From Swiping to Casual Sex and/or Committed Relationships: Exploring the Experiences of Tinder Users

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ABSTRACT

To better understand if and how the mechanics of the process Tinder imposes on its users (i.e., swiping, matching, and starting conversations) influences the resulting sexual or romantic interactions, we collected data from 1038 Belgian Tinder users. Our findings show that a user’s swiping quantity does not guarantee a higher number of Tinder matches, women have generally more matches than men and men usually have to start a conversation on Tinder. Moreover, while having conversations was positively associated with reporting having had offline Tinder encounters, less than half of our sample reported having had an offline meeting with another Tinder user. Whereas more than one third of those offline encounters lead to casual sex, more than a quarter of those offline encounters result in the formation of a committed relationship. Such findings indicate that Tinder is not “just a hookup app”, as often assumed in public discourse. We argue it is plausible that sexual encounters will eventually lead to committed relationships in a society where initiation of relationship formation with dating has been replaced by hooking up.

Keywords: Tinder, casual sex, romantic relationship, Tinder outcomes, Tinder use
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While courtship in the 19th century was characterized by family supervision in the privacy of the home, it became more individualistic during the next century (Illouz, 1997). Recently, it evolved into a more casual practice characterized by high levels of sexual interaction (Garcia, Reiber, Massey, & Merriwether, 2012; Reid, Elliot, & Webber, 2011; Wade, 2017). These developments historically coincided with technological innovations, which enabled new modes of courtship. For instance, starting in the 20th century, the automobile and the entertainment industry (i.e., movie theaters, the drive-in culture, dance halls) provided dating couples with inexpensive opportunities to get away from their daily routines and parental control (Bogle, 2008; Illouz, 1997). Towards the beginning of the 21st century, online dating services started expanding an individual’s dating pool (Clark, 1998; David & Cambre, 2016). Individuals were no longer restricted to dating those physically and socially proximate. They could now connect with prospective partners outside their pre-existing networks (Barraket & Henry-Waring, 2008). This ease of connectivity and the seemingly limitless possibilities offered by online dating sites and mobile dating applications (MDAs) has received considerable critical attention (Bhattacharya, 2015; Hardey, 2004; Landovitz et al., 2013; Sales, 2015).

Both researchers and the popular media argue that it has become easier than ever to find casual sexual partners with MDAs (e.g., Bhattacharya, 2015; David & Cambre, 2016; Race, 2015; Sales, 2015). Especially Grindr, a location-based MDA predominantly targeted at men who have sex with men, has received quite a bit of scholarly attention on issues related to sexual risk behavior (e.g., Landovitz et al., 2013) and its influence on casual sexual interactions (e.g., Licoppe, Rivière, & Morel, 2016; Race, 2015; Stempflhuber & Liegl, 2016). The growing popularity of Grindr quickly led to the development of heterosexual
alternatives, of which Tinder continues to be the predominant leader in Western societies (Duguay, 2017). In 2016, the application was downloaded more than 100 million times and 60% of users were estimated to come from outside North America (Smith, 2017). Yet, despite Tinder’s global popularity and the expanding body of literature on MDAs, it is not quite clear how the mechanics of the process Tinder imposes on its users influences the resulting sexual or romantic interactions.

The objectives of our study are twofold. First, we examine whether Tinder facilitates casual sex by looking at its affordances. Second, we investigate whether Tinder allows for the formation of committed relationships. In doing so, we start by charting the transformations of intimacy over the last three centuries. In the next section we examine the affordances of mobile dating applications (MDAs). In the subsequent sections we provide an overview of our study, describe our methodology, present and discuss our findings.

THE TRANSFORMATION OF INTIMACY

Although the practice of dating made romantic encounters more sexually permissive than courting or calling in the previous century could have allowed (Illouz, 1997), there is debate on what changed in the second half of the 20th century: actual sexual behaviour or attitudes towards that behaviour (e.g., Reay, 2014; Wade, 2017; Whyte, 1990).

Technological and economic developments in the first half of the 20th century made money a central component of romantic encounters. Men would generally treat women to various forms of amusement (e.g., drinks, theatre tickets) in exchange for small sexual favours such as kissing or petting (Bogle, 2008; Illouz, 1997). However, it was the legalization of abortion and the ready availability of contraception in the second half of the 20th century that finally freed women from fears previously associated with sex (e.g., pregnancies, death during childbirth; Hekma & Giami, 2014). With these changes, sexual fulfilment became a decisive factor in continuation of relationships (Gross & Simmons,
2002). Yet, women were still most likely to engage in premarital sex with their future spouse only, indicating that the “sexual revolution” was rather a shift in permissive attitudes towards uncommitted sex than a change in actual behaviour (Whyte, 1990).

