# Understanding Mobile App Selection Criteria for Competitive Exams Amongst Female Aspirants 

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#### Abstract

Smart phones have change the ways people communicate, learn, play, and pay and so on. Competitive exams field is not untouched by change. Apps on mobiles are not only entertaining but gives information and education too. Females are fast adopting the change being at top in organization, as homemaker or as a student. The objective of the research is Understanding Mobile App Selection Criteria for Competitive Exams amongst Female Aspirants. Population under study contains all female competitive exam aspirants who handles a Smartphone and use or ever used Mobile App for their exams preparation. A sample of 122 such respondents is interviewed and their ratings on 21 identified parameters are collected. High Popularity, Small Size and Coverage of All Exams emerged as important selection criteria in decision making, for female aspirants preparing for various competitive exams.


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## KEYWORDS : Mobile Apps, Competitive Exams, Female Aspirants

## Introduction

Today, higher education and government job is an aspiration for youth, males or females. But increasing number of aspirants has toughened the task manifold. Female aspirants are giving tough competition to their male counterparts with their hard work, consistency and will to reach to top. Women are emerging as leaders in growing range of fields, be it aeronautics, medicine, space, engineering, law, education, business. Educational attainment and economic participation are key constituents in ensuring the empowerment of women. Every year females clearing IAS, IPS, banks and railways exams and getting in MBA, engineering and medical exams is evidence to their acumen.

In the recent past, the efforts of aspirants are supported by E-education, being a common place notion. A Female aspirant especially in dark, far part of country finds it a boon for her career. Competitive examinations preparation is not untouched from the phenomenon. Contributing to the change, increased numbers of smart phone users in recent years in urban as well as rural India. Entertainment plays quite an important role in education, coining the term, "edutainment". The blending is smartly done by mobile apps, which have made it possible to turn a mobile phone in to a coaching class.

## Literature Review

Shuk Ying Ho, Sai Ho Kwok (2003) studied the strategic parameters in order to determine the ways in which mobile service providers acquire new customers. The dependent variable is the service subscribers' intention to switch to a new service provider with personalized services. Four main constructs studied were - the amount and the perceived usefulness of general advertisements, the perceived usefulness and privacy issues about personalized advertisements. The study indicated that all four constructs were significant in affecting the decision by subscribers to change to a new mobile service provider. Hong, S., Thong, J. Y., \& Tam, K. Y. (2006) examined the utility of three prospective models for understanding the continued IT usage behavior. The three models include: Expectation-Confirmation Model in IT Domain (ECM-IT), Technology Acceptance Model (TAM), and a hybrid model integrating TAM and ECM-IT (extended ECM-IT). Based on a survey of 1826 mobile Internet users, the LISREL analysis shows that all three models meet the various goodness-of-fit criteria. Uri Gneezy, Kenneth L. Leonard and John A. List used (2009) a controlled experiment to explore whether there are gender differences in selecting into competitive environments across two distinct societies: the Maasai in Tanzania, a patriarchal society and Khasi in India, a matrilineal one. Maasai men opt to compete at roughly twice the rate as Maasai women. The result is reversed among the Khasi, where women choose the competitive environment more often than Khasi men, and choose to compete weakly more often than Maasai men. These results provide insights into the underpinnings of the factors hypothesized to be determinants of the observed gender differenc-
es in selecting into competitive environments. Page (2011) opined that interactive systems play a crucial role in modern life and such reliance on technology is demonstrated in the relationship between users and their mobile phones. As the complexity of services has increased over the last ten years the multimodal interactions of mainstream mobile phones have influenced the usability of the hardware and software interfaces. Hurlburt, G., Voas, J., \& Miller, K. W. (2011) conducted research on the unprecedented growth of Mobile-app usage in games and application entertainment, connection, location, information, documentation, shopping, searching and computing. Furthermore they derived the connection of various kinds of mobile apps and their security loopholes which benefited the data hackers and thieves. Page (2013) provided an exploration into the influence of mobile apps and mobile devices on the design of products. It forms the initial part of a longitudinal study on the use smartphone applications in product design. The literature review shows that researches were done on smart phones and their features, competitive situation and reaction of two genders to it, mobile app features, mobiles apps in general life, games etc. The present research contributes to the system of knowledge by Understanding Mobile App Selection Criteria for Competitive Exams amongst Female Aspirants.

## Methodology

It is Non-disguised exploratory study. Convenience sampling method with structured questionnaire is used for data collection. Respondents were asked to rate the 21 mobile app selection criteria on a 5 point Likert scale. Prior to the finalization of study design, a Pilot sampling was carried out to ensure the reliability and appropriateness of study design with 30 respondents. Cronbach's alpha value of .802 indicated high internal reliability.

