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Mohd Rushidi Mohd Amin Dr

Vinesh Maran Sivakumaran Dr

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University Image: A strategic moderator between Justice Dimensions and Service Recovery Satisfaction in Open and Distance Learning (ODL) context?

Mohd Rushidi Mohd Amin[1], **Vinesh Maran Sivakumaran[2]**

[1]INTI International College (Penang)
1-Z, Lebuh Bukit Jambul, 11900 Penang, Malaysia
Email: rushidixxx@gmail.com
*Corresponding author

[2]INTI International College (Penang)
1-Z, Lebuh Bukit Jambul, 11900 Penang, Malaysia
Email: vmaran.skumaran@newinti.edu.my

Abstract

This study investigated the relationships between perceived justice with justice dimensions (distributive, procedural, interpersonal, and informational), university image, service recovery satisfaction through a survey of 303 ODL students in Malaysia who experienced a service failure and subsequently a service recovery effort.

Keywords: Justice Dimensions, Service Recovery Satisfaction, University Image, Open and Distance Learning (ODL), and PLS – SEM.

In the global dynamic environment, the services sector has become one of the primary drivers for economic development. The services sector plays its role as one of the main economic pillars of many economies worldwide, such as the US, UK, Japan, Brazil, India, Singapore, and most governments are emphasizing the services sector in their countries' economic planning.

In Malaysia, the service sector is ranked as the second leading contributor to the GDP. It is anticipated to be the primary key contributor to the nation's growth in the coming years (MIDA, 2017). In 2005, it recorded a remarkable performance where 62 percent of the 5.3 percent economic growth rate was represented by services trade (EPU, 2010). Tourism, telecommunications, education, and financial services are some of the main services sectors that generate economic revenues. Due to its immense potential for the nation's economic growth, this sector is carefully crafted to improve further its competitiveness and resilience in the Eleventh Malaysia Plan (2016 – 2020).

The services industry could develop competently as a sector, but it could expand dynamically along with other industries' growth. For example, services sectors such as education, transportation and logistics, telecommunications, financial services, and professional services are essential to become facilitators for other industries' operations and productions.

Educational Services

This subsector has grown steadily following the liberalization and deregulation of the education and training market since the late 1990s. There has been considerable import substitution of tertiary education but a rapidly expanding export market for higher education following more significant private investment in the tertiary education industry. The nation's educational reform was introduced in the late 1990s, which had far-reaching implications for the development of higher education in Malaysia.

The reformation of education has encouraged the private sector to play a more dynamic and expanded role in higher education to meet excess demand and to produce sufficient skilled workers to overcome labor and skill shortages. Self-sufficiency in education is critical to the nation's drive to achieve developed nation status by 2020. The expansion of the higher education market began to attract overseas students. It gave a small domestic market to reposition itself as a regional center of excellence in tertiary education to benefit from economies of scale.

Perspective and Relevant Literature

Higher education institutions often need to pay more attention to recovering their student's satisfaction right after service failure happens, and more is known about service recovery satisfaction and its outcomes in the open and distance learning (ODL) context. Past research indicated that the inability to recover during service recovery efforts might cause the customers to leave and potentially negatively affect the service provider's financial bottom line (Shapiro & Nieman-Gonder, 2006). While service failure is inevitable, the failure situation will worsen if the students are not provided with effective service recovery (Hart et al, 1990).

Regarding the cost and profitability benefits of keeping existing customers, little research has been conducted on service failure recovery (Andreassen, 2001; Tax & Brown, 1998) as the retention strategy. Johnston and Michel (2008) and Lewis and McCann (2004) stated that research on service failure and recovery is still evolving, and conducting more research on service failure is very important to facilitate the process of providing satisfactory recovery and to alleviate back the dissatisfied students to satisfied level and at the same time to see whether recovery satisfaction would positively influence the student's response or outcomes.

Past studies on service failure and recovery have studied service recovery from a perceived justice perspective (Juhari et al., 2016; Petzer et al., 2017; Kumar et al, 2014; Singh & Crisafulli, 2016) and also the response from the perspective service organization to the effects of perceived justice (Nikbin et al., 2015). Past studies have indicated that different dimensions of justice (Distributive, Procedural, Interpersonal, and Informational Justice) have different effects on customer recovery, and they suggested analyzing the effects of different dimensions of justice on satisfaction in a service failure and recovery context (Chebat & Slusarczyk, 2005; Kim et al., 2012; Maxham III & Netemeyer, 2002a). Therefore, this study proposes the following hypothesis:

Hypothesis 1 (H$_1$): Distributive justice is significantly related to service recovery satisfaction.
Hypothesis 2 (H$_2$): Procedural justice is significantly related to service recovery satisfaction.
Hypothesis 3 (H$_3$): Interpersonal justice is significantly related to service recovery satisfaction.

