Effect of “Single” vs. “Multiple” Possession and Usage of Loyalty Programme on Re-purchase Intention Behavior of Airline Frequent Passengers in India

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Received December, 2017
Accepted October, 2018

Abstract

**Purpose:** This paper tries to find out the effect of single vs. multiple possession and usage of frequent flyer programme by frequent passengers on their re-purchase intention behavior in India.

**Design/methodology:** This paper tested the hypotheses, whether the variations in possession level of frequent flyer programme influences the relationship among the selected antecedent variables such as passengers’ satisfaction with the loyalty programme, passengers’ level of trust in the airline and the perceived brand image on the re-purchase intention behavior of frequent passengers. A structural equation model depicting the re-purchase behavior of frequent flyers were developed and tested.

**Findings:** There exists an overall statistical reliability of the model build-up by using structural equation modeling. Significant differences are observed in brand and trust variables in influencing re-purchase intention behavior of frequent passengers. This finding was further verified in correspondence to the variations in loyalty programme status and possession levels of loyalty programme memberships.

**Practical implications:** Re-purchase behavior of passengers holding single and multiple loyalty programme memberships were compared and drawn implications for the airlines to guesstimate re-purchase intentions of regular passengers.

**Originality/value:** The empirical findings of this study proved that there is a propensity to shift from single to multiple possession and usage of airline loyalty membership while the frequent passengers progress on their travel voyage. This study proclaim that passengers possessing single loyalty programme are more influenced by brand image of the airline where as
passengers using multiple loyalty programmes are by and large accustomed by means of the trust in the airline services than its brand image.

**Keywords:** Frequent flyer programme, airline loyalty, airline brand image, passenger trust, re-purchase behavior

**To cite this article:**

Pappachan, J. (2018). Effect of “Single” vs. “Multiple” Possession and Usage of Loyalty Programme on Re-purchase Intention Behavior of Airline Frequent Passengers in India. *Journal of Airline and Airport Management, 8*(2), 13-27. https://doi.org/10.3926/jairm.116

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1. **Introduction**

Airline marketers frequently focus on customer loyalty programme that help them to retain loyal customers in the long run. One of such customer retention programme pursued by airlines is the frequent flyer programme. Frequent Flyer Programme (FFP) is one of the most predominant and popular promotional tool used by airlines with an aim to retain and satisfy their frequent passengers, however very little research has been conducted to understand the various factors that influence frequent passengers’ intention behavior towards such programmes (Kivetz & Simonson, 2002).

Frequent Flyer Programme can be considered as an incentive programme of airline to encourage their regular passengers to use more and to get rewarded for their repeated travels. Airlines normally reward their frequent flyers based on travel trips volume and frequency of trips. Each airline loyalty programme attributes comprise attractive features, functions, benefits, and uses.

FFP provides free travel trips, seat upgrades like incentives to fly with better class facilities and other extra allowances. It is considered as one of the most popular and successful marketing promotional programme worked out to build up customer loyalty and makes it easy to sell the highly priced seats (Chin, 2002). According to the special report of International Air Transport Association (IATA) on FFP estimates, there are more than 130 airline frequent flyer programme and in excess of 150 million members. “FFPs are a major direct cash generator for larger carriers through the sale of miles to credit card and other partners, without that revenue source, there would be very few major airlines in North America in business.” (Bhagwanani cited in IATA report, 2012).

Majority of airlines have unoccupied seats on a factually regular basis. As per IATA report (2016), on an average basis only 79 percent of the seats are occupied and as referred to as paid per flight load factor. The empty seats vanish perpetually once the aero plane departs and loses the opportunity of receiving any revenue from these vacant seats.

1.1. **Rationale of the study**

According to the industry officials’ opinion and also as of current literature in aviation, India is considered as ninth largest aviation market and expected to become the third biggest one by 2030. It is evident that there is no specific exposure in the literature with regard to the influence of loyalty programme possession level - either in terms of number of FFPs held or FFP status level and its usage pattern on the re-purchase intention behavior of frequent airline passengers particularly in developing aviation markets like India.

Airlines provide various benefits to its frequent passengers through its loyalty programme; however the effect of these loyalty programmes – possession level in retaining the frequent travelers with the airline is not known on the whole. Some passengers hold more than one loyalty programme whereas some hold only one loyalty programme, though they travel through different airline or associated airline in which they accrue FFP miles on account of airline alliances. Furthermore, the effect of airline brand image and trust of passengers regarding the
single and multiple usage of FFP (passenger’s FFP possession level) on re-purchase intention behavior is almost under researched.

