicians and patients, even though open disclosure had been in place for almost two decades and it was "specifically outlined in the Medical Council's code of ethics." The author continued: "Continued failure to honour this commitment means the time has come for duty of candour legislation to be enacted. This must outline clearly the duties and responsibilities of healthcare professionals when adverse events occur" (Houston, 2018).

A paradigm-altering approach has been in existence in Denmark since 1992, which approximates similar statutory changes that have been made in Norway, Sweden and New Zealand, in which the medical malpractice litigation system has been replaced by an administrative process and where a panel of experts determines whether patients can collect compensation for errors made in their healthcare delivery. Doctors are not sued in this system and therefore do not have the fear of negative financial consequences that can occur in other countries, so physicians in Denmark often help the affected patients in filing claims for compensation with the government fund. An important gain for Danish society in this system is that a data bank of medical errors is maintained that can be mined and that often point to issues that need to be improved upon in the Danish healthcare system, including errors of process, professional guidelines in need to be revamped, and even the identification of specific providers prone to error (Pierce & Allen, 2015).

The existence of an administrative process to replace the medical malpractice litigation model does not mean necessarily that patients in such environments receive open disclosure and apology following a medical error. A qualitative Norwegian study reports that 13-14% of patients in Norway experience adverse events from hospital treatments, and patient narratives revealed a perceived lack of openness and care due to conflicting power structures, established procedures and attitudes in day-to-day patient care, and this proved consistent whether the harmed individuals pursued compensation, or not (Hagensen et al, 2018).

The United States is roundly understood to be a litigious society and many medical providers fear lawsuits. Further, physicians and other caregivers hesitate to provide information related to medical error

for fear of aiding a potential or actual plaintiff. Often, the malpractice insurance carrier is the party most interested in keeping information from the patient or patient's family when a medical error has occurred, resisting any actions that may be perceived to strengthen the suing party's case and putting greater amounts of money at risk (Cwiek et al 2017). The common response in most healthcare institutions continues to be "deny and defend" when legal action is initiated because of patient injury (Boothman, 2009).

The United States is a country of many jurisdictions, including the federal system and the fifty individual states. There is no single, comprehensive legislative development that brings congruence to the development of open disclosure for all these jurisdictions. Thirty-six states and the District of Columbia have "I'm sorry" laws that allow medical providers to make apologies or sympathetic gestures, and most of these states protect an expression of sympathy and not an admission of fault. A time limit is placed on the apology in some states, such as in Vermont, where the statute protects only oral apologies made within 30 days of when the healthcare provider knew or should have known about the consequences of the medical error (Steinman, 2013). There have been various criticisms made of "I'm sorry" laws, including from a Maryland legal counselor who opined: "To preclude an admission of fault, however, is absurd. This is a search for truth and justice. The more restrictive it becomes, the less it becomes a search for truth and the less justice is served" (Villa, 2007).

Ultimately, justice is perhaps best served when laws are enacted not so much to protect the apologizing healthcare provider but to help in the development of more open disclosure programs in healthcare delivery, in all jurisdictions. Tort reform measures can take on the more noble purposes of enabling the maintenance of patient trust in the healthcare system and the lowering of malpractice costs (Shostek, 2017). Added to this, proper legislation can help providers to use adverse outcome experiences to improve overall clinical quality and medical education. The University of Michigan Health System (UMHS) experience within the State of Michigan indicates that these seemingly disparate goals are possible to achieve, with the help of tort law changes that help toward these ends. Michigan passed malpractice reform in 1994 that requires, among other things: 1) a 6-month pre-suit notice period, which mandates the patient to wait until filing a lawsuit (and provides the healthcare system time to work with a review committee to determine its own level of fault and often to present a settlement offer, if culpability is determined); 2) protection of the review committee's findings from legal discovery; 3) Caps on noneconomic damages; and 4) new expert witness foundation requirements (Kachalia et al, 2010; Shostek, 2017).

The authors maintain that the "I'm sorry" apology laws have had some positive effect in recent years with helping remorseful caregivers to explain their regret to the affected patients and their families, but the application of the laws and the various court decisions related to these laws have left uncertainty in the field. This, however, seems to miss the mark. The goal of tort reform legislative law should go beyond apology laws and be toward the development of fully transparent healthcare systems, toward the development of more open disclosure opportunities and organizations that possess full risk integration, and toward fair and expedited settlement of claims. The Michigan experience in the United States is instructive toward these ends, and it is maintained that other statutory and regulatory mechanisms of this type be implemented with the goal of bringing global healthcare to this better place.

A lot of people say it's the right thing to do. I never say that. I say: It's the smart thing to do; it's the necessary thing to do. Because if we're going to look long term, the most important patient is the one we haven't hurt yet. – Richard Boothman (Adams, 2015)

The ultimate goal is to be open about the errors we make, to avoid making them again, and to avoid losing the trust of our patients and families. – Sanjay Saint (Adams, 2015)

REFERENCES

- Adams, J. (2015). Approach to medical mishaps reduces malpractice claims. *ENTtoday*. Retrieved January 24, 2019, from <http://www.enttoday.org/article/approach-to-medical-mishaps-reduces-malpractice-claims/?singlepage=1>
- Australian Commission on Safety and Quality in Health Care (2013). *Australian open disclosure framework*. Sydney: Commonwealth of Australia. Retrieved January 24, 2019, from <https://www.safetyandquality.gov.au/wp-content/uploads/2013/03/Australian-Open-Disclosure-Framework-Feb-2014.pdf>
- Bell, S., Smulowitz, P., Woodward, A., Mello, M., Duva, A., Boothman, R., & Sands, K. (2012). Disclosure, apology, and offer programs: Stakeholders' views of Barriers to and Strategies for broad implementation. *The Millbank Quarterly*, 90(4): 682-705.
- Boothman, R., Blackwell, A., Campbell Jr., D., Commiskey, E. & Anderson, S. (2009). A better approach to medical malpractice claims? The University of Michigan experience, *Journal of Health & Life Sciences Law*, Jan: 2(2): 125-159.
- Boothman, R. & Hoyler, M. (2013). The University of Michigan's early disclosure and offer program. *Bulletin of the American College of Surgeons* 98(3):21-5.
- Cha, A. (2016). Researchers: Medical errors now third leading cause of death in the United States. To Your Health, *The Washington Post*, May 3.
- Cordero, J., Brito, M., Brito, N., Goncalves, R., Fonseca, N., & Oliveira, A. (2014). Natureza e especialidades envolvidas nas denúncias sobre erros médicos que originaram processos etico-profissionais no conselho regional de medicina do. *Ciênc. Biol. Saúde*, v. 12, n. 2, pp. 27–30.
- Curtis, D. (2010). Sometimes, an apology can deter a lawsuit, *California Bar Journal*, July.
- Cwiek, M., Kikano, G., Klaus, J., Novaretti, M., & Weil, D. (2017). Critical steps taken in the United States, Brazil and around the world to improve patient safety: Global implications for hospitals and medical organizations. *Changing Business Environment: Gamechangers, Opportunities and Risks*. New York, NY: Global Business and Technology Association.
- Farnham, W. (2018). Physician-hospital organizations. *Healthlinks.net*. Retrieved January 24, 2019, from <https://healthlinks.net/archive/pmos.html>
- Finlay, A., Stewart, C., & Parker, M. (2013). Open disclosure: ethical, professional and legal obligations, and the way forward for regulation.
- Gomes, T. (2017). The medical error under the judiciary's view: An analysis of the decisions of the Court of Justice of the Federal District and Territories (O erro médico sob a olhar do judiciário: uma análise das decisões do Tribunal de Justiça do Distrito Federal e Territórios), Thesis, Brasília University, Brazil, 99 pp.
- Haefner, M. (2018). Hospitals employed 42% of physicians in 2016: 5 study findings. *Becker Hospital Review*. Retrieved January 24, 2019, from <https://www.beckershospitalreview.com/hospital-physician-relationships/hospitals-employed-42-of-physicians-in-2016-5-study-findings.html>
- Hagensen, G., Nilsen, G., Mehus, G., & Henriksen, N. (2018). The struggle against perceived negligence. A qualitative study of patients' experiences of adverse events in Norwegian hospitals. *BMC Health Services Research* 18:302.
- Houston, M. (2018). A perennially dysfunctional health system. *Second Opinion, Irish Medical Times*, May 17, 2018. Retrieved January 24, 2019 from <https://www.imt.ie/opinion/perennially-dysfunctional-health-system-17-05-2018/>

- Kachalia, A., Kaufman, S., Boothman, R., Anderson, S., Welch, K., Saint, S., & Rogers, M. (2010). Liability claims and costs before and after implementation of a medical error disclosure program. *Annals of Internal Medicine*, 17;153(4):213-21.
- Kachula, A. (2013). Improving patient safety through transparency. *The New England Journal of Medicine*, 369;18
- Kaldjian, L., Jones, E., Rosenthal, G., Tripp-Reimer T. & Hills, S. (2006). An empirically derived taxonomy of factors affecting physicians' willingness to disclose medical errors. *Journal of General Internal Medicine*, 21(9): 942-948.
- Kavaler, F. & Alexander S. A. (2014). *Risk management in healthcare institutions* (3rd ed.). Burlington, MA: Jones & Bartlett Learning.
- Kohn, L., Corrigan J., & Donaldson, M. (Eds.) (2000). *To err is human: Building a safer health system*. Institute of Medicine, National Academy of Sciences.
- Makery, M. & Daniel, M. (2016). Medical error – the third leading cause of death in the US, *BMJ*, 2016;353:i2139.
- Medscape (2010). *Physicians' Top 20 Ethical Dilemmas*. Retrieved January 24, 2019, from <https://www.medscape.com/features/slideshow/public/ethical-dilemmas>
- Mello, M., Boothman, R., McDonald, T., Driver, J., Lembitz, A., Bouwmeester, D., Dunlap, B. & Gallagher, T. (2014). Communication-and-resolution programs: The challenges and lessons learned from six early adaptors. *Health Affairs*, 33(1): 20-29.
- Mendes W., Pavao, A., Martins, M., & Travassos M. (2018). The application of Iberoamerican study of adverse events (IBEAS) methodology in Brazilian hospitals. *International Journal for Quality in Health Care*, 2018, 30(6), 480–485.
- Michigan Medicine, University of Michigan (2018). The Michigan Model: Medical malpractice and patient safety at UMHS. Retrieved January 24, 2019, from <https://www.uofmhealth.org/michigan-model-medical-malpractice-and-patient-safety-umhs>
- Miller, J. (2017). Definition of IPA managed health care insurance. *Azcentral*. Retrieved January 24, 2019, from <https://healthyliving.azcentral.com/definition-of-ipa-managed-health-care-insurance-12336048.html>
- National Patient Safety Foundation (2015). Lucian Leape Institute Report: *Shining a light: Safer health care through transparency*.
- NEJM Career Choices (2014). Understanding the physician employment 'movement.' *New England Journal of Medicine*. Retrieved January 24, 2019, from <http://www.nejmcareercenter.org/article/understanding-the-physician-employment-movement/>
- Novaretti, M., Cwiek, M. & Barbosa, A. (2017). Brazil. In J. Johnson, A. Stoskopf & L. Shi (Eds.), *Comparative Health Systems* (pp. 149-167). Burlington, MA; Jones & Bartlett Learning.
- Palmer, J. (2018). The Joint Commission releases 2018 patient safety goals. *Patient Safety and Quality Healthcare*. Retrieved January 24, 2019, from <https://www.psqh.com/news/joint-commission-releases-2018-patient-safety-goals/>
- Paulin, I.M., Clare, M., & Ortega, R. (2018). Health care professionals make mistakes, and that's okay. *Observations, Scientific American*. Retrieved January 24, 2019, from <https://blogs.scientificamerican.com/observations/health-care-professionals-make-mistakes-and-thats-okay/>
- Phillips-Bute, B. (2013). Transparency and disclosure of medical errors: It's the right thing to do, so why the reluctance? *Campbell Law Review* 35:333
- Pierce, O. & Allen, M. (2015). How Denmark dumped medical malpractice and improved patient safety. *ProPublica*. Retrieved January 24, 2019, from <https://www.propublica.org/article/how-denmark-dumped-medical-malpractice-and-improved-patient-safety>
- Pozgar, G. D. (2018). *Legal Aspects of Health Care Administration*, Burlington, MA: Jones & Bartlett Learning.

- Sage, W. M. (2004). The forgotten third: Liability insurance and the medical malpractice crisis. *Health Affairs*, 23, 11-12.
- Shostek, K. (2017). Communication and resolution programs: Where are we now? *American Society for Healthcare Risk Management, Legal and Regulatory*, June 28, 2017. Retrieved January 24, 2019, from <https://forum.ashrm.org/2017/06/28/communication-and-resolution-programs-where-are-we-now/>
- Steinman, S. (2013). Elements of early offer programs. *Trial*, 49:38.
- Villa, A. (2007). Attorneys weigh impact of “I’m sorry” laws. *Trial*. Retrieved January 24, 2019, from <https://www.thefreelibrary.com/Attorneys+weigh+impact+of+'I'm+sorry'+laws.-a0166432352>
- Watson, B., Angus, D., Gore, L., & Farmer, J. (2014). Communication in open disclosure conversations about adverse events in hospitals. *Language & Communication*, 41: 57-70.
- World Health Organization – Patient Safety Programme (2019). Retrieved January 24, 2019, from <http://www.who.int/patientsafety/about/en/>
- Wu, A., Boyle, D., & Wallace, G. (2013). Disclosure of adverse events in the United States and Canada: an update, and a proposed framework for improvement. *Journal of Public Health Research*, 2:32.

ORGANIZATIONAL AND MARKET FACTORS AFFECTING MOBILE BANKING ADOPTION BY MOZAMBIKAN BANKS

Helen Inseng Duh and Arsénio Fabiao

ABSTRACT

This study applies the Technology-Organisation-Environment framework to examine the organizational and market factors affecting Mozambican banks' adoption of mobile banking. The study is motivated by two factors: 1) about 80% of Mozambicans own mobile phones, while only 13% own bank accounts. Thus, it was necessary to investigate whether Mozambican banks have adopted mobile banking for broader financial service inclusion, and to examine the drivers of the adoption. 2) There are limited studies on mobile banking adoption from a firm's perspective. We surveyed 112 employees at various service and managerial levels from ten banks in Mozambique's capital, Maputo. Descriptive statistics revealed that about 90% of the respondents agreed to mobile banking adoption. Structural equation modelling results revealed that financial resources, customer and competitive pressure, and IT vendor support significantly drive the banks' mobile banking adoption. Top management support and employee capability did not make significant impact. Implications are provided.

Keywords: Mobile banking adoption, organizational and market factors, Mozambican banks, Technology-Organisation-Environment theory.

INTRODUCTION

Mobile phone coverage in Africa has grown at staggering rates over the past decade. In 1999, only 10% of the African population had mobile phone coverage, primarily in North Africa (Algeria, Egypt, Libya, Morocco and Tunisia) and South Africa (Aker & Mbiti, 2010). By 2011, the number of subscribers rose to 647 million (Carmody, 2013), with an annual growth rate of 65 percent (Hosman & Fife, 2012). Mozambique, a South Eastern African country recorded an impressive 80% of mobile phone penetration rate by 2014 (MM4P - Mobile Money for the Poor, 2014). In the same year, about 87% of the population were unbanked (Bank of Mozambique, 2014). Most of Mozambican banks are foreign owned and are established mainly in a few big cities. Millions of people living out of the cities are therefore excluded from banking services (Baptista & Oliveira, 2015). With the high percentage of unbanked population, most of whom own mobile phones, Baptista and Oliviera suggest that mobile banking can overcome the problem of financial service exclusion. Mpinganjira and Mbango (2013) also suggest that service delivery can be greatly improved by the use of electronic technology.

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Mobile banking is the adoption of mobile terminals, such as cell phones to access banking services, including account inquiry, cash transfer, and bill payment and banking information dissemination (Zhou, 2013). In addition to the large number of unbanked Mozambicans, mobile banking is important in Mozambique, because the establishment of traditional branch banking requires investments in infrastructure and personnel, which is not currently adequate in the country. With mobile banking, customer value can be created not only through the provision of various banking services, but also through it being inherently time and place independent (Lin, 2012). With these mobile banking advantages, authorities in various African countries, including Mozambique, are legislating banks to partner with telecom operators for the provision of mobile financial services. For example, in Kenya, there is the Kenyan Bank of Africa b-web and in Mozambique, there is the Mozambican BancoTerra, TerraMovel and MozaBanco Mozamobile, whereby the banks are using mobile service to directly transact with customers (Baptista & Oliveira, 2015). Despite these attempts, technology adoption in Africa generally (Maduku, Mpinganjira & Duh, 2016), and in Mozambique specifically has been slow (Bandiera & Rasul, 2006). More so, studies on the factors which are hindering or helping technology adoption in Africa, are limited (Bandiera & Rasul, 2006; Gikandi & Bloor, 2010).

