# Socializing and Consuming Digital Media in an era of Social Distancing – A study of Dating Application usage in India

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# ABSTRACT

The usage of dating applications has been growing in the past few years. These applications provide the service mostly free of charge and also have a subscription option. The free version comes with advertisements. This paper tries to find out what are the major factors that users consider while using dating applications and what maybe some of the hidden parameters that might exist in that influence their behaviour

#### Keywords

Online Dating, Dating Apps, COVID-19, buyer intention, user interaction

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# Introduction

Dating applications have been growing popularity in the past few years although very recently their growth may have slowed down (eMarketer). More and more companies coming up every other month with the promise of meaningful relationships in their adult life. Major players in this sector are aggressively trying to figure out better ways to promote their brand and attract more customers. From using digital marketing initiatives and creating impressions through other applications by means of video advertisements to using Mass Media communication to garner more awareness and pull more users.

The digital advertising industry is one of the fastest-growing media of advertisement enabling for better reach and impressions. As per a survey conducted over 2011 to 2019 the industry is currently worth INR 160 Billion with a potential to reach INR 539 Billion by 2024 (Source: Statista 2020). It has a CAGR of 33.9% and many organizations are redirecting their efforts to this field in order to reach their audience better and get more sales (Source: ETRetail).

There is however an issue when it comes to traditional online media such as Facebook, Google, Twitter and other social networking or search sites. The problem is the issue of outbidding. Many companies get outbid by a competitor for the set of keywords that both of them are targeting (Source: Augurian 2017). This leads to an increase in costs for reaching the same amount of target audience.

This particular problem can be overcome by exploring other online platforms, in our case dating platforms, which remain less cluttered with advertisements and has a modest user base. The main advantage of this platform is that people are more open to sharing personal data to avail these services. Even though there is a security concern, the Privacy Paradox takes effect and people end up sharing their data in order to avail the services (Taddicken, M., 2014).

A recent study was conducted called 2019 Accenture Global Financial Services Consumer Study headed by Accenture where they found that in the field of personal finance, people are more willing to share their personal data in order to get better and cheaper service from their banking service provider. Many dating websites realize this as well and add this as a part of their privacy policy that they will collect personal data of the user to give better service and also show customized advertisements (e.g. – Tinder - a geosocial networking and dating application which provides anonymity at the same time - collects a lot of personal information and their usage is mentioned in their privacy policy). Thus, organizations will be able to better customize their advertisement on the platform should they be able to get the data from the dating site/application.

Not much research has been done in this regard, thus we aim to establish whether dating sites or applications is a place where people could have the intention to make a purchase. Along with this, we intend to find out what other factors could motivate a user to use a dating application. This research aims to be exploratory in nature from a marketing context.

# **Research Gap**

Previously a study was done to explore the usage of Tinder in an off-label context (Stefanie Duguay 2020). Off-label usage comes from the medical context whereby certain drugs or medication, that were supposed to be used for a particular ailment is used in a way which it is not supposed to be used or finding novel uses for a particular drug. Offlabel usage may occur with prescription drugs and OTC (Over the Counter) medication, however, most studies on off-label use are done on prescription drugs as they have the highest chances of being misused for unintended purposes. The study done by the researcher has taken the context of advertising as well on the platform, how individuals creatively use these platforms, for finding jobs, promoting businesses, forming relationships etc.

However, the study does not take into consideration the potential of maximising the effectiveness of marketing strategies based on the data they may have shared on the platform other than the off-label usage that the previous paper speaks of and the potential of better reach due to unprecedented increase in usage. Thus, the research gaps that we had identified were:

1. There was no existing work in finding out what the factors might be that are in play when we consider the usage of dating applications.

2. Could there be a strong link between the frequency of usage of dating applications with uncertain events such as the COVID-19 lockdown across the country.

# **Literature Review**

Dating apps and websites have been present for a very long time, almost since the beginning of the internet. Initially, before there were proper social networking sites, there used to be online chat rooms and cyber café's where people from across the world might come together and then engage in virtual dating. Most notable of these services could be said to be Craigslist, Inc. Founded in 1995 by Craig Newmark, it was an online classifieds space where people could post things like items for sale, availability of housing on rent etc. Soon it became a place where people could come together and discuss matters. Eventually, it started with the dating scene. Certain trends have emerged over time and these data subcultures have changed how people use the internet (Albury et al., 2017).

