“Impact of claim settlement procedure of health insurance companies on customer satisfaction during the pandemic: A case of third-party administrators”

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Abstract
The claim settlement process is one of the most critical aspects of health insurance. Many policyholder grievances often surface during claim settlement, which will likely shape the insurer’s reputation. Hence, this study aims to evaluate the relationships between hypothesized factors concerning the third-party administrator’s claim settlement process as perceived by policyholders. The paper used the data of policyholders from Delhi/NCR, India, who have availed the cashless claims in the last three years. In the process, a total of 790 questionnaires were sought to be. The methodology used was the extractive factor analysis comprising the KMO test, reliability assessment with Cronbach’s Alpha, and correlation assessment. The study attempted to evaluate all the contributing factors that shape the third-party administrator’s behavior during the claim settlement. Therefore, different factors were identified (themes A, B, C, and D). The study reported a significant relationship between insurance company perceptions (0.162), network hospital perceptions (0.182), product design (0.180), insurance agent (0.332), communications (0.114), disclosure (0.122), internal practices (0.143), and TPA claim settlement prospects across the Indian perspective. The contextual impacts on individual and group decision-making must be monitored and accommodated across effective public policy management concerning settlement of health insurance claims. The study findings could help insurers create business models leading to better customer satisfaction and congruence between agents, policyholders, TPAs, and health insurance companies.

INTRODUCTION
The uncertainty often leads to direct and lateral changes in how things are executed and information is processed and accessed. The insurance industry, before proper regulation, was uncontrolled, unmanaged, and unorganized. In the absence of effective regulation, healthcare costs were inevitably rising, and ordinary people were suffering the most as healthcare became almost unaffordable. There was an inequitable distribution of healthcare delivery systems with low quality and high costs. Policymakers faced numerous challenges in implementing effective and affordable services. For example, they were the provision of a network of hospitals, access to general medication, administration of enrollment...
diagnosis, quality treatment, controlling fraud through the claims process, providing an administration capable of handling millions of clients and settling the claims between insurance companies and hospitals.

In 2001, third-party administrators (TRA) as an intermediary were introduced by IRDAI through TPA's health services regulations notifications to address the issues mentioned above. It aimed to settle health insurance claims between hospitals and insurers. TPA’s health insurance claim settlement behavior as a construct owes a long history of incorporating and considering diverse perspectives ranging from customers to marketers and stakeholders as diverse as non-government organizations. The conceptualization identifies several dimensions (individual policyholder-driven, institutional support-driven, systematic, and contextual) contributing to the phenomenon in question. TPA’s health insurance claim settlement behavior and resultant customer satisfaction and its conceptualization need to consider the diverse effects across policyholders, contextual supports, and TPA as an organization.

1. LITERATURE REVIEW, AIMS, AND HYPOTHESES

TPA’s health insurance claim settlement behavior, as perceived from the customer perspective, needs to emphasize the aspect that focuses on customer aspirations (Malhotra et al., 2018), thinking, and ways of action (Huang & Benyoucef, 2017) in a socially interconnected world. In post lockdown phase, this is even critical as the TPA’s role has surged, and respective customer satisfaction is the crucial sufferer. The construct conceptualization is observed as involving multiple inter-lapping themes. It also reflects the need to combine the scattered academic literature on the subject. The construct operationalization borrows from the earlier studies on the subject that revolve around contingency and social cognition literature. The factors shaping TPA’s practical and appropriate working emerges as an amalgam of the multiple actors that directly or laterally seem to drive the impetus for customer satisfaction.

The global trends revealed that customers (Bhat & Babu, 2004) are rarely satisfied with the process and mechanisms that TPAs occasionally follow. Agarwal (2011) points to differences in customers’ perceptions of trust and grievance-handling mechanisms. Bharath (2005) identifies a policyholder responsible for the state of affairs of the relationship with TPA across health claim settlement. Finally, Rao (2004) regards the contextual and contingent support (Joseph et al., 2003) from across service providers and assessors as vital in shaping the process dynamics.

Customer satisfaction has always remained a victim across in-house or TPA’s management of claims as both involve tedious procedures and often lead to anxieties when needed. Customer satisfaction in health insurance claim settlement with TPA’s involvement has attracted more research attention as this involves the individual-driven aspect, the contingent aspect, as well as the internal work that collectively shapes the sense of satisfaction or dissatisfaction. Owolabi and Agboola (2018) seemed non-convergent, yet the subject remains a matter of research. The challenges to customer satisfaction in health insurance claim management have been reported to emerge from the learned or unlearned psychological biases that shape individual policyholders’ mindsets, cognitions, sense-making, and decision-making patterns and scope.