During the past century, with the erosion of the traditional cultural framework, the romantic love had to make place for what Giddens calls ‘pure’ or ‘confluent’ love”. Whereas romantic love entails a quest for the perfect partner and emphasizes monogamy, the post-traditional confluent love is focused on chasing the perfect relationship and emphasizes reciprocal emotional and sexual pleasure. In confluent love, to secure continuance of the relationship, each partner needs to gain sufficient benefit, which opens negotiations between partners that are not limited by traditional rules. In this way, sexual exclusiveness is a necessary given of the relationship only when both partners deem that desirable (Giddens, 1992).

Whereas lifelong commitment was central to romantic love, self-development is a core feature of confluent love. Once partners begin to diverge in their values, interests, and identities, the relationship loses its essence and needs to be dissolved. Hence, partners in a confluent love relationship are committed only contingently (Gross & Simmons, 2002). Consequently, confluent love has been repeatedly paired with the rise of serial monogamy, in which “individuals have several primary partners over time, but no more than one concurrently” (Pillsworth & Haselton, 2005, p. 100). Yet, the transition out of these relatively short committed relationships is rather complex, as studies on relationship discontinuation reveal that over half of couples who break up continue to have a sexual relationship (Halpern-Meekin, Manning, Giordano, & Longmore, 2012).

From 2000 on, researchers noticed a tremendous shift in dating and mating behaviours on the college campus, repeatedly referred to as “hooking up”, casual sexual encounters, or casual sexual relationships (e.g., Claxton & van Dulmen, 2013; Garcia et al., 2012; Paul &
Hayes, 2002). Instead of having one-on-one dates, college students would gather in groups and eventually have one-time only sexual interactions with strangers or acquaintances they meet at such gatherings, ranging from kissing and oral sex to sexual intercourse (Bogle, 2008; Wade, 2017). Compared to emerging adults in the 1990s, those in the 2004-2012 cohort did not report a higher number of sex partners, but were more likely to report having had sex with a friend or acquaintance (Monto & Carey, 2014). The aforementioned study thus suggests that emerging adults nowadays are more likely to have sex with a partner they are not necessarily emotionally close with. Yet, they do need to find friends or acquaintances interested in pursuing such sexual encounters or relationships with a strong sexual focus. One way to find these potential sex partners, could be through using MDA’s, as explained in the next section.

**AFFORDANCES OF MOBILE DATING APPLICATIONS**

According to Hjarvard (2013), a medium’s influence on a micro-social level depends on the concrete affordances (i.e., material and technical features and social and aesthetic qualities) of the medium in question. Such affordances structure interaction between actor and object by making certain actions possible and ruling out other actions (Gibson, 1979). The main affordances that potentially influence (sexual) encounters through MDAs are: *mobility, immediacy, proximity, and visual.*

First, the mobility affordance encourages people to use MDAs in different locations, which enhances the spontaneity and frequency of use (Chan, 2017; Ranzini & Lutz, 2017). Second, MDAs’ notification system alerts users to new messages and/or matches, even when the application is not open, thereby accelerating the tempo of interactions and allowing for more immediacy (Yeo & Fung, 2016). Third, MDAs have access to users’ geolocative information and display potential partners who are in the immediate vicinity (Blackwell, Birnholtz, & Abbott, 2015). This *proximity* affordance influences instantaneous arrangements
of meetings in real life (Yeo & Fung, 2016). Interaction patterns on mobile dating apps are thus more oriented towards immediacy and proximity compared to online dating sites (Licoppe et al., 2016).

Such affordances of proximity and immediacy can foster mobile intimacy by overlaying geographic space “with an electronic position and relational presence, which is emotional and social” (Hjorth, 2013, p. 113). This mobile intimacy and co-presence on the app in turn intensify the immediacy and ability of users to meet through MDAs (Duguay, 2017) and have “fast sexual encounters” (Licoppe et al., 2016, p. 2545). Moreover, compared to interactions in an offline environment, Tinder’s swipe interface offers the ability to pursue numerous (sexual) relationship initiation interests simultaneously, instead of being limited to only one conversation at a time (Lefebvre, 2017).

Finally, the visual affordance is predominant in the case of MDAs, as selection of potential partners is mostly based on images that take up the whole screen (Chan, 2017; David & Cambre, 2016). Since these selections are mainly based on physical appearances, some researchers argue that these interactions remain superficial (Hobbs et al., 2017).

