Identifying what drove Consumer Satisfaction at Domestic Air Terminals in India during the COVID Era: An Exploratory Study

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ABSTRACT

The Covid 19 pandemic ensured that all nations and communities locked themselves and social-distancing became the buzzword. After an initial spell of a stringent lockdown, the Indian airspace opened to traffic – albeit with severe restrictions in place. Consumers of the domestic air travel in India, earlier, were a heterogenic and a majorly hedonistic segment and enjoyed the plethora of facilities offered at the terminals. Now, however, the consumers are majorly utilitarian and more focussed on health and safety measures. This behaviour is glimpsed in this research, which can be a guidance to Consumer Studies in similar Black Swan events.

Keywords: Covid 19, Air Travel, Customer Satisfaction

A. Introduction

The Covid 19 pandemic engulfed India in the mid-March 2020 and commercial activities came to a pause as a lockdown was imposed by the Central and State Governments in India on 24 March 2020 in order to arrest the spread of SARS CoV2 virus. On 25 May 2020, the Indian airports reopened to restricted domestic travel. With the systematized unlocking of commercial activities, the said restrictions evolved to ease the hardships of the domestic traveller. The ground staff at the domestic airports were keen to observe Covid related protocols and thus the customer service attributes were edited. It was thus intriguing to know the opinion of the traveller regarding the amenities offered to them at the airports prior to boarding and post arrival in this trying season.

B. Literature Review

a) A glimpse into the mind of the traveller

In their study, Das & Tiwari (2020) described the consumer trait of preferring safety above all else, while following hygeine protocol developed during the pandemic. Such travellers are said to follow "Personal Non-Pharmaceutical Intervention (PNPI)" to keep themselves safe from the virus. They observed that

travellers from diverse demographic groups had different views on the adoption of PNPI during travel. Female travellers, older travellers, travellers with higher education levels had shown a greater inclination to adopt PNPI as a safety measure during travel. (Das & Tiwari, 2020)

Kaushal & Srivastava (2020) based their study on the interview with 15 participants, who were employed at senior levels in the hospitality sector. One of the managerial implications of the study was the concept of multiskilling to address the issue of redundancy of employees. Also, hygeine and sanitation dominated much of the responses. Irrespective of the type of operations, there was felt a need to create dedicated task forces to implement mandatory hygeine and sanitization norms. They recommended, also, the creation of a blueprint and the preparation of reserve funds to effectively manage unexpected events.

Meena (2020) in his study, analyzed the impact of the pandemic on the travel pattern in India, using data obtained from online survey responses. The study says that the average citizen is reluctant to travel unless it is absolutely required. Most respondents insisted that the exact hygeine protocol of the pandemic be followed and the facility of travellers being checked for Covid 19 infection should remain in place. They also insisted upon the presence of medical staff at the airport at all times.

Bielecki, et al. (2020) concluded that air travel in the Covid period was severly restricted and caused above 43% drop in traffic at airports. Most travellers who ventured to travel had utilitarian reasoning for the same: essential visits to family and friends, essential travel for work.

Choi (2021) noted the impact of Covid 19 on commercial revenue management. After Covid 29 the verification of traveller health documents increased the dwell-time at terminals. Travellers, even with purchase-intentions and relevant purchasing powers opted to not use the commercial faciities available and airports should work towards mitigation of such travellers' apprehensions. This could be achieved by a number of ways, such as revising departure gates with focus on traveller requirements during the Covid era.

Lamb, et al. (2021), studied the social and emotional perspectives of the air traveller in the pandemic. Their study of the travellers' perspectives revealed trust-issues, a fear of the unknown and protective behaviour such as PNPI, carrying and consuming home-cooked meals and monitoring seat allocations. Trust issues were mainly with other travellers regarding the following of hygeine protocols and misinformation rather than the airport or airlines. Communication to travellers regarding hygeine protocols in place are paramount to reduce trust issues.

Sun, Wandelt, Zheng, & Zhang (2021) reviewed 110 papers to throw light on the impact of Covid 19 on air travel. They said that though many passengers are sensitive to waiting time at the airports, they are also aware of the trade-off between efficiency and safety in operations. Passengers have felt safer with the creation of travel-bubbles and vaccination-endorsed passports and documentation. They recommended that travel modules should consider the extent of a traveller's acceptance of the hygeine protocols like social distancing.

Bhattarai & Malla (2021) discussed the marketing strategies that should be adopted by Nepal Tourism, post Covid 19. They dwelled on tourism in totality but however did throw some insight into the mind of the traveller during and beyond the pandemic. They said that the average traveller preferred to be associated with "green and clean" tourism and many preferred niche tourism due to lack of crowds. The tourists also favoured social media groups on Whatsapp and Facebook to discuss medical and like precautions. Digital and social media communications are preferred over communications using printed material. The tourists also emphasized the importance of health and sanitization protocol.