Hypothesis 4 (H$_4$): Informational justice is significantly related to service recovery satisfaction.

Nikbin et al. (2010) suggested that moderating variables be considered when analyzing the relationship between perceived justice and service recovery satisfaction. They advocate using organization image or, more precisely, university image as one of the factors to apply in this study.

There has been a lack of empirical research clarifying the connection between perceived justice, service recovery satisfaction, and university reputation, especially in the context of lifelong learning or Open and Distance Learning (ODL) context which is closely associated with SDG 16 (effective building institutions at all levels) (Milton, 2021). For that reason, this research is bridging that gap.

This study will further enrich the existing literature on service recovery. It will add new knowledge to the service provider-customer relationship by considering the effect of university image on ODL students and their future behavioral outcomes. Therefore, it is posited that:

Hypothesis 5 (H$_5$): The relationship between distributive justice and service recovery satisfaction will be stronger when the interaction effect of university image is significant.

Hypothesis 6 (H$_6$): The relationship between procedural justice and service recovery satisfaction will be stronger when the interaction effect of university image is significant.

Hypothesis 7 (H$_7$): The relationship between interpersonal justice and service recovery satisfaction will be stronger when the interaction effect of university image is significant.

Hypothesis 8 (H$_8$): The relationship between informational justice and service recovery satisfaction will be stronger when the interaction effect of university image is significant.

Research Design

This study employs a cross-sectional approach, and Partial Least Square (PLS) is the foundation of this study's data analysis. The population for the current study is the online learners who have experienced service failure and comprises active students taking Diploma level up to Doctorate level.

The university classified the students' information that experienced service failure as private and confidential. Due to the sensitivity of data containing confidential information that relates directly to the institution, the university is unwilling to disclose it.

For this study, the convenience sampling technique is adopted due to the unavailability of the list of ODL students with service failure experience the researcher. Therefore, random sampling is almost impossible in this context. Reliability analysis was also conducted to ensure the reliability of the survey instrument to test for consistency using Cronbach's alpha. The results were above 0.7 and suitable for further research and analysis.

Result

Overall, out of the 750 questionnaires distributed, 450 questionnaires were returned. Out of 450 questionnaires, 90 were not usable because more than 25 percent of the items were unanswered, resulting in a final sample of 360 questionnaires (48 percent of response rate). The response rate is adequate and justified as service failure and service recovery are exceptional, and the response rate is typical in service recovery studies (Chang et al., 2012;

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del Río-Lanza et al., 2009; Nikbin et al., 2015). As this study is only interested in respondents that experience service failure and service recovery, 22 samples out of 360 have been identified that have not met this criterion. The remaining 338 questionnaires were used for further analysis.

Assessment of Measurement Model

In this study, the Cronbach alpha value ranges between 0.79 - 0.90, while composite reliability values are reported between 0.88 - 0.93, indicating satisfactory convergent validity. Based on Hair et al. (2017) recommendations, AVE should be at least 0.5 to establish convergent validity.

In this study, the AVE values are between 0.66 - 0.82, indicating convergent validity has been accepted. Concerning of the loadings, thirty-seven items exceeded the recommended acceptable cut-off point of 0.7 (Nunnally, 1978). All items were found to load significantly on their respective constructs, with loadings values ranging from 0.6 to 0.93.

In addition, all average variance extracted (AVE) values and composite reliability (CR) exceeded 0.5 and 0.8, respectively, suggesting good evidence of convergent validity (Anderson & Gerbing, 1988; Fornell & Larcker, 1981). A value of AVE exceeding 0.5 demonstrates that more than 50% of the construct's variance is due to its indicators (Liu et al, 2011).

For the discriminant validity, the results show that all square roots of AVE values are greater than the corresponding correlation estimates. Second, examine whether the items were loaded strongly on their constructs and loaded low on other constructs in the model. The factor loading of each indicator is greater than all of its cross-loadings. Both criteria fulfilled the requirements, demonstrating that discriminant validity is achieved.

Cross-loading is the next criterion to assess discriminant validity. To show satisfactory discriminant validity, the loading of each measurement item on its corresponding construct should be higher than its loading on other constructs (Chin, 1998; Gefen et al., 2000; Straub et al., 2004).

Assessment of Structural Model

In assessing the significance and relevance of the structural model, the statistical significance testing in PLS is accomplished using the bootstrap technique initially described in Efron and Tibshirani (1993). Based on the results, two out of eight hypotheses show significant results as shown in Table 1.

