2017-07-01

# Investigating Motivations for Using Dating Websites and Geosocial Apps

Sean Calvin Aaron
*Brigham Young University*

Follow this and additional works at: https://scholarsarchive.byu.edu/etd

Part of the Psychiatry and Psychology Commons

Investigating Motivations for Using Dating

Websites and Geosocial Apps


Sean Calvin Aaron


A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Science


Scott Braithwaite, Chair
Patrick Steffen
Wendy Birmingham


Department of Psychology

Brigham Young University

ABSTRACT

Investigating Motivations for Using Dating
Websites and Geosocial Apps

Sean Calvin Aaron
Department of Psychology, BYU
Master of Science

Using the internet to meet dating partners is increasingly popular and may have ramifications that are not yet fully realized. Although many dating sites have been operating for years, new online dating platforms continue to draw millions of new users. By using a large sample of people who use online dating platforms (n=1,286) we identified similarities and differences in what motivates people to use geosocial apps and dating sites. Motivations previously considered in the literature were supported and brought together in a single theory driven confirmatory factor analysis for each type of dating platform. A motivation to seek amusement was a latent factor unique to geosocial app use. Implications for researchers, clinicians, and dating platform users and developers may include helping users be better matched to others who have similar motivations to improve the online dating experience.

Keywords: online dating, motivations, geosocial dating apps, relationships

TABLE OF CONTENTS

## LIST OF TABLES

LIST OF FIGURES

Investigating Motivations for Using Dating Websites and Geosocial Apps

The internet and smartphone technology have changed the way people begin intimate

relationships. An increasing number of relationships begin on dating websites and geosocial

networking sites which are mobile apps that allow individuals to connect based on how near they

are geographically to others who use the same geosocial app (Fox & Warber, 2014; Hall, 2014;

Sprecher, 2009). People are also using the internet to create new patterns of courtship and partner

selection (O'Sullivan, 2015). These shifts away from more conventional "offline" dating and

toward using the internet to meet dating partners may have ramifications that are not yet fully

realized (see Bogle, 2008). Regardless of any unknown consequences, there is something about

dating sites and geosocial apps that continues to entice millions of people to give online dating a

try.

Internet dating sites are websites dedicated to using individually crafted personal profiles

to facilitate meetings between strangers who purportedly have the intent of beginning some type

of intimate relationship (Hardey, 2002). The first dating sites began to appear on the internet in

the early 1990s. Hardey (2002), reflecting on the swift rise in internet use, argued that the

internet allows people to come to know one another in a deep way while maintaining their own

personal identity and boundaries. Others, however, worried that reduced face-to-face contact

would create isolation and loneliness (Zubof, 1991). Some studies began to show that people

who used the internet reported more real life interactions with family and romantic partners than

those who did not (Cooper & Sportolari, 1997; Raney, 2000), but that internet dating had both

positive and negative effects on romantic outcomes (Finkel, Eastwick, Karney, Reis, & Sprecher,

2012). Dating sites, such as Match.com, reportedly rely on sophisticated algorithms to match

people with similar personalities and interests. Other dating sites match people based on very

specific factors such as occupation (eg. farmersonly.com), religions (e.g. christianmingle.com), or even a specific diet (e.g. veggieconnection.com which caters to people who eat a vegan diet). Regardless of methods, traditional dating sites tend to focus on compatibility between partners as the primary standard for which users get matched to one another.

Unlike traditional dating sites, geosocial apps do not connect people based on how well two people "match" based on profiles they create. Instead geosocial apps allow users to self-select potential matches by looking at brief profiles. Early geosocial apps, such as Grindr, began with the introduction of mobile internet technology, and were first used in populations of men who have sex with men. Geosocial apps became popular within this group because they helped men find other men who were interested in having casual sex encounters without the difficulty or embarrassment of trying to discern if another man was interested in same-sex intimacy (Miller, 2015). More recently, geosocial apps have been made to appeal to people of various sexual orientations and are used for more reasons than just casual sex. Dozens of these apps have become available in recent years with varying levels of popularity. Tinder, for example, is a free and increasingly popular geosocial app which processes twenty-six million matches each day while users "swipe" an average of 1.6 billion times daily (Tinder, 2015). If any given user of a geosocial app such as Tinder has the potential for multiple matches per week, the stakes may seem relatively low for trying to persuade any individual match to flirt, meet up in real life, or date.

Indeed, some people may seek out geosocial apps for the purpose of managing uncertainty that is often associated with trying to impress and engage with an attractive person face-to-face (Corriero & Tong, 2016). People may be choosing to use geosocial apps because they feel it is easier to interact with a smartphone screen than with a person in front of them. In

addition to controlling the environment when meeting others virtually, Suler (2005) explained that people interact differently online than they would typically interact with others face-to-face. Factors that do not exist in face-to-face communication like anonymity and asynchronicity create what researchers have called the Online Disinhibition Effect, which may dramatically influence online behavior (Suler, 2005). While online, people may become more open, honest and genuine; however, online disinhibition may also empower people to behave in vulgar, rude, or threatening ways (Suler, 2005). For example, the effects of online disinhibition may lead individuals to pursue sexual topics more aggressively when chatting online than they would face-to-face. In addition to the potential effects of online disinhibition, online dating is fundamentally different from conventional offline dating. Finkel et al. (2012) found that online dating offers access to a larger number of potential romantic partners, has altered the romantic acquaintance process (i.e., users encounter others via profiles rather than bars, clubs, etc.), and dating platforms provide various matching algorithms for consumers.

Each dating platform facilitates different ways to interact, such as encouraging users to share different types and amounts of personal information in various ways. geosocial apps, such as Tinder, often use interfaces that emphasize profile photos and short personal descriptions to allow users to swipe through other users' profiles rapidly. More traditional dating sites, such as Match.com or OKCupid, have more extensive profiles and facilitate a slower and often more thorough process of vetting potential romantic partners. Once matched, different platforms support specific modes of communication (e.g., texting, email, photo sharing, etc.) between users. Data shows certain modes of electronic communication correlate to various real-life outcomes for people; for example, one study showed that texting may be related to higher numbers of sexual partners and earlier sexual experiences in some populations (Frank, Santurri,

& Knight, 2010). geosocial app platforms like Tinder that use in-app communication similar to text messages may increase the perceived distance from others that contributes to increased online disinhibition which may account for increased sexual risk taking. It may be the case that geosocial app users deliberately communicate via texting to protect themselves from being vulnerable to rejection. Other types of people may seek out dating sites that allow users to transition to modes of communication which may better personalize experiences with other users (eg. audio calls, video chats, long-text formats like email), thus allowing the possibility for deeper connections. Regardless of which platform people use, the majority of geosocial apps and dating sites begin with text-based communication in some form, and in a study on Tinder, Sumter et. al (2017) found that one reason people use dating technology is for the relative ease of communicating with others through texting.

