To Tinder or not to Tinder, that’s the question: An individual differences perspective to Tinder use and motives

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ABSTRACT

Tinder is quickly becoming one of the most popular mobile dating applications for meeting people within the vicinity. From a personality theory perspective, it is important to find out what motivates people to use Tinder and what makes them different from those who never used the application. The present study investigated how the Five-Factor Model of personality relates to both Tinder use and motives. A cross-sectional online survey was conducted on 502 single emerging adults. Single Tinder users are more extraverted and open to new experiences than single non-users, whereas single non-users tend to be more conscientious than single Tinder users. Additionally, the findings provide several unique insights into how individual differences in singles can account for Tinder motives by supporting nearly all hypotheses. This study thus adds to a growing body of literature that examines traditional personality theories in the context of computer-mediated online environments.

1. Introduction

Recently, mobile dating applications have become a worldwide trend in the dating landscape, with Tinder being the dominant leader in Western societies targeted at heterosexual mobile daters (Duguay, 2016). Especially emerging adults seem to be drawn to dating applications that introduce users based on their physical location and co-presence on the app (Smith & Anderson, 2016). While online dating sites initially attracted users because of their “science-based” online matching systems (Finkel, Eastwick, Karney, Reis, & Sprecher, 2012), the success of mobile dating applications seems to be rooted in its ease of use and connectivity, often described as being quick and effortless (David & Cambre, 2016). Like social networking sites (SNS), mobile dating applications offer the opportunity to connect with other users because of semi-public profiles that are centered around the user. In contrast to SNS, these connections are not public (Ward, 2016).

The Big Five personality traits have often been studied in relation to the use of both online dating sites (e.g., Clemens, Atkin, & Krishnan, 2015) and SNS (e.g., Correa, Hinsley, & de Zúñiga, 2010). Being a relatively new phenomenon, not much is known about the Big Five personality traits that influence the use of mobile dating applications that offer immediacy and proximity through their location-based services. Tinder is such an app that is predominantly targeted at heterosexual singles.

Consequently, the first goal of this study is to examine personality differences between single Tinder users and singles that never used the application.

Personality traits might not only trigger the use of mobile dating applications, but also influence motives of use. Studies that explored motives for using mobile dating applications discovered a wide range of motives. These were not restricted to social components (i.e., seeking a relationship, casual sex, or friendships) but also included non-social motives such as entertainment seeking or ego-boosting (Timmermans & De Caluwé, in press; Van de Wiele & Tong, 2014). The diversity in motives for using mobile dating apps such as Tinder implies that several factors might influence these reasons. Therefore, the second goal of this study is to unravel associations between personality characteristics and Tinder motives.

1.1. The Big Five personality traits and Tinder use

Since its existence, scholars have examined differences in personality characteristics between singles that are active on online dating sites and those who are not, only to discover that not many differences exist (Finkel et al., 2012). A German study that compared online daters with people who never used those services before, only found that internet daters scored significantly lower on extraversion (Aretz, Demuth, Schmidt, & Vierlein, 2010). Tinder users seem not to differ from internet daters, as no differences were found in terms of self-esteem, sociability, and sexual permissiveness (Gatter & Hodkinson, 2016). However, compared to non-users, users of mobile dating apps...
appear more sociable, impulsive, and interested in sex (Carpenter & McEwan, 2016).

Although these studies are helpful in gaining a better understanding of the association between personality traits and use, they are not without limitations. First, analyses were run on a fairly small number of dating app users (N = 57, Carpenter & McEwan; N = 30, Gatter & Hodkinson, 2016). Second, none of these studies explored the associations between mobile dating app use and the Five-Factor Model.

Given the novel nature of mobile dating applications, we argue that individuals with higher scores on openness to experience might be more likely to use Tinder. Furthermore, when it comes to new media, previous studies repeatedly found extraversion to be the strongest predictor for usage (e.g., Ryan & Xenos, 2011; Wilson, Fornasier, & White, 2010). Additionally, Tinder stresses the importance of personal safety and matching with real people by linking the Tinder profile to a user’s Facebook account (Duguay, 2016), thereby reducing anonymity among its users. In combination with the application’s focus on physical attractiveness and location-based matching, Tinder might be attracting extraverts rather than introverts (Correa et al., 2010; McKenna & Bargh, 2000).