Mehta et al. (2020) called for the policyholder’s mindset to be extensively influenced by the contextual environments, actors, and aspects in the nearby environment surrounding the concerned individual. The subsequent often reported influence emerges from across the non-governmental actors whose directive setting impacts the TPA claim settlement dynamics. The theoretical perspective (Muller, 1981) of claim settlement in the health insurance industry entails underwriting the uncertainty concerns and marked risk transfer. Few studies have also studied the specific role and functions of TPAs to analyze customer satisfaction. In contrast, only some have examined the role of TPAs in respect of private health insurance companies in metropolitan cities.
Furthermore, the role of stakeholders in claim settlement procedures, which leads to customer satisfaction, was not extensively studied in any of the studies, which is the focus of the present study. This paper reflects on the central and pivotal role of TPAs as critical to working on health insurance claim settlement and customer satisfaction. The study deplores the concept of proximal and distal determinants of TPAs’ behavior, explores the literature on the subject matter, proposes the hypotheses, and finally presents the research methodology and analyses the data to ascertain the hypotheses.

Dave et al. (2021) highlighted the problems before enrollment and non-enrollment for cashless health insurance facilities and government health schemes. The study observed the incidence of association between the number of beds in a hospital and enrollment in government health schemes. In addition, satisfaction with the current TPA model of health insurance was observed to be statistically significant. Chatterjee et al. (2021), analyzing customers’ knowledge hiding, revealed the prevalence of extensive customer practices of hiding information concerning health deficiencies, unhealthy habits, or any sensitive information that could enhance the current premium outgo.

Geiger and Kjellberg (2021), across mature health insurance markets, exhibited trends that differ from the evolving or emerging markets for health insurance intake. The contrastive study across Asian Pacific countries exhibited significant differences in consumption styles, patterns, and variations in product knowledge and consumption tendencies. Dave et al. (2021) explored the incidence of the critical role of insurance agents in pre and post-policy purchase mode. The study across Indian rural subscribers revealed that the post-policy purchase phase witnesses more problems than those in the pre-policy purchase mode. O’Connor and Kabadayi (2020) revealed a significant role of locus of control, cognitive style, and financial knowledge in shaping consumers’ propensity to share health information. The study across Australian health insurance buyers observed prevalent practices of ignoring the guidelines and hiding health information during policy enrolment.

Mehta et al. (2020) explored the changes in consumer consumption behavior and health insurance purchase instances in the post-Covid-19 phase. The study observed that the disease control measures have been contingent on changes in consumption from materiality to spiritualism. Dutta (2020) researched the health insurance sector in the post-Covid-19 sector and revealed the prevalence of a surge in the sector’s contribution to national health financing yet called for strong measures to ensure customer satisfaction from undertaking health insurance and a possible role of TPAs. Finally, Zwanka and Buff (2021) reflected on gross changes in customer behavior concerning trusting health insurance companies, products, and empaneled hospitals. The study revealed that the post-Covid-19 changes were evident in financial decision-making patterns, consistency, and policy base enrollment.

The study across European policyholders revealed that in post-Covid-19 times, the basis of trust and expectation from insurance marketers, agents, and network hospitals has multiplied. Nandapala and Jayasena (2020) observed the Sri Lankan health insurance policyholders. They found a prevalent need for customer relationship improvement processes to ensure renewal business and timely claim management with TPAs. The study insisted on micro-segmentation and called for the management of relationships will all types of health insurance policyholders to streamline the claim settlement processes and mechanisms. Islam et al. (2021) highlighted the role of support in amicable claim management. The study across Australian health insurance policyholders pointed to changes in preference development and adverse selection as applicable in product choice and action undertaking under contextual support from insurance agents and insurance marketers. Al Kahtani (2020) noted the prevalence of variations in health insurance claim management in post-Covid-19 times, emphasizing mature and developed markets for health insurance.

Selimović et al. (2020) figured out the role of customer satisfaction in driving business. The study devised the critical implications of purpose, partnership, pride, personalization, and protection in ensuring consistent business from the health insurance perspective. The claim settlement and management were the natural outcomes of the process. Christina and Hartini (2020) explored
the impact of service innovation on customer satisfaction from the healthcare insurance perspective. The study reported a significant impact of service innovation on customer-based outcomes concerning claims settlement. Ahire and Rishipathak (2020) observed customer satisfaction as a vital aspect of health insurance penetration from rural and urban Indian perspectives. The study found that customer loyalty, personalization, and product innovation are essential to delivering customer satisfaction in a timed and phased manner.

Alrahbi et al. (2022) reflected on the health information technology setup as coordinating product knowledge and TPA’s knowledge management for faster and seamless claim settlement. The study incorporated 148 diverse sets of persons involving four stakeholders: patients, healthcare providers, citizens, and foresight experts. It also showed that technical barriers must be overcome to operationalize the seamless claim settlement. Naibaho et al. (2020) examined the prospects for a marketing mix of health insurance services and TPA’s organizational culture as influencing claim-based outcomes. The study explored the impact of contextual supports, influences, and TPA-based working on the ratio of health insurance claim settlement. The study, in essence, reflected on the internal process and its implications for the overall functioning of organizations.