The research question addressed in this study was to determine the extent to which the re-purchase intention of frequent airline passengers varies in tune with the variation in the number of frequent flyer programme memberships held by passengers, particularly in two categories ‘single’ vs. ‘multiple’ possession of FFPs. It was also inquisitive to know the variations in the antecedent variables such as ‘passengers trust’ in the airline and their perceived ‘brand image’ about the airline in influencing the re-purchase intention of frequent flyers in accordance with the variations in FFP possession levels.

1.2. Objectives of the study
This research paper tries to achieve the following objectives:

1. To evaluate the combined effect of the variables namely ‘passenger satisfaction’, ‘airline brand image’ and ‘trust in the airline’ on the ‘re-purchase intention behavior’ of frequent flyers.
2. To examine the influence of frequent flyer programme possession levels (single vs. multiple) on the re-purchase intention behavior of passengers.
3. To find out the level of variations in re-purchase intention behavior caused by the effect of brand image and trust as perceived by both single and multiple categories of passengers.

2. Literature Review

2.1. Influence of FFP in airline selection
Proussaloglou and Koppelman (1995) pointed out the influence of FFP on the airline preferences of passengers. According to them, FFP seemed to be a major influencer in the selection decision of a passenger when compared with other antecedents like low ticket fare, on time operations and convenient flight schedule. This indicates that any key changes to a largely accepted loyalty programme offerings would result in serious setback in airlines customer base. However the re-purchase intention behavior of passengers using only one FFP, albeit they require traveling through other airlines in some situations due to non availability of their preferred airline was not discussed largely in the aviation literature. Proussaloglou and Koppelman (1999) indicated in their study as there is a highly significant and positive correlation between frequent flyer programme usage and airline loyalty level among passengers. They also indicated that FFPs make airline demand highly inelastic due to its effective incentive schemes offered for frequent usages.

Gudmundsson, de Boer and Lechner (2002) pointed out the link between airline loyalty and brand image and also indicated that airlines should consider some precautions on the type of service products as part of their FFP in promoting brand as quoted as “there should be a clear separation between the mileage as a currency on the one hand, and service benefits (such as priority check-in and lounge access) on the other”. Though the factors that embraces an airline selection depend upon the airline alliances that provide better connectivity, best check-in facilities at airport, attractive and efficient airline websites, conducive lounge facilities and personal recognition, the real competition is between the alliances, since passengers prefer one FFP which make them avail benefits from the allied/partner airlines (Whitaker, 1998).

Proussaloglou and Koppelman (1999) pointed out the readiness of various categories of frequent flyers to pay for their preferred airline and found that there are three premium ticket price levels corresponding to each FFP levels. They also examined the role of perceived value of FFP membership in the airline choice behavior. Their finding reveals that frequent passengers set tradeoff between the cost of travel and the various benefits they perceive while experiencing the various levels of frequent flyer programme.

Gudmundsson, Evert and de Boer (2012) studied 30 years of development of frequent flyer programmes, and pointed out that FFPs can be considered as separate profit centers and it should be secluded from the core airline service facets. FFP can be considered as a product with its own value. So it can be presumed that the re-purchase behavior of frequent passengers can be discussed separately with the distinctive attributes of FFP as a product. Nevertheless the variations in re-purchase intention behavior of passengers according to the change in possession level of FFP (single FFP and multiple FFP) were not discussed widely in the literature.
2.2. FFP benefits perceived by passengers and airlines

As pointed out by O’Malley (1998), if the offers and terms of an FFP are altered by putting more constraints in availing benefits of the programme it would cause some adverse impact on frequent flyers’ perception of FFP value. This was supported by Kivetz and Simonson (2003), that people felt an intrinsic satisfaction behavior called the “idiosyncratic fit heuristic” (where passengers were attracted by offers for which they have the benefit of a comparative gain by thinking that their personal effort in fulfilling with the programme requirements as lower when compared with the effort of other passengers). Therefore it was made known that FFP will give them a kind of feeling among passengers that they are special to the airline they travel frequently.

Chin (2002) pointed out the importance of network coverage of an airline as a service attribute which was favored by airline frequent passengers, particularly the business passengers. It will be sometimes necessary for business travelers to have multiple numbers of FFPs as they travel to many destinations frequently. Business travelers can easily make up FFP points if a single airline covers most of their business destinations or have superior coverage with the help of airline alliances. Some important FFP attributes such as the kind of service, extra benefits while using top classes and the status of FFP all put together make them eligible for point accumulation and at the same time make it easy in redeeming FFP benefits. Another attribute of FFP was the partner network which includes hotel accommodation, car rental services and other shopping facilities. Frequent Flyers were also selective in using the loyalty programme due to its flexibility on the terms and conditions regarding the reward system. FFP reward system includes the validity of FFP miles, easiness in booking procedures, flexibility in stipulations regarding blackout dates, ability to transfer the awards and the level of competence necessary for award travel. Another attribute of FFP influenced by passengers were focused on special care provided by airlines. FFP passengers were also influenced by a factor which was based on the privileged loyalty programme itself, facilitating to the needs of essential customer group of frequent high-yield travelers.