## Objectives

1. To study the important selection criteria of mobile apps amongst female aspirants w.r.t. competitive exams
2. To study important selection criteria of mobile apps amongst female aspirants w.r.t. app usage frequency

## Sample and Data Collection

Population under study contains all female competitive exam aspirants who handles a Smartphone and use or ever used Mobile App for their exams preparation. A sample of 122 such respondents is interviewed and their ratings on 21 identified parameters are collected and analyzed. Two main factors under study consideration are Competition Exam Category and App usage frequency. There are 3 categories of exams were identified namely Central/State Services; Job Entrance (Railway/Banking/Other PSU) Exams and Education Entrances (CAT/MAT/Engg/Medical etc) Exams. In similar manner 3 categories of app usage frequency were also identified namely Daily; frequently and occasionally.

## Results and Discussions

The findings of the study are as follows:

## Objective 1

The sample distribution of all three exam categories namely Central/ State Services; Job Entrance (Railway/Banking/Other PSU) Exams and Education Entrances (CAT/MAT/Engg/Medical etc) Exams is $24.6 \% ; 42.6 \%$ and $32.8 \%$ respectively. ANOVA was applied on data to observe, whether there are differences in selection criteria.

The null hypothesis w.r.t. to the above objective can be stated as:
HO: All mobile app parameters are equally considered while selecting any mobile app for competitive exam preparation among female aspirants who are preparing for various competitive exam categories.

## ANOVA BY EXAMS TARGETTED

|  |  | Sum of Squares | Df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FOC | Between Groups | 2.531 | 2 | 1.265 | 2.511 | . 085 |
|  | Within Groups | 59.969 | 119 | . 504 |  |  |
|  | Total | 62.500 | 121 |  |  |  |
| User Friendly | Between Groups | . 331 | 2 | . 166 | . 517 | . 598 |
|  | Within Groups | 38.169 | 119 | . 321 |  |  |
|  | Total | 38.500 | 121 |  |  |  |
| Available on All OS | Between Groups | . 253 | 2 | . 127 | . 189 | . 828 |
|  | Within Groups | 79.583 | 119 | . 669 |  |  |
|  | Total | 79.836 | 121 |  |  |  |
| Multi Lingual | Between Groups | 1.505 | 2 | . 753 | 1.914 | . 152 |
|  | Within Groups | 46.790 | 119 | . 393 |  |  |
|  | Total | 48.295 | 121 |  |  |  |
| Color Combination | Between Groups | 1.953 | 2 | . 976 | 2.750 | . 068 |
|  | Within Groups | 42.252 | 119 | . 355 |  |  |
|  | Total | 44.205 | 121 |  |  |  |
| Top of Store List | Between Groups | 1.678 | 2 | . 839 | 1.499 | . 228 |
|  | Within Groups | 66.617 | 119 | . 560 |  |  |
|  | Total | 68.295 | 121 |  |  |  |
| High Popularity | Between Groups | 6.161 | 2 | 3.080 | 8.195 | . 000 |
|  | Within Groups | 44.733 | 119 | . 376 |  |  |
|  | Total | 50.893 | 121 |  |  |  |
| Small Size | Between Groups | 5.051 | 2 | 2.525 | 3.535 | . 032 |
|  | Within Groups | 85.023 | 119 | . 714 |  |  |
|  | Total | 90.074 | 121 |  |  |  |
| Less Battery Consumption | Between Groups | 3.417 | 2 | 1.708 | 2.558 | . 082 |
|  | Within Groups | 79.477 | 119 | . 668 |  |  |
|  | Total | 82.893 | 121 |  |  |  |
| Works On and Off Line | Between Groups | 2.367 | 2 | 1.184 | 1.012 | . 367 |
|  | Within Groups | 139.247 | 119 | 1.170 |  |  |
|  | Total | 141.615 | 121 |  |  |  |