From the initial days of online dating via Craigslist, we have come a long way. Right now, we have a few leading brands that have taken over the online dating market. Most notable of them are Tinder, Badoo and OkCupid which are globally known brands (Statista 2020). Bumble is another such platform founded in 2014 that allows for multiple use cases and not just for dating but has other modes as well which include a Business mode where it acts as a hiring platform. Thus dating applications are not sticking to their conventional definition either and exploring more ways to garner more users. These applications offer the user a unique gamified experience to the user to drive engagement and then provide a limited number of matches so that if the user feels compelled then they will purchase a subscription to avail further services.

These platforms promise to provide a customized match based on the personal data that the users provide. Most users generally willingly provide personal data to these platforms as they promise to keep that data confidential (Tinder Privacy Policy, 2018) (OkCupid Privacy Policy, 2018) (TrulyMadly Privacy Policy). The data collected herein are then processed and used for giving a recommendation to the users about their potential matches (Fang, R., Shen, X., Guo, Y., Yao, J., Qiu, J., 2019) (Sharabi, 2020).

These, however, constitute the normal or prescribed usage scenarios. What we want to explore is the off-label usage of a product or service. In this regards, Stephaney Duguay (Duguay, S., 2019) explored the off-label usage of Tinder as a platform which is primarily for dating but has also experimented with being a place that has been used for alternative uses are well. Some uses are for networking, for searching jobs, for political agendas, but are not limited to these. Novel use cases are coming up as well.

On exploring the reasons why people use dating applications, some key insights have been derived. Dating applications have been proposed to be supplementation of relationships rather than that of substitution (LeFebvre, 2017). Due to the widespread adoption of dating apps, it is used as a form to initiate relationships and it would require further research by relation scholars to assess the impact of how applications may tend to modify relations in the future. One more reason for usage is to commit infidelity (Alexopoulos, Timmermans and McNallie, 2020). As per the research conducted by the authors, people's tendency to commit infidelity increased with the perceived increase in self desirability, and decreases with the availability of potential partners.

A downside of online dating is "catfishing" (Marissa A. Mosley, Morgan Lancaster, M. L. Parker & Kelly Campbell (2020)). Catfishing refers to the practice of setting up a false personal profile on social networking sites for fraudulent or deceptive purposes (Merriam-Webster). The activity falls under a legally grey area. It poses problems to the particular victim. The results from the research indicate that men were more likely to be the perpetrators of catfishing and women to be the likely victims. The victims suffered from attachment anxiety which could be used as a significant predictor of catfishing status.

In summary, there is a trend that we can observe, which is an increase in the usage of dating applications over time (Tinder Revenue and Usage Statistics, 2020). Dating applications are a reality that we have to live with and it could probably be for the better. This is where we wanted to understand what are the major factors that could shape the user interaction on the platform. From this, we would find what matters more in further studies and we can come up with behavioural models that can be used to understand the business potential of a dating platform. Major reasons why the user would be willing to make purchases on the platform, what could be suggestions or hints on the platform that can enhance the user experience.

# **Research Methodology**

The particular research that we wanted to conduct was done by means of a survey. We carried out our survey by means of an online questionnaire. In this, we asked the participants various questions that were relevant to the factors that we were studying. Our expectation was to receive around 100 to 120 responses in the survey. Around 400 people were targeted across platforms such as social media, professional networks, social circles and peer groups. The time frame allocated for this was one month and was conducted from the first week of June 2020. However, we received only a total of 93 responses. Among which we found only 81 responses that were valid and merited further analysis.

Our target population comprised of people belonging to the age group 18-36. This is based on the study conducted by J. Clement (Statista 2020) wherein the researcher found that 14% of respondents between ages 18 to 34 years confirmed they were using dating applications, and 9% of the respondents between the ages 35 to 54 years confirmed they were using dating applications. Thus, based on the study that was conducted, we decided the age group that has the highest likelihood of using a dating application would be between 18 to 36 years of age. This is the target population that we wanted to study.

The target population that we had selected was based on the entire geography of India as we wanted to do a Pan India study and find the common trends that exist, instead of finding out the differences that may vary from one region to another.