The reviewed determinants of the TPA’s health insurance claim settlement mechanism are a combination of individual, contextual, organizational, and support-driven aspects. The topic ‘health insurance claim settlement’ has been reviewed in multiple aspects, propositions, and paradigms. The existing literature (Campbell, 2008) on subject matter consistently identifies diverse themes, vis-à-vis appropriate operationalization, and reflects tremendously on the diverse viewpoints to be considered. Rao (2004) urged the consideration of customers’ mindsets, ideas, perceptions, and opinions as vital for determining process outcomes. Malhotra et al. (2018) stressed the service provider’s role in estimating satisfaction generated across the health claim settlement process. Still, Selimović et al. (2020) advocated the consideration of contingent aspects as shaping the phenomenon. In a nutshell, the TPA-based health insurance claim settlement mechanisms can never be a one-dimensional process. Moreover, it needs to imbibes aspects that are individually borne, contextually derived, socially embedded, and cognitively driven in nature and scope. The interpretation of the ‘health insurance claim settlement’ phenomenon has been observed as non-convergent and remains scattered. In literal terms, construct operationalization is about defining the phenomenon in terms of factors that can be measured effectively and appropriately in a defined manner. This phenomenon exhibits proximal and distal undercurrents incorporated on account of either those involved, those who are actual beneficiaries, or those actors whose actions matter in seamless claim settlement and resultant shaping of satisfaction. The proximal or neighborhood influences (Dilawari, 2015) and distant distal influences (Mathur et al., 2015) have a reported history of influencing the claim evolution and settlement prospects (Shijith & Sekher, 2015) in health insurance and resultant customer satisfaction. The underlying approach has impacted the operationalization of the health insurance claim settlement phenomenon (Table 1).

The studies (Bhat & Jain, 2007) on possible determinants of TPA claim settlement and customer satisfaction from the national perspective reflect tremendously on perceptions, notions, biases, ideas, and ideologies. The rationale (Newes-Adeyi et al., 2000) across the incorporation of multiple themes for operationalizing customer’s sense of satisfaction or dissatisfaction from the usage of TPA services concerning health insurance claim settlement is evident from the literature that identifies the phenomenon in this unique aspect. The act of theorizing the phenomenon borrows extensively from the existing literature on the subject matter.

The literature identifies the psychological basis for the policyholder’s cognitions, sense-making, and decision-making patterns and scope. Other studies call for the policyholder’s mindset to be extensively influenced by the contextual environments, actors, and aspects operating in the nearby environment surrounding the concerned individual. The third reported influence is from across the non-governmental actors whose directive setting seems to impact the TPA’s claim settlement dynamics. The theoretical perspective (Muller, 1981) of claim settlement in the health insurance indus-
try entails underwriting the uncertainty concerns and marked risk transfer. The health expenditure and possible health risk transfer are the obvious reasons, and the role of TPA in facilitating this process becomes more significant when crises arise. The theoretical paradigms explore the portfolio perspective, communication, disclosure dimension, and trust in the relationship between an insurer and agent network (Figure 1).

The significant impact on customer satisfaction or dissatisfaction (Theme A: Policyholder perceptions) is hypothesized from the individual’s own and acquired knowledge about parameters of health that are dually covered in policy notes. In association, the factors considered include individual communication and respective genuineness of disclosures. The intent to club the individually derived forces is to emphasize the role of the individual’s own thinking as vital in shaping the realized satisfaction from TPA-assisted health insurance claim settlement. A plethora of studies underlined the individual notions shaping satisfaction-based outcomes in health insurance and insurance marketing worldwide. As evident, the influence mapping (with regard to individual forces) regards the foremost influence from policyholders’ information being revealed, disclosures,
Table 2. Inclusion and exclusion criteria set

<table>
<thead>
<tr>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>India-based actuarial studies, academic and historical studies, studies published in actuarial sciences, Indian, Asian, South African, American, and European studies, published studies, studies emphasizing at least two research questions and hypothesis</td>
<td>Literary studies published in languages other than English, studies across Russia-Ukraine, Iran, Egypt, and Israel, studies published in non-recognized journals, studies involving one or negligible research questions, studies involving action research or case study as a methodology</td>
</tr>
</tbody>
</table>

their genuineness, and policyholders’ knowledge of inclusions as vital to the attainment of timely TPA-driven claim settlement. This is reported as vital in shaping the claim settlement dynamics as the correctness of health information facilitates trust and mutual respect. However, a policyholder is often an ignored aspect of claim management studies.

