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Customer satisfaction as a performance measurement and management tool in English social housing

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Abstract

Customer satisfaction measurement is argued to be the ultimate arbiter of the success of public organisations (Hill et al 2007). Despite being a regulatory requirement for English social housing providers to measure customer satisfaction throughout the 2000’s and remaining relevant after sector de-regulation in 2010 (Williams 2013), it is surprising there is little academic literature underpinning quality of service and customer satisfaction within English social housing. This study meets this gap by presenting the first academic research exploring the empirical evidence underpinning the relationship between customer satisfaction and service quality orientated business performance in the UK social housing sector.

Keywords: Customer satisfaction, performance management, social housing

Literature Review

Social housing offers a rich area of academic study due to the opportunity for real life impact. It provides one of life’s most basic requirements in line with Maslow’s (1943) physiological and safety needs and is in keeping with Tay et al (2011) who found that when basic needs are met, individuals report their lives are better. Put succinctly, the quality of housing can have a positive impact on the quality of life. This is seen for instance by research indicating that an increase in housing satisfaction relates to a significant increase in overall life satisfaction (Peck et al, 1985), and in countries where the physical health effects of poor housing have been reduced or eradicated perceived housing quality also positively influences mental health (Clark and Kearns, 2012). In addition to the physical capabilities of housing quality, the concepts of service quality and service satisfaction have also been shown to be capable of enhancing quality of life (Dagger and Sweeney, 2006). Given this context, the quality of service delivered by social housing providers can be argued to have a direct impact on quality of life for individuals,
therefore having a direct impact on communities in which social housing is provided, and thus making a contribution to the overall wellbeing of society as a whole.

When considering service performance, there are essentially two perspectives of measurement – through the lens of the organisation measuring operational processes, or through the lens of the customer, measuring performance through customer satisfaction feedback (Hill et al, 2007). An organisation measuring process performance may be given a false sense that they are highly performing by hitting targets such as picking up a phone within three rings or re-letting vacant properties within a seven-day target. However, in practice the customer service advisor who promptly answered the call may have presented themselves as rude to customers and the property may have been re-let in an unclean condition with a poor standard of repairs.

Despite there being a clear role and rationale for process-focused performance management, it cannot fully encompass all perspectives of service provision. Such standards, both great or poor, would however be picked up through customer-focused performance measurement techniques, such as customer satisfaction. Hill advocates that “customer satisfaction is the ultimate arbiter of the success of public organisations” (Hill et al, 2007) as it is the recipients of service who are best placed to assess its quality rather than the often well-meaning professionals delivering the service.

As humans interacting with ‘service’ in many elements of our everyday lives, it is possible to argue that that we all inherently have some understanding of what customer satisfaction represents. Defining it academically however has proved to be extremely difficult (Brown and Yates, 2010). When Giese and Cote (2002) examined the customer satisfaction literature over a 30 year period, they found that despite significant differences, three common elements were notable:

1) customer satisfaction is a response (emotional or cognitive);
2) the response pertains to a particular focus (expectations, product, consumption experience, etc); and;
3) the response occurs at a particular time (after consumption, after choice, based on accumulated experience, etc)

Whilst helpful, even Giese and Cote stopped short of formulating a specific definition, itself perhaps suggesting how difficult customer satisfaction is to explicitly define. Therefore taking a definition back to basics can be considered. Rust and Oliver (1994) can be cited whereby they recognised the word ‘satisfaction’ is derived from the Latin satis (enough) and facere (to do or make), and suggested it implies satisfaction is a consumer’s fulfilment response. Building upon this concept, the Institute of Customer Service (2006) can be cited as providing a succinct definition as follows: “Customer satisfaction, or dissatisfaction, is the extent to which a customer feels their experience with an organisation has met their needs”.

This definition is highly appropriate for the social housing sector for four reasons: it suggests customer satisfaction is a scale of measurement (satisfaction or dissatisfaction), it focuses upon the customer perspective rather than that of the organisation, it alludes to the emotional context of service delivery (what a customer feels), and most importantly for the social housing context it has a focus upon meeting needs.