The influence of passenger attitudes towards the FFP and its usage pattern has been scarcely researched in the literature on airline loyalty programme. The classic theory on consumer behavior supports the effect of usage pattern of loyalty programme (frequency) on the passenger attitude towards the loyalty programme. Martín, Román and Espino (2011) urged that FFP could be able to operate as a barrier to entry of new competitors, however insufficient research has been conducted to ascertain the impact of this approach on passengers’ perceptions with regard to FFP, its possession levels and ultimately in the re-purchase behavior.

Klemperer (1995) emphasized the significance of FFP as a passenger retention strategy by showing that passengers find it difficult and expensive while shifting from one airline to another by forgoing the offering of loyalty benefits. However it was vague in the literature regarding the level of complexity experienced by frequent flyers while they possess multiple numbers of FFPs with different airlines of their choice while associated with different FFP statuses.

2.3. Influence of Brand Image

At times when service quality aspects of airlines are very crucial and not easy to differentiate, the brand image of the airline would influence passenger’s selection decision (Andreassen & Lindestad, 1998).

Zeithaml and Bitner (1996) states that brand image was capable of affecting customers’ opinion about the company’s products. Elgin and Nedunchezhian (2012) indicated that a company that was likely to stand out in market will have both regular and trial users due to its superior brand image. It was understood that corporate brand image has rolled out to be a vital factor in the appraisal of a company that influences customers’ view point on its services (Fombrun, 1996).

It was significant to refer to the contention of Ostrowski, O’Brien and Gordon (1993) indicates that loyal passengers with a favorable image of an airline judge principally a poor flight experience as an exemption to their impression about the airline. However the variations in the re-purchase behavior of frequent passengers owing to the brand image perceptions corresponding to each FFP statuses and the FFP possession pattern has not been discussed previously in the literature.
2.4. Influence of passengers’ trust in the airline

Empirical evidences support the influence of customers’ trust in creating loyalty to a firm (Chaudhuri & Holbrook, 2001; Eriksson & Vaghult, 2000; Harris & Goode, 2004; Lau & Lee, 1999; Sirdeshmukh, Singh & Sabol, 2002). There exists a correlation between satisfaction and trust (Yoon, 2002).

Eisingerich and Bell (2008); Harris and Goode (2004) have emphasized that the service quality perception of passengers influences repurchase intention and loyalty on account of its positive effect of trust in the company. Hence it could be deduced that the passengers’ continuous experiences as regards the services provided by the airline would strengthen their trust in the airline and its promotional programmes. Regardless of the above understanding on the effect of trust on re-purchase behavior, it would be sensible to investigate lying on the trust level of passengers towards the airline while they possess single or multiple number of loyalty programme.

3. Hypotheses of the study

On the basis of the literature referred, it was implicit that the FFP selection and re-purchase intention behavior of frequent passengers was very much influenced by the following vital factors: ‘Satisfaction’ of passengers regarding the services and benefits of loyalty programme; Passengers’ ‘trust’ in the airline and ‘Brand image’ perceived by the passengers with reference to the airline. It was obvious that re-purchase intentions were not solely depend on the above factors. Passengers would definitely consider those flights which provide the lowest ticket fare, schedule suitable to their travel time, better connectivity etc., however these preferences were always considered as normal characteristic features irrespective of all categories of passengers whether frequent or non frequent. When it comes to the frequent passengers possessing FFP with single or multiple memberships, it was significant to find out how these selected variables influence the re-purchase intentions. Though the relationship between these variables and re-purchase intention behavior were discussed in many studies, the combined effect of these variables on re-purchase behavior in a single frame work was not discussed or explored in previous studies. Therefore the following hypotheses were tested for this study.

H1: There is a direct and significant effect of ‘passenger satisfaction’ on the ‘re-purchase intention behavior’ of airline frequent passengers.

H2: There is a direct and significant effect of ‘brand-image of the airline’ on the ‘re-purchase intention behavior’ of airline frequent passengers.

H3: There is a direct and significant effect of ‘passenger trust’ on the ‘re-purchase intention behavior’ of airline frequent passengers.

H4: There is a significant effect of moderation caused by ‘Frequent Flyer Programme’ possession levels (single vs. multiple) among ‘passenger satisfaction’, ‘brand-image’ and ‘trust’ on the re-purchase intention behavior of passengers.

4. Methodology

Structured questionnaires were employed to gather the primary data for this study. A survey among passengers possessing various frequent flyer programme membership cards and travelled through major airports in India was conducted.