Cultural conventions and interpretations influence how affordances are used (Hjarvard, 2013). After successful promotion of Tinder as a useful tool for participating in hookups (Duguay, 2017), it has become a particular type of cultural object – a hookup application (Ansari & Klinenberg, 2015; David & Cambre, 2016; Mason, 2016; Sales, 2015). Consequently, it could be possible that Tinder attracts users with mainly sexual purposes and that sexual references made on the application are more likely to be tolerated.

**THE PRESENT STUDY: AN EXPLORATION OF TINDER USERS**

Recently, an expanding body of literature has started to examine MDAs. In particular, research has been focused on motives for using such apps (e.g., Ranzini & Lutz, 2017; Timmermans & De Caluwé, 2017a; Van De Wiele & Tong, 2014; Ward, 2016) and its
relation to dating (e.g., Chan, 2017; Hobbs, et al., 2017; Lefebvre, 2017) and casual sex (e.g., Chan, 2017; Choi et al., 2016; Landovitz et al., 2013; Licoppe et al., 2016). Yet, it is not clear how requisite steps in this process (i.e., swiping, matching, having conversations on Tinder) are related to eventually having sexual or romantic outcomes.

The need to select account settings forces users to predetermine sex preferences (only men, only women, or men and women), geographical distance, and the age range of the love interest. Tinder’s fast-paced swiping of profiles of potential partners based on information imported from Facebook (e.g., name, photo, age, mutual friends and interests) is designed to invoke ongoing participation (Duguay, 2017). The reduction of the choice to a binary demands a firm, decisive, micro-action that encourages the acceleration of swiping though the available pool of potential partners (David & Cambre, 2016).

In contrast to online dating sites which often use mathematical algorithms to select potential partners for users based on personality characteristics and mutual interests (Finkel, Eastwick, Karney, Reis, & Sprecher, 2012), Tinder’s algorithm is bilateral, meaning that users need to match in order to be able to start a conversation with one another (Zhang, 2016). In other words, the swiping process on Tinder remains unanimous until both users right swipe and match. Here dynamics of mutual attraction and consent are determinative rather than solely physical proximity (e.g., Grindr users can contact any other user within a certain distance) or the co-presence (e.g., users can contact any other user on online dating websites) (MacKee, 2016). One common swiping strategy for increasing the number of matches is to swipe right on all potential partners and filter out options afterwards, which Lefebvre (2017) refers to as the shotgun approach. Therefore, we predict that the number of swipes will be positively associated with the number of matches (H1).

Matching on Tinder, by itself does not guarantee an offline encounter with another Tinder user. After a successful matching process, a physical meeting is dependent upon (a)
the number of other-instigated conversations and (b) the number of self-instigated conversations. Therefore, we predict that the number of successful matches will be positively associated with the number of both self and other-instigated conversations (H2). Once two users engage in a conversation, the Tinder interaction might shift from an online to an offline context. However, skill is needed to first have others participate in a self-instigated conversation and then persuade them to have an offline meeting (Zytko et al., 2014). Therefore, we expect a positive association between the number of both self and other-instigated successful conversations and the number of Tinder meetings (H3).

Given the cultural understanding that Tinder is merely a hookup application (e.g., Ansari & Klinenberg, 2015; David & Cambre, 2016; Mason, 2016; Sales, 2015), it might be that users are more likely to have a sexual motive when using Tinder or at least perceive the sexual references of other users as normative behavior. However, Timmermans and De Caluwé (2017a) found that not only sexual motives were related to an increased number of reported casual sexual interactions, but also, for instance, an increase in usage of Tinder while travelling. Another study conducted in Hong Kong found a positive association between the use of MDAs for more than 12 months and a casual sex partner in the last sexual encounter (Choi et al., 2016). Therefore, we hypothesize that the number of Tinder meetings will be positively associated with an increased engagement in both one-night stands and casual sexual relationships with other Tinder users (H4).