The English social housing sector, defined as housing which is “provided to eligible households whose needs are not met by the market” (DCLG, 2012) has had an interesting relationship with customer satisfaction measurement. In 1999 the STATUS survey (the Standardised Tenant Satisfaction Survey) was introduced by the National Housing
Federation with the aim of providing “quantitative information about... residents’ aspirations, opinions and needs” (National Housing Federation, 2008) and was developed as a means of improving service standards in the sector. STATUS became the platform for customer satisfaction feedback for the English social housing sector for the next decade and formed a regulatory requirement for the survey to be undertaken at least every three years. By 2010 the social housing sector was regarded as one of the most heavily regulated sectors in England with the STATUS survey forming part of this regime. However this suddenly changed through de-regulation as part of the Government’s commitment to reduce the number of quangos (DCLG 2010) and which consequently gave social housing providers freedom to define their own performance measures for the first time.

Despite the decade-long regulatory requirement stipulating the use of customer satisfaction measurement by English social housing providers (whom currently provide 3.9 million homes in England - DCLG, 2015), and despite the apparent continued use of customer satisfaction measurement in the sector (Williams 2013, Placeshapers 2015, Housemark 2015), it is surprising to note that there is little academic literature underpinning the business performance relationship of customer satisfaction within the sector. This is in stark contrast to the private sector, which has been the focus of much of the underpinning of the wider customer satisfaction / business performance dynamic (e.g. Anderson and Mittal, 2000, Magi 2003, Cooil et al 2007, Terpstra et al 2014 etc).

This study therefore seeks to explore this gap in knowledge by investigating the empirical evidence underpinning the relationship between customer satisfaction and service quality orientated business performance in the English social housing sector.

**Methodology**

The purpose of this study was to investigate the relationship between customer satisfaction and perceptions of service quality orientated business performance. A hypothesis was proposed as follows:

\[
\text{H1: There is a positive relationship between customer satisfaction and service quality orientated business performance}
\]

Data was sourced from the UK Customer Satisfaction Index (UKCSI) overseen by the Institute of Customer Service. The UKCSI provides insight into customer satisfaction across thirteen sectors of the UK economy with data gathered on a six monthly basis. Customer satisfaction data from five social housing providers (all English housing associations) was obtained, totalling 627 cases of individual customer feedback spread across fourteen variables. After addressing missing data variables through a process of removing missing data cases and expectation maximisation, a total of 311 cases remained.

To assess the core constructs of customer satisfaction and service quality within the hypothesis, multi-item scales were obtained from the UKCSI data: nine items to capture business performance and five indicators to capture customer satisfaction. All the multi-item scales were assessed in Exploratory Factor Analysis (EFA) using the Principal Component Analysis and Oblimin Kaiser Normalization Rotation. Results, showed that the fit for the EFA model is excellent, returning a cumulative Eigen value of 88.19% for a two-factor solution. While the first factor corresponding to service quality returned 10.53 Eigen value, the second factor corresponding to customer satisfaction produced an Eigen value of 1.56.

Additionally, from Table 1, the standardized factor loadings obtained from the pattern matrix for all items are significant (p< .01), and the alpha values for each
extracted factor are greater than 0.60 and 0.50 respectively, exceeding the benchmarks recommended in the literature (Bagozzi & Yi, 1988). In particular, the alpha value for service quality is .981 and that of customer satisfaction is .953. Thus, it is argued that the measures used to assess the two key constructs in the study are reliable.