Studies and theories have mainly explained technology and mobile banking adoption from customers' perspectives. Yu (2012) and Baptista and Oliviera (2015) provide lists of the models and theories, which have been used to understand drivers of mobile banking acceptance or adoption. It was seen from the lists that few studies and models have examined the drivers from a firm's viewpoint. To explain firm-level adoption of technologies, a few studies have proposed and used the Technology-Organisation-Environment (TOE) framework proposed by Tornatzky and Fleischer (1990). The framework suggests that organizational, technological and environmental factors drive organizations, its employees and managers to adopt various types of technologies.

In line with DiMaggio and Powel's (1983) institutional theory, the TOE framework also posits that organizations can choose to either be coerced or take their own initiatives to conform to various institutional demands and adapt to technological changes (Tornatzky & Fleischer, 1990). This study first investigates whether Mozambican banks have adopted mobile banking and applies the TOE framework to examine the organizational (top management support, financial resources, employee capability) and market factors (competitive, customer pressure and IT vendor support) affecting the banks' adoption of mobile banking.

TOE FRAMEWORK AND HYPOTHESES DEVELOPMENT

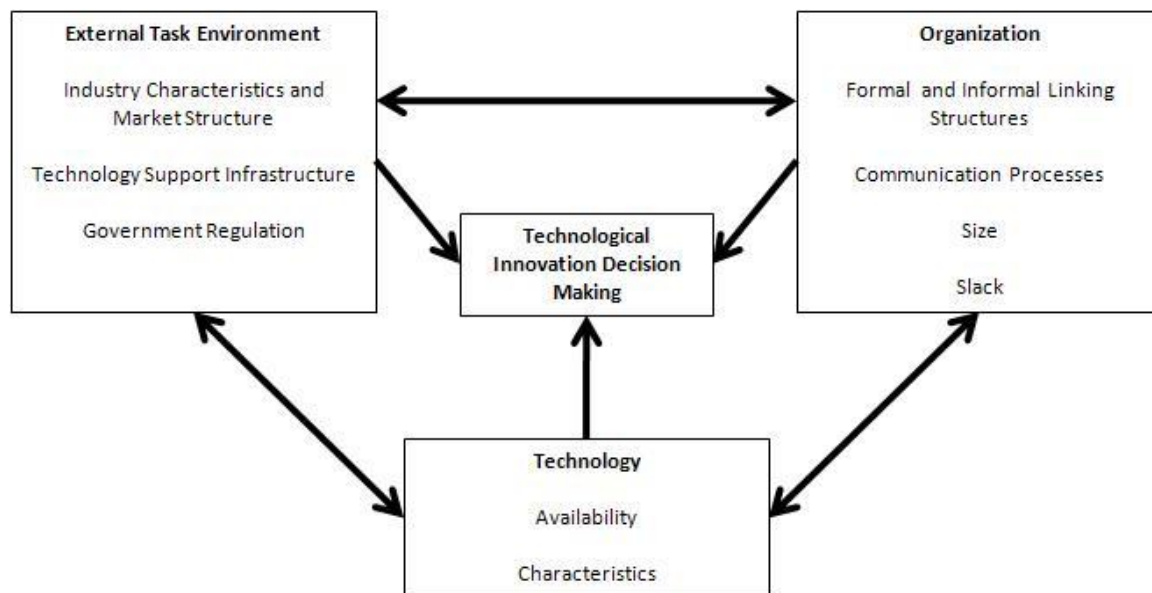
Ghobakhloo, Benitez-Amado and Arias-Aranda (2011) contend that understanding technology adoption should start with an examination of the organizational and environmental factors, which can influence organizations to conceive the idea, embrace and adopt technology in their operations. Silas (2013) and Angeles (2014) suggest the use of the TOE framework (Figure 1) developed by Tornatzky and Fleischer (1990) to get ideas of the organizational and environmental factors that do not only influence organizations to adopt innovations, but also embrace and adopt environmentally friendly measures in their operations (Angeles, 2014).

With the TOE framework suggesting three sets of drivers (environmental, organizational and technological) of innovation adoption (Tornatzky & Fleischer, 1990; Gutierrez, Boukrami & Lumsden, 2015), Sila (2013) found the framework useful to study factors affecting the adoption of B2B e-commerce technologies in the USA. Gholami, Koh and Lim (2010) also found it useful to explain the post-adoption phase of broadband in a small business. The TOE framework was also used to understand Nikes' Green Initiative by Angeles (2014). Also using the TOE framework to understand what drives Hewlett Packard

(HP) to recycle its inkjet printers and a Michigan city to recycle its garbage, Angeles (2013) found that the TOE's environmental (in terms of the City's environmental sustainability campaigns and pressures) and TOE's organizational dimensions (in terms of HP's top management's embrace and support of the environmental sustainability compliance) were the main and important drivers.

Even in a developing country like Tanzania, Kabanda and Brown (2017) found that environmental and organizational factors are influential in the adoption of e-commerce by SMEs. Considering that the organizational and environmental dimensions of the TOE framework were more useful than the technological dimension in an organisational context, this study employed the two dimensions, the organizational and market environmental factors that drive Mozambican banks to adopt mobile banking. The two TOE dimensions are discussed next and hypotheses are developed from the discussions.

Figure 1. The TOE Framework



Source: Tornatzky and Fleischer (1990: 154)

Organisational Factors Driving Technology Adoption

- Top Management Support, Financial Resources and Employee Capability

The organizational dimension comprises the size, quality and characteristics of a firm's resources, including finances, employees, the intra-firm informal and formal communication between employees, the size of the organization and the availability of slack resources. If for example, the organization has cross-functional group of employees or chain partners, who formally and informally communicate to serve customers and achieve organizational objectives, there would be the likelihood to adopt technologies that facilitate such communications (Baker, 2012). This would however depend on the extent to which financial resources are readily available to organisations to acquire and use technological innovations (Maduku et al., 2016). The financial resources are needed to cover the financial costs of hardware, software and systems integration. For the adoption of cloud computing technology in a developing country, Lian, Yen and Wang (2013) found financial cost as one critical hindrance.

Another aspect of TOE organizational dimension relates to the top management style, which welcomes change, embrace and supports technological innovations and communicates the importance of such innovations to subordinates. The top management should also have the willingness and financial resources to employ and support skilled employees, who are willing to adopt and use various innovations (Baker, 2012; Angeles, 2013). Maduku et al. (2016) found that top management support strongly affects SMEs intention to adopt mobile marketing.

In addition to the importance of top management support, Ahmadi, Ibrahim and Nilashi (2015) add that if employees lack the skill and technical knowledge in terms of employee capability, many organizations may delay the adoption of an innovation. For example, Lian et al. (2013) found that hospital staffs' technological capabilities impacted on the hospital's adoption of an innovative information technology. From these discussions, the following hypotheses are formulated:

- H1: Top management support is positively related to Mozambican banks' mobile banking adoption
- H2: The availability of financial resources is positively related to Mozambican banks' mobile banking adoption
- H3: Employee capability is positively related to Mozambican banks' mobile banking adoption.

Market Factors (Vendor Support, Competitive and Customer Pressure) Driving Technology Adoption

The environmental dimension includes the external forces pressuring organizations to change or evolve. It includes stakeholders like governmental regulations, competitors, customers, trading partners and the availability or absence of technological service providers or technology vendors (Baker, 2012). Angeles (2013) mentions that these forces have the ability to shape firms' approach towards the innovation strategy and its decision to channel resources to pursue innovation and its actual implementation. The actual Implementation would require technology vendors to facilitate the acquisition and use of technological innovation. Ahmadi et al. (2015) suggest that sufficient support from technology vendors facilitates the smooth and efficient adoption of technology.

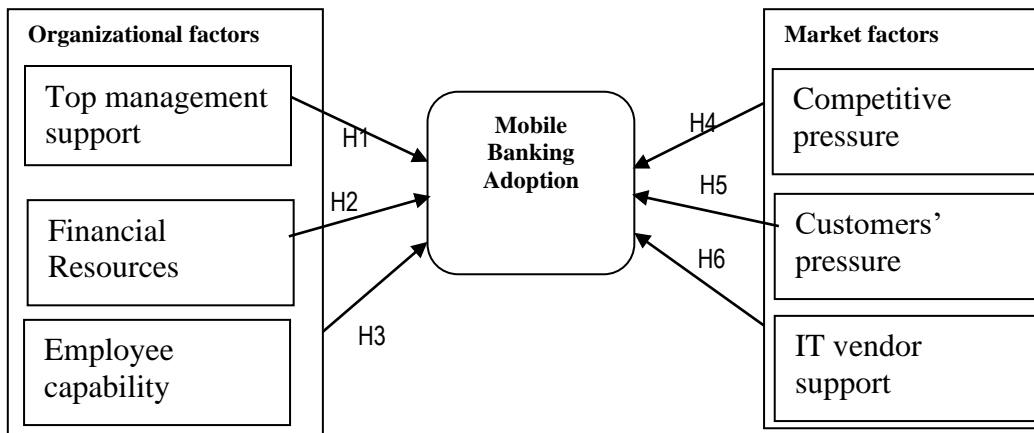
The industry structure (e.g., rapidly growing industry) and dominant organizations, including competitors, can strongly influence organizations' operating models and exert pressure towards the adoption of various technologies. Technology adoption could also be driven by firms' desire and need to be more competitive (Ghobakhloo, Benitez-Amado, & Arias-Aranda, 2011). For SMEs technology adoption for example, Ghobakhloo et al. (2011) found competitive pressure as an important determinant.

Customers can also use their ability to influence and force firms to conform to their demands and their trends (Angeles, 2013; Baker, 2012). For example, using the TOE framework to study reasons for IT adoption, Ghobakhloo et al. (2011) found that customers' pressure was the main determinant of IT adoption within firms. The adoption delivers higher level of customer service and better communication with distant partners/customers. It also leads to customer satisfaction and ultimate business success, especially in developing counties (Begum & Ozuem, 2018). From these discussions, the following hypotheses are formulated:

- H4: Competitive pressure is positively related to Mozambican banks' mobile banking adoption.
- H5: Pressure from customers is positively related to Mozambican banks' mobile banking adoption.
- H6: Support from technology vendors is positively related to Mozambican banks' adoption of mobile banking

A conceptual model and the hypotheses are presented in Figure 2.

Figure 2: Conceptual model

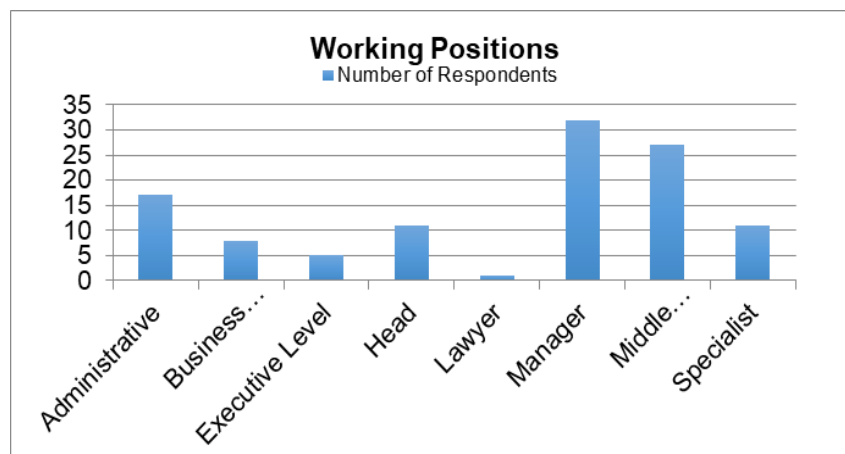


RESEARCH METHODS

Sample

Employees at various levels and departments, including administration, IT specialists, lawyers and business analysts (Figure 3) from 10 out of the 19 retail banks in Mozambique were surveyed in Maputo. Maputo is the country's capital, where most of the banks have head offices. After obtaining ethics clearance from the institution where one of the authors studied, the questionnaires were personally distributed to the ten banks to be self-administered by the respondents. The distribution was done by meeting the managers of each of the ten banks and getting the permission to survey at least 20 of their staff at different levels of management and expertise. Out of 200 distributed, 112 usable questionnaires were returned. It comprised of 57% males and 43% females. The average age of the respondents was 28 with an age range of 18-50. About 79% of the respondents had a university degrees/diplomas, while 21% had high school certificates.

Figure 3: Respondents' Working Positions



Measures

Top management support was measured in terms of whether these managers were enthusiastic about adopting mobile banking and how much they were willing to support and provide resources required for such adoption (Maduku et al., 2016). Financial resources was operationalized according to the degree to which the employees of the banks think they have sufficient resources, or can easily have access and support for financial resources needed to adopt mobile banking (Lian et al., 2013). Employee capability was measured in terms of the extent to which employees were not only capable of learning new mobile banking-related technology, but were also competent and willing to share their knowledge of mobile banking (Lin & Ho, 2010).

In terms of market factors, competitive pressure was measured in terms of the degree to which other banks put pressure, influenced and drove banks to adopt mobile banking (Ifinedo, 2011). Customer pressure was measured according to the extent to which the banks' customers did not only expect and demand the use of mobile banking, but the relationship with their banks will be affected if mobile banking is not adopted (Wu & Lee, 2005). Support from technology vendors was measured in terms of the extent to which banks could receive assistance from mobile banking vendors to facilitate their acquisition and use of mobile banking (Ghobakhloo et al., 2011). The constructs were measured with a seven-point Likert scale, where 1 = strongly disagree and 7 = strongly agree. Mozambique's first language is Portuguese and to conduct this study it was necessary to translate the questionnaire into Portuguese. This translation was done by one of the authors of this paper who is a Mozambican and fluently speaks and writes both English and Portuguese.

DATA ANALYSIS AND RESULTS

After conducting descriptive statistics from the respondents' and constructs' data, confirmatory factor analysis was conducted to test model fit, reliability and validity of the constructs. Considering the multivariate nature of this study, structural equation modeling (SEM) was used to analyse the data.

Mean, Reliability and Validity

The constructs' mean, reliability and validity are presented in Table 1.

Table 1: Accuracy analytics showing means, reliability and validity

Constructs	Items	Cronbach's Alpha	CR	AVE	Factor loadings	Mean/std deviation
Mobile banking Adoption (ADT)	ADT1	0.758	0.891	0.804	0.875	6.8(0.98)
	ADT2				0.918	
	CP1				0.475	
Competitive Pressure (CP)	CP2	0.701	0.76	0.504	0.76	5.4(1.38)
	CP3				0.709	
	CP4				0.700	
Employees Capability (EC)	EC1	0.765	0.859	0.671	0.789	6.0 (0.95)
	EC2				0.871	
	EC3				0.794	

Financial Resources (FR)	FR1				0.684	
	FR2				0.854	5.5(1.15)
	FR3	0.786	0.859	0.605	0.842	
	FR4				0.717	
Pressure from Customers (PC)	PC1				0.706	
	PC2				0.748	
	PC3	0.722	0.826	0.543	0.786	5.6(1.26)
	PC4				0.706	
Support from technology Vendors (SV)	SV1				0.867	
	SV2	0.846	0.892	0.675	0.821	5.2(1.27)
	SV3				0.693	
	SV4				0.891	
Top Management Support (TM)	TM1				0.677	
	TM2	0.888	0.797	0.581	0.553	6(1.02)
	TM3				0.989	

Note: CR = composite reliability; AVE = average variance extracted

The means ranging from 5.2 to 6.8 in Table 1 reveal that respondents agreed and strongly agreed respectively to statements measuring the constructs. Of special note is respondents' agreement that they have adopted mobile banking with ($M = 6.8$). The scales were reliable with Cronbach alphas ranging from 0.701 to 0.888. The validity (e.g., convergent) was good with factor loadings all greater than the recommended 0.4 and the average variance extracted ranging between 0.504 and 0.804, all greater than the recommended 0.5 threshold. The results of the discriminant validity are provided in the next subsection.

Correlation Matrix Measuring Discriminant Validity

According to Henseler, Ringle and Sarstedt (2015), discriminant validity is obtained when the correlation coefficients are all less than 0.9. Since the coefficients in Table 2 are all lower than 0.9, discriminant validity was obtained.