1.2. The Big Five personality traits and Tinder motives

Not only popular media, but also researchers attribute the rise of Tinder and similar applications to their promotion of casual sex (e.g., Mason, 2016). Yet, a recent study on Tinder motives found that casual sex is among the least common motives to use Tinder (Timmermans & De Caluwé, in press). In fact, users report to use mobile dating applications more for entertainment purposes than they did for finding a romantic or sexual partner (Carpenter & McEwan, 2016; Timmermans & De Caluwé, in press). Such findings thus raise the question which factors are associated with these different motives. This study tries to address this void by exploring associations between the Big Five personality traits and the 13 Tinder motives (see Table 1 for the 13 Tinder motives). Our hypotheses will be formulated for each personality trait separately, being agreeableness, conscientiousness, extraversion, neuroticism and openness to experience, respectively.

Research on online dating showed that individuals with higher scores on agreeableness are more likely to use online dating sites out of peer pressure (Clemens et al., 2015) and less likely to engage in risky sexual behavior, such as having multiple partners (Hoyle et al., 2000). Therefore, we hypothesize that the personality trait extraversion is often perceived as a time-consuming and frustrating activity (Finkel et al., 2012), Tinder facilitates the quest for romance by showing potential partners within the proximity. Contrarily, we hypothesize a negative association between conscientiousness and the Tinder motives Pass Time/Entertainment and Distraction. Conciousness people see time as a limited resource that should not be wasted (Christopher, Zabel, & Jones, 2008) and are often portrayed as being goal oriented and efficient in achieving those goals (Roberts, Lejuez, Krueger, Richards, & Hill, 2014). Using Tinder as an entertainment tool or as a means of distracting the attention (i.e., using Tinder when bored in class or at work) contrasts with such values.

While extraverts rather use SNS for its social features than its social outcomes (Amiel & Sargent, 2004; Ross et al., 2009), introverts often seek out online platforms to communicate with others as they experience less anxiety when communicating online (Rice & Markey, 2009). Consequently, we hypothesize that the personality trait extraversion will be negatively associated with social motives such as Relationship Seeking, Socializing, and Flirting/Social Skills. Contrarily, extraverts tend to seek out sexual stimulation more often than introverts (Costa & McCrae, 1992; Jonason, Hatfield, & Boler, 2015) suggesting that extraversion will be positively associated with using Tinder to have casual sex.

Individuals scoring high on neuroticism experience a stronger need for approval (Dunkley, Sanislow, Grilo, & McGlashan, 2004) and more distress following a break-up (Tashiro & Frazier, 2003). Additionally, neuroticism is positively correlated with sexual curiosity and having sex with multiple partners (Hoyle et al., 2000). Therefore, we hypothesize positive associations between neuroticism and Social Approval, Ex, and Sexual Experience. The Tinder motive “Ex” refers to using Tinder to get over the ex-partner.

Finally, individuals scoring high on openness to experience are more likely to use online dating sites to meet new people, rather than looking for a relationship or casual sex (Clemens et al., 2015). Therefore, we expect that openness to experience will be positively associated with Socializing and Travelling. Moreover, given that high scores on openness to experience are reflected in curiosity and novelty-seeking (John & Srivastava, 1999), we hypothesize a negative association with using Tinder because everyone does (i.e., Belongingness), but a positive association with using Tinder out of Curiosity.

Table 1

<table>
<thead>
<tr>
<th>Tinder motives</th>
<th>M</th>
<th>SD</th>
<th>Number of items</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social approval</td>
<td>4.19</td>
<td>1.31</td>
<td>6</td>
<td>0.90</td>
</tr>
<tr>
<td>Pass time/entertainment</td>
<td>5.22</td>
<td>1.07</td>
<td>7</td>
<td>0.90</td>
</tr>
<tr>
<td>Travelling</td>
<td>3.01</td>
<td>1.70</td>
<td>5</td>
<td>0.95</td>
</tr>
<tr>
<td>Sexual experience</td>
<td>2.75</td>
<td>1.42</td>
<td>6</td>
<td>0.92</td>
</tr>
<tr>
<td>Ex</td>
<td>2.61</td>
<td>1.79</td>
<td>3</td>
<td>0.95</td>
</tr>
<tr>
<td>Belongingness</td>
<td>2.42</td>
<td>1.21</td>
<td>4</td>
<td>0.86</td>
</tr>
<tr>
<td>Relationship seeking</td>
<td>4.05</td>
<td>1.43</td>
<td>5</td>
<td>0.91</td>
</tr>
<tr>
<td>Flirting/social skills</td>
<td>3.94</td>
<td>1.43</td>
<td>6</td>
<td>0.88</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>3.66</td>
<td>1.81</td>
<td>3</td>
<td>0.91</td>
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<tr>
<td>Socializing</td>
<td>4.37</td>
<td>1.51</td>
<td>4</td>
<td>0.82</td>
</tr>
<tr>
<td>Peer pressure</td>
<td>2.86</td>
<td>1.40</td>
<td>3</td>
<td>0.79</td>
</tr>
<tr>
<td>Distraction</td>
<td>4.14</td>
<td>1.51</td>
<td>3</td>
<td>0.79</td>
</tr>
<tr>
<td>Curiosity</td>
<td>4.54</td>
<td>1.24</td>
<td>3</td>
<td>0.72</td>
</tr>
<tr>
<td>Personality</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Agreeableness</td>
<td>3.34</td>
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<td>24</td>
<td>0.80</td>
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<tr>
<td>Conscientiousness</td>
<td>3.24</td>
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<td>0.85</td>
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<tr>
<td>Extraversion</td>
<td>3.36</td>
<td>0.44</td>
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<td>0.83</td>
</tr>
<tr>
<td>Neurotician</td>
<td>3.08</td>
<td>0.45</td>
<td>24</td>
<td>0.85</td>
</tr>
<tr>
<td>Openness to experience</td>
<td>3.44</td>
<td>0.41</td>
<td>24</td>
<td>0.78</td>
</tr>
</tbody>
</table>