Our main objective of the study was to find out whether people would be willing to make any kind of purchase on this platform. So we initially had one factor to consider. Based on the literature review we found that there were multiple ways to use a dating application. Some people used it for networking. Some used it for finding long-term relationships and thus they had varying levels of interacting with the dating application. Thus we considered another factor "Usage Frequency" for our considerations. Based on the study conducted to understand "The Privacy Paradox", we understood that "Confidence in Sharing Data" is another factor that deserves analysis. When we were conducting online research we were also trying to understand how the companies are trying to spread awareness in the market and thus we considered "Awareness" to be another major factor and finally based on the social landscape that we are currently facing we wanted to find if the lockdown imposed by the Government of India has had any direct impact in the usage of dating applications. Thus we considered "COVID-19" to be another important factor. We had made an initial assumption that there were mainly 5 factors that could be used to predict the behaviour of a user on the dating application. In order to ensure that our factors were correct, we will be using factor analysis to find out which variables correlate to which factors and whether our initial assumptions were correct.

In addition to the above-mentioned quantitative survey, we supplemented the findings with a qualitative survey that we conducted to find any underlying trends that we may have missed. The qualitative survey used the same questionnaire that was used earlier to gain the quantitative aspects. However, as this study was exploratory in nature and not trying to confirm any existing theories, the selected respondents were given the choice to answer the questions as and how they liked. A total of 12 interviews were taken, where there were 6 users of dating applications and 6 non-users of dating applications. Among the 12 respondents, 2 were females and the rest were males. They were from various states in India. The ages in the group of respondents were 23 to 30, which comprised the most active users as well as to non-users of dating applications.

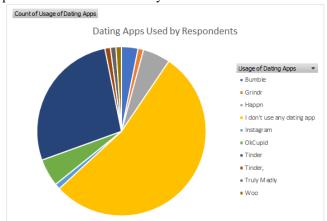
The respondents were asked a series of questions in a telephonic interview and their responses were recorded and analysed. If some questions were not clear then it was rephrased and asked again. Some respondents chose to respond in their vernacular as they were not comfortable having a long conversation in English and the responses were then translated to English. It was then proofread by translators for checking the accuracy.

# **Results And Analysis**

Before we delve deep into the factors, (both estimated and observed) we would like to present some descriptive information.

From the total of 93 responses that we received 7 respondents confirmed that they have neither heard nor were aware of any such thing as dating applications. As they were unaware of what comprises a dating application and what their features are, they were dropped from further study, but

it is important to note that though dating applications have been present for around six to seven years and online dating to be present even longer. Still, around 7.53% of people were unaware of the particular service. These people still fall under our target demographic and meet all the required criteria. It could be that the target group may not have been exposed to such a service, which might be caused due to low penetration across the country.



**Chart 1** – Dating Application Share of the Users (Note: A few respondents were using more than 1 dating application, majority of them were not using any as can be seen in the large yellow section of the pie-chart)

From the remaining 86 responses, 5 surveys were more than 70% incomplete and hence they were removed from further study. Of the remaining 81 responses, we found that a staggering 51 respondents had selected that they do not use any dating application. We could not conclude whether they have never used a dating application before or were they former users of the service, and hence it merited further study. However, the remaining 30 respondents said that they were currently using dating applications. Thus, we can see that even though there are people who have heard of the dating application as a service, a majority of them, around 62.96% do not use the service altogether. From this, we understand that the market is guite under-penetrated and hence it is difficult to gauge a business potential of the same. We have tried to analyse what underlying trends could be there by supplementing these observations with a qualitative survey to gain better insights which will be covered in-depth later on.

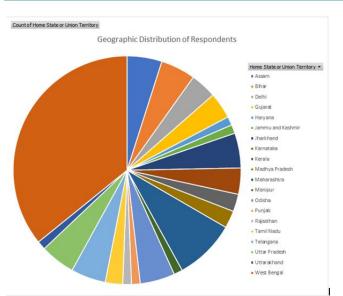


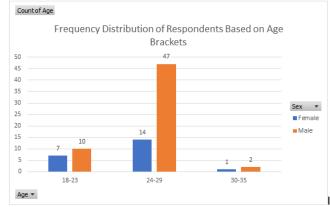
Chart 2 – Geographic Distribution of Respondents

From the survey that we carried out, we had demarcated three groups for age, namely

18-23 – Young Adults

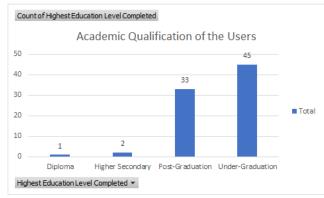
24-29 - Worker Adults and

#### 30-36 – Old Adults



Graph 1 – Age Brackets of the Users

As per a normal distribution, the number of respondents was maximum in the age group of 24-29, with young adults following them and old adults having the least number of respondents. The Number of females was 22 out of 81, around 27.16% of the dataset.