Table 1: Construct Reliability and Validity Tests

<table>
<thead>
<tr>
<th>Factors Extracted</th>
<th>Service Quality</th>
<th>Customer Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Reputation of the organisation</td>
<td>.986</td>
<td></td>
</tr>
<tr>
<td>2. Valued Customer</td>
<td>.930</td>
<td></td>
</tr>
<tr>
<td>3. Product Range</td>
<td>.968</td>
<td></td>
</tr>
<tr>
<td>4. Product Quality</td>
<td>.943</td>
<td></td>
</tr>
<tr>
<td>5. Product Reliability</td>
<td>.930</td>
<td></td>
</tr>
<tr>
<td>6. Information Quality</td>
<td>.910</td>
<td></td>
</tr>
<tr>
<td>7. Enquiries handling</td>
<td>.906</td>
<td></td>
</tr>
<tr>
<td>8. Kept Informed</td>
<td>.884</td>
<td></td>
</tr>
<tr>
<td>9. Ease of Obtaining Service</td>
<td>.920</td>
<td></td>
</tr>
<tr>
<td>10. Satisfaction with Speed</td>
<td>.854</td>
<td></td>
</tr>
<tr>
<td>11. Satisfaction with Helpfulness</td>
<td>.941</td>
<td></td>
</tr>
<tr>
<td>12. Satisfaction with Friendliness</td>
<td>.945</td>
<td></td>
</tr>
<tr>
<td>13. Satisfaction with Competence</td>
<td>.892</td>
<td></td>
</tr>
<tr>
<td>14. Overall satisfaction with Service</td>
<td>.934</td>
<td></td>
</tr>
</tbody>
</table>

Note: All loadings are significant at 1% significant levels.

Overall, the study has established that both constructs studied have sufficient convergent validity (as shown by item loadings on expected factors) and discriminant validity (as cross-loadings are absent from the EFA model). Therefore, it can be argued that the measures can be used for theory testing purposes. Table 2 presents summaries of descriptive statistics and inter-construct correlations for each construct studied included in the conceptual model.

Table 2: Descriptive statistics and inter-construct correlation

<table>
<thead>
<tr>
<th>Variables</th>
<th>MEANS</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ease of Obtaining Service</td>
<td>6.593</td>
<td>3.226</td>
<td>813**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Customer Loyalty</td>
<td>7.308</td>
<td>3.154</td>
<td>621**</td>
<td>.572**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Customer Experience‡</td>
<td>0.635</td>
<td>0.481</td>
<td>943**</td>
<td>.839**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Service Quality</td>
<td>6.466</td>
<td>2.935</td>
<td>681**</td>
<td>.598**</td>
<td>.661**</td>
<td></td>
</tr>
<tr>
<td>5. Customer Satisfaction</td>
<td>7.374</td>
<td>2.253</td>
<td>813**</td>
<td>.572**</td>
<td>.525**</td>
<td>.712**</td>
</tr>
</tbody>
</table>

Note:
** Correlation is significant at the 0.01 level (2-tailed test);
* Correlation is significant at the 0.05 level (2-tailed test);
Sample Size (N) = 311
SD = Standard Deviation
‡ = Dummy Variable: Positive = 1; Negative = 0

To test the study’s hypotheses, ordinary least squares (OLS) estimation method and hierarchical regression analysis was used. Overall, two regression equations were estimated in a nested model. In Model 1, the effect of the control variables were
modelled on service quality. In Model 2, the effect of customer satisfaction was added to Model 1. The regression model estimated in Model 2 is presented in Equation 1:

\[
\text{Equation 1:} \\
\text{Service Quality} = \alpha + E + C + L + S + e
\]

Where: \( E = \) Ease of obtaining service from service provider; \( C = \) customer experience with service provider; \( L = \) customer loyalty to service provider; \( S = \) customer satisfaction; and \( e = \) error terms.

Results
In total, two regression models were estimated. Table 3 presents summary of the findings of the two regression models. As can be seen from Table 3, the findings indicate that the F-values for the full regression model (i.e. Model 2) are significant (\( p < 0.01 \)). None of the regression equations have multicollinearity problems: the largest variance inflation factor (VIF) is 2.15, which is well within the recommended limit of 5.00. Furthermore, from Table 3, it can be seen that change in the adjusted \( R^2 \) values on moving from Model 1 to Model 2 is significant (\( p < .01 \)). More importantly, the adjusted \( R^2 \) value for Model 2 is 81% relative to an \( R^2 \) of 78% for Model 1, suggesting that customer satisfaction experienced an additional 3% variation in service quality over and above the control variables examined. This finding confirms the study’s hypothesis that variations in customers’ satisfaction causes changes in the quality of service provided.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Independent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Paths</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of Obtaining Service</td>
<td>-.227**</td>
<td>-.176**</td>
<td></td>
</tr>
<tr>
<td>Customer Experience</td>
<td>.178**</td>
<td>.132**</td>
<td></td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>.592**</td>
<td>.502**</td>
<td></td>
</tr>
<tr>
<td><strong>Direct Effect Path</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1</td>
<td>Customer Satisfaction</td>
<td>.241**</td>
<td></td>
</tr>
<tr>
<td><strong>F-value</strong></td>
<td>1038.433**</td>
<td>826.747**</td>
<td></td>
</tr>
<tr>
<td>( R^2 )</td>
<td>.777</td>
<td>.810</td>
<td></td>
</tr>
<tr>
<td>Adjusted ( R^2 )</td>
<td>.775</td>
<td>.808</td>
<td></td>
</tr>
<tr>
<td>( \Delta R^2 )</td>
<td>-</td>
<td>.06**</td>
<td></td>
</tr>
</tbody>
</table>