Table 2. Correlation matrix assessing discriminant validity

	ADT	CP	EC	FR	PC	SV	TM
ADT	0.846						
CP	0.454	0.741					
EC	0.466	0.523	0.737				
FR	0.477	0.708	0.512	0.778			
PC	0.458	0.825	0.568	0.825	0.739		
SV	0.484	0.347	0.384	0.322	0.353	0.822	
TM	0.099	0.108	0.042	0.134	0.138	0.049	0.754

Note: ADT = Adoption decision; CP = competitive pressure; EC = employee capability; FR = financial resources; PC = pressure from consumers; SV support from vendors; TM = top management support.

Goodness of Fit

Considering that SEM was conducted with SmartPLS, the goodness-of-fit (GOF) of the model to the data was calculated using the following formula, $\sqrt{[(\text{average AVE}) \times R^2]}$ (Henseler & Sarstedt, 2013). Using the formula, the GOF is calculated by getting the average of all the AVE values found in Table 1 and then multiplied by R squared obtained in terms of the variance explained of the dependent variable. After multiplying the average AVE and R^2 the square root of the result is calculated. The total variance explained (R^2 of the dependent construct (adoption) by the market and organizational independent constructs was 0.47. Thus, $\sqrt{[0.626 \times 0.47]} = 0.542$. According to Henseler and Sarstedt (2013), Goodness-of-fit is assumed when the result is greater than or equal to 0.3. With 0.542 greater than 0.3, GOF of the model to the data was obtained.

SEM Hypotheses Testing Results

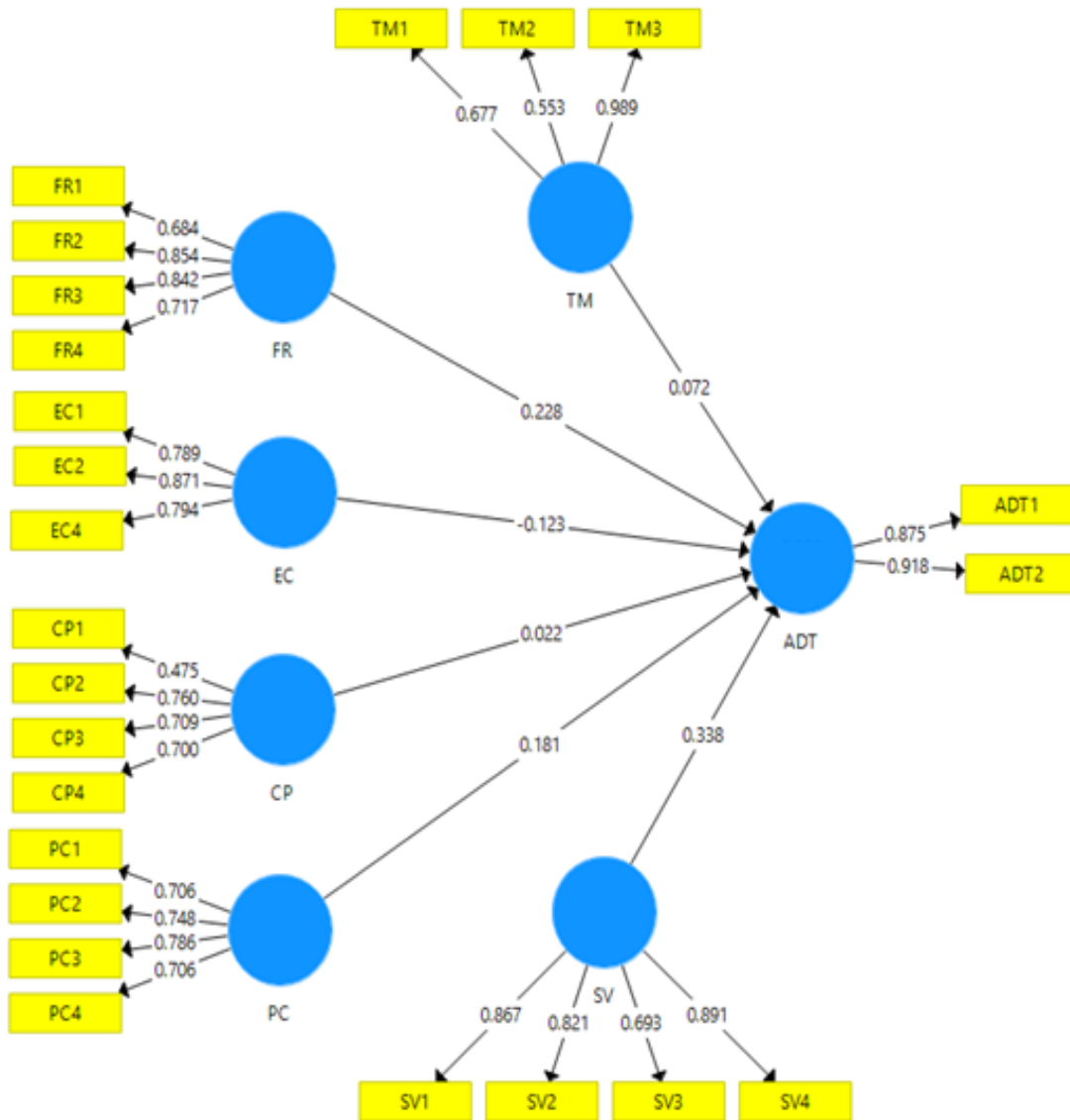
The decision to reject or accept a hypothesis is based on whether the path coefficients obtained are statistically significant at (p-value < 0.05 or t-statistic > 2). The results of the SEM analysis are presented in Figure 4 and summarised in Table 3.

Table 3. Hypothesis testing results

	Hypothesis	Path coefficient	t-statistic	p-value	Decision
TM → ADT (H1)	Top management support is positively related to mobile banking adoption	0.072	0.679	0.497	Not supported
FR → ADT (H2)	Perceived availability of financial resources is positively related to mobile banking adoption	0.228	2.001	0.041	Supported
EC → ADT (H3)	Perceived employee capability is positively related to adoption of mobile banking	-0.123	1.327	0.185	Not supported
CP → ADT (H4)	Competitive pressure is positively related to mobile banking	0.022	2.161	0.035	Supported
PC → ADT (H5)	Pressure from customers is positively related to the adoption of mobile banking	0.181	2.060	0.024	supported
SV → ADT (H6)	Support from technology vendors is positively related to mobile banking	0.338	2.171	0.030	Supported

Note: TM: top management support; FR: financial resources; EC: employee capability; CP: competitive pressure; PC: pressure from customers; SV: support from technology vendors; ADT: adoption of mobile banking.

Figure 4. SEM path model



The results in Table 3 shows that the adoption of mobile banking by banks in Mozambique is positively and significantly affected by the availability of financial resources ($\alpha = 0.228$; t -value = 2.001), competitive pressure ($\alpha = 0.022$; t -value = 2.161), customers' pressure ($\alpha = 0.181$; t -value = 2.060), and vendor support ($\alpha = 0.338$; t -value = 2.171). Top management ($\alpha = 0.072$; t -value = 0.679) and employee capability ($\alpha = -0.123$; t -value = 1.327) did not have a significant relationship with mobile banking adoption.

DISCUSSION AND IMPLICATIONS

Considering that banks in Mozambique are concentrated in big cities, only 13% of the population have a bank account, even though the country had an impressive 80% mobile phone penetration rate by

2014 (MM4P - Mobile Money for the Poor, 2014), it was important to investigate Mozambican banks' adoption of mobile banking. This study has found that for the ten banks studied, there was a strong agreement that mobile banking has been widely adopted with ($M= 6.8$). Examining the organizational and market drivers of the adoption, the results revealed that out of the four factors found making significant impact, vendor support made the greatest impact, followed by customer, financial resources and then competitive pressure. All of the three studied market factors – vendor support, customer and competitive pressures made a significant impact. The only significant organizational driver was financial resources. Ranking drivers of e-banking in Kenya in terms of their importance, Gikandi and Bloor (2010) also found that the market factors, such as competitive forces and pressure from customers were highly ranked.

While the Mozambican banks may have adopted mobile banking to be more competitive and include and serve the many unbanked customers, Gikandi and Bloor's (2010) findings show that these banks' efforts to serve customers electronically through mobile devices can also reduce their operating cost. Banks in developing countries are experiencing increased competition from many financial service providers emerging to serve the large number of unbanked customers. While competition is often viewed negatively, this study as well as Gikandi and Bloor's (2010) and Gutierrez et al.'s (2015) studies reveal that the pressure from competition can be good for the adoption of innovations. The banks in Mozambique do not only have to conform to this pressure, but would also have to excel by formulating and implementing strategies that give them first mover advantages.

In addition to the importance of competitive pressure, customers' pressure also forces banks to become strategically innovative and socially accepted. This is particularly important to the growing number of young adult customers, who are highly techno-savvy and techno-smart. Thus in this era of digital transformation, when change happens fast, banks in Mozambique and in other countries should not only monitor and conform to changes that happen in the environmental, technological and organizational spheres as the TOE framework suggests, they also need to stay abreast with the fast changing lifestyle and socio-demographic characteristics of the growing number of demanding young adult customers (Duh & Struwig, 2015).

Technology vendors' support could have had the greatest impact on Mozambican banks' mobile banking adoption, because in Mozambique, most of the banks and technology vendors are foreign based firms with limited presence in the country. Therefore their support are not only deemed limited, but very important. Mozambican banks need to continuously establish good relationships with technology vendors to provide continuous technical support to the organization. The importance attached to the support from technology vendors for technological innovation adoption has also been found to be critical in other studies. Ismail and Ali (2013) did not only find this market factor to be important, but also added that vendor support plays an important role in minimizing or mitigating the lack of internal technical expertise and skills in firms. Even in a developed country like Canada and about internet/e-business acceptance, Ifinedo (2011) also found that the support from vendors significantly influenced adoption decision. Thus, since firms will be more willing to adopt technology if the support from vendors is available, this factor should be considered in the planning phase of technology adoption.

Given the need for financial resources to invest in technology spaces, financial resources are critical for an organization to decide on the adoption of new innovations (Lian et al., 2013). This was the case for this study. This finding is in agreement with Sila (2013) who found financial resources to be significant in motivating managers in manufacturing firms to adopt B2B e-commerce. The current study's finding also supports Lian et al.'s (2013) study, which showed that financial resources have positive correlation with the adoption of cloud computing in Taiwan. Thus while management succumb to competitive and customers' pressure to embrace new technologies and innovations, they should

remember to budget and make financial resources available to invest in technology. Financial resources would also be needed to develop mutually beneficial innovative marketing communication networks with employees and customers.

Following Sila's (2013) study, which showed that top management support plays a significant role in contributing to a firm's decision to adopt B2B e-commerce, it was surprising to find in this study that top management in Mozambican banks does not significantly impact on mobile banking adoption. The possible explanation could be that more than 90% of the respondents accepted that their banks have already adopted mobile banking. More so, most of this study's respondents were managers themselves, and did not need to get support from any other level. For IT cloud adoption in Taiwan, Lian et al. (2013) also found that there was not a need for top management support to adopt the technology. As is the case of this study, financial resources was more of what was needed in Lian et al.'s (2013) study. The fact that most of the Mozambican banks have already adopted mobile banking, employee capability was also not found important in the current study, especially as they could have already developed the competency to serve customers electronically and through mobile devices.

CONTRIBUTION AND AREAS OF POSSIBLE FURTHER STUDIES

This study contributes in the field of marketing and organizational behaviour by employing the TOE framework to understand organizational and market factors behind Mozambican banks' successful mobile banking adoption. These factors should guide other banks in developing countries with many unbanked customers. The results should however be cautiously generalised until further studies replicate the study with a larger sample size. Further qualitative study can provide deeper insights. As did Gikandi and Bloor (2010), who conducted a follow-up survey to ascertain whether factors driving electronic commerce banking in Kenya were still relevant after four years, a replication of this study can be conducted in five years to not only ascertain the importance of the organizational and market factors studied here, but to also investigate other emerging important drivers of mobile banking and other forms of electronic commerce. This will be particularly important because the organizational and market factors in the current study explained only 47% of the mobile banking adoption variance.

REFERENCES

- Ahmadi, H., Ibrahim, O., & Nilashi, M. (2015). Investigating a New Framework for Hospital Information System Adoption: A Case of Malaysia. *Journal of Soft Computing and Decision Support Systems*, 2 (2), 26-33.
- Angeles, R. (2013). Using the Technology-Organization-Environment Framework and Zuboff's Concepts for Understanding Environmental Sustainability and RFID: Two Case Studies. *International Journal of Economics and Management Engineering*, 7 (11), 2878-2888.
- Angeles, R. (2014). Using the Technology-Organization-Environment Framework for Analyzing Nike's Considered Index Green Initiative, a Decision Support System-Driven System. *Journal of Management and Sustainability*, 4(1), 96-113.
- Aker, J. C., & Mbiti, I. M. (2010). Mobile Phones and Economic Development in Africa. *Journal of Economic Perspectives*, 24 (3), 208.

- Baker, J. (2012). Technology-Organization-Environment Framework. In: Dwivedi Y., Wade, Y., Schneberger, S. (eds) *Information Systems Theory*. Integrated Series in Information Systems, Vol 28, New York, NY.
- Bandiera, O. & Rasul, I. (2006). Social networks and Technology Adoption in Northern Mozambique, *The Economic Journal*, 116 (514), 869-902.
- Bank of Mozambique. (2014). *Relatorio Anual*. Maputo, Mozambique.
- Baptista, G., & Oliveira, T. (2015). Understanding mobile banking: The unified theory of acceptance and use of technology combined with cultural moderators . *Computers in Human Behavior*, 418-430.
- Begum, M., & Ozuem, W. (2018). Issues and Challenges of Online Banking in Developing Countries, The Case Study of Bangladesh. *Global Business and Technology Association*, 12th Annual International Conference, 71-77.
- Carmody, P. (2013). A knowledge economy or an information society in Africa? Thintegration and the mobile phone revolution. *Information Technology for Development*, 19 (1), 24.
- DiMaggio, P., & Powel, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review* , 48, 147-160.
- Duh, H. & Struwig, M. (2015). Justification of generational cohort segmentation in South Africa. *International Journal of Emerging Markets*, 10(1), 89-101.
- Gikandi, J. W., & Bloor, C. (2010). Adoption and Effectiveness of Electronic Banking in Kenya, *Electronic Commerce Research and Application*, 9(4), 277-282.
- Ghobakhloo, M., Venitez-Amado, J., & Arias-Aranda, D. (2011). *Reasons for Information Technology Adoption and Sophistication within Manufacturing SMEs*. POMS 22nd Annual Conference, USA.
- Gholami, R., Koh, E., & Lim, J. (2010). The Prost-Adoption Phase of Boradband in Small Businesses, *Resources Management* , 23 (1), 35-51.
- Gutierrez, A., Boukrami, E., & Lumsden, R. (2015). Technological organisational and environmental factors influencing managers' decision to adopt cloud computing in the UK. *Journal of Enterprise Information Management* , 28 (6), 788-807.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Henseler, J., & Sarstedt, M. (2013). Goodness-of-Fit Indices for Partial Least Squares Path Modeling, **Computational Statistics**, 28(2), 565-580.
- Hosman, L., & Fife, E. (2012). The Use Of Mobile Phones For Development In Africa: Top-Down-Meets-Bottom-Up Partnering. *The Journal of Community Informatics* , 8 (3).
- Ismail, W. N., & Ali, A. (2013). Conceptual model for examining the factors that influence the likelihood of computerised accounting information system (CAIS) adoption among Malaysian SMES, *International Journal of Information Technology and Business Management* , 15 (1), 122-151.
- Kabanda, S. & Brown, I. (2017). A Structuration Analysis of Small and Medium Enterprise (SME) Adoption of E-commerce: A Case of Tanzania. *Telematics and Informatics*, 34(4), 118-132.
- Lian, J.W., Yen, D. C., & Wang, Y.T. (2013). An exploratory study to understand the critical factors affecting the decision to adopt cloud computing in Taiwan hospital. *International Journal of Information Management* , 34 (1), 28-36.
- Lin, H.F. (2012). Determining the relative importance of mobile banking quality factors. *Computer Standards & Interfaces* , 35 (2), 195-204.
- Maduku, D. K., Mpinganjira, M., & Duh, H. I. (2016). Understanding mobile marketing adoption by South African SMEs: A multi-perspective framework. *International Journal of Information Management*, 36, 711-723.
- MM4P - Mobile Money for the Poor. (2014). *Digital Financial Services in Mozambique*. UN Capital Development Fund. USA: UNCDF.