**Why Online?**

Despite the increasing popularity of online dating, the idea that only people who are not able to find romance in "real life" use the internet to find partners persists. However, people may be motivated to meet others online instead of in person for various reasons. Lawson & Leck (2006) qualitatively investigated these motivations and found that people date online to find companionship, to be adventurous, or to fulfill romantic or sexual fantasies. In a study using an exploratory factor analysis, Sumter, Vandenbosch, and Litgenberg (2016) found that love, casual sex, ease of communication, self-worth validation, thrill of excitement, and trendiness were major motivations for people using Tinder. While qualitatively investigating Grindr, Gudelunas (2012) found that men used the geosocial app to find other men to befriend, have casual sex with, or date. Additionally, a motive to use Grindr uncovered in Gudelunas's study (2012) was that some people may enjoy using geosocial apps to check out other people's profile pictures in a way that could be comparable to looking at pornography.

Other motivations for using dating sites and geosocial apps may parallel users' reasons for their general internet use such as to pass time, or avoid responsibility. While the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders was being developed, Block (2008) proposed that Internet Addiction should be included as an independent mental disorder. He argued that due to the potential for excessive use, withdrawal symptoms, increasing tolerance, and negative repercussions on individuals' lives, it had substantial similarities to other addictive substances and behaviors (Block, 2008). In a recent study, David and Cambre (2016) posited that Tinder has elements that are somewhat addictive which contribute to the app's increasing popularity. Since users interact with the app by repeatedly swiping through profiles and perceive other users' appealing photos and chat messages as rewarding, they argued that these behaviors and rewards impact the individual in an addictive way (David & Cambre, 2016). If the interfaces of geosocial app apps are somewhat addictive, using the geosocial app may be rewarding enough in and of itself to be a motivator for people to use the apps even in the absence of any specific desire to meet others.

Other motivating factors related to internet use could be benefits resulting from online disinhibition. As mentioned previously, perhaps online disinhibition may help people avoid feeling awkward or shy as they would when meeting potential partners face-to-face. Because of what Suler (2005) called asynchronicity, individuals have the ability to carefully craft how they appear in images and conversations while online, and thus feel more in control of how their interactions with others will play out (Corriero & Tong, 2016). While some motivations for using the internet to find others have begun to be established, no research to date has shown how motivations may differ between geosocial apps and traditional dating sites.

**Motivations and Methods of Meeting Matter**

Although geosocial apps and dating websites may help users encounter more people than they could potentially meet offline, recent research reports that fewer than half of users of dating websites are seeking long-term commitment, including those who use sites that are designed to match people for long term relationships such as Match.com or OKCupid (Paul, 2014; Rosen, Cheever, Cummings, & Felt, 2008). Although people who begin relationships online have reported feeling less committed to their relationships and that their relationships tend to be less serious compared to those who meet offline (Cornwell & Lundgren, 2001), it remains unclear why relationships started online have these different outcomes. People may be approaching online relationships with different motivations than offline relationships. Furthermore, different dating platforms may entice people who have different types of motives, and the lack of commitment may be greater on one type of platform over another. Cornwell and Lundgren's (2001) finding that relationships tend to be less serious when started online would not be surprising if people who seek out relationships online are not motivated for commitment in the first place.

While the reasons people use different dating platforms are not yet understood, the consequences of people's motivations could impact the way relationships function in society. If, for example, the patterns of courtship that begin online foster less committed unions, this could lead to a number of poor relationship outcomes.  Individuals who enter relationship primarily motivated by sexual opportunity are more likely to have casual sex experiences (Braithwaite, Aaron, Dowdle, Spjut, & Fincham, 2015; Braithwaite, Givens, Brown, Fincham, 2015; Owen & Fincham, 2011; Vanderdrift, Lehmiller & Kelly, 2012) which could lead to unplanned pregnancies and sexually transmitted infections (Centers for Disease Control, 2010). If those who meet online are less interested in committed relationships, the proliferation of online

courtship opportunities could hasten the increase in average at marriage (U.S. Census Bureau, 2011). Higher age at marriage has been shown to reduce the risk of divorce (Rotz, 2016), but also to decrease the birthrate (Dixon, 1971), or to increase the birthrate to unmarried couples or individuals (Popenoe, 2009). Although many dating platforms claim to bring people together by providing users extensive access to information about other people (including relationship status, place of employment, and sexual identity before ever meeting face-to-face) (Fox & Warber, 2014; LeFebvre, Blackburn, & Brody, 2015; Tokunaga, 2010), it remains unclear whether people who meet online are actually motivated to make meaningful connections with romantic partners in the first place.

**Research Questions**

While unique motivations have begun to be identified for individual dating platforms, it is important to determine whether there are differences in what factors motivate people to decide to use geosocial apps over dating sites and vice versa. Motivations for finding potential partners online may lead to important outcomes such as the beginning of long-term relationships, or sexual risk taking. In this study, we seek to determine:

1. What underlying factors motivate people to use geosocial apps and dating sites?

2. Are there broader motivational factors that explain the more specific motivations for geosocial app and dating site use in a succinct way?

3. What differences exist between what motivates users of the different dating platforms?

**Hypotheses**

Based on previous research on motivations for various dating platforms we hypothesize that:

1. Motivations for geosocial app and dating site use can be explained by the desire to find sexual partners, to seek new sexual experiences, to enter into committed relationships, to find excitement, to relax, to stave off boredom, to expand one's options for partners, to overcome shyness, to build one's self-esteem, and to check out others' profiles.

2. For those who use geosocial apps or dating sites, we predict that a desire for amusement will explain the motivations for excitement, to stave off boredom and to check out others' profiles. We also predict that an effort to cope will explain the motivations for relaxation and building one's self esteem, and that seeking new sexual experiences and sexual partners will be explained by a general motivation for sex. Finally, we predict that a motivation to end loneliness will account for not having many dating options and wanting to enter into a romantic relationship.

3. We hypothesize that the motivations of excitement, boredom, and checking out others' profiles be stronger for geosocial apps due to the reward of using the apps in and of themselves.