The next set of effects on customer’s sense-making concerning claim settlement is from the cognitive and contextual support (Theme B: Perceptions of support) from across a health insurance marketer, an insurance agent, and an empaneled network hospital or tertiary health services provider who acknowledges and facilitates or restrains the claim settlement process. The impact of contextual supports or theme B is hence vital in shaping a realized or generalized sense of satisfaction from health insurance claim settlement. The influence mapping finds extensive support across the literature: the policyholder’s opinions of support (as and when needed) from across industry-based stakeholders, namely the insuring company, the medical institution (network hospital), and the insurance agent. Support for shaping claim settlement is a regular topic of study supported by a service provider (health insurance marketer/product) and the actual service requirement place (network hospital); both must be considered for analysis. Studies need to consider the role of the post-purchase insurance behavior of an insurance marketer and insurance agent.

The literature review points to the consideration of both aspects as shaping customer-derived satisfaction from health insurance claim management and settlement. The perceptions of products identify as the third set of aspects that facilitate decision-making with regard to health insurance claim settlement and evident customer satisfaction. Theme C considers the product-specific aspects as perceived by policyholders. The product-based literacy across health insurance product buyers has been observed as nominal, and customers are reported to be under a false image that all quoted expenses in the medical bills will be paid always and forever. In reality, there are set guidelines for the process to commensurate as per policy notes. The fourth set of influence is from the TPA-based internal working and the manner in which TPA is perceived by the health insurance policyholder. Theme D regards the TPA-based aspects as exerting an impact on shaping customer satisfaction from buying and consuming health insurance. Organizational mechanisms have often been considered as environmental aspects yet are vital in shaping the outcomes, vis-a-vis customer satisfaction, in health insurance transactions.

The rationale for theme one (individual policyholder’s perceptions) stems from three distinct aspects of individual policyholder agency, with regard to choice-making and sense-making, vis-a-vis health of a person, as well as knowledge about inclusions in health insurance policy documents. The themes as discussed earlier were borrowed from the existing literature and brought together distinct aspects (Table 2). Theme A focuses on the individual aspects of TPA’s decision-making. The respective hypotheses hence examine the impact of the individually derived factors or the variables on the undertaking of TPA’s claim settlement response:

H1: There is a significant relationship between customer knowledge and TPA claim settlement.

H2: There is a significant relationship between communications and TPA claim settlement.

H3: There is a significant relationship between disclosure and TPA claim settlement.

Their rationale (individual policyholder’s support mechanisms) stems from three distinct aspects of contextual environment that influences TPA.
Theme B, as discussed earlier, borrowed some aspects from the existing literature. It focuses on the individual notions of contextual support in shaping TPA’s decision-making. The respective hypotheses hence examine the impact of the contextual actors on the undertaking of TPA’s claim settlement response:

**H4:** There is a significant relationship between an insurance agent and TPA claim settlement.

**H5:** There is a significant relationship between an insurance company and TPA claim settlement.

**H6:** There is a significant relationship between a network hospital and TPA claim settlement.

Theme C focuses on the individual notions of influences on TPA’s decision-making. The respective hypothesis hence examines the impact of the individually derived factors or the variables on the undertaking of TPA’s claim settlement response.

**H7:** There is a significant relationship between product design and TPA claim settlement.

Theme D focuses on the individual notions of influences on TPA’s decision-making. The respective hypotheses hence examine the impact of the internal practices-based variables on the undertaking of TPA’s claim settlement response:

**H8:** There is a significant relationship between internal practices and TPA claim settlement.

**H9:** There is a significant relationship between TPA claim settlement and customer satisfaction.

**H10:** There is a significant relationship between internal practices and customer satisfaction.

This study aims to search for quantitative evidence for hassles emerging from malfunctioning of third-party claim settlement process and the implications for customer satisfaction. Even after two decades of opening the insurance industry to the private sector in the year 2000, the penetration of health insurance is still very low in India. Only 20% of the Indian population is estimated to be covered under some healthcare, whether private health insurance or government schemes. Moreover, there are many issues in the industry: lesser awareness regarding the terms and conditions of health insurance policies, inadequate after-sales services provided by insurance agents, especially at the time of claim settlement, and dissatisfaction with TPA services. Moreover, there are situations when policyholders’ claims are repudiated or rejected for different reasons, including fraud or non-compliance. The current study is an attempt to better understand the factors that may affect policyholder satisfaction during the claims, with a particular focus on the major stakeholders, i.e., TPAs, hospitals, and agents.