- Mpinganjira, M., & Mbango, P. (2013). Profiling non-users of e-government services: in quest of e-government promotion strategies. *Journal of Global Business and Technology*, 9(2), 37-46.
- Sila, I. (2013). Factors Affecting the Adoption of B2B e-commerce. *Electronic Commerce Research*, 13(2), 199-236.
- Tornatzky, L., & Fleischer, M. (1990). *The Process of Technology Innovation*. USA: Lexington Books.

STUDENT CUSTOMER ORIENTATION: A COMPARISON BETWEEN A SELECTION OF SOUTH AFRICAN AND INDONESIAN STUDENTS

Johan W de Jager and Nuri Wulandari

ABSTRACT

Higher education, like any other business, should embrace a customer-oriented approach within the marketing concept as prerequisite for sustainability. This include implementing the marketing concept which may have raised concerns about academic values and integrity. Thus, it is believed that a thorough understanding of guidance on how a customer-oriented concept should be implemented in higher education is crucial. The study addresses the need to study various higher education industry constructs and attempt to identify in which construct(s) the practice of customer-oriented should be applied. A total of 518 students from Southern Africa and Indonesia representing the management faculties in higher education institution (HEI) were selected. The data was processed with SPSS and tested for relationships between each construct as well as to identify which construct influence student satisfaction most. The study contributes in justifying the constructs in which students expect to be served as customers and be approached and identify which constructs they trust the HEI to conduct according to best practices. The study also highlights the construct which effects students' satisfaction. In addition, it also provides insights on how demographics, namely gender and countries contribute to a different emphases of the students' educational experiences. Lastly, the findings give practical implications and insights to HEI management on how to approach the institution from a marketing perspective.

Keywords: Higher Education, Marketing, Customer Oriented Approach, Satisfaction.

INTRODUCTION

Various authors have researched the importance of the marketing concept, as it relates to higher education (Koris, Ortenblad, Kerem, & Ojala, 2015; Hemsley Brown & Oplatka, 2015; Bailey & Dangerfield, 2010). Most of them contend that customer orientation enhances business performance, regardless of the industry in which they are operating, or the size of the organisation. Higher education

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institutions are regarded as businesses, such as various other service-related organisations; and they should, consequently, embrace a customer-orientated approach within the marketing concept – if they want to succeed (Ivy, 2008; Desai, Damewood, & Jones, 2001). This came in the light where higher education is operating – in a highly competitive and dynamic environment.

The challenge is all the more intense, given the host of comparable alternatives (Gbadamosi & de Jager, 2008). Koris et al. (2015) contend that institutions of higher education world-wide, have to compete for funds from both public and private sectors, as well as for potential students. They continue to state that because only a few institutions of higher education can claim that they are different, based on historical heritage or sustainability; and academic excellence or value-creation also no longer provides any differential advantage; since institutions of higher education increasingly position themselves as customer-oriented academic institutions, stressing flexibility and convenience of attendance, in order to attract prospective students.

As higher education starting to implement marketing concepts, there are increased concerns that the academic values and integrity may be eroded (Wong & Chiu, 2017). There is also a concern that lecturers will shift identities as service providers. The reluctance among academics is believed due to misunderstanding of the discipline and lack of consensus and guidance on how customer-oriented concept should be implemented in higher education (Sabando, Lafuente, Forcada, & Zorilla, 2018; Wong & Chiu, 2017). Thus, it is crucial to have in-depth knowledge of student needs and provide a base for the correct implementation of market-orientation in the multi-faceted nature of higher education.

This study aims to investigate the different categories of educational experience and to what extent students expect higher education institutions to be customer-oriented. Moreover, it tries to find out which categories affecting students' satisfaction.

To be representative of different conditions of the higher education industry, the study combines data from Indonesia and Southern Africa, two developing countries. According to World Economic Forum Report 2017-2018 (Schwab, 2018) in Higher Education and Training Global Competitiveness Index, Indonesia rank 64 while South Africa rank 85 out of 137 countries. Both countries represent the middle tier of higher education competitiveness where all the competition and dynamic is currently taking place. Although the study is taking a regional perspective with regards to the sample data, marketization in the education industry is highly relevant with the world issues in higher education industry (Quinlan, 2014).

LITERATURE STUDY

Market Orientation and competitiveness in Higher Education

One of the main challenges for developing countries lies in mobilising and equipping human resources with the necessary knowledge to exploit the advantages of globalisation. The information age has provided the developing world with a unique opportunity to play catch-up in a world where knowledge is the only enduring asset of any society (Michael, 2004). To meet the challenges of providing a labour force with the appropriate knowledge and skills, institutions of higher education fulfil an important role in this endeavour.

In order to meet this need, institutions of higher education are continuously competing with one another, to attract the best students to build their image and reputation amongst others; and also to be recognised by various stakeholders, such as the government or rating agencies in the international domain. South Africa and Indonesia have different approaches regarding the provision of higher education, with the emphasis on their own citizens. However, this is not limited to locals as international

students contribute to the income of the institutions. Different approaches are followed to recruit and retain students; while it is evident that marketing principles are increasingly being utilised to recruit and retain the most appropriate students (Ivy, 2008).

According to Oplatka and Hemsley-Brown (2007), the following three related components of marketing orientation are suggested; and these components are underpinned by shared values and beliefs. This may assist higher education administrators, managers and faculties to understand the higher education institution and its environment. This may also provide them with norms for behaviour. Three dimensions for marketing orientation can be distinguished (Hemsley-Brown & Oplatka, 2010; Slater & Nerver, 1994).

First is customer orientation – this comprises the service provider to collect information about the environment in which students operate, as well as their characteristics; and they will consequently adapt their teaching methods to accommodate their customers' needs. By following this approach, institutions of higher education would be innovative; and they would implement future improvements for students, based on their anticipated needs (Hemsley-Brown & Oplatka, 2010). Pesch, Calhoun, Schneider and Bristow (2008) contend that university administrators who adopt a customer-oriented approach should endeavour to provide students with challenging and quality education that would enable them to pursue successful, productive careers, and to contribute to the communities in which they work and live. This would contribute to an inter-functional orientation, where qualified students would meet the needs of employers; while the reputation and image of the institutions of higher education would thereby be enhanced.

The second, the adoption of a customer-oriented approach in an educational setting implies that the university looks at the educational experience from the student's perspective. Pesch et al. (2008) conclude by stating that a successful implementation of the marketing concept, while adopting a customer-oriented approach in academia implies the need to access the students' perception of the institution's commitment to understanding and meeting students' needs. Ikeda, Campomar, Veludo-de-Oliveira (2009), however, warn that quality education should not only be customer-driven; as it is when the marketing orientation is applied alone; it is not able to properly sustain the complexity of studies concerning the educational reality. It is stressed that more important – than merely recognizing student satisfaction – is to consider the value that has been created in the society (marketing orientation versus societal marketing orientation).

The third perspective is adopting competitor orientation – Institutions of higher education that would like to assess the strengths, weaknesses, capabilities and potential of competing institutions seem to internalise this element of marketing orientation. Awareness and analyses of competitive activity can have a positive impact on decision-making through the development of initiatives, such as additional services for students. Pesch et al. (2008) contend that various universities in the USA have joined a growing list of schools that build competitive advantage by viewing the relationship between students and universities from the perspective of a marketing exchange.

One of the marketing exchange perspective involves Inter-functional co-ordination (Obermiller, Fleenor & Peter, 2005) – this implies that creating superior value for target customers is significant for institutions of higher education's success in a competitive marketplace; and it may be achieved through the integration and co-ordination of the higher educational institution's resources. Attracting student-customers is the responsibility of all within the university community. Full information about competition, the market environment and the community is important to achieve this goal. This is, according to Ikeda et al. (2009), known as a societal-marketing orientation. This approach enlarges the scope of the manager's actions because the public interest and sustainability are considered; and they are

highlighted by managing the activities according to this philosophy. This can correctly serve the educational institutions and society. Pesch et al. (2008) contend that the adoption of a customer orientation in academia implies that the needs of multiple stakeholders, such as the university, the students, as well as the employers are being recognised and addressed.

According to Pesch et al. (2008), an important component of this marketing perspective is the adoption of the marketing concept, which is based on a simple underlying business philosophy; and that is: to best achieve organisational objectives and goals and to ensure organisations long-term success, the organisation should focus on the identification and satisfaction of customers, as well as the needs of the organisations (Kotler & Armstrong, 2015).

To add to the debate of the impact of competitiveness, Saginova and Belyansky (2008) contend that merging economies are characterised by high levels of complexity, significant reforms in almost all industrial sectors, massive restructuring and increased competition. In an effort to maintain a competitive advantage, the service-quality concept (interwoven in the marketing concept and marketing orientation) in higher education is inextricably linked to the competitive service and the success of participants in the industry (Abouchedid & Nasser, 2002). Service quality can be implemented to meet the basic objective of the retention and enrolment of students in higher education institutions. This mindset confirms the value of offering acceptable services to students, in order to maintain the stature and academic reputation of an institution (Hemsley-Brown & Oplatka, 2010). Consequently, the management process should focus on students as customers, in addition to traditional areas like accreditation and performance indicators of teaching and research. The increasing competition in higher education, has led many organisations to focus on their internal (students) and external customers (potential employers); as there are often no actual products involved (Yeo, 2008).

Higher education's primary focus is to provide a quality-learning experience to students; and its secondary purpose is to meet the industry's needs for skills and knowledge. Due to the effect that is brought about by internationalisation, higher educational institutions worldwide are under pressure to provide unique learning experiences to students; so that they can obtain a competitive advantage to enrich the educational market. Educational services are often intangible and difficult to measure; as the outcome is reflected in the transformation of individuals, as regards their knowledge, their characteristics and their behaviour (Tsinidou, Gerogiannis, & Fitsilis, 2010). Consequently, there is no commonly accepted definition of quality that applies specifically to the higher education sector. Yeo (2008) contends that service quality in higher education is a complex concept; and it concerns not only the student-lecturer relationship; but it is also concerned with the physical, institutional and psychological aspects of higher education.

RESEARCH OBJECTIVE

Different views of marketing approach adoption into the practice of Higher Education Institutions as a business arrives at the conclusion that customer orientation is an important practice but currently lack guidance in conducting the discipline (Sabando, Lafuente, Forcada, & Zorilla, 2018; Wong & Chiu, 2017). It is also suggested that HEI contains of multi-faceted experiences which result in a different approach of each of the categories (Koris & Nokelainen, 2015). Therefore, the primary research objective is to measure the perceptions of students regarding various categories of student's experiences in HEI. The second objective is to investigate which categories effect students' satisfaction overall. The third objective is to give insight on how different demographics can affect the practice of student as customer-orientation.

The study takes a starting point by referring to explorative study conducted by Koris and Nokelainen (2015) on Student-Customer Orientation. The study focus on 14 constructs on educational experience in higher education industry. These constructs are divided into two categories of experience. The first part is the experiences related to the Institutional Network and the second part, is the experience related to the Learning Situation Network.

The Institutional Network comprise of constructs related to the administrative process of a higher education institution. The first construct in this category is admission to an institution, which is defined as the level of selectivity which students expect from a higher education institution to apply during the admission period. The construct includes the importance of the admission interview, the achievement of academic capabilities as the basis for admission; and whether difficult admission requirements would be preferable. The next construct is student feedback. This construct measures the importance of collecting and acting on the feedback of students. The third construct is Graduation, which is defined as the level of strictness that students expect a higher education institution to employ during student graduation. Next is the curriculum design which assesses whether students think their opinion, the opinions of alumni's, and that of the employers should be taken into consideration in the curriculum and in the subjects they study. Furthermore, it also measures the nature of the curriculum: whether it needs to lean towards a practical approach, rather than a theoretical approach. The SCOQ also measures communication. There are two separate constructs measuring communication with staff; while another one measures communication with the lecturer. The communication with the staff measures the expectations of students towards the study consultants, and other bodies responsible for the study-related activities in accommodating the student's requests. This construct excludes the classroom activities. Last is the Rigor or the lenience or strictness with which students expect the higher education institutions to follow the established rules and regulations.

The second category is the Learning Situation Network which comprise into sub parts of Rigour, Student teacher relationship, formal learning and pedagogy. Rigour includes grading and classroom behaviour. Classroom behaviour is defined as the lenience or strictness with which students expect the lecturer to approach students' good or bad behaviour in the class. The behaviour includes cheating, being late in class, as well as deadlines related to assignments. Relationship measure relationship level and communication. The communication with the lecturer construct measures the approachability and convenience that students expect from lecturers outside class hours. Formal learning includes classroom and individual studies. Lastly, pedagogy involves teaching methods and course design. The measure includes students' expectations regarding who is designing the course, as well as the nature of the course (practical vs theoretical).

The hypotheses that are to be tested fall into the following:

1. There is a high level of agreement within the 14 categories of student-customer orientation
2. There is a significant and positive relationship between satisfaction and the 14 categories of student-customer orientation.
3. There are differences between gender (male and female students) and countries (Southern Africa and Indonesia) in the 14 categories of student-customer orientation

To achieve the objectives and test the hypotheses, the study employed quantitative methodology as explained in the next section.

RESEARCH METHODOLOGY

The research design is a cross-sectional study, in which a group of respondents is studied once only (Malhotra, 2004). The unit of analysis of the study is students of higher education institutions, currently studying at such institutions, or who have just graduated less than a year period. A convenience sampling method has been applied with a paper-based survey, as well as an online survey. A total of 518 students, 279 students from Southern Africa, and 239 from Indonesia, were selected. All these students were represented from the management faculties of the respective higher education institutions.

A survey questionnaire was constructed and contains multiple choice questions with 1 to 6 Likert scale measures. The even scales intended to avoid middle range result which can result inconclusiveness of the result. Before distributed a back to back translation was conducted to ensure the same understanding with the original version. A 90-item questionnaire on student-customer orientation, as well as a set of demographic questions to clarify the profile of respondents were finalised based on the study of Koris and Nokelainen (2015). Certain adjustments were done to suit the respective environments involved.

The result was then processed using SPSS software and analysed. The analysis starts with the respondent profile and continued with the reliability of the measurement for each categories of higher education institution experience which is investigated. It will also provide the descriptive statistic and the regression to conclude the effect of satisfaction to each categories.

FINDINGS AND DISCUSSION

Respondents' Profiles

A total of 518 questionnaires were collected from the respondents in Southern Africa (54%) and Indonesia (46%). Overall, they consisted of 47% males and 53% females. Most of the respondents were in their third year at an institution of higher education (44%). Regarding the source of payment for their study, 43% of the students relied on their parents to pay; while 16% of the respondents' fees were covered by government grants/loans. While studying, 81% of the respondents were not working.

Table 1: Summary of Respondents' Profiles by Country

By Country		Southern Africa	Indonesia	Total	% Total
Gender	Male	141	101	242	47%
	Female	137	139	276	53%
Year	1	12	14	26	5%
	2	56	44	100	20%
	3	132	92	224	44%
	4	69	63	132	26%
	5	0	6	6	1%
	6	0	21	21	4%
Financing	I pay	90	11	101	19%
	The State pays	79	3	82	16%
	Full Scholarship	73	5	78	15%
	Partial Scholarship	10	20	30	6%

	Others/Parents	26	196	222	43%
	Others	0	5	5	1%
Working	Work	60	37	97	19%
	Do Not Work	218	203	421	81%

Table 2: Summary of Respondents' Profile by Gender

By Gender		Males	Females	Total	% Total
Country	Southern Africa	141	137	278	54%
	Indonesia	101	139	240	46%
Year	1	8	18	26	5%
	2	50	50	100	20%
	3	107	117	224	44%
	4	62	70	132	26%
	5	3	3	6	1%
	6	6	15	21	4%
Financing	I pay	57	44	101	19%
	The State pays	40	42	82	16%
	Full				
	Scholarship	40	38	78	15%
	Partial				
	Scholarship	9	21	30	6%
	Others/Parents	95	127	222	43%
	Others	1	4	5	1%
Working	Work	58	39	97	19%
	Do Not Work	184	237	421	81%

Instruments' Reliability and Descriptive Statistics

The 14 constructs were tested for the reliability of the instrument using the Cronbach Alpha measures. The constructs are admission, student feedback, graduation, curriculum and course design, communication with service staff and communication with lecturer, rigour, grading and classroom behaviour relational level, classroom study and individual study and teaching methods. This study employed Cronbach's Alpha criteria of 0.5 to 0.75 to be a moderately reliable scale (Hinton, McMurray, Brownlow, & Cozens, 2004). From the 14 constructs, there were 12 that were beyond 0.5 (rounded value). Thus, except for *mission* and *graduation*, all variables may be considered to be moderately reliable. Table 7 in the appendix provides the Cronbach Alpha and the inter-correlation as a sign of reliability and the convergent validity of the measures.