4.1. Sampling methods

Passengers travelling to and fro to all major airports in India were considered in this study. Passengers departing from these airports were selected using judgment sampling method and also with the support of airline officials who could trace whether the typical passenger possess FFP membership or not. It was vital to ensure that all respondents included in this study were frequent flyer programme members of at least one airline.

Five hundred and fifty four frequent passengers were located at the security hold waiting area and at the commercial business lounge of the departure terminal of the airports. These frequent passengers were travelling to various destinations such as Chennai, Mumbai, Delhi, Hyderabad and Bangalore. Majority of these passengers were business travelers and also residents of various cities in India.

Since the passengers were directly approached with individual attention and care. All their doubts were well clarified thus no questionnaire items were left unanswered. Statistical Package for Social Science (SPSS) and AMOS software were used for analysis of data. Microsoft excel statistics were used to calculate and compare the...
‘Z score’ statistic of two categories of passenger data. The effect of moderation was tested using the variable “possession status of FFP”.

4.2. Variables used in the study

Passengers’ re-purchase intention behavior (RPB) was considered as the dependent variable and ‘satisfaction about frequent flyer programme’, ‘passenger’s trust in the airline’ and ‘perceived airline brand image’ of passengers were taken as independent variables of this study. Five-point rating scales were used to measure the variables and the measurement items of each variable were adapted from the literature.

Passengers’ re-purchase intention behavior (RPB) was operationally defined in this study as the degree of preference expressed by frequent flyers on a five point rating scale or their level of inclination to travel again with the same airline in which they possess FFP membership regardless of the schedule availability and other convenience or benefits offered by other airlines in the same sector.

The FFP membership possession levels (single vs. multiple holding of FFP) were taken as the moderating variable for this study. Since the moderating variable was categorical in nature, analysis were done using two groups of passengers, vide passengers possess only one FFP and the other category passengers held more than one FFP at a time.

| Construct measurement scale | Source                                                                 | No. of items | Type of data                      | Reliability (Cronbach Alpha) confirmed |
|-----------------------------|------------------------------------------------------------------------|--------------|-----------------------------------|----------------------------------------|
| FFP satisfaction            | The industry-specific AIRQUAL by Ekiz, Hussain & Bavik. (2006), further adapted by Nadiri, Hussain, Ekiz & Erdogan (2008) | 3            | Interval (using five point scale)  | 0.844                                  |
| Passenger Trust             | Martensen & Groenholdt (2004)                                         | 3            | Interval (using five point scale)  | 0.882                                  |
| Brand Image                 | Nha & Gaston (2001) cited by Park, Robertson & Wu (2006)              | 3            | Interval (using five point scale)  | 0.893                                  |
| Re-purchase intention       | Nadi et al. (2008)                                                    | 3            | Interval (using five point scale)  | 0.897                                  |

Table 1. Summary of scales used in the study

5. Analysis and Results

5.1. Descriptive data

Out of the 554 responses received, 41% reserved their ticket through company assistants / company arrangements. About 48% passengers booked tickets by own efforts (mainly by using airline websites) and 11% booked ticket through travel agents. This study sample includes only those respondents who exercised full freedom in selecting the airline of their travel irrespective of the type of booking method.

Twenty five percent of the sample were above fifty years of age, age between forty and fifty were 32 percent, another 32 percent of the respondents were between thirty and forty years whereas only 11 percent of respondents were aged below thirty years. It was observed that very young people were not using frequent flyer programs largely. This could be attributed to the factors such as the level of income and the nature of occupation that may not necessitates them for air travel.

Occupation of the respondents comes under categories; business (19%), employed officials (76 %) and leisure / family travelers and retired persons all together represented only five percent of the sample. Fifty two percent of the respondents were using more than one FFP memberships; within this about 34 percent used only two FFPs and 18 percent of them possess three or more airline FFPs, however nearly half (48%) of the respondents held only one FFP. This holding pattern of FFP among frequent passengers was seemed to be more or less similar to the sample characteristic of the studies conducted by Toh, Hu & Browne (1999) and Weber (2005).
The frequency of air travel of both category of passengers (single vs. multiple) holding FFPs were verified and found that there is no significant variations in the average number of trips per year, yielding to the presumption that single FFP users were not holding multiple FFPs in spite of more number of travel requirements.