**Method**

**Participants**

For the present study, a total of 3,175 participants were recruited in various ways. To get a nationally representative sample, Amazon's Mechanical Turk online survey system was used to recruit 33.4% of participants, and ResearchMatch, a service that connects researchers with a pool of people who are matched to participate in many different types of studies with human subjects composed 32.9% of the sample. Another 12% of the sample were recruited through advertisements posted in the city of Rochester, NY and various websites including Tumblr,

eHarmony, and the Grindr App. The final 21.7% of participants were students recruited through

The University of Rochester's SONA system, which gives students course credit for

participating in academic research. Only individuals above 18 years old were included due to the

sensitive nature of some of the items in the survey. Participants recruited through Mechanical

Turk received $.50 for completing the survey. Those recruited through ResearchMatch,

advertisements, or SONA did not receive any monetary compensation, but all participants

received personalized feedback about how they compared to others who took the survey on

various scales.

A total of 3,180 participants completed the survey. Ages ranged from 18-75 years old

with a mean of 29 years old. The median age was 26 years old, and 90% of participants were

under 46 years old. Results from five participants (who reported being under 18 years old) were

dropped. Of the remaining sample, 1,889 participants reported never using a dating site or a

geosocial app in the past two months and were not used in the analyses. The final sample of

"internet daters" used in most analyses contained 1,286 participants. Of this sub-sample, 1,025

had used a geosocial app at least once in the past two months, 655 had used a dating site at least

once in the past two months, and 394 had used both a geosocial app and a dating site within the

last two months.

The final sub-sample used for analyses was 58.9% female, 39.9% male, and 1.2% other.

Reported ethnicities were 76.4% White, 8.7% Black, 7.6% Asian, 4.4% other, 2.1% American

Indian, Alaskan Native, or Pacific Islander, and .8% missing.  Ages in the sub-sample ranged

from 18-68 years old with a mean of 29 years old. The median age was 26 years old, and 90% of

participants were under 44 years old. Although the questions asked about geosocial app and

dating site behavior in the last 2 months, 374 participants -- 29.1% of this sub-sample -- reported being in a relationship for longer than 2 months.

**Measures**

**Means and motivations for finding partners.** To determine which methods of finding partners participants had used, they were asked "IN THE LAST 2 MONTHS…How often did you use geo-social apps (apps that use your location to find other users nearby; e.g., Tinder, Grindr)?" and "IN THE LAST 2 MONTHS…How often did you use social websites (e.g., okcupid, match.com, gay.com, manhunt.com) to find romantic or sexual partners?" Participants answered both of these questions using a 7-point Likert scale ranging from "Never" to "Multiple times a day." Those who reported that they had used a geosocial app at least once were asked a series of questions about their motivations for using the app. Specifically, they were asked "In the last 2 months, I used geosocial apps (e.g., Tinder, Grindr)…" followed by 24 newly created items that were generated to capture 9 primary motivations previously studied in the literature and items to measure being motivated by a lack of other options for dating (see Table 1 for the full list of items and their hypothesized motivations). To measure motivations for using dating websites those who reported using dating sites were asked "In the last 2 months, I used social websites (e.g., okcupid, match.com, gay.com, manhunt.com) …" followed by the same 24 items to capture the same 10 motivations as were used for geosocial apps (Table 1).

**Results**

We predetermined that we would use CFA (confirmatory factor analysis) informed by established theory on motivations to test the differences in motivations for both geosocial apps and dating sites. Our aim was to compare two identical models using data from the separate motivation items from geosocial app and dating sites to determine if motivating factors differ

between the different types of dating platforms. Our planned analyses of each category of online

platforms followed the following steps.

First, we planned to determine if the individual motivation items captured our 10

hypothesized primary motivation factors. Specifically, the ten motivating factors tested were

desires to find sexual partners, to seek new sexual experiences, to enter into committed

relationships, to find excitement, to relax, to stave off boredom, to expand one's options for

partners, to overcome shyness, to build one's self-esteem, and to check out others' profiles.

Second, we would attempt to fit a second model that reduced the number of primary

motivations to five main factors to increase ease of interpretation. The higher order factors would

be informed by research and adjusted, if necessary, based on how well the model fits the data.

Finally, after doing the first two steps separately for the motivation items for geosocial

apps and dating sites, we would compare the two final models to one another. All analyses were

run using STATA13 software (StataCorp, 2015).

**Geosocial App Motivations**

   **Establishing a first-order factor models for geosocial app.** Before we attempted to run

any models, we first examined the correlations of all geosocial app motivation items for

indications that a CFA with 10 hypothesized primary factors would likely work for our data (see

Table 2). With only one exception (the item "I like to experience new people" which only

correlated between .33 and .44), items that were planned to represent the first order latent

variables correlated well with one another (correlations ranged from .60 to .89).

Since the correlations provided evidence for the pattern we expected, we ran a CFA on

the geosocial app motivation items with the hypothesized ten factors as latent variables. Prior to

running the model, we confirmed that it would be identified. One item, "to experience new

people," had a very low factor loading compared to the others ($\beta$=.49), so the item was dropped

and the model was run again (see Figure 1). Each item's factor loadings were significant and

strong (standardized loadings ranged from .74 to .96). model fit was good for all indicators of

models fit except for chi square, which is overly sensitive to sample size ($\chi^2$(185) =515.84

p<.001; RMSEA=.044; CFI=.98; TLI=.97; SRMR=.030). Since the model with ten motivating

variables fit the data for geosocial app motivations well, our hypothesis that there would be ten

primary underlying motives for using geosocial apps was supported.

     **Reducing factors with second-order variables for geosocial app.** We examined the

factor loadings and correlations from the ten variable solution to determine if our hypothesized

higher order solution would be feasible, and thus simplify the motivations to fewer variables for

increased ease of interpretation. We found that the nine first order variables we planned to

combine to create a model with four second-order latent variables were highly correlated (see

Figure 2 for more detail on how variables would be combined). As predicted, the first order

variable that captured a motivation to overcome shyness was not strongly correlated with any

other variable (highest correlation =.48), so we did not consider it for use in creating a second

order factor. Likely due to multicollinearity of two or more factor loadings, there were problems

with empirical identification for this model that resulted in it failing to converge, so another

solution was necessary.

     **Deconstructing the geosocial app models to find an identified model.** In an attempt to

create a solution that captured the same theoretical reasoning as the model shown in Figure 2,

five separate models were used as a deconstructed version of the larger one which then informed

the construction of a new, identified, model that examined all of the motivations simultaneously.

     **Motivated by sex.** The model inspecting the two sex-related variables had factor

loadings that were uninterpretable due to the factor loadings in the structural portion of the

models not being significant (see Figure 3). This suggested that the high correlations between the new sexual experiences variables and the new sexual partners variables were likely to better load onto a single first-order latent factor rather than onto a second-order factor through two distinct first-order factors.