| Compatible with Social Media Sites | Between Groups | . 212 | 2 | . 106 | . 140 | . 870 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Within Groups | 90.386 | 119 | . 760 |  |  |
|  | Total | 90.598 | 121 |  |  |  |
| Contemporary Mock Tests | Between Groups | 1.188 | 2 | . 594 | 1.123 | . 329 |
|  | Within Groups | 62.944 | 119 | . 529 |  |  |
|  | Total | 64.131 | 121 |  |  |  |
| Result and Analysis Available | Between Groups | 1.649 | 2 | . 824 | . 814 | . 445 |
|  | Within Groups | 120.458 | 119 | 1.012 |  |  |
|  | Total | 122.107 | 121 |  |  |  |
| Discussion Forums Available | Between Groups | . 894 | 2 | . 447 | . 585 | . 559 |
|  | Within Groups | 90.942 | 119 | . 764 |  |  |
|  | Total | 91.836 | 121 |  |  |  |
| Inputs of Experts | Between Groups | 1.695 | 2 | . 848 | . 961 | . 385 |
|  | Within Groups | 104.969 | 119 | . 882 |  |  |
|  | Total | 106.664 | 121 |  |  |  |
| Coverage of All Exams | Between Groups | 4.737 | 2 | 2.368 | 3.099 | . 049 |
|  | Within Groups | 90.944 | 119 | . 764 |  |  |
|  | Total | 95.680 | 121 |  |  |  |
| Exam Notifications - Upcoming | Between Groups | . 391 | 2 | . 195 | . 581 | . 561 |
|  | Within Groups | 40.011 | 119 | . 336 |  |  |
|  | Total | 40.402 | 121 |  |  |  |
| Regular Updates | Between Groups | 1.046 | 2 | . 523 | 1.136 | . 324 |
|  | Within Groups | 54.790 | 119 | . 460 |  |  |
|  | Total | 55.836 | 121 |  |  |  |
| Positive Reviews | Between Groups | 1.582 | 2 | . 791 | 1.807 | . 169 |
|  | Within Groups | 52.098 | 119 | . 438 |  |  |
|  | Total | 53.680 | 121 |  |  |  |
| Relevant Content | Between Groups | . 242 | 2 | . 121 | . 187 | . 829 |
|  | Within Groups | 76.717 | 119 | . 645 |  |  |
|  | Total | 76.959 | 121 |  |  |  |
| Less Internet Data Consumption | Between Groups | . 240 | 2 | . 120 | . 268 | . 766 |
|  | Within Groups | 53.269 | 119 | . 448 |  |  |
|  | Total | 53.508 | 121 |  |  |  |

Table 1
The significant value of criteria High Popularity (.000), Small Size (.032) and Coverage of All Exams (.049) is less than . 05 (Table 1), hence it can be concluded that as there is difference in mean value for these criteria, these criteria are important in decision making, as far as female aspirants are compared exams wise. It can also be said females preparing for different exams consider these selection criteria imp over other criteria. A comparison of means showed that high popularity is most important for aspirants of entrance exams, where as small size and coverage of all exam is important for those preparing for state and central jobs.

## Hence, alternate hypothesis is accepted which is:

Ha: Among the female competitive exam aspirants, using mobile apps for preparations, "High Popularity", "Small Size" and "Coverage of All Exams" criteria for the mobile apps changes of the competitive exam group targeted by the aspirant

## Objective 2

The sample distribution of the all three app usage categories- Daily, Frequently and occasionally are $70.5 \%, 26.2 \%$ and $3.2 \%$ respectively. ANOVA was applied on data to observe, whether there are differences in selection criteria.

The null hypothesis w.r.t. to the above objective can be stated as:
Ho: All mobile app parameters are equally considered while selecting any mobile app for competitive exam preparation among female aspirants with respect to their app frequency usage

ANOVA BY APP USAGE FREQUENCY

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FOC | Between Groups | . 686 | 2 | . 343 | . 660 | . 519 |
|  | Within Groups | 61.814 | 119 | . 519 |  |  |
|  | Total | 62.500 | 121 |  |  |  |
| User Friendly | Between Groups | 1.886 | 2 | . 943 | 3.065 | . 050 |
|  | Within Groups | 36.614 | 119 | . 308 |  |  |
|  | Total | 38.500 | 121 |  |  |  |
| Available on All OS | Between Groups | 8.473 | 2 | 4.236 | 7.064 | . 001 |
|  | Within Groups | 71.363 | 119 | . 600 |  |  |
|  | Total | 79.836 | 121 |  |  |  |
| Multi Lingual | Between Groups | 1.268 | 2 | . 634 | 1.605 | . 205 |
|  | Within Groups | 47.027 | 119 | . 395 |  |  |
|  | Total | 48.295 | 121 |  |  |  |
| Color Combination | Between Groups | 3.185 | 2 | 1.592 | 4.619 | . 012 |
|  | Within Groups | 41.020 | 119 | . 345 |  |  |
|  | Total | 44.205 | 121 |  |  |  |
| Top of Store List | Between Groups | . 367 | 2 | . 184 | . 321 | . 726 |
|  | Within Groups | 67.928 | 119 | . 571 |  |  |
|  | Total | 68.295 | 121 |  |  |  |
| High Popularity | Between Groups | 2.041 | 2 | 1.020 | 2.486 | . 088 |
|  | Within Groups | 48.852 | 119 | . 411 |  |  |
|  | Total | 50.893 | 121 |  |  |  |
| Small Size | Between Groups | 1.872 | 2 | . 936 | 1.263 | . 287 |
|  | Within Groups | 88.201 | 119 | . 741 |  |  |
|  | Total | 90.074 | 121 |  |  |  |
| Less Battery Consumption | Between Groups | 1.495 | 2 | . 748 | 1.093 | . 339 |
|  | Within Groups | 81.398 | 119 | . 684 |  |  |
|  | Total | 82.893 | 121 |  |  |  |
| Works On and Off Line | Between Groups | 2.185 | 2 | 1.092 | . 932 | . 397 |
|  | Within Groups | 139.430 | 119 | 1.172 |  |  |
|  | Total | 141.615 | 121 |  |  |  |
| Compatible with Social Media Sites | Between Groups | . 048 | 2 | . 024 | . 032 | . 969 |
|  | Within Groups | 90.550 | 119 | . 761 |  |  |
|  | Total | 90.598 | 121 |  |  |  |