While it has often been assumed that MDAs are used to expand sexual networks (e.g., Chan, 2017; Choi et al., 2016), both qualitative (e.g., Hobbs et al., 2017; Ward, 2016) and quantitative (Timmermans & De Caluwé, 2017a) studies suggest that many people also use these new technologies to pursue meaningful relationships. By connecting the Tinder account to Facebook and other third-party platforms (e.g., Instagram, Spotify), verifiability becomes compulsory, thereby regulating (sexual) self-presentation (e.g., Tinder users can only choose
profile pictures from their Facebook account) and reducing anonymity. Fake accounts and disrespectful users can be reported and pictures cannot be exchanged on the app, thereby making it impossible to exchange (unwanted) sexual explicit material on Tinder (Duguay, 2017; MacKee, 2016). Consequently, this authenticity affordance makes the app more attractive to search for romantic partners in the vicinity. Moreover, Licoppe et al. (2016) argue that sexual interactions between strangers are not a recognized and shared practice within heterosexual circles. In fact, MDAs targeted at a heterosexual population might lead to a wider distribution of relational orientations resulting in committed relationships. Moreover, Tinder’s post-launch marketing includes success stories in which couples thank Tinder for helping them to meet by sharing engagement and wedding photos (Duguay, 2017). Therefore, we predict that the number of Tinder meetings will be positively associated with the number of committed relationships with other Tinder users (H5).

Cunningham and Barbee (2008) found that one important motive for engagement in casual sexual encounters or casual sexual relationships is to evaluate the partner’s suitability for a long-term relationship. As a casual sexual relationship has the potential to eventually become a committed relationship (Mongeau, Knight, Williams, Eden, & Shaw, 2013) and people generally express a desire for emotional connection to the sexual partner (Epstein et al., 2009; Paul & Hayes, 2002), we hypothesize that the number of one-night stands and casual sexual relationships will be positively associated with the number of committed relationships with Tinder users (H6). In addition, it is possible that the relationship between the number of Tinder meetings and the number of committed relationships will be mediated by the number of Tinder one-night stands and casual sexual relationships (H7). Finally, previous studies have shown that accounting for Tinder motives is crucial in gaining a better understanding of Tinder outcomes (e.g., Chan, 2017; Timmermans & De Caluwé, 2017a). Therefore, we predict that Tinder motives (i.e., relationship motive, sexual motive, and social
motive) will be associated with offline Tinder outcomes (i.e., meetings, one-night stands, casual sexual relationships, and committed relationships) and having a serious relationship and sexual experience will moderate this association (H8).

**METHOD**

**Participants and Procedure**

A total of 2284 emerging adults (ages 18 – 29) filled in an online survey about their Tinder use. For the purpose of this study, participants that were not current users of Tinder \( (n = 1237) \) were deleted from all analyses. In addition, 9 participants were deleted from all analyses due to dubious responses (e.g., having had more than 20 serious relationships while only being 19 years old). As a result, 1038 Belgian Tinder users remained in the dataset, who were on average approximately 22 years old \( (M = 21.80; SD = 2.35) \). More females (59%) than males participated in the study. The large majority of respondents identified as heterosexual (91%), single (82%) and had sexual intercourse (80%).

To access the population of interest, Facebook sampling was used as Tinder users are required to have a Facebook account. Two graduate students assisted in data collection and administrators of popular Facebook pages (e.g., confessions pages, popular magazines) were asked to spread the survey link on their Facebook page to reach a large and distinct population of Tinder users. Facebook has often been successfully employed as a research tool for social scientific research, as it offers a cheap and fast way to collect self-reported data of good quality (Bhutta, 2012; Kosinski, Matz, & Gosling, 2015). Because of this sampling method, not only college students living on campus (43%), but also college students living at their parents’ home (31%), emerging adults on the job market (3%), and emerging adults who

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1 572 of those participants indicated that they had used Tinder in the past but were not actively using Tinder at the time of inquiry.
currently have a job (16%) were included in the sample. Participation was voluntarily and participants did not receive any incentive for their participation.

**Measures**

**Demographics and relationship variables.** Respondents reported their sex (0 = male, 1 = female), age, relationship status (0 = single, 1 = in a relationship), and whether they have had sexual intercourse (0 = no, 1 = yes). These variables were added as men were significantly more likely to report they had a sexual motive for using Tinder (Timmermans & De Caluwé, 2017b), and it is plausible to assume that people in a relationship and those without sexual intercourse will behave differently on the app.

**Tinder account and motives.** Respondents indicated when they created their Tinder account (0 = less than half a year ago, 1 = more than half a year ago, 2 = more than one year ago). Experience with using Tinder possibly influences the use of the app, as users’ process of trial and error adjusts their expectations and goals related to the use of the app.

Furthermore, three subscales of the Tinder Motives Scale (Timmermans & De Caluwé, 2017a) were used. Tinder users indicated to what extent they used Tinder for relationship seeking (five items, e.g., “I use Tinder to find someone for a serious relationship”), sexual experience (six items, e.g., “I use Tinder to find a one-night-stand”), and socializing (four items, e.g., “I use Tinder to make new friends). All subscales had good reliabilities and were averaged to form a scale of relationship motive ($M = 3.59$, $SD = 1.54$, $\alpha = .92$), sexual motive ($M = 2.75$, $SD = 1.48$, $\alpha = .92$), and social motive ($M = 4.19$, $SD = 1.38$, $\alpha = .84$).