Graph 2 – Academic qualification of Users

All the quantitative analysis of the data was done using IBM SPSS 25.0.0.0. Before we began factor analysis, we started with finding the sampling adequacy of the survey data that we had gathered. We used KMO Measure of Sampling adequacy and we found that our data provides Sampling adequacy of 0.726 which is much higher than the threshold criteria of 0.5 that should be satisfied to consider that the sample size is sufficient. We also found the significance to be of the observations to be quite significant (Much less than 5%) and based on these conditions we went for further analysis.

The table for KMO and Bartlett's test is shared in Table 1.

Kaiser-Meyer-Olkin Measure of Sampling .7.	26	
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#### Adequacy.

Bartlett's Test of Sphericity	Approx. Chi-Square	660.324
	Df	171
	Sig.	.000

#### Table 1 - KMO and Bartlett's Test

(Note: All the quantitative analysis of the data was done using IBM SPSS 25 by the author)

As we had established that the sampling adequacy was sufficient, we proceeded with further analysis. For the next part, we used Principal Component Analysis to extract the various features that were important for confirming our factors.

	Initial E	Eigenvalues	
Component	Total	% of Variance	Cumulative %
1	5.301	27.901	27.901
2	2.491	13.112	41.013
3	1.712	9.010	50.023
4	1.317	6.932	56.954
5	1.143	6.015	62.969
6	1.014	5.337	68.306
7	.944	4.968	73.274
8	.914	4.813	78.086
9	.791	4.165	82.252
10	.583	3.070	85.322
11	.574	3.019	88.340
12	.529	2.785	91.125

13	.375	1.975	93.100
14	.339	1.786	94.886
15	.293	1.543	96.429
16	.234	1.231	97.660
17	.171	.901	98.561
18	.150	.787	99.348
19	.124	.652	100.000

Table 2 - Total Variance Explained

From Table 2 we can observe that when we have tried to find the components, only 6 among the total 19 possible factors have Eigenvalues greater than one. Thus, we have considered only these factors for further study.

Extraction Sums of Squared Loadings				
Total	% of Variance	Cumulative %		
5.301	27.901	27.901		
2.491	13.112	41.013		
1.712	9.010	50.023		
1.317	6.932	56.954		
1.143	6.015	62.969		
1.014	5.337	68.306		

 Table 3 – Sums of Squared Loadings of the Factors

From Table 3 above which shows the sum of squared loadings, we found that the first 6 factors cumulatively were able to explain 68% of the variance of the data.

Rotatio	on Sums of Squa	ared Loadings
Total	% of Variance	Cumulative %
3.974	20.917	20.917
2.580	13.578	34.495
2.057	10.828	45.323
1.811	9.531	54.853
1.451	7.635	62.489
1.105	5.817	68.306

Table 4- Rotated Sums of Squared Loadings of the Factors

Table 4 shows the cumulative percentage of variance explained once the factors have been rotated. From this, we observed that the rotated factor model changes the percentage of variance explained by factor 1 and factor 4 significantly. Other factors do not experience as much change.

We finally proceeded to analyse the factor matrix. Component

	1	2	3	4	5	6
aware4	.417			.535		
aware5					.763	
aware6	.404					
aware7	.485					
freq2	.545					
freq3			.557			
freq4			.688			
conf1	.551	.510				
conf2	.556					
open1						.815
open2	.421					
pur1	.711		447			
pur2	.606					
pur3	.655	476				
pur4	.788	425				
pur5	.844					
pur6	.658					
covid1		.426		.559		
covid2	.438	.693				

Extraction Method: Principal Component Analysis.

a. 6 components extracted.

#### Table 5 - Component Matrixa

The matrix from Table 5 is the unrotated factor matrix. We had suppressed the small coefficients that have absolute values less than 0.4. This way we received a better picture as to which variable was part of which factor.