Next, the study provides a descriptive statistic measures by the Means and Standard Deviation in table 3. From the result, it can be inferred from the descriptive statistics in Table 3, overall, variables that have the strongest agreement of expectations are: Class Study (M=4.97, SD=1.00); Student Feedback (M=4.91, SD=0.91); and Relational Level (M=4.83, SD=1.08).

Table 3: Means and standard deviations of study variables

		Mean	SD
1	Admission	3.35	1.31
2	Student Feedback	4.91	0.91
3	Graduation	4.11	0.82
4	Curriculum Design	4.34	0.79
5	Communication with Service Staff	3.70	1.15
6	Rigour	4.10	0.72
7	Grading	4.19	0.94
8	Class Behaviour	4.18	0.83
9	Relational Level	4.83	1.08
10	Communication with Teacher	4.48	1.09
11	Class Study	4.97	1.00
12	Individual Study	2.99	1.30
13	Teaching Method	4.53	0.80
14	Course Design	4.30	0.92
15	Satisfaction	3.48	0.90

Satisfaction and SCOQ constructs

The study conducted a multiple-regression analysis to find satisfaction outcome from the SCOQ variables. The analysis was conducted using the combined data of Indonesia and Southern Africa. The results found that there are two variables that statistically predicted significant satisfaction: $F(14,502) = 1.823$, $p < .003$, $R^2 = .048$.

- The first variable is Classroom Behaviour. This variable had a positive and significant relationship with satisfaction. This result implied that the students feel more satisfied when the class teacher imposes a stricter rule to approach students' bad behaviour in the classroom (e.g. regarding cheating, deadlines and plagiarism).
- The second variable is Course Design. The regression analysis resulted in a significant and negative relationship between Course Design and Satisfaction. The Course Design variable is measuring the expectation of who designs the course, as well as the nature of the course (practical vs theoretical). The result implies that the more practical the course design, the greater the degree of satisfaction. The result, in any case, should be interpreted with caution, because of the complexity of the data which consist of two different sets merged into one. It would be advisable to conduct a separate analysis for each set (the Southern African and the Indonesian set).

A longitudinal study conducted by Burgess, Senior & Moores (2018) resulted in 'Teaching Quality' and 'Organisation & Management' as the predictors of satisfaction. The current study put the elements of quality by heightened the importance of conducive class behaviour in the teaching experience, which may then significantly increase satisfaction. Interestingly, the result seemed to support a more theoretical Course Design versus the practical one. With many universities, the curricula are designed more towards the practical approach. This result provides evidence that there is still a demand for a solid theoretical basis in the curriculum. Furthermore, it is important to integrate theoretical

framework into every practice-based learning experience, thereby providing theory in practice, instead of theory versus practical (Rotthoff, Schneider, Ritz-Timme, & Windolf, 2015).

Table 4: Coefficients

	Unstandardized Coefficient		Standardized Coefficient	Sig.
	B	Std. Error	Beta	
Constant	3.376	0.338		-
Admission	-0.460	0.048	-0.047	0.334
Student Feedback	0.037	0.068	0.029	0.589
Graduation	0.076	0.058	0.069	0.186
Curriculum Design	-0.059	0.069	-0.047	0.393
Communication with Service Staff	0.074	0.048	0.079	0.120
Rigour	-0.026	0.071	-0.021	0.711
Grading	-0.055	0.055	-0.057	0.319
Class Behaviour	0.210	0.067	0.169	0.002
Relational Level	-0.044	0.062	-0.039	0.479
Communication with Teacher	-0.085	0.055	-0.084	0.120
Class Study	0.052	0.051	0.057	0.306
Individual Study	-0.036	0.058	-0.033	0.540
Teaching Method	0.024	0.066	0.022	0.711
Course Design	-0.106	0.051	-0.112	0.039

Dependent Variable: Satisfaction

Gender Differences

This section reports on the findings related to gender differences between the respondents surveyed. An independent t-test was conducted to examine gender differences across study constructs, as well as the individual variables. Significant gender differences were found within the following constructs: Student Feedback, Communication with Service Staff and Class Behaviour.

The result validated that Student Feedback is significantly more important to females than it is to males. Communication with service staff, on the other hand, is significantly more important to the males compared to the females. With regard to in class behaviour, females, more than males, significantly agree that it is important to be controlled.

The independent t test also found that there were no significant differences in terms of satisfaction between male and female students. This implies that both gender perceptions on satisfaction fall within a similar level.

Table 5: Independent Sample test (gender differences)

	Male		Female		Levene's Test for Equality of Variances		t-test for equality of means		
	Mn	SD	Mn	SD	F	Sig.	t	df	Sig. (2- tailed)
Admission	3.41	1.34	3.30	1.29	0.56	0.46	0.91	514	0.37
Student Feedback	4.80	0.99	5.00	0.82	8.91	0.00	-2.51	466	0.01
Graduation	4.05	0.82	4.17	0.82	0.03	0.87	-1.66	514	0.10
Curriculum Design	4.36	0.77	4.33	0.82	1.27	0.26	0.33	514	0.74
Communication with Service Staff	3.83	1.10	3.57	1.17	0.63	0.43	2.64	514	0.01
Rigour	4.08	0.73	4.12	0.72	2.10	0.15	-0.64	514	0.52
Grading	4.15	0.91	4.22	0.96	1.76	0.19	-0.85	514	0.39
Class Behaviour	4.03	0.86	4.32	0.76	2.88	0.09	-4.00	514	0.00
Relational Level	4.81	1.09	4.85	1.07	0.01	0.91	-0.38	514	0.71
Communication with Teacher	4.42	1.12	4.53	1.08	0.09	0.76	-1.15	514	0.25
Class Study	4.92	1.01	5.00	1.00	0.04	0.84	-0.92	514	0.36
Individual Study	3.06	1.27	2.94	1.32	0.17	0.68	1.06	514	0.29
Teaching Method	4.51	0.82	4.55	0.79	0.28	0.60	-0.65	514	0.52
Course Design	4.30	0.93	4.30	0.93	0.24	0.62	-0.02	514	0.99
Satisfaction	3.42	0.92	3.53	0.89	0.94	0.33	-1.43	513	0.15

Country Differences

An independent t-test was conducted to investigate the regional differences within the student-customer oriented constructs. The result showed that within the 14 constructs, there were five constructs that proved to have significant differences between Southern Africa and Indonesia. These variables are: curriculum design, grading, communication with the lecturer, class study and individual study.

Table 6: Independent Sample test (country differences)

	Southern Africa		Indonesia		Levene's Test for Equality of Variances		t-test for equality of means		
	Mn	SD	Mn	SD	F	Sig.	t	df	Sig. (2- tailed)
Admission	3.35	1.445	3.36	1.14	14.96	0.00	-0.09	513	0.93
Student Feedback	4.94	0.928	4.86	0.883	0.04	0.84	1.00	517	0.32

STUDENT CUSTOMER ORIENTATION

Graduation	4.16	0.803	4.06	0.835	0.36	0.55	1.47	517	0.14
Curriculum Design	4.41	0.785	4.26	0.794	0.00	0.96	2.16	517	0.03
Communication with Service Staff	3.72	1.201	3.67	1.086	4.19	0.04	0.55	516	0.58
Rigour	4.07	0.705	4.15	0.742	3.00	0.08	-1.22	517	0.23
Grading	3.88	0.924	4.54	0.828	2.23	0.14	-8.45	517	0.00
Class Behaviour	4.14	0.847	4.23	0.801	1.74	0.19	-1.21	517	0.23
Relational Level	4.86	1.135	4.8	1.01	4.12	0.04	0.70	516	0.48
Communication with Teacher	4.82	1.086	4.08	0.965	5.60	0.02	8.20	516	0.00
Class Study	5.18	1.007	4.73	0.943	0.11	0.74	5.23	517	0.00
Individual Study	2.68	1.266	3.35	1.241	0.45	0.50	-6.03	517	0.00
Teaching Method	4.53	0.801	4.54	0.798	0.07	0.79	-0.27	517	0.79
Course Design	4.29	0.942	4.31	0.906	0.31	0.58	-0.25	516	0.80
Satisfaction	3.44	0.982	3.53	0.797	12.45	0.00	-1.13	513	0.26

Table 7: Cronbach's Alpha and inter-correlation among study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 Admission	--	.097*	.170**	0.1	.126**	.176**	.124**	.138**	0.1	.135**	0.0	.135**	0.1	0.1	- 0.0	- 0.0	- 0.0	- 0.0	- 0.0
2 Student Feedback		0.72	.305**	.380**	.220**	.320**	.313**	.211**	.357**	.276**	.364**	- 0.1	.333**	.255**	- 0.0	.109*	- 0.1	- 0.0	0.1
3 Graduation			--	.369**	.275**	.397**	.330**	.326**	.244**	.278**	.285**	0.1	.335**	.253**	0.1	0.1	- 0.0	- 0.0	0.1
4 Curriculum Design				0.47	.384**	.437**	.344**	.224**	.283**	.280**	.317**	.148**	.356**	.345**	- 0.0	- 0.0	- 0.0	-100*	- 0.0
5 Communication with Service					0.66	.315**	.283**	0.1	.202**	.102*	.124**	.271**	.221**	.257**	0.0	-.089*	- 0.1	- 0.1	- 0.1
6 Rigor						0.50	.490**	.377**	.329**	.244**	.327**	.203**	.396**	.317**	- 0.0	0.0	0.0	0.0	0.0
7 Grading							0.65	.323**	.296**	0.0	.204**	.249**	.451**	.322**	- 0.0	0.0	- 0.0	.252**	0.1
8 Class Behavior								0.64	.260**	.293**	.315**	0.0	.342**	.211**	.121**	.125**	0.0	0.0	.087*
9 Relational Level									0.45	.316**	.512**	- 0.0	.480**	.341**	- 0.1	0.0	0.0	0.0	0.0
10 Communication with Teacher										0.49	.478**	- 0.0	.289**	.233**	- 0.0	0.0	0.1	-.277**	- 0.1
11 Class Study											0.73	-.113**	.499**	.407**	0.0	0.0	0.1	-.175**	- 0.0
12 Individual Study												0.70	.169**	.293**	- 0.1	- 0.1	- 0.0	.192**	0.0
13 Teaching Method													0.70	.520**	- 0.0	0.0	- 0.0	0.0	0.1
14 Course Design														0.67	- 0.1	- 0.0	0.1	0.0	0.0
15 Satisfaction															--	0.1	0.0	0.0	.112*
16 Gender																--	0.0	.088*	.128**
17 Year																	--	0.1	-.116**
18 Paying																		--	.156**
19 working																			--

* Correlation is significant at the 0.05 level (2-tailed).

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

The results reveal that Curriculum Design is significantly more important to Southern African students than it is to Indonesian students. The same applies to communication with the lecturer, which is significantly more important to the Southern African students compared to the Indonesian Students. It seems as if Southern African students expect that lecturers' communication should be available through various channels, including after-class hours. In terms of study, Southern African students have more expectations of class study compared to Indonesian students. On the contrary, Indonesian students assigned greater importance to individual study. Lastly, Indonesian students also regard Grading as very important, which differs significantly from Southern African students. The study also tested for differences in satisfaction between Southern African and Indonesian students. The results found no significant evidence of differences between the two regions, in terms of satisfaction.

CONCLUSION

Education has always been evaluated in terms of its practical value; and in many parts of the world, university education is highly regarded and treasured because it has always been, and may still be for a long time, only available to very few people (de Jager & Gbadamosi, 2008). This study aims to address the issue of contributing to practical implementation of the marketing concept to the higher educational experience. It has achieved its objective by three means. First by identifying categories or construct where customer-orientation are needed. Second by validating constructs related to satisfaction of the students and third by giving insights on demographic differences of the students using data from two regions/ countries, namely, Indonesia and Southern Africa. The study has also contributed to literature by adding evidence from the Asian and African higher education industry, as well as strengthening similar studies from Estonia on educational experience of HEI (Koris, Ortenblad, & Ojala, 2015).

The study found that students expect that classroom study, relational level and student feedback to be attended and well addressed. Regarding satisfaction, there are two elements that education managers should be paying attention to in any situation. Firstly, there is the classroom behaviour. A conducive classroom situation of other students determines the students' overall satisfaction for the HEI. Secondly is the course design which has the right balance of theory and practice is found also affecting overall satisfaction of the students.

In addition, the findings confirm that there are significant differences within gender (female's vs males) in three of the student-customer orientation constructs. The first difference is in the student feedback. Most of the past literature studying student feedback discusses feedback to students' work or lecturers/lecturer as an object of student's evaluation. The contribution of this study is by giving a different perspective on the topic, which is to explore the action taken by the HEI management, after feedback to them had been given by the students. Females were found more attentive to the feedback; and the university's action was based on the feedback given, compared to the male students. This implies that the university should communicate all actions taken based on feedback; and alert the students that they are acting proactively in addressing issues through regular evaluation.

Communication with service staff was also found to be a factor that is differentiated by gender. Male students demand more than female students, that service staff actively communicate changes to them. This finding might imply that direct communication is preferred by males; while female students might prefer mediated communication by technology. Past study shows that the females compared to the males, are using mediated technology more (Kimbrough, Guadagno, Muscanell, & Dill, 2013).

In addition, male students regard clarity and timely communication with service staff as more important than do the female students. However, the study indicates that female students place more importance on the information provided than do their male counterparts (Joseph & Joseph, 2000). Thus, females might be more focused on the content of communication; whereas the males are more focused on how the information was communicated to them.

On class behaviour, the study revealed that female students take class discipline more seriously than do their male counterparts. The finding is in line with recent literature reported that females are indeed more critical regarding the behaviour of laddism in the learning environment, which includes arriving late and being disrespectful to lecturers (Jackson, Dempster, & Pollard, 2015) compared to their male counterparts. The implications of the findings might result in a clear set of rules on the class discipline of learners, in order to create a supporting learning experience.

The study also found that there are, indeed, differences between students' expectations related to higher education institutions in Southern Africa and Indonesia. The variables that differ most between the

two regions are the students' expectations on curriculum design, grading, communication with the lecturer, class study and individual study.

From a management perspective, the study has given valuable information. First, in order to deliver satisfaction is to control the behaviour of students in the class and designing a course that is answering today's challenges in the industry. In other hand, regarding different demographic areas, such as gender expectations, the study found that should a higher education institution have a majority of a specific gender e.g. males, they should be able to concentrate on specific issues, as the results from the study indicated that this applies more to the specific gender group (e.g. males). Another managerial implication also applies, especially to the variables that are proved to be different in Southern Africa and the Indonesian region. Thus, if a university has the intention to expand in the two countries, they need to realise the differences and adjust their approach accordingly. This may, for example, apply to an Australian university that has branches in, for example, Johannesburg as well as Jakarta.

Although the current study, attempts to contribute in the practical and theoretical aspect of education experience in HEI, limitation exists. The study did not focus on the different sources of financing, which may affect the expectations of students within the two regions. Other have also focussed on the increasing tuition issue and its effect on student's satisfaction (Burgess, Senior & Moores, 2003). It is also important for future elaboration in the industry specific issues which might contribute to the dynamics of universities and to some extent, motivation to compete in satisfaction. This include aspects such as HEI funding that is now shifting trends from state funding to private or independent funding sources and the move towards performance-based funding (Jongbloed & Vossensteyn, 2016).

A further study on education is important and could be explored further in terms of cultural aspects affecting both the Southern African region and Indonesia representing the Asian region. Furthermore, an interesting avenue can also be investigated in the study of private vs public (state-owned) university students' expectations in each region. Furthermore, the study did not differentiate between the various disciplines or the type of institution e.g. public versus private institution. More granularity of the data in terms of respondent's characteristics and combination of perspectives (from student's and lecturer's or academic staff's) may provide more depth in future studies.

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REFERENCES

- Abouchedid, K. & Nasser, R. (2002). Assuring quality service in higher education: registration and advising attitudes in a private university in Lebanon. *Quality Assurance in Education*, 10(4), 198-206.
- Altbach P.G. & Knight, J. (2007). The internationalisation of higher education: motivations and realities, *Journal of studies in internationalisational education*, 11 (3/4), Fall/winter, 290-305
- Anwar, S. (2016). Perubahan Strategi Pemasaran Perguruan Tinggi Swasta (Studi kebijakan di Universitas Prof Dr. Hazairin Bengkulu). *Jurnal Aplikasi Manajemen-Journal of Applied Management*, 14(4).