The PLS product-indicator technique was used to study the moderating impact of university image on the relationship between justice dimensions and service recovery satisfaction. Multiplying the predictor variable (each justice dimension) with the moderator variable (university image) created an interaction construct that could predict service recovery satisfaction. If it were discovered that the impact of the interaction variable on the criterion variable was considerably different from zero, then proof of moderation would be established.

Based on the findings, the theorized path for H_5, H_6, H_7 and H_8 did not occur in the expected direction. Therefore, it is found out that University Image has no significant interaction effects on the connection between justice dimensions (distributive, procedural, interpersonal and informational justice) with service recovery.

Table 1   Hypotheses Testing

Hypotheses	OS	SM[a]	SD[b]	T Statistics	P Values	f2	q2
DISTRIBUTIONAL JUSTICE -> SERVICE RECOVERY SATISFACTION	0.00	0.00	0.05	0.11	0.910	0.01	0.003
INFORMATIONAL JUSTICE -> SERVICE RECOVERY SATISFACTION	0.10	0.10	0.05	1.88	0.060	0.01	0.004
INTERPERSONAL JUSTICE -> SERVICE RECOVERY SATISFACTION	0.16	0.15	0.07	2.24	0.030	0.01	0.004
PROCEDURAL JUSTICE -> SERVICE RECOVERY SATISFACTION	0.29	0.29	0.06	5.04	0.000	0.17	0.004
UNI IMAGE*DIS JUS -> SERVICE RECOVERY SATISFACTION	0.03	0.03	0.05	0.55	0.580		
UNI IMAGE*INFO JUS -> SERVICE RECOVERY SATISFACTION	-0.05	-0.06	0.06	0.86	0.390		
UNI IMAGE*INTER JUS -> SERVICE RECOVERY SATISFACTION	-0.06	-0.06	0.05	1.32	0.190		
UNI IMAGE*PROCE JUS -> SERVICE RECOVERY SATISFACTION	-0.07	-0.07	0.05	1.23	0.220		

Notes:

[a]SM = Sample Means, [b]SD = Standard Deviation

[c]T statistics = [t-value]^ > 1.96

Discussion

The empirical results of the relationships between perceived justice with justice dimensions and service recovery satisfaction demonstrated that the hypothesized relationships between procedural justice and interpersonal justice and service recovery satisfaction were supported. However, the hypothesized relationship between distributive and informational justice and service recovery satisfaction was not supported.

Based on the existing literature, it was proposed that procedural justice will significantly affect service recovery satisfaction. This is in line with previous findings of Homburg and Fürst (2005), Karatepe (2006) and Waqas et al. (2014). The empirical result shows that distributive justice does not significantly affect recovery satisfaction. This result was unexpected as offering distributive justice would indicate that the service consumption process is completed, and offering some service compensation would require the students to repeat the consumption process, another service transaction. This is inconsistent with the findings in other industries such as hotel, restaurant, airline and other industries of Kim et al. (2009), and Nikbin et al. (2015).

In this study, informational justice does not significantly affect service recovery satisfaction. Therefore, the hypothesized relationship between informational justice and service recovery satisfaction was not supported. The effects of informational justice may always be different for the customer. Although informational justice reduces service disconfirmation and improves assessed service for ODL institutions, it does not likely lead to any improvement in recovery satisfaction, as found in this study.

This study also proposed that university image moderates the relationship between perceived justice with justice dimensions and service recovery satisfaction. However, in this study, the hypothesized moderating relationship was not supported. The insignificant moderating role of the university image implies that the university image in service failure situations, particularly in the ODL context.

This is in line with Nefat et al. (2012) findings which stated that there is no statistically significant moderator's influence on the image of distributive justice constructs. Once a failure occurs, it is expected that equity will be compromised. Therefore, if failure is manageable by the service provider and the students are treated fairly by fair treatment, they may think that the service provider has realized and accepted the guilt, thus trying to restore equity to the relationship.

Implications for Adult Education

The research goals had been accomplished: to explore the relationship between perceived justice dimensions, the image of the institution, and the level of satisfaction with service recovery. Including university image as a moderator had no significant impact on the connection between perceived justice dimensions and service recovery satisfaction; this conclusion contradicts prior research findings such as Civera and Meoli (2017).

This study needs more improvement by conducting more research to overcome the shortcomings discovered in the findings. Furthermore, the findings of this study provide early insight and knowledge of the influence of service recovery satisfaction and university image on the ODL business in Malaysia, in addition to contributing to the field related to SDG 16 (effective building institutions at all levels).

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