2. METHODOLOGY

The literature review showed the prevalence of unidimensional and multidimensional as well as formative and reflective measures of TPA’s health claim settlement behavior. The factors considered were derived from the list and were ranked by the actuarial sciences faculty members on appropriateness. The sample comprised the native and resident individual health insurance policyholders in urban households comprising one to five family members. The data of policyholders who have availed the cashless claims in the last three years from Delhi/NCR were taken from insurance companies. A total of 790 questionnaires were sought to be either emailed, posted, couriered or made to reach some 790 households comprising health insurance policyholders across diverse roles, of which 430 responses were observed as valid and completely filled in tone and content. The study attracted a response ratio of 52%, which overall signals a satisfactory response generation. The study regarded this sample response ratio as appropriate because of existing literature and past research protocols.

The paper relies on stratified and purposive sampling as an appropriate sampling methodology. The sample units were the households (urban households) and the individual respondents consciously drawn from across these households. The extractive factor analysis methodology comprising the KMO test (for data adequacy), EFA (for extraction of loading variables or sub-scale items...
and reduction of data), reliability assessment with Cronbach’s Alpha, and correlation assessment were leveraged. The study leveraged the IBM SPSS version 24.0 for empirical calculations, validity assessment, and reliability exploration. The factor structure was examined with factor analysis and subsequent tests like variance examination, scree plot analysis, and pattern matrix determination. The study leveraged the factor analysis methodology to explore the representing dimensions of the factors assumed for the analysis. The extractive factor analysis facilitates the evaluation of the dimensions and leads to dimensional validity assessment concerning data collected from the Likert-based scales.

3. RESULTS

The reliability assessment is vital for evaluating the internal consistency of the responses collected from the Likert scaling instrument. Reliability is deemed essential to ascertain the nature of responses that have been received. The existing literature identifies that internal reliability analysis is crucial for ascertaining data-based internal consistency. As advocated in the existing literature, Cronbach’s Alpha is the most prominent tool for achieving internal reliability assessment. The scale elements reported a reliability measure of 0.886. The KMO measure for scale-based elements was observed to be 0.883, which is in the satisfactory range of 0.7 to 0.99. This is tantamount to saying that data collected with regard to factors comprising theme-based scales are factorable.

The Bartlett test of data sphericity revealed a p-value of 0.000 (< 0.05), which stands for the satisfactory presence of statistically significant variance across the data collected with regard to scale representing scale items. The significant p-value points toward the data’s significant utility and suitability for consideration with regard to factor analysis. Such a KMO measure revealed the suitability of the data for factor analysis and dimensional validity assessment. KMO, in ideal terms, is the proportion of variance amongst the variables undertaken for the analysis. The KMO satisfactory scale points toward the satisfactory presence of data-based factorability. The factor extraction (Table 3) formed the next crucial stage. This is essential to ascertain the factor weightage that each factor occupies across scale composition. This enables the paper to comprehend the variance exhibited by each scale constituent.

The rationale for using extractive factor analysis is that this methodology is suitable for examining the construct validity and ascertaining whether the factor represents the phenomenon. The literature reflects on the need for segregating the loading and non-loading items to establish empirical dimensional validity. In the empirical literature, factor analysis is an exquisite technique for establish-

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial eigenvalues</th>
<th>Extraction sums of squared loadings</th>
<th>Rotation sums of squared loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1 = Disclosure Genuineness</td>
<td>7.677</td>
<td>27.419</td>
<td>27.419</td>
</tr>
<tr>
<td>2 = TPA Claim</td>
<td>5.045</td>
<td>18.016</td>
<td>45.435</td>
</tr>
<tr>
<td>4 = Knowledge</td>
<td>3.033</td>
<td>10.832</td>
<td>68.126</td>
</tr>
</tbody>
</table>

Note: The extraction method is a principal component analysis.
ing data validity based on the internal structure in factor-based instrument development. Table 4 shows the loading of sub-scale dimensions representing the factors incorporated for this paper. The reliability examination revealed differences in Cronbach’s Alpha across managerial effectiveness propositions. The loading aspects indicate the factor strength, AVE, CR, and MSV measures, which are all satisfactory. All the reported values are well above .70 and confirm the significant composite reliability for the factors concerned, also confirming the convergent validity. All reported AVE values are more than 0.5 and above MSV and ASV, confirming discriminant validity. For themes A, B, and C, CFA measures signified good model fit indices with the values χ²/pdf = 2.8, CFI = .903, GFI = .942, AGFI = .908, NFI = .952, and RMSEA = .05. Hence, the CFA model of themes A, B, and C can further be tested for structural relationships.

The dimensional validity is represented by factor loadings, and convergent validity is represented by CR measures and discriminant validity with AVE and MSV measures, respectively. The respective model fit indices are considered, as calculated in the AMOS with confirmatory factor analysis. The calculations point toward satisfactory outcomes. The causal and path-based hypothesis testing was accomplished in the SEM modeling platform. The research-based data collection was undertaken with a specified Likert scale and subsequently analyzed using statistical tools like exploratory and confirmatory factor analysis across SPSS and AMOS statistical software. The comprehensive data analysis was accomplished using SPSS version 24.0. The validity and reliability assessment of the respondent’s data was established with variance analysis and Cronbach’s Alpha measurement. Further, SEM modeling was incorporated to establish the causal path-based linkages across the chosen factors. The path-based causal linkages are illustrated in Figure 2.