2. Method

2.1. Procedure and participants

To reach a diverse sample of Belgian respondents, we relied on several local and national newspapers to spread the link to the online survey both offline (newspaper) and online (website and social media). Participation was voluntary and participants did not receive any incentive for their participation. The study was approved by the research ethics board. The virtual sampling method resulted in a total of 1573 adults that participated in the study. The completion rate was approximately 81.50%, with 1282 respondents remaining in the dataset. In order to compare single Tinder users with single non-users without any Tinder experience within the same age range, respondents that were currently in a relationship (n = 484, 15.9% is a Tinder user), used Tinder in the past (n = 65), and middle-aged (ages 30–45, n = 149) and older adults (ages 46 and older, n = 47) were excluded from the dataset. We decided to only include emerging adults as they are most likely to use mobile dating apps (Smith & Anderson, 2016). A final data cleaning was done based on four instructed-response items (Meade & Craig, 2012) and all respondents with more than one
incorrect answer were deleted to increase reliability (n = 35). In total, 502 respondents remained in the dataset (58.5% females, M_age = 23.11; SD_age = 2.83, Age_range = 18–29 years old) of which 378 singles were currently using Tinder and 124 singles never used Tinder. More than two third of the sample (70.3%) consisted of students and 44 participants were non-heterosexual.

2.2. Measures

2.2.1. Demographical information

Respondents indicated their age, sex (0 = male; 1 = female), sexual orientation (0 = non-heterosexual; 1 = heterosexual), and whether they were currently a student (=1) or not (=0).

2.2.2. Tinder use and motives

Participants were asked whether they use Tinder (0 = never; 1 = currently). To assess motives for using Tinder, the Tinder Motives Scale (TMS; Timmermans & De Caluwé, in press) was adopted. Development and validation of the TMS is based on four independent studies, including both qualitative and quantitative data. In Study 1, 18 participants were interviewed about their Tinder motives to create an initial item pool. In Study 2 (N = 1728), this item pool was tested (exploratory factor analysis [EFA] and reliability of factors) and an open-ended question was added to obtain a comprehensive set of Tinder motive items. In Study 3 (N = 485), items developed in Study 1 and 2 were subjected to psychometric analyses to finalize the development of the TMS. More specifically, conducting an EFA (oblique rotation) on the 58 items (rated on a 7-point Likert scale) revealed 13 Tinder motives and these were confirmed by confirmatory factor analysis (CFA). All Cronbach’s alpha’s were good to excellent (range α = 0.70–0.95). Finally, Study 4 (N = 1031) confirmed the factor structure in an independent sample (EFA + CFA), indicating the same 13 Tinder motives. Again, all Cronbach’s alpha’s were good to excellent (range α = 0.74–0.95). Finally, the construct validity was confirmed by associations with Tinder outcomes and the Fear of Being Single Scale (Spielmann et al., 2013). In short, based on these four studies incorporating in total 3262 participants it can be concluded that the TMS has a replicable factor structure, a good reliability and construct validity.

Factor analytic results of the current study are reported in the preliminary analyses section, also including a descriptive statistics table with all reliabilities, ranging from good (α = 0.72; Curiosity) to excellent (α = 0.95; Travelling, Ex) (see Table 1).