Schiffman, Wisenblit, & Kumar (2016) say that consumers process only a small amount of the information they receive. When exposed to stimuli, consumers are selective, basing their choices on expectations drawn from previous experience and personal motives. Consumers remove stimuli that they find threatening, creating a situation of perceptual defense. When stimuli are ambigious, consumers tend to form a stereotyped bias within their mind.

Schiffman, Wisenblit, & Kumar (2016) says also that consumers form new attitudes and change existent attitudes by learning attitudes by Word of Mouth (WoM) and social media. The attitude-dynamism is often related to the personality of the consumer. The Tri Component Attitude Model speaks about the cognitive component (formed from experience), the affective component (evaluations resulting in emotions and feelings) and the conative component (asking will the consumer commit himself).

b) Policies and concerns that relate to health

The AarogyaSetu App:The AarogyaSetu App is installable onmobile phones with operation systems Android Version 5 & above and iOS version 10.3 & above. It helps trace the presence of infected people and creates alerts for individual and governments, identifying hotspots of infection.

Padhee (2020) stated in her Office Memorandum dated 07 Aug 21 that passengers must sign a self-declaration form at least 72 hours before travel. Evation of institutional quarantine period is permissible only on the submission of a negative RT PCR report which is less than 96 hours old. All passengers must have the Aarogya Setu app and only asymptomatic passengers would be

allowed to board. Suitable precautionary hygeine protocols would have to be followed within the airport terminal, such as thermal scrteening, social distancing, the wearing of masks and gloves.

In March 2021, the regulatory government body released circulars emphasizing the strict adherence to Covid protocol that has been already established at the airport terminal (Kumar, Circular: Strict Compliance of Covid Protocol, 2021).

Sun, Wandelt, Zheng, & Zhang (2021) have insisted the creation of data dynamics to understand customer dynamics among travellers better and to make sounder policy-decisions. Studies must look into the possibility of high-risk aerosol transmissions in centrally-airconditioned spaces.

Saini & Saini (2020) note that the World Health Organization ruled against travel in general. They advise that lockdownd should be shorter and more frequent to break the transmission of the virus and the importance of hygeine protocols cannot be overemphasized.

Choi (2021) says that airports should cooperate with the rise in online channels and alter sales strategies accordingly. He also recommended that to increase revenue, traveller hygiene and safety are the uppermost priority and the documentations about travellers' health conditions be strengthened.

Bielecki, et al. (2020) in his paper, has mentioned that studies have shown that the mere checking of body-temperature of travellers will not contribute towards hygeine protcpols as many patients of Covid 19 are asymptomatic. Thus the observance of all hygeine protocols are very important. GoIbibo created a questionnaire that requires a traveller to give his health-updates multiple times before the flight.

c) Findings from Literature Review

From this section of the research, we could say that citizens are interested in domestic travel only if they need to, thereby reducing domestic traffic. They insist on facilities such as Covid screening at the airport terminal and the presence of medical staff at all hours. Most travellers would incorporate the concept of Personal Non-Pharmaceutical Intervention into their travel routine but this is especially enhanced with age and educational level and female travellers are more likely to do so, showing that consumer response to stimuli is based on demographics and personality. The travellers would prefer communications on digital and social media with WhatsApp and Facebook Groups and strict avoidance of printed material. They also insisted on a regular task force within the airport terminal to implement necessary hygiene protocol as well as the presence of resources to deal with unforeseen situations. Multiskilling of employees would enhance such requirements and reduce employee attrition among Ground Staff during the pandemic. Airports must realize that travellers

feel safer with the creation of bubbles, correct and timely communication, reduction of waiting times and stringent maintenance of health-related documentation-checks.

It would also be intriguing to note that the pandemic and its related protocol as stimuli may evoke different reactions from consumers. Some may display perceptual defence and some others may submit to the protocol willingly displaying strong cognition and conation.

C. Methodology

a) Conceptual framework

The research has used the 22-item multidimensional SERVQUAL instrument developed by Parasuraman et al. (Buttle, 1996), as shown in Table 1. A Focus Group decided on 51 variables based on the application of the 22-item scale to the traveller perspective. The construct, so unearthed will be further ratified by relating it to the perceptual and input stimuli of the Howard Sheth Model of Consumer Behaviour (Figure 1) (Kapoor &Madichie, 2012; Howard Sheth Model – 4 Components, 3 Levels, and Limitations).

b) Data collection

Opinions were gathered using a questionnaire involving 51 variables derived on the basis of the SERVQUAL model in the backdrop of the pandemic and changing eventualities (Table 2). For the purpose of this research, we shall denote all Central Industrial Security Force (CISF) personnel and Ground Staff as "Ground Staff" and travellers, fliers, customers, consumers will be referred to as "Customers".