We could observe that many of the variables fall under factor 1. At the same time, we found that some factors which were supposed to be together were spread apart in various other factors. For instance, our assumption that awareness related variables should be together was challenged by the fact that they seem spread about in factors 1, 4 and 5. This gave us a very haphazard picture as to which factor should go where. So, we used Varimax Rotation on the Factor Matrix and then observed the Rotated Factor Matrix.

Component	1	2	3	4	5	6
1	.751	.489	.285	.216	.259	043
2	597	.403	.377	.532	.073	225
3	.095	584	.800	.023	061	.077
4	.112	456	353	.725	.339	.122
5	211	027	.079	374	.898	.051
6	117	.222	.077	.060	057	.961

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

 Table 6 - Component Transformation Matrix

 Table 6 is the factor transformation matrix that was used to arrive at the rotated component matrix.

Com	ponent	
00111	ponioni	

	1	2	3	4	5	6
aware4					.643	
aware5					.829	
aware6				.401		
aware7	.477					
freq2		.409	.560			
freq3			.786			
freq4			.790			

conf1		.706			
conf2		.789			
open1			-		.896
open2		.676			
pur1	.552	.619			
pur2	.635				
pur3	.822				
pur4	.875				
pur5	.836				
pur6	.813				
covid1				.820	
covid2				.750	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 7 iterations.

Table 7 - Rotated Component Matrix<sup>a</sup>

Finally, from Table 7 of the rotated factor matrix, we were able to get a much clearer picture as to the various factors that were present in the model. Our initial assumption of having 5 factors that correlate to various variables was not correct as we could observe that there were six factors in play.

The following Table 8 shows the different variables that we had considered for factor analysis.

age	How Young Are You? (Age)
sex	Sex
edu	Highest Education Level Completed
home	What is you Home State or Union Territory?
aware1	Are You Aware of Dating Apps or Websites?
aware2	How many of the below are you familiar with?

aware3	How many of the below do you use?
aware4	Why do you use dating apps? [Socializing]
aware5	Why do you use dating apps? [Casual Dating]
aware6	Why do you use dating apps? [Searching Potential Life Partners]
aware7	Do you think Dating applications can provide a better way to give to know a person before engaging in a relationship?
freq1	How often do you use this app?
freq2	How would you rate the following services of your favourite dating application? [User-friendliness]
freq3	How would you rate the following services of your favourite dating application? [Customer Support ]
freq4	How would you rate the following services of your favourite dating application? [Finding a partner]
freq5	Would you consider using the Premium subscription of your favourite dating application?
freq6	Do you see yourself using this application more often in the future?
conf1	Are you comfortable with sharing personal data on these apps/sites in order for them to give better service? (Facebook and Google already do it to give you their best experience possible)
conf2	Would you be willing to share your personal details with others (such as birthday's, special religious occasions) so that others may send well wishes or gifts on these occasions?
open1	Do you find advertisements on applications and websites annoying?
open2	Would you be willing to help out the service providers by watching advertisements in order to keep the service free and optimized?
pur1	Would you consider using services provided by dating apps or third-party service providers? (Say you want to book a table for two at a restaurant and the app provides you with a service provider to make it happen)
pur2	Would you be willing to purchase gifts for your network on special occasions on these dating applications?

pur3	Would you like to use dating apps as a platform to shop if [Provided 4s and Services at competitive prices compared to other e-commerce sites]
pur4	Would you like to use dating apps as a platform to shop if [Find products that you think will be ideal for gifting ]
pur5	Would you like to use dating apps as a platform to shop if [You get customized recommendation of gifts for your partner]
pur6	Would you like to use dating apps as a platform to shop if [Buy gifts for your friends and family]
covid1	Due to lockdown, your usage of dating apps has increased
covid2	In future after COVID-19 lockdown, do you see yourself using this application as an effective means to screen potential partners?

The variables age, sex, edu, aware1, aware2, aware3, freq1, freq5 were used for descriptive statistics and hence were not used for the purpose of factor analysis.

The Factors based on the Principal Component Analysis are Factor 1 - variables aware7, pur2, pur3, pur4, pur5 and pur6, these factors correspond to the 'Purchase Intentions' of a user.

Factor 2 – variables conf1, conf2, open2 and pur1 relate to a user of a dating application the 'Openness' to try something new.

Factor 3 – variables freq2, freq3 and freq4 refer to the 'UsageFrequency' of using a dating application.