**Motivated to end loneliness.** We created a model to find a potential second-order variable representing a desire to not be lonely which would account for the those who feel like they lack options for dating and want to be in a committed relationship. However, this second-order variable had similar problems as the sexually motivated model. The factor loadings in the structural part of the models were not significant and could not be interpreted (see Figure 4). Just as we did for the sexually motivated variable, we attempted to use a model that took the item level motivational variables to explain the loneliness variable directly, but it had very poor fit ($\chi 2(5)1494$, $p>.001$; RMSEA=.546, 95% CI [.522, .569]; CFI=.613; TLI=.225; SRMR=.173) suggesting that the motivations to expand dating options and to enter into a relationship should remain separate factors that do not load onto a higher-order factor.

**Motivated to find amusement.** A second-order variable that would account for a desire to find simple amusement was run combining the motivations to relax, to stave off boredom and to seek excitement. Multicollinearity of the variables may have resulted in the models not being able to converge, but once removing the variable representing the desire to avoid boredom from contributing to the second-order variable, the model had good model fit ($\chi^2(11) =33.66$; RMSEA=.046, 95% CI [.029,.064]; CFI=.995; TLI=.99; SRMR=.019; see Figure 5). The variable representing a motivation to avoid boredom marginally covaried with the variable representing a desire for amusement, indicating that if identification problems were resolved, it may be able to load onto the second-order variable once combined with the other models.

**Motivated to cope with difficult emotions.** The last of the smaller models attempted to capture a motivation to deal with difficult emotions. A second-order variable combining a desire to boost one's self esteem and to relax. To increase degrees of freedom (see Figure 6) while also allowing for a theoretical bridge between this model and the model with the model explaining a desire for amusement, we included the latent variable representing a desire to avoid boredom. While the model showed that the correlations between seeking a boost in self-esteem and relaxing would likely merit the creation of a second-order variable, it was just identified and did not allow for an estimate of model fit.

**The final higher-order model for geosocial app use.** Once the deconstructed models had all been analyzed, it appeared that there would be six general factors (e.g. Desires for sex, relationships, increased dating options, amusement, cope with difficult emotions, and feeling less shy) to explain motivations for using geosocial apps. Upon inspecting the factors that generated the variable that explain a desire for amusement and to cope with difficult emotions, it was determined that they had a theoretical connection for a third-order variable that would explain a motivation to use geosocial app for the enjoyment that it brings in and of itself. We included this third-order factor to reduce the final geosocial app motivation model to having five distinct motivation variables (see Figure 7). The model was identified, had good fit ($\chi2(213) = 781.31$, $p<.001$; RMSEA= .053, 95% CI [.49, .57]; CFI=.97; TLI=.96; SRMR=.049) and all factor loadings were found to be significant.

The good fit and significant factor loadings of this final model partially supported our hypothesis that there would be five higher-order factors that explain the 10 primary latent variables. Specifically, we found the hypothesized motivations for seeking amusement which explained the lower-order motivations of seeking excitement, avoiding boredom, and a desire to

check out profiles, and we found a variable explaining a motivation to cope with difficult

emotions that explains the motivations to relax and to boost self-esteem. Since the desires to

relax and boost self-esteem covaried well they combined to make an unplanned third-order

variable that explains a motivation to be entertained. We did not find our hypothesized second-

order loneliness factor that explained the motivations to expand dating options and to enter into a

relationship.

**Dating Sites Motivations**

The process to find a CFA models for dating site motivations that matched that of

geosocial app motivations followed the same process as previously outlined, except we were able

to skip certain steps since we knew what the final models should look like.

**Establishing a first-order factor model for dating sites.** We examined the correlations

between dating site motivation items which had high correlations between items intended to

generate ten primary factors (correlations ranged from .72 to .91) with the exception of the

parallel "to experience new people" item for dating sites (correlations of .43; see Table 3).

Next we ran a CFA on the dating site motivation items with the same ten factors as used

for the first geosocial app model, omitting the "to experience new people" item (see Figure 8).

Factor loadings were strong (standardized loadings ranged from .84 to .98) and model fit was

good ($\chi 2(185) = 445.23$, p<.001; RMSEA=.048, 95% CI [.042, .054]; CFI=.98; TLI=.97;

SRMR=.027). Since the model had good fit, our first hypothesis that there would be ten primary

latent factors that described the motivations for online dating was supported for dating sites.

**The final higher-order model for dating sites.** Next we used the same model used for

geosocial apps, but with the dating site motivation questions. The model did not fit the data and

produced no interpretable results. Although we wanted identical models, we determined that the

third-order variable explaining a desire for entertainment that applied to geosocial apps may not

apply since traditional dating sites do not involve the same type of rapid swiping and excitement that geosocial apps have. We ran the models one more time without the third order variable and got interpretable results. The final higher-order model for dating sites (see Figure 9) had moderate to good fit ($\chi2(210)$ =644.73 p<.001; RMSEA=.058, 95% CI [.053, .064]; CFI=.964; TLI=.957; SRMR=.048). This finding partially supported our second hypothesis since we found higher-order factors explaining desires to be amused and to cope with difficult emotions. Like the analysis of geosocial apps, no higher-order factor explaining a desire to not feel lonely was found for users of dating sites. Unlike geosocial apps we were unable to combine motivations to be amused and to cope with difficult emotions into a third-level factor indicating that these motivations behave somewhat differently for those on dating sites.

## Discussion

The landscape of online dating continues to change with ever increasing numbers of users on dating platforms to find others. Although previous studies (e.g. Gudelunas, 2012; Lawson & Leck, 2006; Sumter, Vandenbosch, & Litgenberg, 2016) have examined motivations for using specific geosocial apps and motivations for using any type of online dating, this study is the first to directly compare and contrast the differences between the motivations to use dating websites and geosocial apps. We supported the claims of these previous researchers who suggest the motives to find sexual partners, seek new sexual experiences, enter into committed relationships, find excitement, relax, stave off boredom, expand one's options for partners, overcome shyness, build one's self-esteem, and check out others' profiles apply to both dating sites and geosocial apps.

A strength of this study is that in addition to supporting previous research, we generated models that explain motivations in a more parsimonious way allowing for easier interpretation of

individual user's motivations for using online dating. Our results show different higher-order motivations that best explain geosocial app use compared to dating site use. Specifically, seeking entertainment appears to motivate people to use geosocial apps while the same variable does not explain dating site use. All of these findings together have many implications for developers of dating platforms, people looking for partners online, and future research and practice.