The aggregate modeling of influences amongst the factors revealed that customer aspects exert a statistically significant impact of 0.08 on shaping TPA’s settlement inclinations. In association, contextual support aspects exert a statistically significant impact of 0.20. In contrast, product design knowledge exerts a statistically significant impact of 0.25. This is tantamount to observing that the contextual support and policyholder’s knowledge of product design affect TPA’s settlement inclinations.

The causal path-based relationships portrayed here in table 4 presents the causal relationships across constituent independent, mediating and dependent factors. The causal relationships map the possible probable influence of the factors considered in the possible shaping of contextual phenomenon.

The independent factor effect modeling was undertaken to ascertain the factor-bound independent impact in shaping the contextual phenomenon in Indian insurance claim settlement. The independent modeling of influences amongst the factors revealed that policy knowledge seems to exert a statistically significant impact of 0.07 on shaping TPA’s settlement inclinations. In association, communication exerts a statistically significant impact of 0.1. In contrast, disclosure genuineness exerts a statistically significant impact of 0.07. This is

![Figure 2. Aggregate effect modeling: SEM](image-url)
tantamount to observing that the policyholder’s mindsets, knowledge, and communications affect TPA’s settlement inclinations across Indian perspectives (Figure 3 and Table 5).

The regression weights as ascertained with application of structural equation modeling in AMOS yielded following outcomes which categorically point to the communication, insurance agent, in-

**Table 4. Causal path relationship: Aggregate**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPA_SETTLEMENT ← INTERNAL_PRACTICES</td>
<td>.186</td>
<td>.060</td>
<td>3.072</td>
<td>.002</td>
</tr>
<tr>
<td>TPA_SETTLEMENT ← CUSTOMER_ASPECTS</td>
<td>.076</td>
<td>.021</td>
<td>3.614</td>
<td>***</td>
</tr>
<tr>
<td>TPA_SETTLEMENT ← CONTEXTUAL_SUPPORT</td>
<td>.198</td>
<td>.025</td>
<td>7.804</td>
<td>***</td>
</tr>
<tr>
<td>TPA_SETTLEMENT ← PRODUCT_DESIGN</td>
<td>.250</td>
<td>.051</td>
<td>4.942</td>
<td>***</td>
</tr>
<tr>
<td>CUSTOMER_SATISFACTION ← INTERNAL_PRACTICES</td>
<td>.242</td>
<td>.087</td>
<td>2.794</td>
<td>.005</td>
</tr>
<tr>
<td>CUSTOMER_SATISFACTION ← TPA_SETTLEMENT</td>
<td>.340</td>
<td>.062</td>
<td>5.526</td>
<td>***</td>
</tr>
</tbody>
</table>

**Note:** *** stands for statistical significance.

**Table 5. Regression weights**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERNAL_PRACTICES ← COMMUNICATION</td>
<td>.232</td>
<td>.056</td>
<td>4.142</td>
<td>***</td>
<td>par_18</td>
</tr>
<tr>
<td>INTERNAL_PRACTICES ← INSURANCE_AGENT</td>
<td>.143</td>
<td>.042</td>
<td>3.412</td>
<td>***</td>
<td>par_19</td>
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<tr>
<td>INTERNAL_PRACTICES ← GENUINENESS_DISCLOSURES</td>
<td>.007</td>
<td>.019</td>
<td>.351</td>
<td>.726</td>
<td>par_20</td>
</tr>
<tr>
<td>TPA_SETTLEMENT ← KNOWLEDGE_POLICY</td>
<td>.070</td>
<td>.060</td>
<td>1.164</td>
<td>.245</td>
<td>par_1</td>
</tr>
<tr>
<td>TPA_SETTLEMENT ← COMMUNICATION</td>
<td>.098</td>
<td>.075</td>
<td>1.313</td>
<td>.189</td>
<td>par_2</td>
</tr>
<tr>
<td>TPA_SETTLEMENT ← GENUINENESS_DISCLOSURES</td>
<td>.074</td>
<td>.025</td>
<td>2.928</td>
<td>.003</td>
<td>par_3</td>
</tr>
<tr>
<td>TPA_SETTLEMENT ← INSURANCE_AGENT</td>
<td>.380</td>
<td>.061</td>
<td>6.272</td>
<td>***</td>
<td>par_4</td>
</tr>
<tr>
<td>TPA_SETTLEMENT ← INSURANCE_COMPANY</td>
<td>.152</td>
<td>.059</td>
<td>2.591</td>
<td>.100</td>
<td>par_5</td>
</tr>
<tr>
<td>TPA_SETTLEMENT ← NETWORK_HOSPITAL</td>
<td>.132</td>
<td>.039</td>
<td>3.406</td>
<td>***</td>
<td>par_6</td>
</tr>
<tr>
<td>TPA_SETTLEMENT ← PRODUCT_DESIGN</td>
<td>.197</td>
<td>.055</td>
<td>3.585</td>
<td>***</td>
<td>par_7</td>
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<tr>
<td>TPA_SETTLEMENT ← INTERNAL_PRACTICES</td>
<td>.181</td>
<td>.062</td>
<td>2.911</td>
<td>.004</td>
<td>par_17</td>
</tr>
<tr>
<td>CUSTOMER_SATISFACTION ← INTERNAL_PRACTICES</td>
<td>.242</td>
<td>.088</td>
<td>2.741</td>
<td>.006</td>
<td>par_8</td>
</tr>
<tr>
<td>CUSTOMER_SATISFACTION ← TPA_SETTLEMENT</td>
<td>.340</td>
<td>.061</td>
<td>5.607</td>
<td>***</td>
<td>par_15</td>
</tr>
</tbody>
</table>