A questionnaire scoring the said 51 variables was put across to respondents in a Google Form the sample was derived using convenience sampling and snowballing technique of forwarding the questionnaire to suitable respondents. 157 genuine responses were welcomed. A database of strength 504 was then simulated using random number generation (Courtesy: https://www.random.org/) in order to facilitate Exploratory Factor Analysis using "Statistical Package for the Social Sciences" (SPSS Package) Version 23. The demographic break-up of respondents is shown in Figure 2.

c) Exploratory factor analysis

The data demonstrated a healthy Kaiser-Meyer-Olkin Score of Sampling Adequacy of 0.870. To maximize the sum of the variances of the squared loadings, Varimax Rotation was used with Principal Component Analysis. (Varimax Rotation, 2020). Bartlett Factor Scores, though saved, are not an explicit part of this research. Maximum iterations were selected at 100 and in the

Rotated Component Matrix, all correlation coefficients below 0.5 were suppressed. The resultant Scree Plot is shown in Figure 3 and depicts 11 factors with Eigen Value > 1.

D. Findings

Exploratory Factor Analysis (was performed on the 51 variables listed in Table 2) to reveal a construct of 11 factors. The Factors and the Variance they explain are shown in Table 3 and the Rotated Component Matrix is shown in Table 4.

The unearthed construct and its constituent 11 factors are described below:

Factor 1, accounting for 10.36% of the variance: (Name: Ease and Transparency) The "hassle free component of the service" besides a check on the transparency of the purchase of the service (Facilities at the Airport) Factor 2, accounting for 10.32% of the variance: (Name: Connect with Customer) The ground staff should connect with the customer, make sure that they are adequately guided and they get the empathetic service that they expect Factor 3: (Name: Appropriate Accessories and Protocol) The staff as well as passengers should have adequate accessories especially with respect to staff uniform and covid-kit. Covid protocols should be maintained Factor 4: (Name: Self Navigation in Sanitized Environment) The customers can enter the airport only after crossing the regulatory Covid checks. Then they may relax at the lounge. They would like to have an easy form of self-navigation through the airport with minimization of human contact points, thus, also ensuring social distancing Factor 5: (Name: Connectivity and Biological Needs) The customer looks forward to basics in a covid-stricken connected world: WIFI, charging points, appropriately structured comfortable seating Factor 6: (Name: Aesthetics and Sanitization) The customer is interested in aesthetic appeal of the terminal while yet bothering about the social distancing and sanitization Factor 7: (Name: Hygienic Retail Facility) The customers should have access to hygienically maintained and operated shopping and food-purchase facilities Factor 8: (Name: Arogya Setu App) All customers must mandatorily maintain the Arogya Setu App Factor 9: (Name: 24hrs Service and Assistance) Customers feel the need for the Ground Staff to be actively guiding them at the airport irrespective of the time or day Factor 10: (Name: Acoustics) The music and sounds in the background at the airport affect customer satisfaction Factor 11: (Name: Confidence of Ground Staff) Customers feel safe and satisfied if the Ground Staff display confidence and trustworthiness as they perform their duties. Factor numbers are in descending order of their contribution to Total Variance (72.224%).

The findings of the Exploratory Factor Analysis are discussed as follows:

1. Pandemic related precautions do not form a distinct factor but form (majorly) a part of Factor 4 (Self Navigation in Sanitized Environment) and Factor 8 (Arogya Setu App) and minorly part of Factor 3 (Appropriate Accessories and Protocol), Factor 5 (Connectivity and Biological Needs), Factor 6 (Aesthetics and Sanitization), Factor 7 (Hygienic Retail Facility). Could we question that due to the continuing nature of the pandemic, customers are not allowing the fear regarding the pandemic to take center stage and affect their satisfaction levels? We would note that all respondents are educated above the level of graduation. (Refer to Figure 2)

2. Customers respect the fact that most of the operative activities during departure and arrival at domestic terminals should be easy and transparent. They are insistent that they get the value for the money they have spent

3. Customer satisfaction is affected by the kind of empathetic connect that the Ground Staff has with the customers. They are keen that they are taken care of by the Ground Staff even if they do not explicitly mention so

4. The very basics that a customer would need in a connected world makes a difference: WIFI connectivity, charging points, adequately sanitized rest rooms. The customer also looks forward to the lounge facility, keeping within limits of the pandemic protocol.

5. The air terminal's décor, the level of sanitization, the acoustics of the environment all affect the customer's love for the terminal's facilities. The customer is also keen that the terminal's function throughout the day and on all days

6. The customers feel secure regarding the usage of the Arogya Setu app that the Covid Kit that is given at the time of the departure. They are also insistent that sufficient sanitization be maintained during the service of food and contact points and social distancing be maintained at all queues and seating areas

7. It is also rather intriguing to note that the variables: Tan_Equip_BagScan, Tan_Equip_RestRm, Tan_Equip_Parkg, Tan_Appeal_SDistWaitng, Tan_Appeal_PdCln, Emp_Understand_Delay, Assr_Safe_CovidProtocol, Assr_Knowledge_SplCase, Assr_Knowledge_CovidProtocol (9 variables, listed in Table 2) have not found a significant presence in any factor. Thus, the sophistication of baggage scanning equipment, restrooms, parking facility, the periodicity of sanitization, the explicit knowledge of the Covid protocol among Ground Staff do not seem to affect the customer's satisfaction levels, provided the other factors are looked into. This may be because of selection of stimuli (subliminal perception) by the consumer and the tendency for perceptual defense in view of the dangers posed by the pandemic. (Schiffman, Wisenblit, & Kumar, Consumer Perception, 2016)