**Online Tinder behavior.** Respondents were asked to rate how many in 10 Tinder users they would on average 1) swipe right ($M = 2.93$, $SD = 2.43$), 2) match with ($M = 3.90$, $SD = 2.65$), and 3) start a conversation with ($M = 2.42$, $SD = 2.78$). In addition, they were
asked how many of 10 Tinder matches would start a conversation with them ($M = 2.80, SD = 2.17$).

**Offline Tinder behavior.** Tinder users were asked whether they ever met a person they matched with on Tinder. Participants who had an offline meeting with a Tinder match ($n = 571$) received follow up questions. On average, people would have 3 offline meetings ($M = 2.92, SD = 3.55$). Twenty-three percent of those with offline Tinder meetings reported to have had at least one one-night stand ($M = 0.43, SD = 1.16$) and 31% engaged in a casual sexual relationship with another Tinder user ($M = 0.57, SD = 1.24$), whereas 27% started a committed relationship with another Tinder user ($M = 0.37, SD = 1.57$).

**Interaction relationship status and sexual experience with Tinder motives.** The continuous variables relationship motive, sexual motive, and social motive were centered in order to compute the interaction between on the one hand the dichotomous variable relationship status and the centered motive variables, and on the other hand the dichotomous variable sexual experience and the centered motive variables.

**RESULTS**

To test our hypotheses, several regression models were fitted. Since the dependent variables were all count variables and the variance was generally larger than the mean for these dependent variables (Gardner, Mulvey, & Shaw, 1995), negative binomial models were estimated using Mplus version 6.12 (Muthén & Muthén, 1998-2015). For the offline Tinder variables, which included a large number of zero counts (46.5% for meetings, 87.5% for one-night stands, 82.8% for casual sexual relationships, and 85.2% for committed relationships), zero-inflated negative binomial regression models were estimated. These zero values could have two meanings: participants never had an offline encounter with another Tinder user (which was the case for approximately 45% of the sample) or participants indicated not to have engaged in one or more of the aforementioned Tinder behaviors.
Table 1 summarizes the results of the regression models for the online Tinder behaviors. Sex appeared to be an important predictor for all three dependent count variables. The odds for females to have matches with other Tinder users were 1.34 times higher than the odds for males to have matches. A similar trend emerged for other-instigated conversations: the odds for having other Tinder users start a conversation are 34% higher for females. Contrarily, the odds for males to start a conversation with another Tinder user were 1.86 times higher than the odds for females. Age was only significantly associated with having Tinder matches, indicating that the odds to have matches for young emerging adults increase with 4% compared to the odds for older emerging adults. Contrary to our expectations, the number of swipes did not influence the number of matches. Hypothesis 1 could not be supported.

Furthermore, having a sexual or relationship motive influenced self-instigating a conversation. The odds for starting a conversation on Tinder increased with 20% for Tinder users with a sexual motive and 17% for Tinder users with a relationship motive. In addition, having had sexual intercourse moderated the effect of sexual motive and social motive on starting a conversation on Tinder. While the odds of starting a conversation were 16% higher for Tinder users with a sexual motive but no sexual experience, the odds of starting a conversation were 19% higher for Tinder users with a social motive and sexual experience. Again, in contrast with our expectations, the number of matches did not influence the number of self-instigated conversations. Regarding other-instigated conversations, however, the number of matches increased the odds of having others starting a conversation on Tinder with 16% for Tinder users with a higher number of matches on Tinder. Hypothesis 2 could thus be partially supported.

Table 2 reports on the offline Tinder behaviours. Hypothesis 3, which predicted a positive association between the number of both self-instigated and other-instigated
conversations and the number of offline meetings, could be supported. However, despite being significant, these odds appeared to be rather low. While the odds of meeting up with a Tinder match were 13% higher when the number of other-instigated conversations increased, the odds of meeting up with a Tinder match were only 4% higher when the number of self-instigated conversations increased. Several other significant associations appeared. To summarize: the odds for meeting with another Tinder users were higher for females (28%), older emerging adults (9%), Tinder users who have their account at least six (57%) or twelve (141%) months, for Tinder users who have had sexual intercourse in the past (161%) and for Tinder users with a relationship motive (65%) or a social motive (19%).