FFP statuses discussed in this study comes under four different categories in a pecking order of FFP status levels include ‘Blue’, ‘Silver’, ‘Gold’ and ‘Platinum’. All these status levels are achieved by means of accruing FFP miles which are correlated with the no. of trips and also with distance travelled by the passengers in a successive progression of trips in a given period.

a. ‘Blue’ status represented as the initial / primary level with limited privileges such as waitlist priority, personal preferences remembered, earn miles and book rewards at the time of planning the trip, and at the airport these category passengers can buy instant upgrades with miles at check-in.

b. ‘Silver’ status refers as those FFP passenger categories that can enjoy all the privileges of ‘Blue’ apart from priority check-in and boarding, excess baggage allowances, lounge facility at selected airports and buy instant upgrades with miles on board for some airlines.

c. ‘Gold’ status signifies the level at which can avail all the facilities of ‘Blue’ and ‘Silver’. In addition to this, these passengers can ensure guaranteed seats even on fully-booked flights, priority services through contact centers, check-in at dedicated counters, additional baggage allowance, lounge access at all operational airports including economy class, lounge access for guests and priority baggage tagging & delivery.

d. ‘Platinum’ status corresponds to the level at which frequent flyers can avail all the facilities provided by the FFP. Apart from the priorities of all other levels, Platinum card holders shall get the benefit of cancellation fees waived on fares in domestic sectors, additional checked-in baggage allowance, lounge access to one more person other than the passenger, non expiry of miles and nomination of a ‘Gold’ partner.

5.2. Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) provides better explanation and confirmation on unidimensionality aspect than Exploratory Factor Analysis (EFA). This approach was focusing on the overall construct validation (Ahire Golhar & Waller, 1996). Assessment of unidimensionality was important as this makes sure that all scale items indicating a variable measures on one and the same construct (Venkatraman, 1989).

5.2.1. Results of confirmatory factor analysis

Confirmatory Factor Analysis was performed to validate the measurement models of each constructs under study and then applied for testing the theoretical model using SEM. The results of the same is provided in Table 2.

Confirmatory Factor Analysis would give information on confirmation of the hypothesized model. Goodness of fit indices provides information on the clarity of indicator items and the degree of interrelationship with other constructs (Table 3). Figure 1 shows the output of the tested hypothetical model and the interrelationship between the constructs. The structured model included selected antecedent variables of re-purchase intention behavior (RPB) of frequent flyers and their inter-relationships were tested and found to be statistically valid.

| Construct            | P value | C MIN/ D.F. | RMR | GFI   | AGFI   | NFI   | TLI   | CFI   | RMSEA | Cronbach Alfa |
|----------------------|---------|-------------|-----|-------|--------|-------|-------|-------|-------|--------------|
| FFP satisfaction     | 0.155   | 2.02        | 0.998| 0.985 | 0.998  | 0.997 | 0.997 | 0.999 | 0.043 | 0.844        |
| Brand Image          | 0.008   | 6.94        | 0.031| 0.992 | 0.950  | 0.993 | 0.982 | 0.994 | 0.104 | 0.893        |
| Trust                | 0.017   | 4.09        | 0.034| 0.991 | 0.972  | 0.991 | 0.990 | 0.993 | 0.075 | 0.883        |
| Re-purchase intention| 0.052   | 3.77        | 0.031| 0.995 | 0.973  | 0.996 | 0.992 | 0.997 | 0.071 | 0.897        |

Table 2: Validation of measurement models and inter-item reliability of constructs
Figure 1. Frequent Flyers’ Re-purchase intention behavior – Structural Model

| Model               | NPAR | CMIN       | DF  | P   | CMIN/DF |
|---------------------|------|------------|-----|-----|---------|
| Default model       | 30   | 176.348    | 48  | 0.000 | 3.674   |
| Independence model  | 12   | 5146.71    | 66  | 0.000 | 77.980  |

| Model               | RMR  | GFI         | AGFI | PGFI |
|---------------------|------|-------------|------|------|
| Default model       | 0.035| 0.947       | 0.914| 0.583|
| Independence model  | 0.481| 0.225       | 0.084| 0.190|

| Model               | NFI  | RFI         | IFI  | TLI  | CFI  |
|---------------------|------|-------------|------|------|------|
| Default model       | 0.966| 0.953       | 0.975| 0.965| 0.975|

| Model               | RMSEA| LO 90     | HI 90  | P CLOSE |
|---------------------|------|-----------|--------|---------|
| Default model       | 0.070| 0.059     | 0.081  | 0.002   |
| Independence model  | 0.373| 0.364     | 0.382  | 0.000   |

Table 3. Model fit indices

5.3. Statistical Inferences

Fit indices validate the interrelationship of the variables and its dependent variable as shown in Table 3. Minimum discrepancy (CMIN/DF) obtained was 3.67. If this value is less than 5 then it is considered as a reasonably fit model (Wheaton, 1977). Model indices such as CFI, TLI and RMSEA were showing good fit values and these model indices were also not sensitive to the sample size. It can be inferred with 95 percent confidence that the three constructs namely passenger satisfaction with regard to loyalty programme, passengers’ trust in the airline, and passengers perceived brand image on the airline all with reflecting indicators best fit the model authenticating the re-purchase intention behavior of FFP members.

According to Jöreskog and Long (1993), a model can be assumed statistically fit and accepted if the fit indices such as GFI, AGFI, CFI and TLI are above 0.9 and at the same time RMR and RMSEA values were below 0.08.