**Implications for Developers and Users of Dating Sites**

Dating sites have used algorithms to help people find like-minded partners since their inception (Paul, 2014). Although these sites entice millions of people to use them, assessing motivations by using the items we developed for this study may help match people with similar motivations in addition to hobbies and interests already built into the algorithms. This would help prevent matching users seeking long-term relationships with those looking for casual sex. This could lead to more users who are satisfied with their online dating experiences and increased revenues for internet sites.

**Implications for Developers and Users of Geosocial Apps**

Our finding that there is a broad overarching motivation that may encourage many people to use geosocial apps simply for entertainment supports and expands on the theory posited by David and Cambre (2016) that geosocial apps may have an addictive element that is rewarding in and of itself. The addictive quality of geosocial apps likely benefits developers in the short term, but may present problems over time. Users who use geosocial apps primarily for entertainment may match with users who desire deeper connection with others. Users who want to meet people for sex or relationships may become disenfranchised with geosocial apps if they are mostly matching with users who have no interest to meet in person. This problem may worsen if people who seek entertainment use the apps most frequently which could be the case if the apps are truly addictive.

Developers of geosocial apps may consider marketing their apps specifically to people who share similar clusters of motivations. Stereotypes about the type of people who use geosocial apps exist which may not match what companies advertise (Gudelunas, 2012). Marketing an app in a way that matches specific motivations its users have for using the app will help new users find the platform that match their own reasons for downloading the app.

**Limitations and Implications for Research and Practice**

The motivational models we developed to explain why people use dating platforms have many promising areas for future research. Continued research can further refine and validate the models in the present study. An area to focus on to improve upon our models is to address problems with identification which can be handled by developing more items to measure the motivational factors we found. Doing so may strengthen the models and allow for greater reliability and predictive power. Other studies could link the motivational factors we found to other established measures of mental health and personality such as those for depression, self-esteem, or sensation seeking. A longitudinal design using the motivational models may also provide a powerful tool to predict other real life outcomes such as sexual risk behavior, marriages, or divorces over time.

Since the internet presents an ever-changing target, it is critical that clinicians remain up to date on the most recent trends in technology. Understanding various motivations for using dating platforms may help inform clinicians who work with populations who have internet, relationship, or sexual concerns. Knowing what type of motivations are common for the dating platforms people use may help clinicians help individuals, couples, or families seeking psychotherapy to use or avoid certain platforms based on what the clients' needs and desires are.

**Conclusion**

Motivations that lead people to date online vary between platforms and may be indicators of important outcomes in romantic and sexual socialization. For example, it is likely that depending on an individual's motivations for engaging in online dating, they could be at increased risk for STIs, unplanned pregnancies, legal unions, romantic disappointment, or other outcomes. This study presents an important step toward understanding which motivations affect people's choice of platform, which in turn could lead to discovering how people's online dating behaviors will translate into significant real-life outcomes.

References

Block, J. J. (2008). Issues for DSM-V: Internet addiction. *The American Journal Of Psychiatry*, *165*(3), 306-307. doi:10.1176/appi.ajp.2007.07101556

Braithwaite, S. R., Aaron, S. C., Dowdle, K. K., Spjut, K., & Fincham, F. D. (2015). Does pornography consumption increase participation in friends with benefits relationships? *Sexuality & Culture*, *19*(3), 513-532.  DOI 10.1007/s12119-015-9275-4

Braithwaite, S. R., Givens, A., Brown, J., & Fincham, F. D. (2015).  Is pornography consumption associated with condom use and intoxication during hookups? *Culture, Health & Sexuality, 17*(10). 1-19. DOI: 10.1080/13691058.2015.1042920

Center for Disease Control and Prevention. (2010). Youth Risk Behavior Surveillance-United States, 2009. *MMWR* .

Cooper, A., & Sportolari, L. (1997). Romance in cyberspace: Understanding online attraction. *Journal of Sex Education and Therapy*, *22*(1), 7-14.

Cornwell, B., & Lundgren, D. C. (2001). Love on the Internet: Involvement and misrepresentation in romantic relationships in cyberspace vs. realspace. *Computers in Human Behavior*, *17*(2), 197-211.

Corriero, E. F., & Tong, S. T. (2016). Managing uncertainty in mobile dating applications: Goals, concerns of use, and information seeking in Grindr. *Mobile Media & Communication,4*(1), 121-141. doi:10.1177/2050157915614872

David, G., & Cambre, C. (2016). Screened intimacies: Tinder and the swipe logic. *Social Media Society, 2*(2). 1-11. DOI:10.1177/2056305116641976

Dixon, R. B. (1971). Explaining cross-cultural variations in age at marriage and proportions never marrying. *Population Studies*, *25*(2), 215-233.

Finkel, E. J., Eastwick, P. W., Karney, B. R., Reis, H. T., & Sprecher, S. (2012). Online dating: A critical analysis from the perspective of psychological science. *Psychological Science in the Public Interest, 13*(1), 3-66.

Fox, J., & Warber, K. M. (2014). Social networking sites in romantic relationships: Attachment, uncertainty, and partner surveillance on Facebook. *Cyberpsychology, Behavior, and Social Networking , 17* (1). 1-5. DOI: 10.1089/cyber.2012.0667

Frank, S., Santurri, L., & Knight, K. (2010, November 9). *Hyper-texting and hyper-networking: A new health risk category for teens?* Paper presented at the 138th Annual Conference of the American Public Health Association, Denver, CO.

Gudelunas, D. (2012). There's an app for that: The uses and gratifications of online social networks for gay men. *Society and Culture, 16*(4). 347-365. DOI:10.1007/s12119–012–9127–4

Hall, J. A. (2014). First comes social networking, then comes marriage? Characteristics of Americans married 2005-2012 who met through social networking sites. *Cyberpsychology, Behavior, and Social Networking , 17*(5). 322-326. DOI: 10.1089/cyber.2013.0408

Hardey, M. (2002). Life beyond the screen: Embodiment and identity through the internet. *The Sociological Review*, *50*(4). 570–585. DOI: 10.1111/1467-954X.00399

Lawson, H. M., & Leck, K. (2006). Dynamics of internet dating. *Social Science Computer Review,24*(2), 189-208. doi:10.1177/0894439305283402

LeFebvre, L., Blackburn, K., & Brody, N. (2015). Navigating romantic relationships on Facebook: Extending the relationship dissolution model to social networking environments. *Journal of Social and Personal Relationships , 32* (1), 78-98.