Hypothesis 4, which predicted a positive association between the number of Tinder meetings and the number of casual sexual encounters and relationships with other Tinder users, could be supported. The odds of having a one-night stand with another Tinder user were 36% higher and the odds for having a casual sexual relationship with another Tinder user were 34% higher for Tinder users with a larger number of offline Tinder meetings. Albeit a bit lower, the odds of having a committed relationship with another Tinder user were 13% higher for Tinder users with a larger number of offline Tinder meetings – supporting Hypothesis 5. Sexual motive appeared to be an important predictor for both one-night stands and casual sexual relationships. The odds for having a one-night stand with another Tinder user were 32% higher for users with a sexual motive, and the odds of having a casual sexual relationship were 51% higher for users with a sexual motive. Interestingly, Tinder users’ sex predicted engagement in casual sexual relationships with other Tinder users, but not one-night stands. The odds of having casual sexual relationships with another Tinder user were 172% higher for females. In addition, the odds of having a casual sexual relationship with another Tinder user for those who have their account for at least 6 or 12 months were respectively 63% and 101% higher. Relationship motive, on the contrary, was negatively
associated with having casual sexual relationships with other Tinder users. The odds for having a casual sexual relationship with another Tinder user were 16% higher for users with low scores on relationship motive. Finally, serious relationship appeared to be the only other significant association with the number of committed relationships with another Tinder user. The odds for having a committed relationship with another Tinder user within the referenced period were 344% higher for Tinder users in a committed relationship.

Hypothesis 6 could not be supported. The number of one-night stands and casual sexual relationships with other Tinder users is not significantly associated with the number of committed relationships with other Tinder users. Hypothesis 7, which assumed the relationship between the number of Tinder meetings and the number of committed relationships will be mediated by the number of Tinder one-night stands and casual sexual relationships, could not be supported. Figure 1 shows that all indirect effects between Tinder meetings and committed relationships were not significant.

Finally, Hypothesis 8 could only be partially supported. While motives played an important role when it comes to predicting Tinder outcomes as described above, the dichotomous variable serious relationship did not seem to moderate the relationship between any of the three Tinder motives and offline Tinder outcomes. Regarding the interaction effects between sexual experience and the Tinder motives, only the interaction effect between sexual experience and relationship motive was significant for offline Tinder meetings. The odds of having offline Tinder meetings are 41% higher for virgins with a relationship motive, but not for those with sexual experience and a relationship motive. In summary, the evidence for the hypotheses is enumerated in Table 3.

**DISCUSSION**

This study was undertaken to examine how users go from swiping to romantic or sexual encounters. While swiping is a necessary first step to get acquainted with other users,
our results suggest that the swiping quantity does not guarantee a higher number of Tinder matches. Women in our sample were significantly more likely to have matches than men, a finding that resonates with research on online dating users (Rudder, 2014). It is possible that women are more selective in their swiping process compared to men, thereby decreasing the number of successful matches for men. In her study on mobile phone usage, Shade (2007) shows how advertising campaigns reinforce femininity and heteronormativity. In a similar vein, given Tinder’s status as hookup app (e.g., Ansari & Klinenberg, 2015; David & Cambre, 2016; Duguay, 2017; Mason, 2016), it could be possible that women are more selective in their swiping behavior in order to, for instance, avoid those only interested in sexual encounters. In addition, Lefebvre (2017) found that male users were more likely to swipe to increase the odds for matches compared to female users. Another explanation lies in the freemium business model of the application, in which users are charged for certain premium features including those designed to increase the number of matches (e.g., Tinder Boost). Part of Tinder’s success lies in the thrill of getting a new match (Zhang, 2016). When the swiping process is generating too many successful matches, it undermines Tinder’s business model as the premium matching feature becomes superfluous.

The number of successful Tinder matches was only positively associated with the number of other-instigated conversations but not the number of self-instigated conversations. Again, sex differences were found, in that women were less likely to start messages but more likely to receive messages compared to men. This seems to be in line with both the offline and online dating script, in which women are more likely to be waiting to receive messages (online dating script) or to be asked on a date (offline dating script), whereas men were supposed to initiate the first contact and ask the date (Rose & Frieze, 1989; Rudder, 2014). It thus seems that MDAs continue to reinforce traditional gender roles, a trend that has also been observed in studies related to mobile phone usage (e.g., Cardoso, Gomes, Espanha, &
Araújo, 2007; Ganito, 2010). Tinder motives also increased odds of starting a conversation: those with a sexual or relationship motive were more likely to start a conversation on Tinder.