Factor 4 - variables aware6, covid1 and covid2 relate to a user of a dating application the using it during the time of lockdown due to 'COVID-19'.

Factor 5 – variables aware4 and aware5 relate indicate the various 'User Interactions' of a dating application.

Factor 6 – variable open1 refers to the 'User Resistance' (how annoyed a person is) of a user using a dating application.

The above were all the factors that we could analyse on a quantitative basis from the survey results that we obtained. However, we were not satisfied in finding that 62% of the respondents who are aware of dating applications still do not use it. In order to gain a better insight, we decided to do a qualitative survey to supplement our findings.

The study uncovered some hidden themes which have a mediating role in the usage of dating applications. They have been further elaborated in the Discussions section.

# **Discussions**

When we started with analysing the usage pattern of dating applications, we tried to create a typical user persona. This persona would have the various characteristics of a normal user and we tried to find the commonalities through the survey that we had administered. While going through the survey we found some interesting trends that did not appear at first glance. Such as the majority of the users of the dating applications were male, most of the people did not respond well with their usage of dating applications. Further, a lot of people were aware of dating applications as a service and still, they chose not to use it. We wanted to find out what could be the reason why such trends would occur and also wanted to explore in-depth the various factors that the survey results came up with.

We would like to start by discussing the various factors that we had come across when performing the analysis, which are:

#### 1. Purchase intentions –

This is a major factor and also one that we had considered to be the main factor that would merit further studies by academics on the suitability of using dating applications as a platform for marketing activities. In this factor, there were several questions that were concerned with the various aspects that a user will be willing to invest in procuring goods and services from dating applications. Questions were asked on whether they would prefer the dating application to be a suitable alternative for purchase compared to other ecommerce retailers. Questions based on price and on customized recommendations were asked and gauged whether users would be willing to switch to these applications for shopping purposes. Questions pertaining to the integration of services from other service providers were also asked and whether they would enhance the experience of the platform. As the nature of the platform was for dating purposes, questions on sending and receiving gifts were specifically asked to understand how a user or non-user would respond to the offering. We found that there was a strong reason to justify that users might want to try the platform at the very least if not consider switching to it for future purchase.

# 2. Openness –

This is the second most important factor that we wanted to explore. From our studies, we wanted to find out which variable would significantly impact the purchase intentions. We could not conclude whether Openness has any significant impact on the Purchase Intention, however, we saw there is some degree of correlation between the two factors.

# 3. UsageFrequency –

The frequency is mostly an indicator of the time invested on the platform. Our initial assumption that frequency might indicate a greater degree of Purchase Intention could not be substantiated.

#### 4. COVID-19 –

COVID-19 is a moderating factor. Our objective of study included the time frame of April to June 2020, and many respondents who were first-time users actually started using the application during the lockdown imposed by the Government of India as a precautionary measure to prevent the spread of Novel Coronavirus. This factor has a direct impact on factor Frequency.

# 5. User Interaction –

This is a factor that we see of a user when they are interacting with a particular platform. The more intuitive and easier it is for a user to adapt to a platform, the greater the chances of using it in the future

# 6. User Resistance –

This is the factor in which we asked the users and non-users whether they like viewing advertisements on the platforms that they were using to use the service free of charge. Most of the respondents answered in the negative. It seemed from our observations that they were willing to perform a tradeoff. They would be willing to watch advertisements to support the platform but would have preferred to get the service entirely for free.

The above were the factors that we had discovered while exploring the trends in the variables using factor analysis. However, we were not satisfied with some of the results that we obtained. For instance, why there are such low adoption rates of dating applications in the target demographic? What could be the possible reason that people would or would not be willing to make a purchase on dating applications? To answer these questions a qualitative survey was administered. After taking six (6) interviews we observed recurring trends and by the 12th interview, we could not find any new significant data point for further analysis. The findings from them are as below.

# Service Offerings -

Many of the respondents who used the dating application said that it was not with the intention of actually using it on a dedicated basis, but rather it was a form of an experiment for them. They used the application to find out what the service was offering and whether they could integrate it into their daily lives. When non-users were asked why they did not choose to use such a service, most of them responded saying that they did not trust the authenticity of the application and it seemed too dubious to them to be of any real value. They further claimed that there were many fake profiles on dating applications, a fact that was confirmed by the users of the application as well and they used this basis to show that they offerings of the platform were not as good as promoted.