8. A consideration with the Perceptual Constructs and Input Stimuli of the Howard Sheth Model would be that the Overt Search would look for whether

the staff have appropriate accessories, whether a Covid Protocol would be maintained, whether the environment is sanitized and there are notices in the airport for the self-navigation, whether there are hygienically maintained and operated retail facilities. When travellers get connected on social media groups and when they experience the ease and comfort of smooth operations, the input stimuli may create a perceptual bias, thus enabling the decision to repurchase. Confident Ground Staff, Acoustics, 24 hours assistance and aesthetics could gain the attention of the traveler, thus again with the possibility of creating a perceptual bias, leading to brand comprehension and satisfaction, further leading to repurchase.

E. Conclusions and Recommendations

a) Managerial Implications

The authorities in charge of the airport terminal must emphasize on the following and ensure adherence:

1. Adequate hygiene related measures and sanitization
2. Thermal screening, social distancing, the wearing of masks and gloves. Self-navigation should be enabled with as much reduction of human contact as possible
3. The facility should ensure that all promised services are provided and the Ground Staff need to be sensitized to approach customers if required
4. The acoustics at the airport terminal should soothe the customer
5. The customers should be provided with the Covid Kit and the Ground Staff should ensure hygiene in both appearance and operations
6. The check of necessary documents is important as is the presence of the AarogyaSetu app
7. The customers would feel confidence if there is the presence of medical staff at the airport terminal, necessary Covid Testing facility and resources to meet unforeseen events be ready at disposal
8. Multiskilling of Ground Staff towards the meeting of pandemic related needs may ensure enhanced confidence in customers
9. The creation of a blue print to address a pandemic related issue within an airport terminal
10. All retail facilities must follow pandemic protocols
11. There should be WIFI availability and adequate charging points and sanitized rest rooms
12. The airport terminal should function round the clock
13. The airports should have a feedback mechanism to check on satisfaction levels regarding departure gates and commercial establishments within the terminals

14. The airports should organize commercial activities ensuring much of the transaction is online
15. Airports should ensure transparent and prompt communication with travellers
16. Airliners can ensure that travellers form social media groups and communicate thus with the airport authority, airlines and with each other.

b) Research Implications

The topic is by itself intriguing as the SARS Covid 19 pandemic has given rise to a dynamic nature of an unforeseen situation, with waves and mutants of the virus. As commercial activities have evolved back into the original gear, customer satisfaction is likely to alter its parameters accordingly. In this study, we noticed that the factors relating to the pandemic protocol did not seem to take centre stage and remained in the background, yet affecting the variance in data just as any other underlying issue would have. The pandemic is yet to completely exit the world and similar data collected in the near future may show varied results. Thus, the study is very cross sectional, though the methodology can be extrapolated to future research. Also, noting the method of data collection, the unearthed factors are not further analysed using Friedman Test or the ANOVA in this research. To take the research forward, with the vision of suitable consultant guidance in a black swan event, one must further study the interrelationships between factors and between factors and demographic partitions of respondents, after using appropriate resampling methods.

References

Arogya Setu. (n.d.). Retrieved Mar 31, 2021, from https://www.aarogyasetu.gov.in/: https://www.aarogyasetu.gov.in/

Bhattarai, B., &Malla, S. (2021, Nov). Marketing strategies of Nepalese tourism industry post Covid-19. *Annamalai International Journal of Business Studies and Research, 13*(1), 50-58. doi:https://doi.org/10.51705/AIJBSR.2021.v13i01.007

Bielecki, M., Patel, D., Hinkelbein, J., Komorowski, M., Kester, J., Ebrahim, S., . . . Schlagenhauf, P. (2020, Dec 5). Air travel and COVID-19 prevention in the pandemic and peri-pandemic period: A narrative review. *Travel Medicine and Infectious Disease, 38*, 1-11. doi:https://doi.org/10.1016/j.tmaid.2020.101915.

Buttle, F. (1996). SERVQUAL: review, critique,research agenda. *European Journal of Marketing,30*(1),8-32. Retrievedfromhttp://140.117.77.118/2009/m954011064/References/20080927Buttle1994

Choi , J. H. (2021). Changes in airport operating procedures and implications for airport strategies post-COVID-19. *Journal of Air Transport Management*. doi:https://doi.org/10.1016/j.jairtraman.2021.102065

Das, S. S., & Tiwari, A. K. (2020). Understanding international and domestic travel intention of Indian travellers during COVID-19 using a Bayesian approach. *Tourism Recreation Research*, 1-18. doi:https://doi.org/10.1080/02508281.2020.1830341

Howard Sheth Model – 4 Components, 3 Levels, and Limitations. (n.d.). Retrieved Nov 30, 2022, from Neostrom: https://neostrom.in/howard-sheth-model/

Kapoor, R., &Madichie, N. O. (2012). Models of Consumer Behaviour and Decision-Making. In R. Kapoor, & N. O. Madichie, Consumer Behaviour: Text and Cases (pp. 42 - 52). New Delhi: Tata Mc GrawHill Education Private Limited.