Miller, B. (2015). 'They're the modern-day gay bar': Exploring the uses and gratifications of

      social networks for men who have sex with men. *Computers In Human Behavior*, *51*(Pt

      A), 476-482. doi:10.1016/j.chb.2015.05.023

O'Sullivan, L. F. (2015). High texting rates mediate oral sex and intercourse experience in a

      longitudinal study of high school students. *Computers in Human Behavior*, *49*, 526-531.

Owen, J., & Fincham, F. D. (2011). Effects of gender and psychosocial factors on "friends with

      benefits" relationships among young adults. *Archives of Sexual Behavior*, *40*(2), 311-320.

Paul, A. (2014). Is online better than offline for meeting partners? Depends: Are you looking to

      marry or to date? *Cyberpsychology, Behavior, and Social Networking*, *17*(10), 664-667.

Popenoe, D. (2009). Cohabitation, marriage, and child wellbeing: A cross-national perspective.

      *Society*, *46*(5), 429-436.

Rosen, L. D., Cheever, N. A., Cummings, C., & Felt, J. (2008). The impact of emotionality and

      self-disclosure on online dating versus traditional dating. *Computers in Human Behavior*,

      *24*(5), 2124-2157.

Rotz, D. (2016). Why have divorce rates fallen?: The role of women's age at marriage. *Journal

      of Human Resources*, *51*(4). 961-1002. DOI: 10.3368/jhr.51.4.0214-6224R

Smith, E. (2015, June 21). Tinder chief boasts app's 8 billion matches. Retrieved January 13,

      2017, from http://pagesix.com/2015/06/21/tinder-chief-boasts-apps-8-billion-matches/

Sprecher, S. (2009). Relationship initiation and formation on the internet. *Marriage & Family

      Review,45*(6-8), 761-782. doi:10.1080/0149492090322435

StataCorp. (2015). *Stata Statistical Software: Release 14*. College Station, TX: StataCorp LP.

Suler, J. (2005). The online disinhibition effect. *International Journal of Applied Psychoanalytic

      Studies*, *2*(2), 184-188.

Sumter, S. R., Vandenbosch, L., & Ligtenberg, L. (2017). Love me Tinder: Untangling emerging

adults' motivations for using the dating application Tinder. *Telematics And Informatics*,

*34*(1). 67-78. doi:10.1016/j.tele.2016.04.009

Tinder. (2015, November 11). *You Asked, We Listened: The Best Tinder Experience Yet*.

Retrieved December 19, 2015, from http://blog.gotinder.com/: http://blog.gotinder.com/

Tokunaga, R. S. (2011). Social networking site or social surveillance site? Understanding the use

of interpersonal electronic surveillance in romantic relationships. *Computers in Human*

*Behavior*, *27*(2), 705-713.

U.S. Census Bureau. (2011). *Estimated median age at first marriage, by sex: 1890 to the present.*

Retrieved from http://www.census.gov/hhes/families/data/marital.html

Vanderdrift, L. E., Lehmiller, J. J., & Kelly, J. R. (2012). Commitment in friends with benefits

relationships: Implications for relational and safe-sex outcomes. *Personal Relationships*,

*19*(1), 1-13.

Zuboff, S. (1991). Dilemmas of transformation in the age of the smart machine. In M. Welton

(Ed.), *Toward development work: The workplace as a learning environment* (pp. 81-90).

Victoria, Australia: Deakin University Printery.

Table 1

*Items For Geosocial App And Dating Site Motivations With Proposed Latent Variables.*

| Item# | Item Text | Latent Variable |
|---|---|---|
| 1 | in hopes of finding a romantic partner | Relationship |
| 2 | to find someone to date | |
| 3 | to find a long-term relationship | |
| 4 | to find someone to hook-up (engage in sexual activity) with | New Sex Partners |
| 5 | because I want to have a one-night stand | |
| 6 | to find new sex partners | |
| 7 | to satisfy my sexual curiosity | New Sex Experiences |
| 8 | to experience new people | |
| 9 | to try new sexual activities | |
| 10 | to pass the time, especially when I am bored | Boredom |
| 11 | when I have nothing better to do | |
| 12 | because it's exciting | Excitement |
| 13 | because it gives me a kick | |
| 14 | because it's fun | |
| 15 | to check out other people's profiles | Check out |
| 16 | to check out other people's pictures | |
| 17 | because I am more open online than I am offline | Openness |
| 18 | because I am less shy online than I am offline | |
| 19 | to gain more self confidence | Self-Esteem |
| 20 | to feel better about myself | |
| 21 | to relax | Relaxation |
| 22 | to unwind | |
| 23 | because there isn't much of a dating scene where I live | Options |
| 24 | because there aren't many other options where I live | |