When the users were asked if they would be willing to trust the information in the profiles of users presented on the platform, both users and non-users expressed scepticism at the possibility. Cemented with their previous negative experience with the platform having to deal with fake profiles, they justified their stance by arguing that it is very easy to falsify information on such platforms, unlike social media, where you are actually known well by your social circle and any false information may lead the account being reported. On dating applications, there actually is no mechanism to proof-check the authenticity of the information and thus becomes easier to falsify.

One of the respondents said "See the thing is that its online right? So there is already one level of obscurity. Then the information is all provided by the user themselves. So there is no way to peer review them. I just have to rely on what they put on the profile to get a glimpse about them. So there was this person, who put coding as a hobby. I was really intrigued and wanted to engage in conversation. Turns out they know nothing about that. They just put it there to appear cool and gain more Instagram followers."

Platform Features – The users were asked as to how they liked their existing platform and whether they were comfortable using it. Most of them replied in the affirmative, the platforms were very intuitive and not that big a hassle to understand. A few of them recommended some features that are currently not present and which may merit further study in the future. When asked if any of them had used the Customer Service feature, none of them said that they have used that feature. They did not need the use of customer support possibly because it was never required in normal usage.

#### Matchmaking Ability -

The users were asked on the dating application's ability to find a decent match with another person of their interest. They were asked on how well the application was able to find a partner for them to socialize and initiate relationships. Majority of the Male users said that it was extremely poor for the male audience. A few of them even claimed that the matchmaking ratio was as low as 1% to 3%, meaning if the users showed interest in around 100 profiles then they would probably get responses from 1 to 3 profiles of the opposite sex. For the female users, it was actually the opposite and instead of being able to properly browse profiles and select according to their preferences, they were bombarded with like requests and had a really hard time dealing with the constant notifications that were flooding their phone. Both genders expressed severe negative sentiments towards the matchmaking of the application.

Confidence in Sharing Data – The users were asked how confident they were in sharing their data on dating applications. They were also reminded that they most probably have given consent in sharing data in one way or another when they used services such as Google or Facebook. They were also asked if they would be willing to share the same data with other users. Baring a few users and non-users alike, the respondents were not confident in sharing their personal data on such platforms. They were open to the possibility of trying it provided that it provided some form of value addition to their existing user experience.

# Adversity to Advertisement -

The users and non-users were asked about their feeling towards advertisements that they viewed on various online websites and applications. This was asked to understand their sentiment towards advertisements in general and whether there is a possibility that they will approve of advertisements on dating applications in the future. Based on the responses that we received, we could get a mixed impression that the users have. The users are not willing to view long advertisements as it is deemed disruptive to their user experience. They were, however, willing to come to a compromise by using the service for free and viewing advertisements in return. It merits further study in future to find the impact of these advertisements on dispassionate viewers. Whether advertising to them is actually of any benefit is a research question that comes into view.

One of the respondents said, "See I really don't like advertisements, only thing is that I get to use the service for free. Also, the service of dating applications is so terrible that I would never consider purchasing the premium option. Besides, what do I lose if I just spend thirty seconds by turning the screen face down when the advertisement is playing. Just some data. No point in creating a fuss over it."

#### Purchasing Tendencies –

The users and non-users were asked whether they would be willing to send gifts to another person with whom they were matched. They were asked questions based on price (whether the user was price-conscious), exclusive gifting recommendation (where the application would provide a platform exclusively for gifting) and customized gifting recommendation (whether the user would like to gift the other person something that the other person likes). In this regard, most of the male users were willing to try out this feature as they perceived it will be of convenience and would save time in finding the right item that could be considered as a gift for their match. They were however concerned with the recommendation being not duplicated and their match having received something similar earlier itself, so the novelty of the gift would become meaningless. They were also concerned whether the platform would overcharge the users based on the recommendation provided and thus the users would end up paying more than intended. For this, they recommended that integrations to popular ecommerce websites could be used to maintain fair and transparent pricing.

Some of the male users and especially female users commented that they would not consider shopping on dating applications even on the remotest of possibility. They cited that using a dating application as an e-commerce site would dilute the reason of creating the site. Also, there were much better e-commerce websites already available and as an alternative and thus did not merit further consideration.