5.4. Construct validity

Construct validity refers to the unidimensionality of the construct items. A break up measurement model was tested for every construct and then run CFA for each constructs. Accordingly Comparative Fit Index (CFI) value obtained was above 0.90 which implies the presence of strong indications of unidimensionality of construct items (Byrne, 1998). CFI values obtained for the variables are given in Table 3.
5.5. Convergent validity

According to O'Leary and Vokurka (1998), measurement of a variable using different methods provides the identical values then convergent validity is assumed. Bentler-Bonett is an index which measures the extent to which different approaches of measuring a variable generates the same outcome (Hair, Anderson, Tatham & Black, 1996). Similarly if the NFI values achieved were above 0.90, then it shows a sufficient model fit (Bentler, 1980). The Normed Fit Index (NFI) obtained in this study was 0.966, which is valid.

5.5.1. Results of convergent validity

There were commonly applied measures that were useful for establishing validity and reliability of the constructs: Composite Reliability (CR), Average Variance Extracted (AVE).

The thresholds for these values are:
Reliability (CR) should be greater than 0.7 and that of Convergent Validity could be obtained based on the analysis that CR should be greater than AVE, provided AVE was greater than 0.5. The values obtained corresponding to each constructs used in this study are shown in Table 3(a) below:

| Constructs                        | CR value | AVE   | (CR – AVE) +ve |
|-----------------------------------|----------|-------|----------------|
| Brand image regarding airline     | 0.913    | 0.777 | 0.136          |
| FFP satisfaction                  | 0.903    | 0.757 | 0.146          |
| Re-purchase Intention             | 0.908    | 0.767 | 0.141          |
| Trust in airline                  | 0.866    | 0.684 | 0.182          |

Table 3(a). Convergent validity measures of constructs

5.6. Internal consistency of the items

Reliability analysis of scale items was conducted using SPSS. Cronbach Alpha values were obtained for each variables and all the values were above the acceptable threshold limit of 0.7 (Nunnally, 1978). Further, the squared correlation coefficient values were also found to be significant in the SEM model which was taken as another indication of consistency of scale items.

5.7. Test re-test reliability of variables

A separate 35 samples were collected to find out the test re-test reliability. The results confirmed the evidence of construct reliability. The scores obtained for all the variable items were above the accepted value of 0.7.

5.8. Testing of Hypothesis - Estimates of regression weights

| Regression Estimates: FULL MODEL | Estimate | S.E. | C.R. | P value |
|----------------------------------|----------|------|------|---------|
| RPB                              | ---      | 0.274 | 0.066| 4.127   | ***     |
| RPB                              | ---      | 0.295 | 0.051| 5.803   | ***     |
| RPB                              | ---      | 0.579 | 0.077| 7.51    | ***     |

| Regression Estimates: SUB GROUP MODEL (SINGLE FFP HOLDERS) | Estimate | S.E. | C.R. | P value |
|-----------------------------------------------------------|----------|------|------|---------|
| RPB                                                        | ---      | 0.606| 0.115| 5.25    | ***     |
| RPB                                                        | ---      | 0.325| 0.074| 4.413   | ***     |
| RPB                                                        | ---      | 0.273| 0.107| 2.547   | 0.011   |

| Regression Estimates: SUB GROUP MODEL (MANY FFP HOLDERS) | Estimate | S.E. | C.R. | P value |
|---------------------------------------------------------|----------|------|------|---------|
| RPB                                                     | ---      | 0.074| 0.083| 0.892   | 0.372   |
| RPB                                                     | ---      | 0.205| 0.072| 2.848   | 0.004   |
| RPB                                                     | ---      | 0.853| 0.111| 7.652   | ***     |

*** indicates that P value is significant at 1% level

Table 4. Estimates of Regression Weights: (Default model)
Table 4 indicates the association between all the independent variables and the dependent variable - Re-purchase intention behavior (RPB) in three situations represented by three models namely:

(a) Structural Model with all categories together (Full model),
(b) Structural Model with passengers using only one FFP and
(c) Structural Model with passengers using more than one FFP at a time.

In the full model, all the P values (Table 4) obtained for all regression paths were less than 0.05, which shows all the regression paths were significant. It was also found that significant difference exists between the combined (full model) and the sub group models.

5.8.1. Effect of brand and trust on Re-purchase behavior

While comparing the regression outputs for single FFP users’ model with many FFP group model, it was very clear that the influence of airline brand image on Re-purchase intention behavior was more significant pertaining to single FFP usage category. This single FFP user group can be considered as brand loyal customers than the other categories, so the re-purchase behavior of this category was mostly influenced by the brand factor. However in the case of passengers using multiple FFPs, they seem to be not very specific to any brand and their re-purchase intention behavior was mostly influenced by their trust in the airline (Table 4).