2.2.3. NEO-PI-3 First Half

The 120-item NEO-PI-3FH (McCrae & Costa, 2007; Williams & Simms, 2016) was used to measure the Big Five personality traits (cfr., the Five-Factor Model of personality, Costa & McCrae, 1992), which only consists of the first 120 items (rated on a 5-point Likert scale) of the Revised NEO Personality Inventory (NEO-PI-R) but has strong relations to the full-length scale and preserves the overall-structure of the measure (Williams & Simms, 2016). In the current study, the five traits had good reliabilities, ranging from 0.78 (openness to experience) to 0.85 (conscientiousness/neuroticism) (see Table 1).

3. Results

3.1. Preliminary analyses

As in the original construction paper, also in the current study, the 58-item TMS was subjected to EFA with oblique rotation, and again, 13 eigenvalues with a value >1 were extracted: 10.06, 7.46, 5.00, 3.48, 3.10, 2.64, 2.34, 1.78, 1.73, 1.47, 1.39, 1.21, 1.14. Together, these factors explained 73.77% of the variance. The scree plot also showed that 13 factors explain most of the variance because the line starts to straighten after factor 13. Additionally, parallel analyses and the Velicer’s (1976) Minimum Average Partial (MAP) test both suggested to retain 13 factors.

Table 1 reports on the descriptive statistics of these 13 Tinder factors and the personality traits. Inspecting the mean scores of the Tinder factors indicates that they are all broadly represented in the data, given their maximal coverage with scores between 1 and 7. Also the personality traits show a good coverage with scores ranging from 1.58 to 4.63, hence almost reaching the maximal range (1–5).

Table 2 shows the intercorrelations between the 13 Tinder motives, indicating that these 13 factors are not independent. Therefore, we used oblique rotation when conducting EFA. In addition, to correct for multiple testing we adjusted the p-values (Bonferroni correction) in our correlation and regression analyses.

3.2. The Big Five personality traits and Tinder use

To investigate whether singles with certain personality traits were more likely to be Tinder users or non-users, a t-test was performed (see Table 3). Tinder users scored significantly higher on extraversion than non-users. The Cohen’s d value (0.47) implies a medium effect (Cohen, 1988), where the group means differ approximately half a standard deviation from each other. Additionally, Tinder users have significantly higher scores on openness to experience than non-users. Again, Cohen’s d (0.55) indicates a medium effect, in which the group means are more than half a standard deviation apart. Finally, Tinder users score significantly lower on conscientiousness than non-users. The Cohen’s d (0.27) indicates a small effect. No differences were found for agreeableness and neuroticism.

3.3. The Big Five personality traits and Tinder motives

To test our proposed hypotheses for the second goal of this study, hierarchical regressions were run with sex, age, sexual orientation, being a student or not (block 1), and the Big five personality domains (block 2) as independent variables and the 13 Tinder motives as dependent variables (see Table 4). Because several regressions were run, we used an adjusted p-value (0.0038). Agreeableness was, as predicted, negatively associated with the Sexual Experience. However, agreeableness was not significantly associated with Peer Pressure.

Conscientiousness was, as predicted, positively associated with Relationship Seeking, and negatively with both Pass Time/Entertainment and Distraction.

Furthermore, extraversion was, as predicted, negatively associated with both Relationship Seeking and Flirting/Social Skills. Additionally, the results also showed that extraversion was positively associated with Pass Time/Entertainment. Although expected, extraversion was not significantly associated with Socializing and Sexual Experience.

As hypothesized, neuroticism was positively associated with Social Approval and Ex. Despite being predicted, this was not the case for Sexual Experience.

Finally, as expected, openness to experience was positively associated with Travelling. In contrast with the hypotheses, no significant associations existed between openness to experience and Socializing, Belongingness or Curiosity.