Kaushal, V., & Srivastava, S. (2020, Oct 01). Hospitality and tourism industry amid COVID-19 pandemic: Perspectives on challenges and learnings from India. *International Journal of Hospitality Management, 92*(2021), 1-9.

Kumar, S. (2021, Mar 13). Circular: Strict Compliance of Covid Protocol. Retrieved from https://www.dgca.gov.in/digigov-portal/jsp/dgca/homePage/viewPDF.jsp?page=topHeader/COVID/Circular(15.3.2021).pdf

Kumar, S. (2021, Mar 15). Circular: Strict Compliance of Covid Protocol. Retrieved from: https://www.dgca.gov.in/digigov-portal/jsp/dgca/homePage/viewPDF.jsp?page=topHeader/COVID/Circular(15.3.2021).pdf

Lamb, T. L., Ruskin, K. J., Rice, S., Khorassani, L., Winter, S. R., & Truong, D. (2021). A qualitative analysis of social and emotional perspectives of airline passengers during the COVID-19 pandemic. *Journal of Air Transport Management, 94*. doi:https://doi.org/10.1016/j.jairtraman.2021.102079

Meena, S. (2020, July 16). Impact of novel Coronavirus (COVID-19) pandemic on travel pattern: A case study of India. Indian Journal of Science and Technology, 13(24), 2491 - 2501.

Padhee, U. (2020). Office Memorandum made by the Ministry of Civil Aviation, India. Retrieved from https://www.civilaviation.gov.in: https://www.civilaviation.gov.in/sites/default/files/Updation_of_Guidelines.pdf

Saini, N., & Saini, V. (2020). Air travel in COVID-19 pandemic. Journal of Patient Safety and Infection Control, 8(1), 29 - 32. doi:10.4103/jpsic.jpsic_12_20

Schiffman, L. G., Wisenblit, J., & Kumar, S. (2016). Consumer Attitude Formation and Change. In L. G. Schiffman, J. Wisenblit, & S. R. Kumar, *Consumer Behaviour, 11,*168 - 203. Delhi, Chennai: Pearson.

Schiffman, L. G., Wisenblit, J., & Kumar, S. (2016). Consumer Perception. In L. G. Schiffman, J. Wisenblit, & S. R. Kumar, *Consumer Behaviour, 11,* 98-137. Delhi, Chennai: Pearson.

Sun, X., Wandelt, S., Zheng, C., & Zhang, A. (2021, Apr 14). COVID-19 pandemic and air transportation: Successfully navigating the paper hurricane. *Journal of Air Transport Management*. doi:https://doi.org/10.1016/j.jairtraman.2021.102062