* \( p < 0.05 \); ** \( p < 0.01 \) (2-tailed test)

The direct effects of the control variables
As expected, our control variables exhibited varying effects on service quality. The study finds that ease of obtaining service from a service provider is negatively related to service quality (\( \beta = -.176; t = -4.809; p < .01 \)). Positive customer experience with a service provider is positively related to service quality (\( \beta = .132; t = 3.873; p < .01 \)). Additionally, results show that customer loyalty to a service provider is positively associated with service quality (\( \beta = .507; t = 14.199; p < .01 \)).

The direct effects of the independent variable
The study argues that increases in customer satisfaction will be associated with increases in levels of service quality provided by service providers. Findings indicate
that customer satisfaction is significantly and positively related to service quality ($\beta = .241; t = 7.322; p < .01$). These findings reveal interesting characteristics of the customer satisfaction–service quality nexus: unlike previous research that has often argued for the effect of service quality on customer satisfaction, this study reveals a competing finding to show that the reverse is also true: increases in levels of customer satisfaction is associated with increases in the level of service quality provided by service organisations.

Discussion
The findings that customer satisfaction influences business performance in the English social housing sector is important on a number of levels. Academically, this research presents the first academic evidence for this subject area. When looking at this in a wider context, the research can also be seen to provide the first independent academic research using UKCSI data, building upon earlier academic trends of undertaking academic investigations using national customer satisfaction index models such as the ACSI, the American Customer Satisfaction Index (e.g Fornell et al, 1996; Anderson, 1998, Yeung et al, 2000) and the SCSB, the Swedish Customer Satisfaction Barometer (e.g. Anderson et al, 1994; Johnson et al, 1996; Anderson et al, 1997).

The research findings also contribute to the breadth of wider academic knowledge on the links between customer satisfaction and service quality orientated business performance, such as building upon existing research investigating the influence of customer satisfaction on business performance (as cited earlier). Furthermore, as this research is based in a social housing setting it can also be considered in terms of having an impact on the non-profit charitable sector (of which English housing associations belong) – an area which provides much less of a focus for academic research than the private sector. It also presents an interesting perspective in that the model revealed that increases in customer satisfaction are associated with increases in service quality. This challenges the position of researchers who found that service quality is an antecedent of customer satisfaction (e.g. Parasuraman et al, 1985; Cronin et al, 1992) but is consistent with others who found the opposite (e.g. Bitner, 1990; Bolton and Drew, 1991).

From an operations management perspective, the research findings also have application for managers working in social housing operations or performance management fields and has relevance for CEO’s and Boards making strategic decisions, giving them additional confidence that investing time, energy and resources into customer satisfaction is worthwhile. It also suggests that the sector was correct to invest in customer satisfaction during its decade-long period of regulatory requirement – a finding that although overdue is still historically applicable. Finally, as not-for-profit charitable organisations, it also supports the moral and ethical arguments for social housing providers investing in service quality, customer satisfaction and business performance - something which lies at the very foundations of what social housing is all about. Overall, it suggests that customer satisfaction is not just a ‘nice to have’ but more a case of customer satisfaction being ‘essential to the business case’ when seen in a service quality performance context.