- Bailey, J.J. & Dangerfield, B. (2010). Applying the distinction between market-oriented and customer-led strategic perspectives to business school strategy, *Journal for Education for Business*, 75(3), 183-187.
- Burgess, A., Senior, C., & Moores, E. (2018). A 10-year case study on the changing determinants of university student satisfaction in the UK. *PloS one*, 13(2), e0192976.
- Coetzee, M., Botha, J., Eccles, N., Nienaber, H. & Holtzhausen, N. (2012). Developing student graduatedness and employability. Issues, provocations, theory and practical guidelines. Randburg. Knores Publishing
- Gbadamosi, G. & De Jager, J. (2008). Measuring service quality in South African higher education: Developing a multidimensional scale. Published in conference proceedings, Global Business and Technology Association (GBATA), Madrid, Spain, July 8-12, 2008, 375-384, ISBN 1-932917-04-7
- Hemsley-Brown, J. & Oplatka, I. (2010). Market orientation in universities – a comparative study of two national higher education systems, *International Journal of Educational Management*, 24 (3), 2014-220
- Hinton, P. R., Brownlow, C., McMurray, I. & Cozens, I. (2004). SPSS explained.
- Ikeda, A.A., Campomar, M.C. & Veludo-de-Oliveira, T.M. (2009). Business students' perspective on customer in education, paper presented at the BALAS Annual conference, ITESM, Guadalajara, (1 April 2009).
- Ivy, J. (2008). A new higher education marketing mix: the 7Ps for MBA marketing, *International Journal of Educational Management*, Vol. 22 Issue: 4, pp.288- 299, <https://doi.org/10.1108/09513540810875635>
- Jackson, C., Dempster, S. & Pollard, L. (2015). “They just don’t seem to really care, they just think it’s cool to sit there and talk”: Laddism in university teaching-learning contexts. *Educational Review*, 67(3), 300-314.
- Joseph, M. & Joseph, B. (2000). Indonesian students’ perceptions of choice criteria in the selection of a tertiary institution: Strategic implications. *International Journal of Educational Management*, 14(1), 40-44.
- Jongbloed, B. & Vossensteyn, H. (2016). University funding and student funding: international comparisons. *Oxford Review of Economic Policy*, 32(4), 576-595.
- Kimbrough, A. M., Guadagno, R. E., Muscanell, N. L. & Dill, J. (2013). Gender differences in mediated communication: Women connect more than do men. *Computers in Human Behaviour*, 29(3), 896-900.
- Koris, R. & Nokelainen, P. (2015). The student-customer orientation questionnaire (SCOQ). Application of customer metaphor to higher education, *International journal of educational management*, 29 (1), 115-138
- Koris, R., Ortinblad, A., Karem, K. & Ojala, T. (2015). Student-customer orientation at a higher education institution: the perspective of undergraduate business students, *Journal of Marketing for Higher Education*, 25 (1), 29-44
- Kotler, P. & Armstrong, G. (2015). Principles of marketing, Cape Town: Pearson
- Malhotra, N. K. (2008). Marketing research: An applied orientation, 5/e. Pearson Education.
- Michael, S.O. (2004). In search of universal principles of higher education management and applicability to Moldavian higher education system. *International Journal of Educational Management*, 18(2), 118-137
- Mpinganjira, M. (2011). Retaining Africa’s talent: the role of Africa’s higher education. *International Journal of Emerging markets*, 6(2), 168-179.
- Naudé, P. & Ivy, J. (1999). The Marketing Strategies of Universities in the United Kingdom. The *International Journal of Educational Management*, 13(3), 126-136.
- Obermiller, C., Fleenor, P. & Peter, R. (2005). Students as customers or products: perceptions and preferences of faculty and students, *Marketing Education Review*, 15(2), summer 2005, 27-36.

- Oplatka, I. & Hemsley- Brown, J. (2007). The incorporation of market orientation in the school culture: an essential aspect of school marketing, *International journal of educational management*, 21(4), 292-305.
- Razak, Y., Syah, D. & Aziz, A. (2017). Kepemimpinan, kinerja dosen dalam peningkatan mutu pendidikan perguruan tinggi. *Tanzhim*, 1(02), 30-44.
- Rotthoff, T., Schneider, M., Ritz-Timme, S. & Windolf, J. (2015). Theory in Practice instead of Theory versus Practice—Curricular design for Task-based Learning within a competency-oriented Curriculum. *GMS Zeitschrift für Medizinische Ausbildung*, 32(1).
- Slater, S.F. & Narver, J.C. (1994). Market orientation, customer value and superior performance. *Business Horizons*, March –April 1994, 22-28.
- Palihawadana, G.H. (1999). Modelling Module Evolution in Marketing Education. *Quality Assurance in Education*, 7(1), 41- 46.
- Pesch, M., Calhoun, R., Schneider, K. & Bristow, D. (2008). The student orientation of a college of business: an empirical look from the students' perspective. *Marketing management journal*, 18(1), 100- 10
- Quinlan, K. M. (2014). Everything for sale? The marketisation of UK higher education. By Roger Brown with Helen Carasso.
- Saginova, O. & Belyansky, V. (2008). Facilitating innovations in higher education in transition economies, *International journal of educational Management*, 22 (4), 341-351.
- Schwab, K. (2018). *The Global Competitiveness Report* [White paper]. Retrieved January 18, 2018 from World Economic Forum: <http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf>
- Tsinidou, M., Gerogiannis, V. & Fitsilis, P. (2010). Evaluation of the factors that determine quality in higher education: an empirical study. *Quality Assurance in Education*, 18(3), 227-244.
- UNESCO (n.d). Retrieved from: <http://uis.unesco.org/en/uis-student-flow>
- Wong, B. & Chiu, Y. L. T. (2017). Let me entertain you: the ambivalent role of university lecturers as educators and performers. *Educational Review*, 1-16.

ANTECEDENTS AND OUTCOMES OF POSITIVE DISCONFIRMATION AFTER SERVICE FAILURE AND RECOVERY

Rosemary Matikiti, Mercy Mpinganjira, and Mornay Roberts-Lombard

ABSTRACT

The main purpose of this study was to identify the precursors of disconfirmation and examine the influence of disconfirmation on customer satisfaction in the airline industry of an emerging economy. The target population was airline travellers who had previously experienced service failure with a South African airline. Data was collected from a total of 300 respondents and analysed using structural equation modelling (SEM). The results revealed that positive disconfirmation is influenced by service recovery expectations and the perceived quality of recovery performance; that recovery expectation is positively related to the perceived quality of recovery performance; that service failure severity influences customer service recovery expectations; and that disconfirmation influences customer recovery satisfaction, which in turn affects customer loyalty. The study recommends that airlines establish in advance their customer expectations after service failure so that they can craft appropriate service recovery strategies.

Keywords: Service failure, Service recovery, Disconfirmation, Customer loyalty, Customer satisfaction

INTRODUCTION

The distinctive characteristics of service industries, such as customer involvement, heterogeneity, real-time performance and quality evaluation, increase the chances of perceived failure in a service industry such as an airline (Baker, 2013; Choi & Choi, 2014). Service failures are thus inevitable in such industries and if not well addressed can result in negative disconfirmation, which will eventually lead to dissatisfaction (Li-hua, 2012). Dissatisfaction often results in a customer exiting or spreading negative word of mouth (Lai & Chou, 2015). However, if appropriate service recovery strategies are implemented,

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positive disconfirmation can be achieved, turning dissatisfied customers into loyal ones (Lankton & McKnight, 2012). Disconfirmation refers to the discrepancy between two concepts, expectations or desires and actual performance (Spreng & Page, 2003). Service recovery describes the process of returning aggrieved customers to a state of satisfaction with the service provider after a service/product has failed to live up to expectations (Zemke & Bell, 1990). It is generally part of quality management, with the ultimate objective of maintaining a good relationship between the business and its customers.

Since the ultimate goal of any service recovery strategy is to improve customer satisfaction and customer loyalty (Al-Msallam, 2015), this study sought to examine factors which influence disconfirmation and the influence of disconfirmation on customer satisfaction with service recovery and on customer loyalty in the airline industry of an emerging economy, South Africa. The choice of an emerging economy was based on the need to get a glimpse of how service firms in such an economy perform in terms of service recovery and to provide suitable recommendations that could enhance such industries. In addition, the outcome of the model might be different as it is assumed that the expectations of customers after service failure in an emerging economy might be different from those in advanced economies due to exposure. Again, service failures are common in emerging markets. On top of this, the experience and qualification gap between emerging economy frontline employees and advanced economy employees who deal with customer complaints as well as handling might also influence the outcome of the model. Hence, it is assumed that these highlighted issues may affect the outcome of the model in an emerging economy. Thus, testing this model in an emerging economy will determine its applicability in these economies. This is in recognition of the fact that emerging economies press towards becoming advanced but have not yet reached the advanced stage. To achieve its aim, the study made use of the expectancy-disconfirmation theory as it is one of the dominant theories in service literature for explaining customer expectation and satisfaction (Li-hua, 2012; Jha & Balaji, 2015). Specifically the objectives of this study are 1) examine the influence of service failure severity on recovery expectation, 2) to examine the influence of service recovery expectation on perceived quality of recovery performance and positive disconfirmation, 3) to establish the relationship between positive disconfirmation and customer satisfaction, and 4) to examine the relationship between customer satisfaction with service recovery and customer loyalty.

The next section of the paper presents a review of literature including the theory grounding the study, the theoretical model proposed for the study and the posited hypotheses. This is followed by the research methodology and research findings respectively. Thereafter the findings are discussed, their theoretical and managerial implications are outlined, and limitations and areas of further research are highlighted.

LITERATURE REVIEW

Service Failure in the Airline Industry

Service failure is inevitable in many service industries, including the airline industry. A review of literature (Keiningham, Morgeson, Aksoy, & Williams, 2014; Chou, 2015; Sousa & Desai, 2015; Migacz, Zou, & Petrick, 2017) revealed a number of incidents of service failure in the airline industry, which included flight cancellations and delays, attitude of cabin and ground staff, reservation problems, and fights over booking delays or losses of luggage. These service failures, according to Keiningham et al. (2014) and Nikbin, Marimuthu, Hyun, and Ishak (2015), can increase a passenger's frustration and disgruntlement, and they can be costly for the airline industry, especially for that in South Africa, which is faced with a number of challenges already.

A report on competition and regulatory issues in the South African civil aviation sector notes that the South African airline industry is experiencing financial distress and suffering from unbalanced government intervention (Mncube, 2014). The financial distress faced by South African Airways (SAA) is the result of both internal factors (inflated personnel, unprofitable routes, and a lack of good, effective management systems) and external factors (fuel price volatility and the global financial and economic crises that started in 2008) (International Air Transport Association, 2015). Airlines should therefore avoid losing customers in order to remain profitable, and this among other things demands that they learn to respond properly to service failures.

Theory Grounding the Study

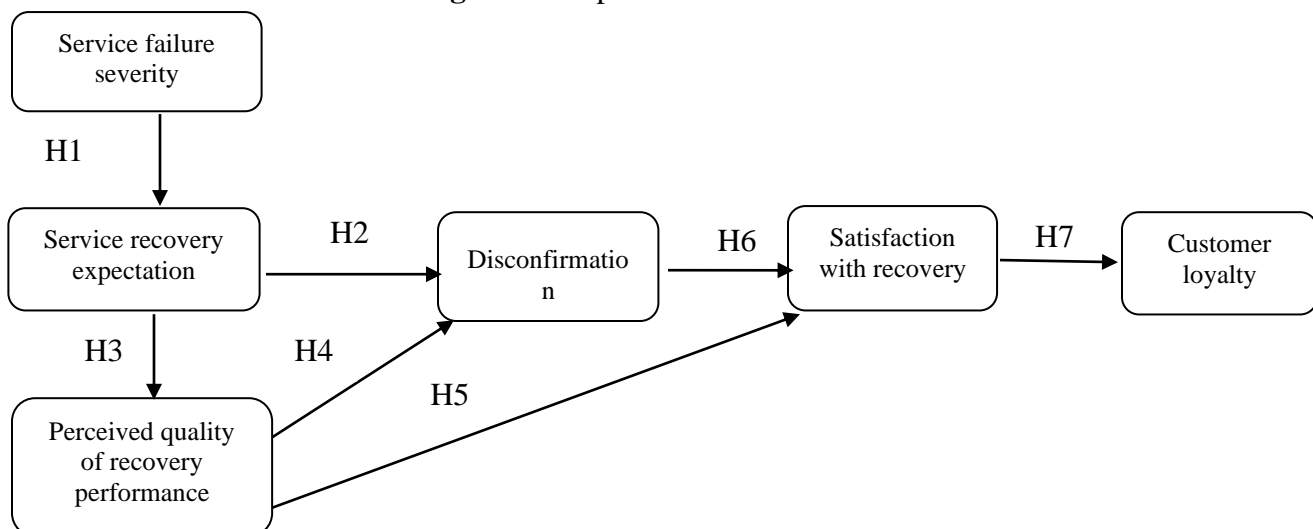
This study makes use of expectancy-disconfirmation theory to examine customer loyalty after service failure and recovery. Expectancy-disconfirmation theory states that individuals look forward to a specific quality of service when they are about to buy a particular service (Oliver, 1997). During and after the recovery process, individuals form valid perceptions of the service recovery performance (Tang, 2014). Positive or negative disconfirmation can develop when customers compare their pre-recovery and post-recovery expectations, and this in turn can influence overall satisfaction with service recovery (Awa, Ukoha, & Ugwo, 2016). Accordingly, the theory is made up of four constructs, namely customer expectations, performance, disconfirmation, and satisfaction.

The following subsections focus on how hypotheses for this study were developed using variables in disconfirmation theory. Two new variables, namely service failure severity and customer loyalty, were added to the disconfirmation model. The reason for adding service failure severity to the model is that research on service recovery has generally not considered severity of service failure, even though service failures can range from very minute failures to more serious cases (Weun, Beatty, & Jones, 2004), and severity has been identified as an important factor to consider in service research (Zeithmal, Berry, & Parasuraman, 1993). Customer loyalty was included since the ultimate aim of satisfying customers is to gain their loyalty (Chuang, Tsai, Wu, & Shiu, 2012).

Proposed Theoretical Model

Figure 1 depicts the proposed theoretical model for this study, illustrating the six constructs of the study and the hypothesised relationships between them.

Figure 1. Proposed theoretical model



Service Failure Severity and Service Recovery Expectation

Service failure severity has been described by Lai and Chou (2015) as how customers perceive the magnitude of a service failure. If the service failure is more intense, customers perceive a great loss (Chuang et al., 2012). Previous studies (Sundaram, Mitra, & Webster, 1998; Wang, Wu, Lin, & Wang, 2011; Keiningham et al., 2014; Chuang et al., 2012) are of the view that when research is being conducted on service failure and recovery, the severity of service failure should be considered carefully to ensure that the results are accurate. After a service failure, customers often expect the service provider to consider measures to ensure service recovery (Weber & Sparks, 2010). Keiningham et al. (2014) discovered that service failure severity has a significant impact on recovery expectation in the airline industry. Hee (2016) also found a significant relationship between failure severity and service recovery. Based upon these findings, the following hypothesis can be formulated for the study:

H1: Service failure severity has a significant and positive impact on the service recovery expectations of airline customers.

Service Recovery Expectation, Perceived Quality of Recovery Performance, and Recovery Disconfirmation

The key determinant of whether customers experience a feeling of satisfaction or dissatisfaction after a service failure and recovery depends on the gap between what service providers do to rectify the problem and the recovery expectations of customers, also known as service recovery disconfirmation (Li-hua, 2012). Positive disconfirmation develops when service recovery exceeds the customer's initial expectation, and negative disconfirmation occurs when a service provider fails to meet the customer's original expectations (Rashid, Ahman, & Othman, 2014; Wei, 2017). Lai and Chou (2015) found a significant relationship between customer recovery expectation and customer disconfirmation. Habel, Alavi, Schmitz, Schneider, and Wieseke (2016) established a significant relationship between perceived quality of recovery performance and recovery expectation. Chih, Wang, Hsu, and Cheng (2012) also established a significant positive relationship between quality of recovery performance and customer recovery expectation. Based upon these findings, the following hypotheses can be formulated for the study:

H2: Service recovery expectation is significantly and positively related to disconfirmation of airline customers.

H3: Service recovery expectation is significantly and positively related to perceived quality of service recovery performance.