4. Discussion

This study advances the literature on mobile dating applications by being the first to investigate associations between the Big Five personality traits and Tinder use and motives. Regarding Tinder use, our findings suggest that single Tinder users are more extraverted and open to new experiences than single non-users, whereas single non-users reported higher scores on conscientiousness than single Tinder users. No significant differences emerged concerning agreeableness and neuroticism. Indeed, extraverts are known for their interests in new media (Ryan &
Xenos, 2011; Wilson et al., 2010), whereas conscientious individuals are less likely to use Tinder as its matching process promotes instant gratification-seeking, a goal attributed to those low in conscientiousness (Roberts et al., 2014). The significant difference regarding scores on openness to experience between single users and non-users indicates Tinder still accounts for being a “new experience” in Belgium. Nonetheless, it is interesting to note that while at first a decent part of our sample turned out to be non-users, a closer examination revealed that the majority of those non-users was in a committed relationship at the moment of inquiry. The relative paucity of singles that never used Tinder as its matching process promotes instant gratification-seeking, a goal attributed to those low in conscientiousness (Roberts et al., 2014). The significant difference regarding scores on openness to experience between single users and non-users indicates Tinder still accounts for being a “new experience” in Belgium. Nonetheless, it is interesting to note that while at first a decent part of our sample turned out to be non-users, a closer examination revealed that the majority of those non-users was in a committed relationship at the moment of inquiry. The relative paucity of singles that never used the application in our sample thus suggests that mobile dating applications have become part of day-to-day single life in emerging adulthood.

Furthermore, our findings stress the importance of personality traits as drivers of individual differences in Tinder motives. As predicted, those with higher scores on agreeableness are less likely to engage in risky sexual behavior, such as using Tinder to find multiple sex partners. Contrary to our expectations, no significant positive association was found with Peer Pressure. While individuals with higher scores on agreeableness are more likely to use online dating sites out of peer pressure (Clemens et al., 2015), they seem not to be more likely to use the mobile dating app Tinder.

When it comes to conscientiousness, all hypotheses based on the previous literature could be supported. Single users with higher scores on conscientiousness are significantly more likely to use Tinder to find a romantic partner and less likely to use Tinder to pass time or as a tool for distraction.

As hypothesized, Tinder users with higher scores on extraversion are less likely to use Tinder to find a romantic partner and to improve their flirting/social skills. Being an online platform, Tinder creates a safer environment for individuals whom fear being judged and evaluated negatively. Introversion (low extraversion) is a personality trait that positively predicts social phobia (Bienvenu, Hettema, Neale, Prescott, & Kendler, 2007). Therefore, it is likely that individuals with lower scores on extraversion are more likely to use the application to improve their social skills. Extraversion was also significantly associated with Pass Time/Entertainment. Extraverts are more prone to boredom when they are by themselves (Costa & McCrae, 1992). Consequently, it is not surprising that singles with higher scores on extraversion are more likely to use the application when wanting to pass time or looking for entertainment. Contrarily to the expectations, extraversion was not significantly associated with Socializing. In fact, none of the personality traits significantly predicted Socializing, which may imply that people are generally using the application to meet new people and to broaden their social network, regardless of their scores on the Big Five personality traits. In a similar vein, the hypothesized positive association between extraversion and using Tinder to increase sexual experience was not supported.

Similarly, no significant association was found between neuroticism and the Sexual Experience motive. A review of the research on personality and casual sex showed that associations with agreeableness are repeatedly found whereas this is not the case for neuroticism and extraversion (Hoyle et al., 2000). This is exactly in line with our findings and could in part explain the non-findings of this study. Remarkably, the Tinder user’s sex played a strong role in predicting Sexual Experience. Male Tinder users are significantly more likely to use Tinder to have casual sex than female Tinder users. Nonetheless, single Tinder users with higher scores on neuroticism are more likely to use Tinder for social approval and to get over their exes, thereby reflecting the overly anxious and emotional aspects of the neurotic person (Eysenck & Eysenck, 1994).

As anticipated, openness to experience was positively associated with Travelling. Contrarily to expectations, no significant associations with openness to experience emerged for Socializing (as already indicated), Belongingness and Curiosity. The Tinder motive Belongingness had the lowest mean score, which suggests that this motive was endorsed the lowest by participants in the sample. Curiosity, on the other hand, is for these participants the second most common motive to use Tinder. Notably, ideas (described as ‘intellectual curiosity’ in the manual) is a lower order personality facet of the personality domain openness to experience (Costa & McCrae, 1992). Consequently, we argue that Tinder has the power to elicit curiosity among its population of interest, regardless of its users’ personality traits, as it is a fairly new medium often discussed in popular media (Duguay, 2016) that easily found its way to day-to-day single life among emerging adults.

Limitations of the current study are the cross-sectional nature of the data and the sampling method. Consequently, causal interpretations cannot be made and the sampling method might increase participant
self-selection. Nevertheless, self-report survey-based measures can generally be administered through the Internet with good results (Weigold, Weigold, & Russell, 2013). Despite the limitations, this research contributes to the body of research on mobile dating applications, as no studies have yet investigated associations between the Five-Factor model of personality and Tinder use and motives.

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References