Both the number of successful self-instigated and other-instigated conversations were positively associated with the number of Tinder meetings. Notably, the longer users have their Tinder account, the higher their odds of having Tinder meetings. According to Uses and Gratifications Theory, as long as a medium gratifies a user’s needs, the user will continue using this medium (Ruggiero, 2000). It is therefore highly likely that users with successful Tinder meetings continue to use the application and thus have had the application for a longer time period. Alternatively, it is also possible that having the application for a long time provides more opportunities to meet other users in a physical setting.

The primary goal of this study, however, was to address the question whether the affordances of Tinder facilitate engagement in casual sex. Our findings seem to imply some degree of ambiguity on this issue. On the one hand, our study shows that less than half of Tinder users in this sample actually met someone in a physical setting they matched with on Tinder, which calls in question the success of Tinder as an application that brings people together. However, such findings might be country or sample specific, as in another U.S. study, 77% of the sample reported meeting matches (Lefebvre, 2017). On the other hand, it is important to note that more than one fifth of people who actually met someone in a physical setting, had a one-night stand with at least one other Tinder user. These numbers are even higher for casual sexual relationships, as almost one third of people who met another Tinder user in a physical setting have had a casual sexual relationship with at least one other Tinder user. The number of Tinder meetings was significantly and positively associated with both the number of one-night stands and the number of casual sexual relationships with other Tinder users.
Interestingly, women were more likely to report a higher number of casual sexual relationships with other Tinder users than men. Contrarily, the literature on casual sex either finds no significant gender differences (e.g., Bisson & Levine, 2009; Owen, Rhoades, Stanley, & Fincham, 2010; Vrangalova, 2015) or reports that male emerging adults are more likely to engage in casual sex compared to female emerging adults (e.g., Grello, Welsh, & Harper, 2006; Lyons, Manning, Longmore, & Giordano, 2015; Owen & Fincham, 2011; Townsend & Wasserman, 2011). Yet, this study would not be the first to report opposite findings, as female respondents in a German sample also reported more casual sex compared to male respondents (Kaspar, Buß, Rogner, & Gnambs, 2016). Furthermore, a growing literature posits that: too little attention has been paid to potential positive effects of having casual sex (Vrangalova, 2015); women do receive several emotional and physical benefits from casual sex (e.g., Owen, Quirk, & Fincham, 2014); attitudes towards casual sex play a significant role in experiencing the benefits of it (Kalish & Kimmel, 2011; Vrangalova & Ong, 2014). As women are more likely to have a higher number of matches, this supply of potential (sexual) partners possibly empowers them to select and potentially create the (casual sexual) relationships of their own preference – women are becoming power users of technology and starting to use MDAs to perform new cultural meanings (Ganito, 2010).

Since sexual motive also appeared to be a significant predictor of engagement in both one-night stands and casual sexual relationships with other Tinder users, it might be that the cultural conventions surrounding the app (i.e., Tinder is a hookup app; Sales, 2015) have influenced its use as a means for finding sexual partners. In this way, Tinder serves as a tool that facilitates sexual encounters for those that are looking for it, a similar pattern that was found in studies on Grindr (e.g., Licoppe et al., 2016). However, in the case of respondents who do not report a sexual motive, a sexual outcome is still possible, as shown in the study by Timmermans and De Caluwé (2017a). In another study conducted in the UK
(Bhattacharya, 2015), a female respondent explained that online interactions on Tinder prior to meeting in real life increased the possibility for casual sex to happen on a first real-life encounter. The matching hypothesis aids in a better understanding of these findings. According to this hypothesis, people are most motivated to pursue romantic relationships with others whose level of physical attractiveness matches their own (Berscheid, Dion, Hatfield, & Walster, 1971). Applied to Tinder, the matching hypothesis suggests that Tinder users are only motivated to meet other users in an offline setting, when they perceive the other user’s level of attractiveness to be compatible to their own. Taking into account Tinder’s user interface, which greatly emphasizes appearances (David & Cambre, 2016), it is plausible that Tinder users will feel a certain degree of mutual attraction when meeting in a physical setting. Consequently, it is not surprising that a significant proportion of offline Tinder meetings end up in sexual encounters, since users are now “nearby” and likely to experience some level of mutual physical attraction, even when not interested in pursuing a romantic relationship.