Varimax Rotation. (2020). Retrieved from https://en.wikipedia.org: https://en.wikipedia.org/wiki/Varimax_rotation
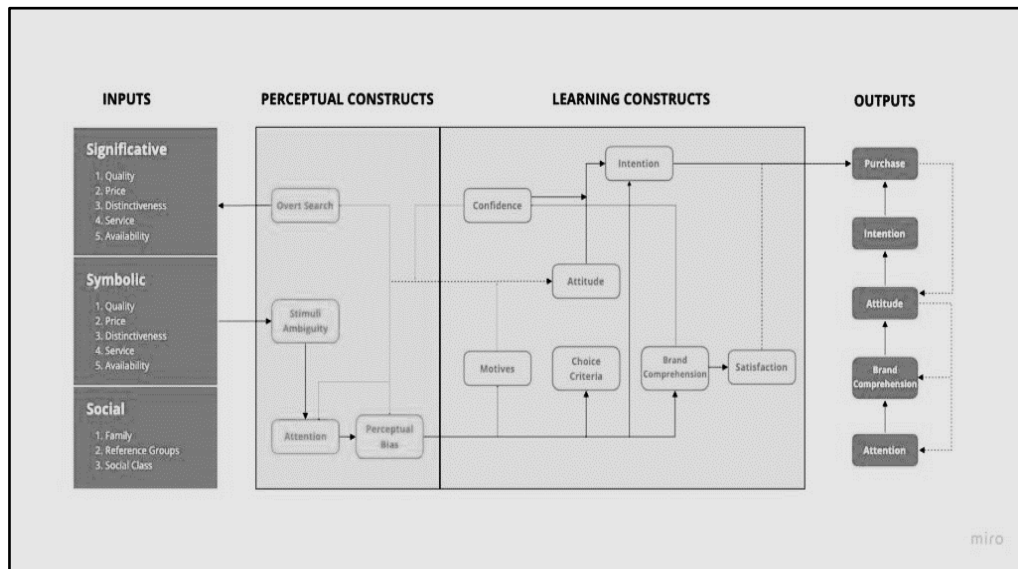
Figure 1: The Howard Sheth Model of Buying Behaviour; Source:Howard Sheth Model – 4 Components, 3 Levels, and Limitations
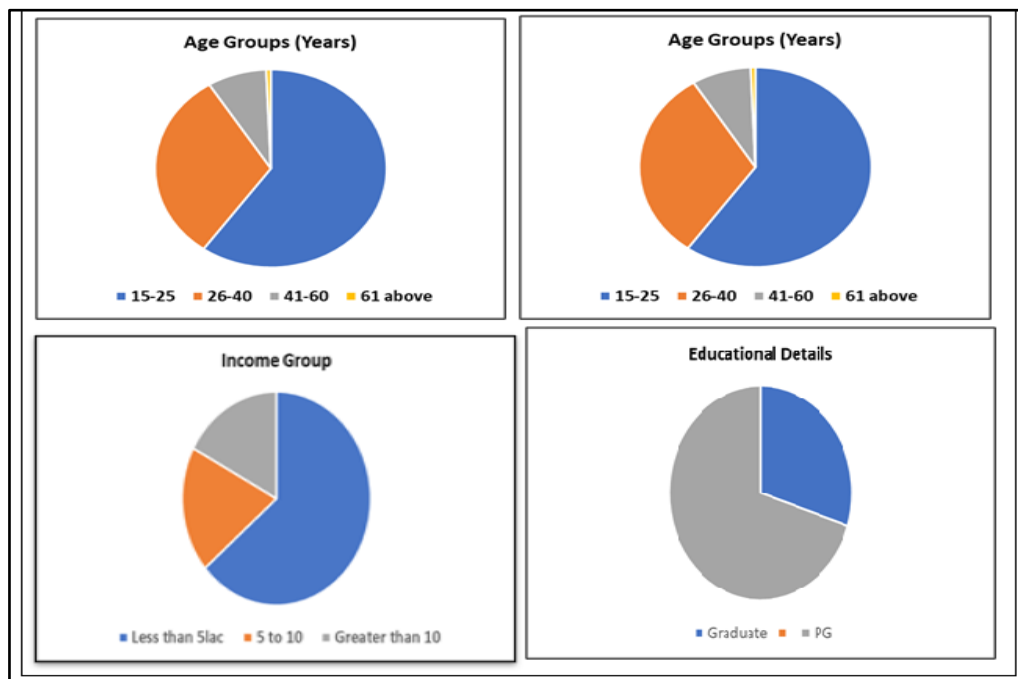
Figure 2: Demographic Details of Respondents (Research Output)
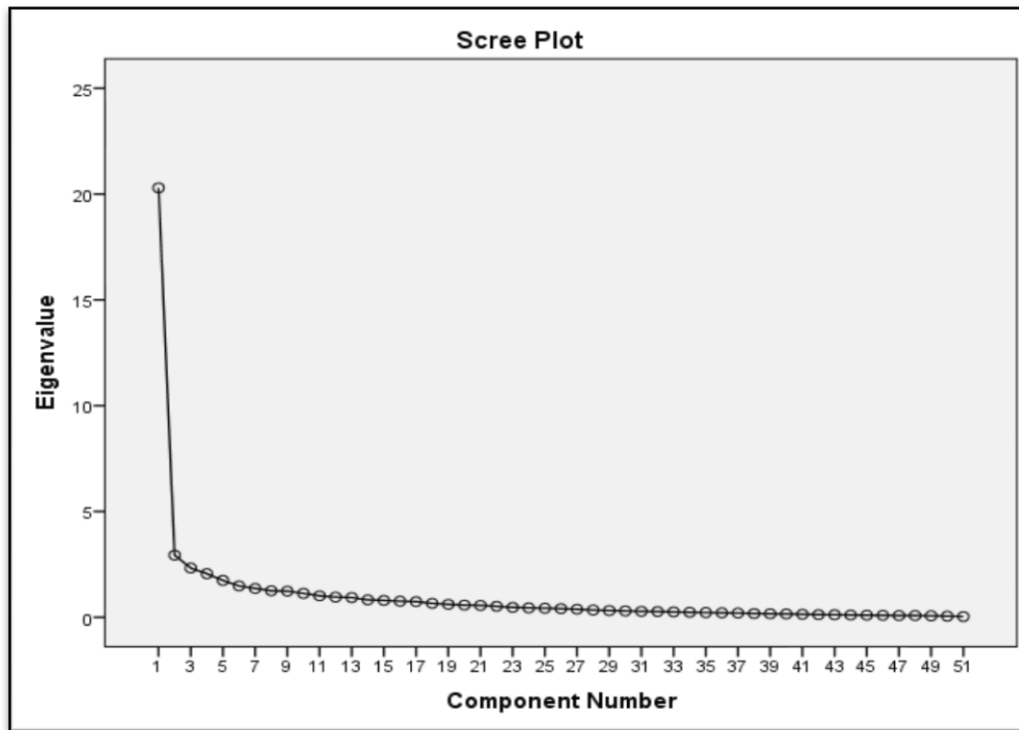
Figure 3: Scree Plot (Research Output)