Table 2

*Correlations Of Geosocial App Motivation Items.*

| | romance | date | relation | hookup | one-night | partner | curiosity | new exp. | activities | bored | whim | exciting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| romance | 1.000 | | | | | | | | | | | |
| date | 0.789 | 1.000 | | | | | | | | | | |
| relation | 0.798 | 0.763 | 1.000 | | | | | | | | | |
| hookup | -0.200 | -0.148 | -0.259 | 1.000 | | | | | | | | |
| one-night | -0.259 | -0.231 | -0.283 | 0.788 | 1.000 | | | | | | | |
| partner | -0.212 | -0.166 | -0.303 | 0.824 | 0.775 | 1.000 | | | | | | |
| curiosity | -0.259 | -0.220 | -0.342 | 0.706 | 0.682 | 0.720 | 1.000 | | | | | |
| new exp. | -0.020 | -0.013 | -0.070 | 0.381 | 0.312 | 0.353 | 0.430 | 1.000 | | | | |
| activities | -0.223 | -0.180 | -0.275 | 0.754 | 0.751 | 0.771 | 0.769 | 0.434 | 1.000 | | | |
| bored | -0.089 | -0.053 | -0.099 | 0.136 | 0.117 | 0.076 | 0.204 | 0.304 | 0.125 | 1.000 | | |
| whim | -0.098 | -0.060 | -0.112 | 0.125 | 0.139 | 0.098 | 0.210 | 0.255 | 0.126 | 0.885 | 1.000 | |
| exciting | -0.191 | -0.128 | -0.163 | 0.421 | 0.388 | 0.359 | 0.469 | 0.422 | 0.464 | 0.404 | 0.400 | 1.000 |
| kick | -0.277 | -0.239 | -0.263 | 0.422 | 0.450 | 0.383 | 0.542 | 0.377 | 0.470 | 0.415 | 0.425 | 0.720 |
| fun | -0.164 | -0.137 | -0.167 | 0.345 | 0.348 | 0.313 | 0.428 | 0.361 | 0.394 | 0.417 | 0.408 | 0.727 |
| profiles | -0.011 | 0.020 | 0.000 | 0.210 | 0.162 | 0.181 | 0.257 | 0.327 | 0.211 | 0.335 | 0.330 | 0.431 |
| pictures | -0.086 | -0.028 | -0.037 | 0.265 | 0.224 | 0.220 | 0.276 | 0.337 | 0.236 | 0.324 | 0.332 | 0.437 |
| open | -0.108 | -0.054 | -0.051 | 0.302 | 0.271 | 0.228 | 0.360 | 0.310 | 0.305 | 0.203 | 0.213 | 0.340 |
| shy | -0.092 | -0.035 | -0.041 | 0.248 | 0.210 | 0.182 | 0.314 | 0.315 | 0.251 | 0.205 | 0.220 | 0.336 |
| confident | -0.045 | -0.035 | -0.034 | 0.240 | 0.266 | 0.225 | 0.387 | 0.267 | 0.292 | 0.231 | 0.253 | 0.424 |
| feel good | -0.050 | -0.051 | -0.039 | 0.262 | 0.308 | 0.231 | 0.379 | 0.275 | 0.306 | 0.255 | 0.264 | 0.430 |
| relax | -0.157 | -0.139 | -0.127 | 0.310 | 0.356 | 0.281 | 0.408 | 0.281 | 0.358 | 0.344 | 0.364 | 0.509 |
| unwind | -0.126 | -0.117 | -0.114 | 0.325 | 0.362 | 0.287 | 0.410 | 0.313 | 0.363 | 0.370 | 0.391 | 0.551 |
| scene | 0.190 | 0.206 | 0.214 | 0.047 | 0.054 | 0.044 | 0.075 | 0.179 | 0.013 | 0.066 | 0.098 | 0.109 |
| options | 0.188 | 0.195 | 0.213 | 0.008 | 0.026 | 0.010 | 0.052 | 0.189 | -0.014 | 0.067 | 0.096 | 0.088 |

Table 2 (cont.)
*Correlations Of Geosocial App Motivation Items.*

|  | kick | fun | profiles | pictures | open | shy | confident | feel-good | relax | unwind | scene | options |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| kick | 1.000 | | | | | | | | | | | |
| fun | 0.738 | 1.000 | | | | | | | | | | |
| profiles | 0.408 | 0.506 | 1.000 | | | | | | | | | |
| pictures | 0.394 | 0.483 | 0.801 | 1.000 | | | | | | | | |
| open | 0.392 | 0.341 | 0.282 | 0.330 | 1.000 | | | | | | | |
| shy | 0.363 | 0.333 | 0.272 | 0.312 | 0.877 | 1.000 | | | | | | |
| confident | 0.477 | 0.415 | 0.228 | 0.251 | 0.491 | 0.516 | 1.000 | | | | | |
| feel good | 0.480 | 0.435 | 0.235 | 0.257 | 0.475 | 0.505 | 0.896 | 1.000 | | | | |
| relax | 0.546 | 0.513 | 0.342 | 0.374 | 0.402 | 0.362 | 0.543 | 0.596 | 1.000 | | | |
| unwind | 0.558 | 0.525 | 0.360 | 0.377 | 0.394 | 0.376 | 0.534 | 0.570 | 0.906 | 1.000 | | |
| scene | 0.043 | 0.050 | 0.170 | 0.139 | 0.178 | 0.153 | 0.180 | 0.169 | 0.170 | 0.220 | 1.000 | |
| options | 0.029 | 0.051 | 0.154 | 0.128 | 0.185 | 0.178 | 0.151 | 0.168 | 0.135 | 0.194 | 0.906 | 1.000 |

Table 3
*Correlations Of Dating Site Motivation Items*

|  | romance | date | relation | hookup | one-night | partner | curiosity | new exp. | activities | bored | whim | exciting |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| romance | 1.000 | | | | | | | | | | | |
| date | 0.804 | 1.000 | | | | | | | | | | |
| relation | 0.786 | 0.781 | 1.000 | | | | | | | | | |
| hookup | 0.025 | 0.030 | -0.107 | 1.000 | | | | | | | | |
| one-night | -0.084 | -0.088 | -0.158 | 0.792 | 1.000 | | | | | | | |
| partner | -0.008 | -0.020 | -0.135 | 0.835 | 0.806 | 1.000 | | | | | | |
| curiosity | -0.039 | -0.054 | -0.128 | 0.646 | 0.642 | 0.651 | 1.000 | | | | | |
| new exp. | 0.144 | 0.180 | 0.062 | 0.390 | 0.328 | 0.391 | 0.441 | 1.000 | | | | |
| activities | 0.003 | -0.006 | -0.063 | 0.700 | 0.717 | 0.733 | 0.712 | 0.385 | 1.000 | | | |
| bored | -0.049 | -0.015 | -0.101 | 0.103 | 0.093 | 0.083 | 0.185 | 0.277 | 0.075 | 1.000 | | |
| whim | -0.004 | 0.020 | -0.068 | 0.081 | 0.090 | 0.065 | 0.134 | 0.256 | 0.040 | 0.816 | 1.000 | |
| exciting | 0.100 | 0.090 | 0.027 | 0.392 | 0.365 | 0.351 | 0.456 | 0.398 | 0.399 | 0.269 | 0.259 | 1.000 |
| kick | -0.003 | -0.007 | -0.068 | 0.341 | 0.332 | 0.305 | 0.380 | 0.299 | 0.305 | 0.381 | 0.401 | 0.597 |
| fun | 0.058 | 0.057 | 0.001 | 0.310 | 0.279 | 0.278 | 0.334 | 0.339 | 0.273 | 0.371 | 0.362 | 0.632 |
| profiles | 0.113 | 0.116 | 0.057 | 0.211 | 0.205 | 0.195 | 0.268 | 0.286 | 0.186 | 0.317 | 0.340 | 0.460 |
| pictures | 0.112 | 0.107 | 0.071 | 0.230 | 0.204 | 0.220 | 0.272 | 0.287 | 0.177 | 0.298 | 0.302 | 0.443 |
| open | 0.172 | 0.152 | 0.150 | 0.214 | 0.258 | 0.218 | 0.294 | 0.220 | 0.257 | 0.125 | 0.148 | 0.316 |
| shy | 0.142 | 0.136 | 0.141 | 0.167 | 0.210 | 0.176 | 0.271 | 0.205 | 0.206 | 0.131 | 0.133 | 0.247 |
| confident | 0.113 | 0.090 | 0.078 | 0.200 | 0.210 | 0.187 | 0.292 | 0.219 | 0.232 | 0.148 | 0.173 | 0.331 |
| feel good | 0.090 | 0.096 | 0.059 | 0.204 | 0.210 | 0.194 | 0.287 | 0.212 | 0.232 | 0.164 | 0.182 | 0.364 |
| relax | 0.058 | 0.039 | 0.028 | 0.256 | 0.310 | 0.279 | 0.345 | 0.244 | 0.317 | 0.225 | 0.235 | 0.473 |
| unwind | 0.056 | 0.067 | 0.044 | 0.239 | 0.293 | 0.285 | 0.324 | 0.255 | 0.304 | 0.234 | 0.233 | 0.443 |
| scene | 0.285 | 0.293 | 0.291 | 0.190 | 0.163 | 0.167 | 0.176 | 0.254 | 0.192 | 0.065 | 0.096 | 0.187 |
| options | 0.288 | 0.293 | 0.300 | 0.163 | 0.142 | 0.151 | 0.143 | 0.230 | 0.177 | 0.057 | 0.083 | 0.179 |