When asked if the users would consider using services such as getting reservations for tables and maybe some exclusive deals on other activities such as going to a movie theatre, the users said they would consider it provided these suggestions were non-intrusive and add value to the user experience.

#### Post COVID-19 Lockdown Usage -

We asked both the users and non-users about whether they would use dating applications and websites in the future considering the pandemic situation in the world right now. Most of them said that they were aware of the implications of meeting someone else in person and hence would prefer to socialize more digitally in the future. Thus, there are chances that the usage of dating applications will increase over time in the near future. However, the users said that a lot of improvement is needed in order to actually use the dating application in a suitable manner.

#### Brand association –

This question was not a part of the initial survey and for that reason, it was included in the qualitative interview to find what the users actually think about dating applications. The results that we uncovered were surprising. Most of the brand associations were negative in nature. People perceive dating applications to be equivalent to hook-up applications as is prevalent in the Western parts of the world. Some of the words that people came up with while describing dating applications were "Social Stigma", "Conservative Society" and "Object of Ridicule".

When asked if the respondents would be comfortable sharing the fact that they are actively using dating applications for whatever reasons, many of them said they would like to keep this private. Some were comfortable sharing this with their friends and no-one was willing to share this with their family for fear of being misunderstood. These sentiments combined with a prior negative experience in using dating applications are what prevents users from using dating applications from further acceptance and usage. Off-Label Usage - Some of the male users made an observation about the application. They said that the dating applications were actually being used for getting more followers on their Instagram pages and the users of those accounts were actually not at all active. It was merely a front for them to gain more visibility to a larger crowd. The dating applications scan for spam and bot created profiles, but the search algorithms cannot understand which profiles are fake that has been created by human users and thus they remain unflagged. The organizations also do not take action regarding this as these profiles artificially increase the number of users albeit not genuine. This helps them show growth to their investors and directly benefits them.

Based on the observations that we gathered from the interviews and surveys we can find that the "Privacy Paradox" (Taddicken, M., 2013) is in full effect. Some people are reluctant to share their data on these platforms but at the same time, they would want to avail customized services that are tailored to their requirements.

In addition to that something that exemplifies the context of Off-Label usage (Duguay, S., 2019) can be seen where users are using dating applications to get more followers on their social handles. We have also seen instances where people use dating applications to initiate casual and non-committal relationships (LeFebvre, 2017).

# **Conclusion And Recommendations**

Based on our quantitative as well as qualitative analysis of dating applications and the platform that they offer we were able to get a diverse and holistic insight into the usage patterns. We were able to make a good estimate that the market for this category is not well penetrated. Due to this lack of penetration, a lot of promotional activities are not giving the sustained results for the brands that are using the service.

The negative experience that people have experienced on the platform has adversely affected the user experience and this, in turn, has hampered purchase intentions that they might have had previously. People are willing to view advertisements as long as the advertisements are not invading into their user experience and do not disrupt using the application.

The respondents were also not satisfied with the options and filters that were available and if dating applications have to maintain the status quo then they will need to innovate both on the user engagement front as well as on the innovation front, otherwise, a competitor will come up with a better alternative and they risk the chance of losing out on the customer base.

From our understanding of the application, the users do not perceive the application positively. They have the concept that dating applications are used exclusively for hook-ups, a concept that is more prevalent in Western Society. Our recommendation is that this perception needs to change. It could be achieved through ATL (Above the Line) activities, working with some media agencies. The organizations also need to focus on Research and Development to make the brands more localized. More investment is needed to weed out fake profiles from the platform. This has been a major concern for users. The lack of genuine profiles is what makes the platform devoid of genuine users.

#### Limitations

Our analysis was done with the limited quality data that we could gather. The main challenge that could be attributed to much less data is because of a few underlying themes. One of the main reasons is the negative brand associations that these applications have. People are not ready to associate themselves with these brands. From some of our qualitative interviews, we found that there were some people who were using these applications, but they refused to partake in the survey as they considered dating to be a private affair. So, they willingly withdrew from the survey even though they were well equipped with the knowledge and familiarity of dating applications.

Our research has focused on finding the factors that were playing major roles in the consumer decision-making process. We have been able to identify some of the major factors. However, we could not establish a strong correlation among the factors. As a further improvement of this study, it is imperative that we focus our efforts in some correlation analysis or regression analysis that can be used to predict the purchase intentions of a user based on other factors.

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