Tinder meetings not only generate casual sexual encounters but are also associated with a higher number of committed relationships with other Tinder users. More than a quarter of offline Tinder encounters result in the formation of a committed relationship, indicating that Tinder is not “just a hookup application” as often assumed in public discourse. Based on some findings reported in the literature, we also argued it is plausible that sexual encounters will eventually lead to committed relationships in a society where initiation of relationship formation with dating has been replaced by hooking up (Bogle, 2008; Wade, 2017). Yet, the number of one-night stands and casual sexual relationships was not directly associated with the number of committed relationships, nor did it mediate the relationship between the number of Tinder meetings and the number of committed relationships with people met on Tinder.
Finally, motives played an important role when it comes to studying Tinder outcomes. Having a sexual motive was positively associated with reporting a higher number of one-night stands and casual sexual relationships, whereas having a relationship motive was negatively associated with reporting a higher number of casual sexual relationships. Interestingly, having a relationship motive was not associated with reporting a higher number of committed relationships, indicating that Tinder might not be that successful in gratifying a relationship need. Relationship status and sexual experience did not seem to moderate these associations, implying that the motives that are linked to offline Tinder outcomes are not different for singles and virgins compared to users in a committed relationships and users with sexual experience.

**LIMITATIONS AND FUTURE DIRECTIONS**

The main limitation of this study is that it is cross-sectional and therefore cannot investigate Tinder interactions over time. Future studies could use a longitudinal design to track if and how many casual sexual relationships eventually lead to a committed relationship. Also, future studies could include ex-Tinder users because one reason for quitting a MDA is gratification of a relational need. In other words, users are likely to delete their Tinder account once they find their romantic or casual partner and get back only when they experience the need to find a new partner.

Second, while our operationalization of casual sex included the two most common forms of contemporary sexual intimacies (i.e., one-night stands and casual sexual relationships), we do not have any information on the type of casual sexual relationships respondents are referring to. While it could be that casual sexual relationships formed on Tinder are merely sexual in nature for both partners, an alternative possibility is that at least one of the partners in the casual sexual relationship wants to pursue a committed relationship, but fails to do so because of external factors such as distance (i.e., while Tinder users match
based on distance preferences, it might be that two people match and meet in a location they do not frequently visit), time (e.g., the Tinder user does currently not have time to pursue the sexual encounter further), and disinterest of the other partner. Due to the design of this study, our findings lack context regarding the reported casual sexual relationships and encounters on Tinder – qualitative studies are needed for such investigation. If Tinder leads to casual sexual relationships that eventually evolve in committed relationships or are dissolved because only one of the partners wants to pursue a committed relationship, our findings tell a different story compared to when the casual sexual relationship remains merely sexual.
REFERENCES


Kaspar, K., L. V. Buß, J. Rogner, and T. Gnambs. 2016. Engagement in one-night stands in


Yeo, T. E. D., and T. H. Fung. 2016. Relationships form so quickly that you won't cherish them: Mobile dating apps and the culture of instantaneous relationships. Proceedings of the 7th 2016 International Conference on Social Media & Society, 1-6. ACM.


# Tables

**Table 1. Negative Binomial Models for Online Tinder Behaviors**

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<tr>
<th></th>
<th>Model 1 Matches</th>
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<th></th>
<th>Model 3 Other conversations</th>
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*Note: * p < .05, ** p < .01, *** p < .001*
Table 2. Zero-Inflated Negative Binomial Models for Offline Tinder Behaviors.

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<th>Model 6 Casual Sexual Relationships</th>
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Note: * p < .05, ** p < .01, *** p < .001
Table 3. Summary of Hypotheses.

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<th>Hypothesis</th>
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<td>Hypothesis 1: The number of swipes will be positively associated with the number of matches.</td>
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<tr>
<td>Hypothesis 2: The number of successful matches will be positively associated with the number of both self and other-instigated conversations.</td>
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<td>Hypothesis 3: The number of successful conversations (both self and other-instigated conversations) will be positively associated with the number of Tinder meetings.</td>
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<td>Hypothesis 4: The number of Tinder meetings will be positively associated with an increased engagement in both one night stands and casual sexual relationships with other Tinder users.</td>
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<td>Hypothesis 5: The number of Tinder meetings will be positively associated with the number of committed relationships with Tinder users.</td>
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<td>Hypothesis 6: The number of one night stands and casual sexual relationships will be positively associated with the number of committed relationships with other Tinder users.</td>
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<td>Hypothesis 7: The relationship between the number of Tinder meetings and the number of committed relationships will be mediated by the number of Tinder one night stands and casual sexual relationships.</td>
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</tr>
<tr>
<td>Hypothesis 8: Tinder motivations will be associated with offline Tinder outcomes (i.e., meetings, one night stands, casual sexual relationships, and committed relationships) and having a serious relationship and sexual experience will moderate this association.</td>
<td>Partially confirmed</td>
</tr>
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Figure 1. Visualization of the Tinder Process