Perceived Quality of Service Recovery Performance and Disconfirmation

According to expectancy-disconfirmation theory, disconfirmation is affected by the service provider's performance quality and expectation (Oliver, 1997). Following a service failure, disconfirmation is affected by the perceived quality of recovery performance. If the recovery process satisfies customers, positive disconfirmation will occur (Elkhani & Bakri, 2012). However, when the quality of recovery performance is worse than customers expected, negative disconfirmation will occur (Rejikumar, 2015). Jha and Balaji (2015) also found that perceived quality of recovery performance has an influence on disconfirmation and satisfaction with service recovery. Satisfaction and disconfirmation, as mentioned earlier, are two distinct constructs since disconfirmation is the discrepancy between two concepts, namely expectation or desire and actual performance (Spreng & Page, 2003), and it is a

function of satisfaction. Thus, it is expected that perceived quality of recovery performance may influence both constructs. Accordingly, the following two hypotheses can be formulated for the study:

H4: Perceived quality of recovery performance is significantly and positively related to disconfirmation for airline passengers.

H5: Perceived quality of recovery performance is significantly and positively related to satisfaction with service recovery for airline passengers.

Customer Disconfirmation and Satisfaction with Service Recovery

“Customer satisfaction” is a common term used in marketing and is a measure of how customer expectations are being met by the products and services supplied by an organisation (Adesina & Chinonso, 2015; Tweneboah-Koduah & Farley, 2016). The importance of ensuring customer satisfaction lies in the belief that it can pave the way to loyalty and ultimately to customer retention (Mostert, Steyn & Mentz, 2017). Satisfaction after service recovery depends on how the service organisation meets the service recovery expectation of the customer. Rashid et al. (2014) indicated that disconfirmation influences recovery satisfaction; similarly, Chou (2015) concluded that customer disconfirmation influences recovery satisfaction. Baker (2013) studied service quality and customer satisfaction in the airline industry and also concluded that customer disconfirmation influences customer satisfaction with service recovery. Thus, the following hypothesis can be formulated for the study:

H6: Disconfirmation is significantly and positively related to airline customer satisfaction with service recovery.

Customer Satisfaction with Service Recovery and Customer Loyalty

Customer loyalty is described as a deep commitment to repurchasing or re-patronising a preferred product consistently in the future or an obligation, based on emotion, to continue purchasing a specific brand (Rai & Srivastava, 2012; Rai & Medha, 2013). Of interest in this study is customer commitment to patronising certain airlines and recommending the same to other customers. Thus, elements of both attitudinal and behaviour loyalty are pertinent. Attitudinal loyalty, according to Andreassen and Lindestad (1998), includes positive word of mouth, while behavioural loyalty includes measures such as repeat purchase probability. A number of previous studies (Castañeda, 2011; Gures, Arslan, & Tun, 2014; Al-Msallam, 2015; Tweneboah-Koduah & Farley, 2016; Zainol, Ahmad Rozali, Mahat, Akhir, & Nordin, 2016) have found a significant positive relationship between customer satisfaction and customer loyalty. Based upon these findings, the following hypothesis can be formulated for this study:

H7: Satisfaction with recovery is positively associated with customer loyalty.

METHODOLOGY

The study used a quantitative research method following an exploratory research design. Exploratory research identifies main issues and key variables and seeks to establish the relationships (between key variables and main issues) and the nature of those relationships (Zikmund, 1984). Quantitative research is ideal where there is a need to collect data from a large number of respondents to be analysed using statistical methods (Malhotra, 2010). Data were collected using a cross-sectional approach through the use of a self-administered questionnaire which offered respondents greater anonymity (Bhattacharjee, 2012).

The target population for the study was airline travellers (South Africans and non-South Africans) who had experienced a service failure with a South African airline. Only respondents who experienced the failure during the 12 months preceding the study and could recall it clearly were requested to complete the questionnaire. Considering that there was no available database on airline passengers for possible use as a sampling frame, a non-probability sampling method was used, specifically convenience sampling. According to Morse and Niehaus (2009), when the population size cannot be accurately defined, non-probability sampling techniques such as convenience sampling are appropriate. Data were collected over a period of a month from the two airports in the Gauteng province of South Africa, namely the OR Tambo and Lanseria international airports. OR Tambo is the largest international airport in South Africa. A total of 306 questionnaires were obtained, and after data screening 300 questionnaires were retained for analysis.

The first part of the questionnaire covered the demographic information of respondents, and the last part covered the constructs relevant to the study, namely customer satisfaction, service failure severity, service recovery expectation, perceived quality of service recovery, disconfirmation, and customer loyalty. These constructs were measured using a five-point Likert scale ranging from 1 = “strongly disagree” to 5 = “strongly agree”. To measure the constructs, items were adopted from existing literature to ensure validity of the measures (see Appendix A). After the data were edited and cleaned, they were entered into SPSS 22.0. Frequencies and descriptive statistics were calculated to gain insight into the demographic profile of respondents, their age, level of income, gender, and level of education.

RESULTS

Demographic Information

Of those who completed the questionnaire, 66% were male and 34% female. As regards their age, 46.7% were 36–45 years, 30% were 26–35 years, 10% were 56–65 years, 8.3% were 18–25 years, and 5% were over 65 years. In respect of their education, 34% had a bachelor’s degree, 21% an honours degree, 27% a diploma, 10% a master’s degree, and 3% a doctoral degree, while 5% had no matric certificate. In terms of their earnings, 29.2% were earning between R16 000 and R20 000, 32.3% between R11 000 and R15 000, 15% between R21 000 and R22 000, 6.7% over R25 000, and 6.4% less than R5 000, while 3.1 % had no income. Most of the respondents (65.7%) had experienced a service failure when using domestic flights, while the others (34.3%) had experienced a service failure when using international flights.

Measurement Model

The study employed a Structural Equation Modelling (SEM) approach using AMOS, and a model was developed to represent the causal relationships among the variables (Monecke & Leisch, 2012). Appendix A shows the items used to collect the data in the form of a questionnaire.

The model was empirically tested using confirmatory factor analysis (CFA). Composite reliability (CR), average variance extracted (AVE) and Cronbach’s alpha were used to assess the reliability and validity of the constructs. The results illustrated in Table 1 show that the alpha values of all the constructs are above 0.7, the cut-off point (Saunders, Lewis, & Thornhill, 2003). The CR values need to be greater than 0.7 for convergent validity to be demonstrated. It is evident from Table 1 that all the CR values of the different constructs exceed 0.7 and the AVE values exceed 0.5, indicating good convergent validity (Fornell & Larcker, 1981).

Table 1 also indicates the factor loadings, variances explained, means and standard deviations of the 24 items used to measure the six constructs in this study. The factor loading for each item is above 0.5. Therefore, no items were removed, since they all meet the requirement for further analysis. The variance explained for each item exceeds 0.3, ranging from 0.455 to 0.814. The means vary between 3.24 and 4.97, and the standard deviations vary between 1.431 and 1.821. This is indicative of regularity between the items measuring the constructs of the study.

Table 1. Factor loadings, variances explained, means (M) and standard deviations (SD)

Construct	Item	Factor loading	Variance explained		M	SD	Cronbach's α	CR	AVE
SFS	SFS ₁	0.947	0.612		4.21	1.478	0.81	0.807	0.673
	SFS ₂	0.763	0.737		4.45	1.761			
	SFS ₃	0.852	0.701		4.67	1.572			
	SFS ₄	0.876	0.652		3.78	1.513			
SRE	SRE ₅	0.934	0.718		4.01	1.616	0.79	0.723	0.586
	SRE ₆	0.850	0.731		4.51	1.677			
	SRE ₇	0.837	0.756		4.47	1.440			
	SRE ₈	0.772	0.644		4.76	1.462			
PQRP	PQRP ₉	0.784	0.584		3.95	1.522	0.73	0.715	0.517
	PQRP ₁₀	0.715	0.621		4.01	1.533			
	PQRP ₁₁	0.976	0.467		4.21	1.654			
	PQRP ₁₂	0.806	0.678		3.24	1.635			
PD	PD ₁₃	0.864	0.814		4.17	1.821	0.76	0.746	0.592
	PD ₁₄	0.919	0.805		4.26	1.666			
	PD ₁₅	0.929	0.781		4.97	1.709			
	PD ₁₆	0.741	0.592		3.91	1.461			
SR	SR ₁₇	0.845	0.623		4.08	1.771	0.81	0.793	0.612
	SR ₁₈	0.817	0.714		4.67	1.634			
	SR ₁₉	0.792	0.748		4.37	1.431			
	SR ₂₀	0.902	0.489		4.10	1.653			
CL	CL ₂₁	0.883	0.576		3.63	1.549	0.90	0.889	0.703
	CL ₂₂	0.845	0.651		4.95	1.806			
	CL ₂₃	0.937	0.455		4.79	1.476			
	CL ₂₄	0.778	0.719		3.91	1.456			

Discriminant validity was assessed using the criterion proposed by Fornell and Larcker (1981), who state that the correlation between constructs must be less than the square root of the AVE for each construct. Statistical results in Table 2 indicate that the inter-construct correlation values are less than the values of the square root of the AVE for each construct. The square root values are the diagonal italicised values in Table 2.

Table 2. Correlation and average variance extraction

	SFS	SRE	PQRP	PD	SR	CL
SFS	<i>0.731*</i>					
SRE	0.651	<i>0.842*</i>				
PQRP	0.583	0.112	<i>0.715*</i>			
PD	0.345	0.635	0.316	<i>0.765*</i>		
SR	0.612	0.423	0.670	0.438	<i>0.816*</i>	
CL	0.123	0.287	0.471	0.198	0.164	<i>0.711*</i>

Note: The italicised diagonal figures are the square roots for AVE

The overall goodness of fit of the model was assessed using common model-fit measures, namely chi-square/(df), Tucker Lewis index (TLI), normed fit index (NFI), incremental fit index (IFI), comparative fit index (CFI) and root mean square error of approximation (RMSEA). To indicate an adequate model fit, the CFI should be greater than 0.95, the RMSEA should be less than 0.08, and the TLI, NFI and IFI should be greater than or equal to 0.90 (Hu & Bentler, 1999). The results obtained with the fit indices are displayed in Table 3. These results indicate that all the model-fit indices meet the common acceptance levels proposed by Schumacker and Lomax (2010), showing that overall the measurement model demonstrates a good fit with the collected data.

Table 3. Measures for goodness of fit

Fit index	Recommended value	Obtained value
Chi-square/(df)	≤ 3.00	2.91
NFI	≥ 0.90	0.90
IFI	≥ 0.90	0.92
CFI	> 0.95	0.96
TLI	≥ 0.90	0.93
RMSEA	< 0.08	0.06

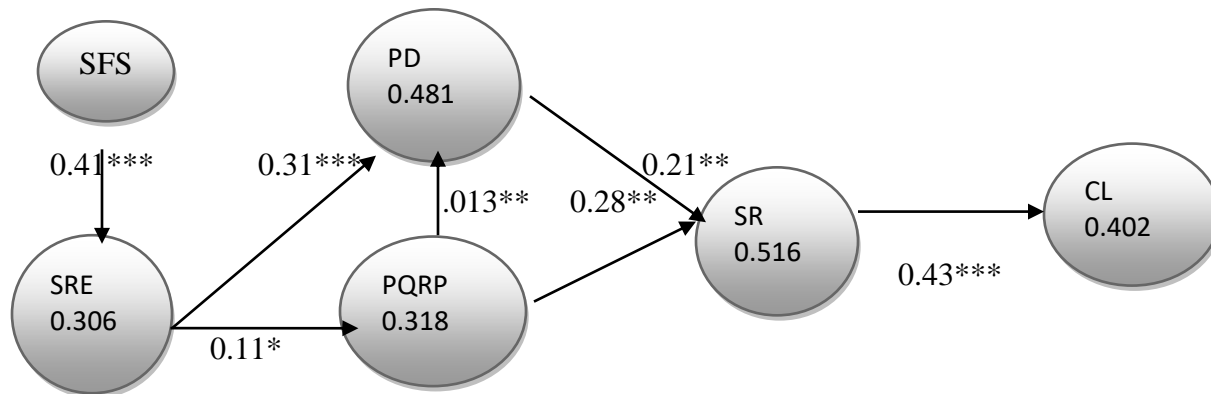
Structural Model

The model was tested using structural equation modelling (SEM), through the application of partial least squares (PLS), since this can be used to examine complex relationships (Monecke & Leisch, 2012) and is also regarded as an appropriate statistical technique for testing theories (Babin & Svensson, 2012; Westland, 2010). The PLS results are indicated in Figure 2. The results show that statistically all paths are significant. According to the results, the model explains 30.6% of the variance in service recovery expectation, 31.8% of the variance in perceived quality of recovery performance, 48.1% of the variance in positive disconfirmation, 51.6% of the variance in satisfaction with service recovery, and 40.2% of the variance in customer loyalty. This illustrates that the model offers a good explanation of service recovery in the airline industry.

According to the results, service failure severity ($\beta = 0.41$, $p < 0.001$) significantly influences service recovery expectation ($\beta = 0.11$, $p < 0.05$), which significantly influences perceived quality of recovery performance. Moreover, service recovery expectation ($\beta = 0.31$, $p < 0.001$) significantly

influences positive disconfirmation. Thus hypotheses 1, 2 and 3 are supported. Perceived quality of recovery performance ($\beta = 0.13, p < 0.01$) significantly influences positive disconfirmation. Hypothesis 4 is thus supported. Both perceived quality of recovery performance ($\beta = 0.28, p < 0.01$) and positive disconfirmation ($\beta = 0.21, p < 0.01$) significantly influence satisfaction with service recovery. Therefore, hypotheses 5 and 6 are also supported. Finally, the results also show that satisfaction with service recovery ($\beta = 0.43, p < 0.001$) significantly influences customer loyalty, supporting hypothesis 7.

Figure 2. Hypothesis results



*: $P < .05$, **: $P < .01$, ***: $P < .001$

NB: SFS = service failure severity, SRE = service recovery expectation, PQRP = perceived quality of recovery performance, PD = Positive disconfirmation, SR = satisfaction with recovery, CL = customer loyalty

DISCUSSION

Summary of Research Findings

This study's main purpose was to determine the expectation of customers after a service failure and how it influences customer recovery satisfaction and ultimately customer loyalty, and also to determine the influence of service failure severity on recovery expectation. The results of this study reveal that customers' recovery expectations are influenced by the severity of the service failure. This supports the argument of Abbas, Abdullateef, and Mokhtar (2015) that the gravity of the service failure probably influences customer expectations of service recovery. This is also in line with the findings of previous studies (Abbas et al., 2015; Keiningham et al., 2014; Wu & Chia, 2011) that established a significant relationship between service failure severity and service recovery expectation. If customers perceive the service failure to be severe, they expect the service provider to take action and compensate them, but for a minor service failure a simple apology is enough to secure customer satisfaction (Abbas et al., 2015; Haryono, Fauzi, & Suyadi, 2015).

The results also confirm that perceived quality of recovery performance depends on the expectation of service recovery. It was also established that service recovery expectation influences positive disconfirmation. This finding further supports the argument presented by Li-hua (2012) that if the service

provider is able to meet the customers' recovery expectations, positive disconfirmation occurs, and that if the service provider fails to meet expectations and customers become more frustrated, this leads to negative disconfirmation. Lai and Chou (2015) and Habel et al. (2016) have also confirmed that positive disconfirmation is dependent on service recovery expectation and perceived quality of recovery performance. From the results it was deduced that service recovery expectation exerts more influence than perceived quality of recovery performance on positive disconfirmation. Thus, meeting their expectation is more important to customers.

The study further established that perceived quality of recovery performance and positive disconfirmation both influence a customer's satisfaction with service recovery. This result is in line with the research findings of Jha and Balaji (2015), who found that perceived quality of recovery performance influences satisfaction with service recovery. In addition, studies by Smith, Bolton, and Wagner (1999), Andreassen (2000) and Lai and Chou (2015) found that satisfaction with recovery is influenced by positive disconfirmation. When customers feel that the service recovery performance meets their expectation, positive disconfirmation occurs, and eventually those customers will be satisfied and in turn become loyal customers.

The results indicate that disconfirmation influences recovery satisfaction and that recovery satisfaction in turn influences customer loyalty. This finding supports the argument of Castañeda (2011) and Al-Msallam (2015) that customers who are highly satisfied tend to be more loyal than simply satisfied customers. This result confirms the findings of prior studies that customer satisfaction is positively related to customer loyalty (Gures et al., 2014; Abbas et al., 2015; Tweneboah-Koduah & Farley, 2016). It is therefore only those customers who are satisfied with service recovery who will become loyal to the service provider.