Dimensions	Definition	Items in scale
Reliability	Is the promised service (at the airport) delivered with accuracy?	4
Assurance	Do the ground staff demonstrate trust and confidence?	5
Tangibles	Does the terminal seem sanitized, aesthetic and pleasing?	4
Empathy	Do the Ground Staff connect with the travellers empathetically?	5
Responsiveness	Are the Ground Staff willing to help immediately, as required?	4

Table 1: Researcher's output, referencing (Buttle, 1996)

SERVQUAL Rater	Sno	Subdimensions of SERVQUAL	Sub-Sub dimension	Covid Component (Yes/No)	Var Name	Var No
Tangibles	1	Modern	Thermal Screening Equipment	Yes	Tan_Equip_Therm	1
Tangibles			Sanitizer Dispenser	Yes	Tan_Equip_Santzr	2
Tangibles			Automatic Boarding Pass Printing Machine	No	Tan_Equip_PassPrnt	3
Tangibles			Luggage Scanning Machine	No	Tan_Equip_BagScan	4
Tangibles			Rest rooms have modern facilities	No	Tan_Equip_RestRm	5
Tangibles			Rest Rooms have sufficient sanitization with respect	Yes	Tan_Equip_RestrmCln	6
Tangibles			Comfort of Seating Facility in waiting area	No	Tan_Equip_Seat	7
Tangibles			Food Service Areas	No	Tan_Equip_FoodSrv	8
Tangibles			Facilities of retail/ shopping	No	Tan_Equip_Retail	9
Tangibles			Facility of the Lounge	No	Tan_Equip_Lounge	10
Tangibles			Anti Covid Kit handed to the Customers	Yes	Tan_Equip_CovidKit	11
Tangibles			Background music at the airport	No	Tan_Equip_Music	12
Tangibles			The parking facility is adequate	No	Tan_Equip_Parkg	13
Tangibles			Free wifi at the airport	No	Tan_Equip_Wifi	14
Tangibles			Adequate and well placed charging points	No	Tan_Equip_Charger	15
Tangibles	2	Visually	Neat and Clean Terminal	No	Tan_Appeal_Neat	16
Tangibles			Adequate and visible navigation boards	No	Tan_Appeal_Navgn	17
Tangibles			Décor in the Terminal	No	Tan_Appeal_Decor	18
Tangibles			Adequate social distancing maintained in the	Yes	Tan_Appeal_SDistWaitng	19
Tangibles			Adequate social distancing maintained in the	Yes	Tan_Appeal_SDistQ	20
Tangibles	3	Employees have a neat	Neat and regularized uniform of Ground Staff	No	Tan_Appear_Uniform	21
Tangibles			Ground Staff use sanitization equipment (gloves,	Yes	Tan_Appear_Covid	22
Tangibles			Ground Staff who serve food and beverages follow	Yes	Tan_Appear_CovidFood	23
Tangibles	4	Visually appealing	Look of the Boarding Pass	No	Tan_Appeal_BPass	24
Tangibles			Functional Luggage Trolleys	No	Tan_Appeal_Trolley	25
Tangibles			Periodic Cleaning/ Sanitization of Waiting Areas	Yes	Tan_Appeal_PdCln	26
Empathy	5	Giving Customers	Individual attention from Ground Staff, if required (E.g.: Provision of Wheelchair)	No	Emp_IndlAttn	27
Empathy	6	Employees deal with	Staff handle baggage carefully	No	Emp_BagCare	28

Table 2: Researcher Output, referrering SERVQUAL instrument

SERVQUAL Rater	Sno	Subdimensions of SERVQUAL	Sub-Sub dimension	Covid Component (Yes/ No)	Var Name	Var No
Empathy	8	Employees who	Ground Staff assist in special cases of Customers	No	Emp_Understand_Assist	29
Empathy			In case of delay of Customer, Ground Staff assist him	No	Emp_Understand_Delay	30
Empathy	9	Convenient	The Terminal works 24x7	No	Emp_WkgHr	31
Assurance	10	Employees who instill	Confidence level of Ground Staff at Contact Points	No	Assr_Conf_Lvl	32
Assurance			Ground staff guide fliers to board correctly	No	Assr_Conf_Guide	33
Assurance	11	Making customers	All financial transactions are transparent	No	Assr_Safe_Fin	34
Assurance			Covid Testing Facility at the Airport	Yes	Assr_Safe_CovidTest	35
Assurance			All dealings regarding Covid protocol are transparent	Yes	Assr_Safe_CovidProtocol	36
Assurance	12	Employees who are	Courtesy level and politeness of Ground Staff	No	Assr_Courtsy_Staff	37
Assurance	13	Employees who have the knowledge to	**Ground Staff have knowledge of special cases (Services Passengers, Senior Citizens and benefits due to them)**	No	Assr_Knowledge_SplCase	38
Assurance			Ground Staff have knowledge of medical cases	No	Assr_Knowledge_MedCase	39
Assurance			Ground Staff have knowledge of Covid protocols	Yes	Assr_Knowledge_CovidProtocol	40
Responsiveness			Ground staff guide Customers regarding departure	No	Resp_Info_Dep	41
Responsiveness			Ground staff guidance in silent airports	No	Resp_Info_Announce	42
Responsiveness	16	Willingness to	Customer Care Support of the Airlines at the Airport	No	Resp_Help_CustCare	43
Responsiveness	17	Readiness to respond to	Ground staff reply enquiries correctly and promptly	No	Resp_Enq_Correct	44
Reliability	18	Providing Services as	All services, mentioned in ticket and boarding pass are delivered	No	Rel_Promise_Ticket	45
Reliability			Adequate Cab and Transport Facility available at the	No	Rel_Promise_CabSupport	46
Reliability	20	Performing services right	Prompt Service at the Security Check Queues	No	Rel_ServeRt_Security	47
Reliability	21	Providing services in the	Prompt Service at the Check in Queues	No	Rel_ServeRt_Q	48