| Contempo- <br> rary Mock Tests | Between Groups | 1.569 | 2 | . 785 | 1.493 | . 229 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Within Groups | 62.562 | 119 | . 526 |  |  |
|  | Total | 64.131 | 121 |  |  |  |
| Result and Analysis Available | Between Groups | 2.115 | 2 | 1.057 | 1.049 | . 354 |
|  | Within Groups | 119.992 | 119 | 1.008 |  |  |
|  | Total | 122.107 | 121 |  |  |  |
| Discussion Forums Available | Between Groups | . 786 | 2 | . 393 | . 514 | . 600 |
|  | Within Groups | 91.050 | 119 | . 765 |  |  |
|  | Total | 91.836 | 121 |  |  |  |
| Inputs of Experts | Between Groups | 1.571 | 2 | . 785 | . 889 | . 414 |
|  | Within Groups | 105.093 | 119 | . 883 |  |  |
|  | Total | 106.664 | 121 |  |  |  |
| Coverage of All Exams | Between Groups | 1.880 | 2 | . 940 | 1.193 | . 307 |
|  | Within Groups | 93.800 | 119 | . 788 |  |  |
|  | Total | 95.680 | 121 |  |  |  |
| Exam Notifications Upcoming | Between Groups | . 059 | 2 | . 029 | . 086 | . 917 |
|  | Within Groups | 40.343 | 119 | . 339 |  |  |
|  | Total | 40.402 | 121 |  |  |  |
| Regular Updates | Between Groups | 1.867 | 2 | . 934 | 2.059 | . 132 |
|  | Within Groups | 53.969 | 119 | . 454 |  |  |
|  | Total | 55.836 | 121 |  |  |  |
| Positive Reviews | Between Groups | 3.395 | 2 | 1.698 | 4.018 | . 020 |
|  | Within Groups | 50.285 | 119 | . 423 |  |  |
|  | Total | 53.680 | 121 |  |  |  |
| Relevant Content | Between Groups | 2.147 | 2 | 1.074 | 1.708 | . 186 |
|  | Within Groups | 74.812 | 119 | . 629 |  |  |
|  | Total | 76.959 | 121 |  |  |  |
| Less Internet Data Consumption | Between Groups | 1.058 | 2 | . 529 | 1.200 | . 305 |
|  | Within Groups | 52.451 | 119 | . 441 |  |  |
|  | Total | 53.508 | 121 |  |  |  |

Table 2
The significant value of criteria User Friendly (.050), Available on All OS (.001), Color Combination (.012) and Positive Reviews (.020) (Table 2) is equal to or less than .05 for females using mobile apps at different frequencies. It can be concluded that as there is difference in mean value for these criteria, the criteria are important in decision making, as far as female aspirants are compared mobile app usage frequency wise. These criteria are imp for female aspirants over other criteria.

## Here, alternate hypothesis is accepted which is:

Ha : Among the female competitive exam aspirants, using mobile apps for preparations, "User Friendly", "Available on All OS", "Color Combination" and "Positive Reviews" criteria for the mobile apps changes of the usage frequency of such mobile apps of the aspirant.

## Conclusion

Mobile apps are becoming a common utility for preparation of competitive exams. Females preparing for competitive exams are using apps extensively to remain in touch with latest happenings. High Popularity, Small Size and Coverage of All Exams are selection criteria important in decision making, for female aspirants preparing for various competitive exams. Entrance exam aspirants go by Word of

Mouth and rating of app. On the contrary, IAS and PSC aspirants, look for more number of apps, need more data in their apps and mobiles, hence like those apps which satisfy these needs. Daily users look for an app which is available on all OS making it clear that operating software matters. Along with this, color combination and positive reviews are also important for daily app users. It makes sense, as females love colors, so marketers have to make sure that the apps for them are also having colors, even if it is for education. Positive reviews help in decision making, ease down the decision, puts the decision maker in comfortable zone. The finding of research will help marketers to design an app useful for female aspirants.

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