5.8.2. Effect of loyalty programme satisfaction on Re-purchase behavior

It was evident from the analysis (table 3) that FFP satisfaction can influence Re-purchase intention behavior, yet the effect of variation in FFP possession levels influences FFP satisfaction at various intensity which in turn affected the Re-purchase behavior. It was noteworthy to see the diminishing influence of loyalty programme satisfaction on re-purchase intention behavior while the FFP possession level increases. It was also seen that the critical ratio (CR) values were declining while moving from single FFP to many FFP level.

5.9. Testing of Hypothesis: - moderation effect caused by FFP possession level.

The effect of moderation due to the variation in possession level of loyalty programme was determined by running the models using AMOS software with two different categories (single FFP vs. many FFP) and the regression estimates of critical paths of the two groups were measured. The critical path differences matrix was plotted by using excel statistics and the results were obtained (Table 5).

As per the Z score values shown in table 4 above, there is significant variations in the P values of the regression estimates of the variables - brand image and trust for the both groups of passengers, i.e. single FFP users and multiple FFP users. In other words it can be presumed that there is significant effects of moderation caused by FFP possession level of passengers in predicting re-purchase intention behavior which is also positively influenced by brand image and trust in the airline.

It will be sensible to analyze the correspondence between FFP possession level of passengers and their status of FFP. Although FFP status was based on the travel frequency or miles accrued, it was not sure about the correspondence between higher FFP status and multiplicity of FFP membership. Correspondence analysis was performed using SPSS software and the results are plotted in Figure 2. Apart from the fact that more the usage of the airline more will be the FFP status, Figure 2 further demonstrates the relationship between FFP status and FFP possession level. Dimension 1 can be envisaged as FFP possession time or time duration and dimension 2 corresponds to the FFP satisfaction in tune with FFP status.

| Dependent variable | Independent variable | ONLY ONE FFP IN HAND | MANY FFP IN HAND | z-score |
|--------------------|----------------------|----------------------|------------------|---------|
|                    |                      | Estimate             | P value          | Estimate | P value |         |
| Re-purchase behavior | Brand image         | 0.606                | 0.000            | 0.074    | 0.372   | -3.751***|
| Re-purchase behavior | FFP Satisfaction    | 0.325                | 0.000            | 0.205    | 0.004   | -1.164  |
| Re-purchase behavior | Trust in airline    | 0.273                | 0.011            | 0.853    | 0.000   | 3.752***|

Primary data - Comparison of P values based on Excel statistics results, *** shows significant differences in estimates. If the Z score is between -1.96 and +1.96, it indicates no significant differences.

Table 5. Test of moderation due to change in FFP possession level
It is evident from Figure 2 that, passengers show an increasing propensity to hold more number of FFPs along with their increase in travel needs and usage of FFP.

6. Discussion

This study provides clear understanding on the effect of “single vs. multiple” type of possession and usage of FFP by frequent passengers on re-purchase intention behavior. It was obvious from this study that passengers possessing single FFP have more influenced by brand image of the airline when compared with passengers using multiple FFP. On the other hand, multiple FFP users by and large accustomed by means of the trust in the airline services than its brand image, whereas there is no significant variation in the satisfaction level with regard to both categories of passengers.

It was very imperative to clarify the distinctive finding of this study that passengers ‘trust’ in an airline was not only because of FFP services but it could be also due to airline specific service quality aspects as contented by Pappachan and Moli (2015). On the contrary the ‘brand image’ factor makes them unique in holding only one FFP particularly at the initial level (“Blue” status) even though they trust the airline and are also satisfied with the FFP. In other words, “brand image” play no significant role in re-purchase behavior when it comes to “users of many brand” whereas ‘trust’ play significant role. However in the case of “single/sole brand users” it was the brand image that plays a major role than ‘trust’, even if ‘trust’ was significant in determining re-purchases intention behavior.

This study finding was consistent with the contention of Dolnicar, Grabler, Grun and Kulnig. (2011), i.e. efforts in simply promoting and attracting regular passengers just for the sake of a loyalty programme may go in vain if the key FFP service attributes according to the FFP status perceived by passengers were not appropriately dealt with by the airlines. Another important characteristic feature which reassures the benefits and services proclaimed by a typical loyalty programme was its relative status level. Higher statuses of FFP provides passengers with extra services like higher flexibility in booking terms, free cancellations, and timeless validity and other such benefits as envisaged in the loyalty programme. Generally ‘Gold’ or ‘Platinum’ status passengers were facilitated in a better way to avail more services and benefits offered by the airline. However it can be argued then, why some frequent passengers hold more number of FFPs even after achieving higher FFP status, while others hold only one FFP? In accordance with the findings of this study, a better rationalization to this argument can be given with the support of the antecedent factors seeing that the influences of brand image and trust level affected variously for the passengers holding single and multiple FFPs.