**Note:** *** – stands for statistical significance.
surance company, internal practices, product design and network hospital as critical in shaping phenomenon whereas secondary role of individual stimulated disclosures on health and prior policy undertakings. (Table 5)

The respective model fit indices, calculated in the AMOS with confirmatory factor analysis, are presented in Table 6. The calculations point toward satisfactory outcomes. The observed outcomes and model fit indices were in the range prescribed for the same. The RMSEA measures were less than 0.1, and respective NFI, CFI, RFI, IFI, and TLI measures were observed in the range from 0.8 to 0.9.

Table 6. Model-fit indices

<table>
<thead>
<tr>
<th>Measure</th>
<th>Ideal range</th>
<th>Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/df</td>
<td>The smaller, the better</td>
<td>1.866</td>
</tr>
<tr>
<td>NFI</td>
<td>Less than 0.9</td>
<td>0.834</td>
</tr>
<tr>
<td>CFI</td>
<td>Less than 0.9</td>
<td>0.937</td>
</tr>
<tr>
<td>RFI</td>
<td>Less than 0.9</td>
<td>0.828</td>
</tr>
<tr>
<td>RMSEA</td>
<td>Less than 0.1</td>
<td>0.034</td>
</tr>
<tr>
<td>IFI</td>
<td>Less than 0.9</td>
<td>0.938</td>
</tr>
<tr>
<td>TLI</td>
<td>Less than 0.9</td>
<td>0.935</td>
</tr>
</tbody>
</table>

4. DISCUSSION

The study reported significant relationships between insurance company perceptions, network hospital perceptions, product design, communications, disclosure, internal practices, and TPA’s claim settlement prospects. The independent modeling of effects amongst the factors revealed that network hospitals exert a statistically significant impact of 0.182 on shaping TPA’s settlement inclinations. In association, communication exerts a statistically significant impact of 0.114. In contrast, disclosure genuineness exerts a statistically significant impact of 0.122. This is tantamount to observing that the policyholder’s own mindsets, policy knowledge, and communications affect TPA’s settlement inclinations across Indian perspectives (Table 7).

As per research outcomes, the TPA’s health insurance claim settlement procedure was observed to possess severe implications for customer satisfaction in the health insurance sector. The policyholder’s sense-making was observed to be driven by knowledge of policy inclusions, perceptions of product design, and patterns of communications with TPAs. The theoretical implications lie in the empirical exploration of the effects across individual and contextual aspects that shape the impetus for health insurance claim settlement and customer satisfaction across the regional perspective. The study-based outcomes point toward the incidence of the impact of factors as assumed in the study. The results are evident in the sense that individual attitudes and practices shape the impetus and set the background for the perceptions of health insurance claim settlement process. The behavioral perspective is more meaningful, along with the public administration-based approach to managing health insurance claims as an asset. The theoretical paradigms reflect on individual participation in health insurance claim management dimensions. The contextual impacts on individual and group decision-making need to be monitored and accommodated across effective public policy management with regard to health insurance claims settlement. The research outcomes provided insights to scholars, academic institutions, and insurance companies in understanding factors responsible for customer satisfaction regarding