Table 2: Researcher Output, refererring SERVQUAL instrument

SERVQUAL Rater	Sno	Subdimensions of SERVQUAL	Sub-Sub dimension	Covid Component (Yes/ No)	Var Name	Var No
Reliability	22	Maintaining	Genuinity of Documents on person are checked	No	Rel_Docu_Genuine	49
Reliability			Genuinity of Covid Cetificate are checked thoroughly	Yes	Rel_Docu_CovidCert	50
			Arogya Setu App is checked	Yes	Rel_Docu_ArogyaSetu	51

Table 2: Researcher Output, refererring SERVQUAL instrument

Table 2

Total Variance Explained

Component	Initial Eigenvalues			Loadings			Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	20.293	39.791	39.791	20.293	39.791	39.791	5.283	10.359	10.359
2	2.936	5.756	45.547	2.936	5.756	45.547	5.263	10.320	20.678
3	2.326	4.561	50.108	2.326	4.561	50.108	4.366	8.562	29.240
4	2.059	4.037	54.145	2.059	4.037	54.145	4.265	8.362	37.602
5	1.744	3.419	57.565	1.744	3.419	57.565	3.406	6.679	44.282
6	1.480	2.902	60.467	1.480	2.902	60.467	3.359	6.586	50.867
7	1.362	2.671	63.137	1.362	2.671	63.137	2.877	5.641	56.508
8	1.254	2.458	65.596	1.254	2.458	65.596	2.708	5.309	61.818
9	1.237	2.426	68.022	1.237	2.426	68.022	2.443	4.790	66.607
10	1.129	2.214	70.236	1.129	2.214	70.236	1.660	3.254	69.862
11	1.014	1.987	72.224	1.014	1.987	72.224	1.205	2.362	72.224

Table 3: Research Output

Rotated Component Matrix[a]

	1	2	3	4	5	6	7	8	9	10	11
Tan_Equip_Therm				.797							
Tan_Equip_Santzr				.583							
Tan_Equip_PassPrnt				.510							
Tan_Equip_BagScan											
Tan_Equip_RestRm											
Tan_Equip_RestrmCln					.500						
Tan_Equip_Seat					.647						
Tan_Equip_FoodSrv					.594						
Tan_Equip_Retail							.709				
Tan_Equip_Lounge					.645						
Tan_Equip_CovidKit			.657								
Tan_Equip_Music							.652				
Tan_Equip_Parkg											
Tan_Equip_Wifi					.658						
Tan_Equip_Charger					.600						
Tan_Appeal_Neat						.775					
Tan_Appeal_Navgn				.602							
Tan_Appeal_Decor						.643					
Tan_Appeal_SDistWaitng											
Tan_Appeal_SDistQ						.550					
Tan_Appear_Uniform			.747								
Tan_Appear_Covid			.653								
Tan_Appeal_CovidFood							.550				
Tan_Appeal_BPass							.513				
Tan_Appeal_Trolley			.592								

Rotated Component Matrix[a]

	1	2	3	4	5	6	7	8	9	10	11
Tan_Appeal_PdCln											
Emp_IndlAttn		.502									
Emp_BagCare		.596									
Emp_Understand_Assist		.577									
Emp_Understand_Delay											
Emp_WkgHr									.733		
Assr_Conf_Lvl											.857
Assr_Conf_Guide									.593		
Assr_Safe_Fin	.517										
Assr_Safe_CovidTest				.641							
Assr_Safe_CovidProtocol											
Assr_Courtsy_Staff											
Assr_Knowledge_SplCase								.507			
Assr_Knowledge_MedCase		.507									
Assr_Knowledge_CovidProtocol			.543								
Resp_Info_Dep		.631									
Resp_Info_Announce		.781									
Resp_Help_CustCare		.609									
Resp_Enq_Correct	.719										
Rel_Promise_Ticket	.547	.526									
Rel_Promise_CabSupport	.754										
Rel_ServeRt_Security	.785										
Rel_ServeRt_Q	.696										
Rel_Docu_Genuine	.684										
Rel_Docu_CovidCert				.610							
Rel_Docu_ArogyaSetu								.730			

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 17 iterations.

Table 4: Research Output