The results of this study gives in some thoughts in line with the contention of Gudmundsson et al. (2002); Pappachan and Moli (2015) that FFP attributes and service related characteristics were not perceived equally by frequent passengers. It was important for airlines while developing retention strategies connected with loyalty programmes, to segregate and study the attributes that sometimes influence, akin to impose positive values to
passengers. This study finding were in agreement with the arguments of van Osselaer, Alba and Manchanda (2004) which reveals that a typical set of passenger behavior significantly influenced only by the positive benefits of promotional schemes even though the attributes associated with the service were mixed with negative and positive rewards. Yet this study attempts to clarify the variations in the passenger preferences and also explains the behavioral tendencies to hold single or multiple programmes accustomed with their respective brand image or trust in the airline.

7. Managerial implications and Recommendations

Findings of this study hold up the understanding of passenger's re-purchase intention behavior towards an airline in terms of passengers’ possession level of loyalty programmes. It was eminent that some frequent passengers rely on multiple programs (Whyte, 2003; Uncles, Dowling & Hammond, 2003). Today passengers face no difficulty in switching from one airline to another particularly when an airline modifies the terms and conditions of its frequent flyer program. Although, the decisions of a passenger in picking again or recommending one airline to others would be anchored in many elements which normally includes priority in check-in, easiness in seat confirmation while booking, better treatment at all levels of services and provide better services in lounges and in flights but more specifically influenced by the competency of the frequent flyer program and its performance in delivering its specific attributes.

This study also percolates into the details of FFP usage pattern and suggests that airlines can effectively manage FFP as a facilitator for frequent flyers. The usage of FFP appeared to benefit passengers even if there was price discrimination (Lederman, 2007), despite the fact that many frequent flyers hold more than one FFP. If there was any change in the FFP status particularly downgrading a passengers’ status, has to be patched-up through appropriate customer relationship management. Airlines can also consider in providing some minimum guaranteed benefits to each FFP status of the program, particularly for those passengers using FFP for many years. It was hard or sometimes not possible for the airlines to find out their sole loyal frequent travelers who hold FFP of their brand alone. This study finding indicates that passengers show a behavioral tendency to hold only one FFP of the airline they perceive high in brand image at the same time as they were at the beginning stages of frequent flyer programmes. So it could be essential for the airlines to go with more brand image building and relationship management strategies for making them more loyal to the airline.

Frequent travelers in India tend to use or favor an airline FFP that may perceive themselves as superior due to its status level even at times the ticket fares are marginally high. In the case of usage pattern of a loyalty programme, it was the status level that matters more while the travel requirements were low. On the other side, if the travel requirements were more, then passengers exhibits a behavioral tendency to hold multiple number of FFP with relatively low status regardless of the benefits they receive through better status of a single FFP. Therefore airlines should differentiate the various attributes of FFP which truly influence the frequent travelers.

8. Conclusion

Frequent flyer program is found to be an effective tool for promotion and better retention of loyal travelers, if airlines provide adequate attention on FFP service performance and thereby boost up brand image and trust in the airline. One of the major facets revealed through this study is the significant difference seen in the re-purchase intention behavior of passengers according to the changes in their FFP possession level i.e. single vs. multiple dependencies on loyalty programme. This study also proposes that there is an association between loyalty programme satisfaction and re-purchase intention behavior on account of the moderation effect produced by the possession level of FFP. Though the effect of brand image and trust in the airline explains the re-purchase intentions in similar directions in each sub group model, the consequent regression weights indicates opposing views from single to multiple FFP sub groups.

A cross sectional sampling design was used to collect response of passengers’ re-purchase intention behavior towards the airline in which they hold the loyalty programme membership; however a longitudinal research study could have been used with more clarity to the findings of this study. Researchers found it practically not possible to approach the same passengers (sample) again for a temporal study due to airline security restrictions.

Altogether, the loyal passengers’ mostly the multiple FFP users desires to be perceived as ‘special’ ones, which could be motivated through enhancing FFP service quality dimensions and also by building passengers’ trust in
the airline. Another empirical finding of this study revealed a peculiar behavioral tendency of flyers that once the frequent passengers’ travel needs and FFP status levels are higher, they would desire for more number of loyalty programmes. Therefore there is a propensity to shift from single to multiple possessions of FFPs and its usages.

**Acknowledgement**

I would like to express my sincere gratitude to Professor Dr Moli P. Koshy, Former Director, School of Management Studies, CUSAT, India, for her valuable guidance, which helped me in materializing this work.

**Declaration of Conflicting Interests**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**Funding**

The authors received no financial support for the research, authorship, and/or publication of this article.

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