Table 7. Summary of regression outcomes

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesis statement</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>There is a significant relationship between customer knowledge and TPA claim settlement</td>
<td>.063</td>
</tr>
<tr>
<td>H2</td>
<td>There is a significant relationship between communications and TPA claim settlement</td>
<td>.114</td>
</tr>
<tr>
<td>H3</td>
<td>There is a significant relationship between disclosure and TPA claim settlement</td>
<td>.122</td>
</tr>
<tr>
<td>H4</td>
<td>There is a significant relationship between an insurance agent and TPA claim settlement</td>
<td>.332</td>
</tr>
<tr>
<td>H5</td>
<td>There is a significant relationship between an insurance company and TPA claim settlement</td>
<td>.162</td>
</tr>
<tr>
<td>H6</td>
<td>There is a significant relationship between a network hospital and TPA claim settlement</td>
<td>.182</td>
</tr>
<tr>
<td>H7</td>
<td>There is a significant relationship between product design and TPA claim settlement</td>
<td>.180</td>
</tr>
<tr>
<td>H8</td>
<td>There is a significant relationship between internal practices and TPA claim settlement</td>
<td>.117</td>
</tr>
<tr>
<td>H9</td>
<td>There is a significant relationship between TPA claim settlement and customer satisfaction</td>
<td>.291</td>
</tr>
<tr>
<td>H10</td>
<td>There is a significant relationship between internal practices and customer satisfaction</td>
<td>.143</td>
</tr>
</tbody>
</table>
health insurance claim settlement. The findings deepened the understanding of issues that may result in customer dissatisfaction during the claim settlement (Table 8).

The results could help insurers create business models leading to better customer satisfaction and congruence between agents, policyholders, TPAs, and health insurance companies. The theoretical paradigms signal the need to adopt a social approach to claim management. Services provided by the stakeholders also affect the policyholder satisfaction during the claims, including TPAs, hospitals, and agents. The managerial implications could be identified in terms of utility to individual health insurance customers, health insurance-based policymakers, and non-government organizations active in this sector. Regarding utility for individual health insurance buyers, communications and disclosures matter. In terms of application across policymakers, the strict regime and hard frameworks need to concentrate on exploring ways and means to engage health insurance buyers in activities that ultimately aim to secure seamless claim management and enhance the prospects for secure access to health management. In terms of application for non-government bodies, the avenues are open for public engagement and embedment in actions that fuel the demand for collaboration and coordinated utilization of health resources.

The study was primarily conducted in Delhi and NCR, and it can be conducted in some other geographical areas. Thus, the outcomes may vary according to different geographical areas. The current paper was confined to policyholders only who have availed cashless claims and excluded reimbursement claim settlement. The present study focused on retail health insurance policyholders; a similar study could be conducted on a group of health insurance policyholders.

### CONCLUSION

The aim of the paper was to search for quantitative evidence for hassles emerging from malfunctioning of third-party claim settlement processes and the implications for customer satisfaction in Delhi/NCR, India. The study concluded the multidimensional nature of constructs. The perceived influences across individual and contextual aspects shape the impetus for health insurance claim settlement and customer satisfaction. The contextual effects matter in shaping customer satisfaction when the claims are accomplished with the aid of third-party administrators from a health insurance perspective. The behavioral perspective is more critical, along with the public administration approach, for managing health insurance claims as an asset.

The aggregate modeling of effects amongst the factors revealed that customer aspects exert a statistically significant impact of 0.08 on shaping TPA’s settlement inclinations, contextual support showed 0.20, and product design knowledge showed 0.25. The independent modeling of influences among the
factors revealed that policy knowledge exerts a statistically significant impact of 0.07 on shaping TPA’s settlement inclinations; communication – 0.1; disclosure genuineness – 0.07. The results have shown that the policyholder’s own mindsets, policy knowledge, and communications affect TPA’s settlement inclinations across Indian perspectives. The study found significant relationships between insurance company perceptions, network hospital perceptions, product design, insurance agent, communications, disclosure, internal practices, and TPA’s claim settlement prospects.

Future research in the Indian health insurance segment could be carried out longitudinally (with a consistent focus on a more extended timeframe) rather than in a time-bound manner (limited or short-duration research). The types of health insurance policyholders could be widened, and cross-comparative analysis could be undertaken. Future academic research should consider evolving age dynamics, food habits, health issues, smoking patterns, pollution, demographics, and pre- and post-Covid-19 exposure phases.

AUTHOR CONTRIBUTIONS

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Methodology: Sunil Kadyan, Narinder Bhasin, Vikas Madhukar.
Project administration: Sunil Kadyan, Narinder Bhasin, Vikas Madhukar.
Software: Sunil Kadyan, Narinder Bhasin, Vikas Madhukar.
Supervision: Sunil Kadyan, Narinder Bhasin, Vikas Madhukar.
Validation: Sunil Kadyan, Narinder Bhasin, Vikas Madhukar.
Visualization: Sunil Kadyan, Narinder Bhasin, Vikas Madhukar.
Writing – original draft: Sunil Kadyan, Narinder Bhasin, Vikas Madhukar.
Writing – review & editing: Sunil Kadyan, Narinder Bhasin, Vikas Madhukar.

REFERENCES