The research findings are also timely. The English social housing sector finds itself at a time of unprecedented pressure and change. Political pressure on the sector from the Conservative government means that political rhetoric has firmly shifted from social housing providers being for people in need and more towards being part of the solution to building homes to meet the housing shortage. This political shift has been supported by significant funding cuts through the Welfare and Reform Act 2016 requiring social housing providers in England to reduce rents by 1% a year for 4 years from April 2016.
Although this sounds a small percentage, it has the effect of social housing providers needing to re-assess their operational models and save millions of pounds over the period. Different social housing providers have responded in different ways, with some making reductions in staffing, others reducing the scope of their service to core housing management levels (i.e. only letting properties and building new ones), whilst others have undertaken a combination of the two. It is therefore inevitable that for some organisations, reductions in their customer research and performance management functions has also been apparent. This research however contributes to this debate putting forward the case to retain a focus upon customer satisfaction measurement as part of the social housing business performance eco-system.

A further source of pressure and change within the sector comes as a direct result of the shifts in political ideology explained above. Due to the 1% reduction in income through welfare payments (such as through the amount of housing benefit paid to cover rent) there are now greater financial pressures and subsequently greater needs to drive efficiencies in operational service provision. The answer is felt by many in the sector to lie in increasing the use of data (e.g. PWC, 2015) and digital service provision, following similar transitions from the Government’s push towards services that are digital by default (Omfax, 2016). The shift to the digitisation of social housing services is inevitable. Given the context of the findings from this study, it can be argued that throughout this transition in service delivery, focus on the customer perspective and using appropriate measures (e.g. customer satisfaction) should remain important. Due to the very nature of the work social housing provides (i.e. helping those in need), it is too easy to simply digitise services without adequately thinking of some of the vulnerable groups and how they will be supported. Without this, there are risks it could create new forms of exclusion, deprivation and poverty for vulnerable groups.

The relevance of customer satisfaction as a performance measurement and management tool has also recently come under increasing scrutiny. At the global level, research suggests that whilst many companies are committed to satisfying customers, customer service may not be taken as seriously at Board level as in other departments (Economist Intelligence Unit, 2014). In the social housing sector there are voices questioning the role of customer satisfaction as a meaningful measure. A report by the English social housing provider Family Mosaic (2014) asked whether it was relevant to new ways of working with tenants and whether a new measure was required, possibly including aspects such as health, wealth, wellbeing, and basic services. Interestingly the report wrote that “in time... [the new satisfaction index] should be able to show not just how good we are operationally, but to reflect on how demanding, aspirational and, at times, dissatisfied our customers are with us. Only then will we be able to measure how successful we really are” (Family Mosaic, 2014, P.17). However, this misses the point about customer satisfaction – it is primarily an operational performance management tool, and despite its flaws, it can be used to extremely good effect as a performance improvement instrument. To quote Strickland (2014), “there is undoubtedly a political objective to the ‘customer satisfaction is dead’ rhetoric popular today among market research professionals. It is certainly difficult to sell a new and ground-breaking idea without first telling potential customers why the incumbent methods they’ve invested in are no longer adequate”.

Looking forward to the future of the English social housing sector, it is clear that it is currently in a significant period of change which is yet to settle down. With political and financial pressures questioning the very nature of what social housing providers are for, it is difficult to maintain a focus on the case arguing for quality of service. However, with this research suggesting that there is a positive relationship between
customer satisfaction and service quality orientated business performance, there is a clear need both to communicate this to practitioners and also strive for additional research.

Conclusion
This study has presented the first academic research exploring the empirical evidence underpinning the relationship between customer satisfaction and service quality orientated business performance in the UK social housing sector. It has also presented the first independent academic research using UKCSI data, building on the tradition of academic investigation using national measures of customer satisfaction (e.g. ACSI, SCSB). By undertaking factor analysis and multiple regression analysis, results revealed a relationship between customer satisfaction and service quality orientated business performance, whereby increases in customer satisfaction are associated with increases in levels of service quality. This challenges the position of earlier researchers who found that service quality is an antecedent of customer satisfaction but supports the position of others that the reverse can also be true.

The research makes a contribution not only by building upon existing research focusing upon the business benefits of customer satisfaction measurement, but it also does this in a social housing sector context – an area of limited academic research. With the English social housing sector finding itself at a time of unprecedented political, financial, and operational change, this research advocates that customer satisfaction has a role to play as a performance measurement and management tool contributing both towards business performance itself and social housing aims of helping those in need.

Acknowledgments
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