Theoretical Contribution

From a theoretical perspective, the results affirm that the measurement scales used to measure the positive disconfirmation construct, its antecedents and outcome are reliable and valid. The proposed model has been verified, confirming the relationship between positive disconfirmation and its antecedents and customer loyalty within the airline industry. The study establishes that positive disconfirmation in relation to the airline industry in an emerging market does lead to customer satisfaction. It can therefore be argued that the different constructs in expectancy-disconfirmation theory do have an influence on customer satisfaction with service recovery and on customer loyalty as hypothesised in this study. This finding is important as it shows what constitutes disconfirmation. The study also provides a clear indication that the customers' expectation of service recovery depends on the severity of the service failure.

MANAGERIAL RECOMMENDATIONS

Airlines should focus more on how to satisfy dissatisfied customers and retain loyal customers through offering service recovery strategies which surpass the customers' expectations. It is therefore imperative for airlines to concentrate on and put more effort into implementing service recovery which satisfies their customers, as satisfied customers become ambassadors of their organisation.

Secondly, airlines should strive to offer quality service delivery which will minimise failures. They must upgrade the status of the recovery function within the company. When a service failure has already occurred, airlines should provide quality recovery performance which sticks in the minds of the customers, thereby erasing their memories about the service failure. This can be achieved if service

employees are trained in how to handle customer complaints. Service recovery quality should start from the way service employees respond to the complaints of customers and should extend to the final outcome of the service recovery process.

Airlines should strive to establish in advance what their customers normally expect so that they can use this information when crafting a service recovery strategy. This would assist them to perform to the expectation of their customers, thereby reducing the gap between customer expectation and actual recovery performance. This may be done in two ways: the airline could check the expectation trends of previous customers and come up with at least a general idea of customers' expectations. Also, airlines could carry out a survey requesting customers to highlight what they expect in a case of service failure to get an idea of what customers want.

Airlines should make sure that the best service providers also become members of the recovery team to ensure quality of recovery performance. They would assist in providing the best recovery performance, which would satisfy customers so that they become loyal to the company. Customer satisfaction data should be captured and given to management, as this information could be used to improve the quality of service delivery in future. The data could also be given to organisational policy makers whose performance is partly dependent on this data. A customer satisfaction measurement system should be implemented, enabling managers to realise what customers are thinking and to make the necessary improvements.

LIMITATIONS AND FURTHER RESEARCH OPPORTUNITIES

One of the limitations of this study is that the population used consisted of only 300 travellers in a selected emerging economy in Africa, and a larger population size might be required to obtain a more realistic response concerning passengers' perceptions of service recovery performance. A comparison study of South African Airways and other African airlines could be conducted to note any differences in expectations of service recovery performance between countries in Africa. However, the study provides useful insight into the influence of positive disconfirmation on satisfaction with service recovery and consequently on customer loyalty in the airline industry, and this could assist airlines globally to realise the importance of providing a satisfactory service recovery strategy.

CONCLUSION

The purpose of this study was to examine the influence of positive disconfirmation on satisfaction with service recovery and on customer loyalty. The study was also aimed at examining the antecedents of positive disconfirmation. The results reveal that both expectation of service recovery and perceived quality of service recovery performance have a significant influence on positive disconfirmation. Furthermore, it was also established that perceived quality of service recovery performance has a bearing on customer satisfaction with service recovery. The findings of this study support the importance of expectancy-disconfirmation theory in explaining the dynamics of service failure and service recovery. The results also confirm that service failure severity is an important factor that airlines should consider, as it influences the recovery expectation of customers.

REFERENCES

- Abbas, M.R., Abdullateef, A.R., & Mokhtar, S.S.M. (2015). Does service recovery lead to customer satisfaction and loyalty in airline industry? A perceived justice theory approach. *World Applied Sciences Journal*, 33, 256–262.
- Adesina, K.I. & Chinonso, I. (2015). Service delivery and customer satisfaction in the hospitality industry: A study of the Divine Fountain Hotels Limited, Lagos, Nigeria. *Journal of Hospitality Management and Tourism*, 6, 1–7.
- Al-Msallam, S. (2015). The relationship between customer satisfaction and customer loyalty in the banking sector in Syria. *Journal of Marketing and Consumer Research*, 7, 27–37.
- Andreassen, T.W. (2000). Antecedents to satisfaction with service recovery. *European Journal of Marketing*, 34, 156–175.
- Andreassen, T.W. & Lindestad, B. (1998). Customer loyalty and complex services: The impact of corporate image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. *International Journal of Service Industry Management*, 9, 7–23.
- Awa, H.O., Ukoha, O., & Ugwo, O.E. (2016). Correlates of justice encounter in service recovery and word-of-mouth publicity. *Cogent Business & Management*, 3, 1–16.
- Babin, B.J. & Svensson, G. (2012). Structural equation modelling in social science research: issues of validity and reliability in the research process. *European Business Review*, 24, 320–330.
- Baker, D.M. (2013). Service quality and customer satisfaction in the airline industry: A comparison between legacy airlines and low-cost airlines. *American Journal of Tourism Research*, 2, 56–63.
- Bhattacharjee, A. (2012). *Social science research: Principles, methods and practices* (2nd ed.). Tampa, FL: University of South Florida.
- Boulding, W., Staelin, R., Kalra, A., & Zeithaml, V.A. (1992). *Conceptualizing and testing a dynamic process model of service quality* (Working Paper No. 92-121). Cambridge, MA: Marketing Science Institute.
- Castañeda, J.A. (2011). Relationship between customer satisfaction and loyalty on the internet. *Journal of Business Psychology*, 26, 371–383.
- Chih, W., Wang, K., Hsu, L., & Cheng, I. (2012). From disconfirmation to switching: An empirical investigation of switching intentions after service failure and recovery. *The Service Industries Journal*, 32, 1305–1321.
- Choi, B. & Choi, B.J. (2014). The effects of perceived justice on customer defection, loyalty and word-of-mouth. *European Journal of Marketing*, 48, 108–131.
- Chou, P.F. (2015). An analysis of the relationship between service failure, service recovery and loyalty for low cost carrier travelers. *Journal of Air Transport Management*, 47, 119–125.
- Chuang, L., Tsai, M., Wu, Z., & Shiu, J. (2012). The impact of customer interaction on customer loyalty in Taiwan's international tourist hotels: The mediating effect of service quality and trust. *Innovative Marketing*, 8(2).
- Elkhani, N. & Bakri, A. (2012). Review on “expectancy disconfirmation theory” (EDT) model in B2C e-commerce. *Journal of Information Systems Research and Innovation*, 2, 95–102.
- Fornell, C. & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
- Gures, N., Arslan, S., & Tun, S. (2014). Customer expectation, satisfaction and loyalty relationship in Turkish airline industry. *International Journal of Marketing Studies*, 6, 66–74.
- Habel, J., Alavi, S., Schmitz, C., Schneider, J.V., & Wieseke, J. (2016). When do customers get what they expect? Understanding the ambivalent effects of customers' service expectations on satisfaction. *Journal of Service Research*, 19, 361–379.
- Haryono, S., Fauzi, T., & Suyadi, I. (2015). The effects of service quality on customer satisfaction, customer delight, trust, repurchase intention and word of mouth. *European Journal of Business Management*, 7(12), 36–48.
- Hee, K, S. (2016). The structural relationship among service failure, service recovery, emotional reaction and recovery satisfaction in the airline service. *Indian Journal of Science and Technology*, 9(26), 1-7.

- Hu, L. & Bentler, P.M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 51–55.
- International Air Transport Association. (2015). *Annual review 2015*. Geneva: IATA. Retrieved from <https://www.iata.org/about/Documents/iata-annual-review-2015.pdf>
- Jha, S. & Balaji, M.S. (2015). Perceived justice and recovery satisfaction: The moderating role of customer-perceived quality. *Management & Marketing*, 10(2), 132–147.
- Keiningham, T.L., Morgeson, F.V., Aksoy, L., & Williams, L. (2014). Service failure severity, customer satisfaction, and market share: An examination of the airline industry. *Journal of Service Research*, 17, 415–431.
- Lai, M.C. & Chou, F.S. (2015). The relationships among involvement level, service failure, service recovery disconfirmation and customer lifetime value. *Journal of Economics, Business & Management*, 3, 452–457.
- Lankton, N.K. & McKnight, H.D. (2012). Examining two expectation disconfirmation theory models: Assimilation and asymmetry effects., *Journal of the Association for Information Systems*, 13(2), 88–115.
- Li-hua, Y. (2012). Customer satisfaction antecedents within service recovery context: Evidences from “Big 4” banks in China. *Nankai Business Review International*, 3, 284–301.
- Malhotra, N.K. (2010). *Marketing research: An applied orientation* (5th ed.). Upper Saddle River, NJ: Pearson.
- Migacz, S.J., Zou, S.S., & Petrick, J.F. (2017). The “terminal” effects of service failure on airlines: Examining service recovery with justice theory. *Journal of Travel Research*, 57, 83–98.
- Mncube, L. (2014). *Competition and regulatory issues in the civil aviation sector*. Paper presented at the Aviation Industry Growth and Safety Conference. Retrieved from <http://www.compcom.co.za/wp-content/uploads/2014/09/Remarks-on-competition-and-regulatory-issues-in-the-civil-aviation-sector-4-11-2014-LM.pdf>
- Monecke A, & Leisch F. (2012). semPLS: Structural equation modeling using partial least squares. *Journal of Statistical Software*, 48(3), 1-32.
- Morse, J.M. & Niehaus, L. (2009). *Mixed Method Design: Principles and Procedures*. Walnut Creek, CA, USA: Left Coast Press Inc
- Mostert, P. G.; Steyn, T. F. J.; Mentz, M. H. (2017). Relationship Intention and Customer Satisfaction as Predictors of South African Smes' Loyalty towards a Risk Financier. *Journal of Global Business and Technology*, 13 (1), 28-36.
- Nikbin, D., Ismail, I., Marimuthu, M., & Salarzahi, H. (2012). The relationship of service failure attributions, service recovery justice and recovery satisfaction in the context of airlines. *Scandinavian Journal of Hospitality Management*, 12, 345–353.
- Nikbin, D., Marimuthu, M., Hyun, H.S., & Ishak, I. (2015). Relationships of perceived justice to service recovery, service failure attribution, recovery satisfaction, and loyalty in the context of airline travelers. *Asia Pacific Journal of Tourism Research*, 20, 181–192.
- Oliver, R.L. (1997). *Satisfaction: A behavioural perspective on the consumer*. New York, NY: McGraw-Hill.
- Oliver, R.L. & Swan, J.E. (1989). Consumer perceptions of international equity and satisfaction in transactions: A field survey approach. *Journal of Marketing*, 53(2), 21–35.
- Park, J.J. & Park, J.W. (2016). Investigating the effects of service recovery quality elements on passengers’ behavioral intention. *Journal of Air Transport Management*, 53, 235–241.
- Piha, L.P. & Avlonitis, G.J. (2015). Customer defection in retails banking: Attitudinal and behavioural consequences of failed service quality. *Journal of Service Theory & Practice*, 25, 304–326.
- Rai, A.K. & Srivastava M., (2013). The antecedents of customer loyalty: An empirical investigation in life insurance context. *Journal of Competitiveness*, 5, 139–163.
- Rai, A.K. & Srivastava, M. (2012). Customer loyalty attributes: A perspective. *NMIMS Management Review*, XX11, 49-76.
- Rashid, M.H.A., Ahmad, F.S., & Othman, A.K. (2014). Does service recovery affect customer satisfaction? A study on co-created retail industry. *Procedia – Social and Behavioral Sciences*, 130, 455–460.

- Rejikumar, G. (2015). An empirical study on antecedents of perceived service recovery quality in e-banking context. *Journal of Internet Banking and Commerce*, 20(3), 1–24.
- Saunders, M., Lewis, P., & Thornhill, A. (2003). *Research methods for business students* (3rd ed.). Harlow: Financial Times / Prentice Hall.
- Schumacker, R. E., & Lomax, R. G. (2010). *A Beginner's Guide to Structural Equation Modeling* (3rd Edition ed.). New York: Routledge Taylor and Francis Group, LLC.
- Smith, A.K., Bolton, R., & Wagner, B.J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of Marketing Research*, 36, 356–372.
- Sousa, F. & Desai, P.H. (2015). Customer complaints and their types in airline industry: A descriptive exploration of service failure in airline services. *International Journal of Managerial Studies & Research*, 3(10), 73–86.
- Spreng, R.A. & Page, T.J. Jr. (2003). A test of alternative measures of disconfirmation. *Decision Sciences*, 34, 31–62.
- Sundaram, S.D., Mitra, K., & Webster, C. (1998). Word-of-mouth communications: A motivational analysis. In J.W. Alba & J.W. Hutchinson (Eds.), *NA – Advances in Consumer Research*, Vol. 25 (pp. 527–531). Provo, UT: Association for Consumer Research.
- Tang, A.C. (2014). *Justice-based normative recovery expectations in enterprise information technology services: The effect of failure severity and criticality on disconfirmation and satisfaction* (Unpublished doctoral dissertation). Georgia State University, Atlanta, Georgia.
- Tweneboah-Koduah, E. & Farley, A.Y.D. (2016). Relationship between customer satisfaction and customer loyalty in the retail banking sector of Ghana. *International Journal of Business and Management*, 11, 249–262.
- Wang, Y., Wu, S., Lin, H., & Wang, Y. (2011). The relationship of service failure severity, service recovery justice and perceived switching costs with customer loyalty in the context of e-tailing. *International Journal of Information Management*, 31, 350–359.
- Weber, K. & Sparks, B. (2010). Service failure and recovery in a strategic airline alliance context: Interplay of locus of service failure and social identity. *Journal of Travel & Tourism Marketing*, 27, 547–564.
- Wei, S. (2017). The relationships among service recovery, self-esteem and satisfaction after service failure in online shopping environment. *Journal of Innovation & Sustainability*, 8, 69–78.
- Westland, J.C. (2010). Lower bounds on sample size in structural equation modeling. *Electronic Commerce Research and Applications*, 9, 476–487.
- Weun, S., Beatty, S.E., & Jones, M.A. (2004). The impact of service failure severity on service recovery evaluations and post-recovery relationships. *Journal of Service Marketing*, 18, 133–146.
- Wu, K. & Chia, F. (2011). Customer loyalty explained by electronic recovery service quality: Implications of the customer relationship re-establishment for consumer electronics e-tailers. *Contemporary Management Research*, 7, 21–43.
- Zainol, N., Ahmad Rozali, A.R., Mahat, F., Akhir, I.M., & Nordin, N.A. (2016). The influence of customer satisfaction towards positive word-of-mouth in hospitality industry. *SSRN Electronic Journal*, January 11, 2016. Retrieved from <http://dx.doi.org/10.2139/ssrn.2713613>
- Zeithaml, A.A., Berry, L.L., & Parasuraman, A. (1993). The nature and determinants of customer expectations of service. *Journal of the Academy of Marketing Science*, 21, 1–12.
- Zemke, R. & Bell, C. (1990). Service recovery: Doing right the second time. *Training*, 27(6), 42–48.
- Zikmund, W.G. (1984). *Business research methods*. London: Dryden Press.

Appendix A: Constructs and items

Construct	Source
Service failure severity	Nikbin, Ismail, Marimuthu, and Salarzahi (2012); Wang et al. (2011)
I consider the service failure experience to be very severe. The service failure experience was very bad. The service failure experience was very unpleasant to me. The service failure experience was enormous.	
Service recovery expectation	Boulding, Staelin, Kalra, and Zeithaml (1992)
For my situation, I had high expectations that the airline would take action to deal with the problem. I did expect the airline to act quickly if I encountered a problem. I expected the airline to do everything in its power to solve the problem. I expected the airline to make up for the problem I encountered.	
Perceived quality of recovery performance	Park and Park (2016)
The airline responded promptly to my complaint. The airline informed me immediately about the problem-solving status. The airline informed me of the expected time it would take them to solve the problem.	
Positive disconfirmation	Oliver and Swan (1989)
I was treated like royalty during the service recovery process. The way the airline resolved my problem was much better than I expected. The way the airline responded to my problem was more prompt than I expected. The efforts provided by the airline to deal with my problem were better than what I expected.	
Customer satisfaction	Li-hua (2012)
I am satisfied with the way my problem was dealt with. I am satisfied with the way my problem was resolved. I am satisfied with the treatment from the airline's employees involved in resolving the problem. I am satisfied with the procedure and resources used to resolve the problem.	
Customer loyalty	Piha and Avlonitis (2015); Habel et al. (2016)
In the future I would use the airline again. In the future I would travel with this airline more frequently. I consider the airline to be my first choice for future trips. I will encourage friends and others to use the airline.	

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