Table 3 (cont.)
*Correlations Of Dating Site Motivation Items.*

|  | kick | fun | profiles | pictures | open | shy | confident | feel-good | relax | unwind | scene | options |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| kick | 1.000 | | | | | | | | | | | |
| fun | 0.721 | 1.000 | | | | | | | | | | |
| profiles | 0.484 | 0.551 | 1.000 | | | | | | | | | |
| pictures | 0.429 | 0.493 | 0.836 | 1.000 | | | | | | | | |
| open | 0.253 | 0.269 | 0.309 | 0.317 | 1.000 | | | | | | | |
| shy | 0.184 | 0.216 | 0.271 | 0.272 | 0.835 | 1.000 | | | | | | |
| confident | 0.328 | 0.325 | 0.255 | 0.236 | 0.438 | 0.403 | 1.000 | | | | | |
| feel good | 0.360 | 0.332 | 0.275 | 0.261 | 0.431 | 0.379 | 0.867 | 1.000 | | | | |
| relax | 0.460 | 0.500 | 0.399 | 0.375 | 0.382 | 0.338 | 0.508 | 0.545 | 1.000 | | | |
| unwind | 0.432 | 0.479 | 0.364 | 0.346 | 0.355 | 0.319 | 0.473 | 0.509 | 0.871 | 1.000 | | |
| scene | 0.118 | 0.151 | 0.237 | 0.214 | 0.270 | 0.276 | 0.233 | 0.218 | 0.257 | 0.273 | 1.000 | |
| options | 0.109 | 0.152 | 0.204 | 0.178 | 0.276 | 0.287 | 0.249 | 0.235 | 0.261 | 0.267 | 0.893 | 1.000 |
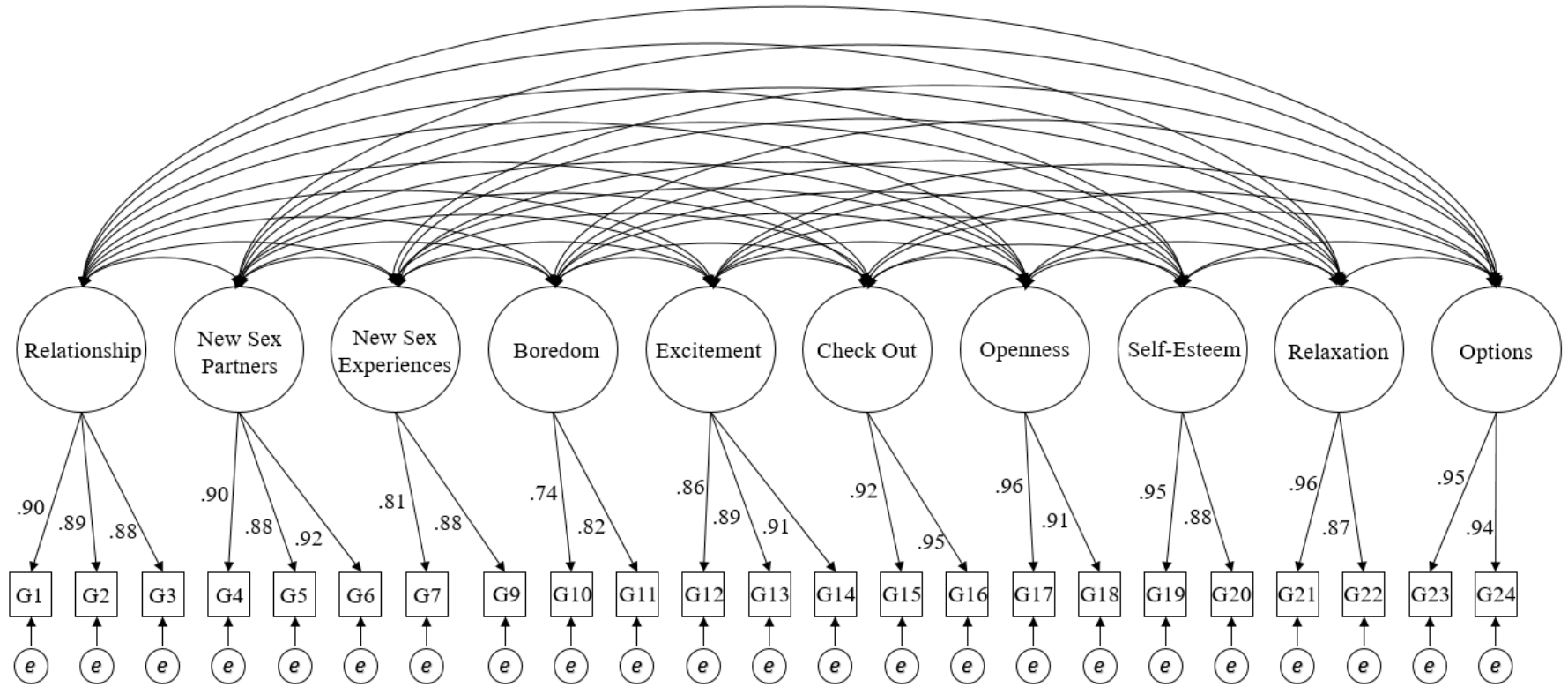
*Figure 1.* Geosocial 10 factor first order model.
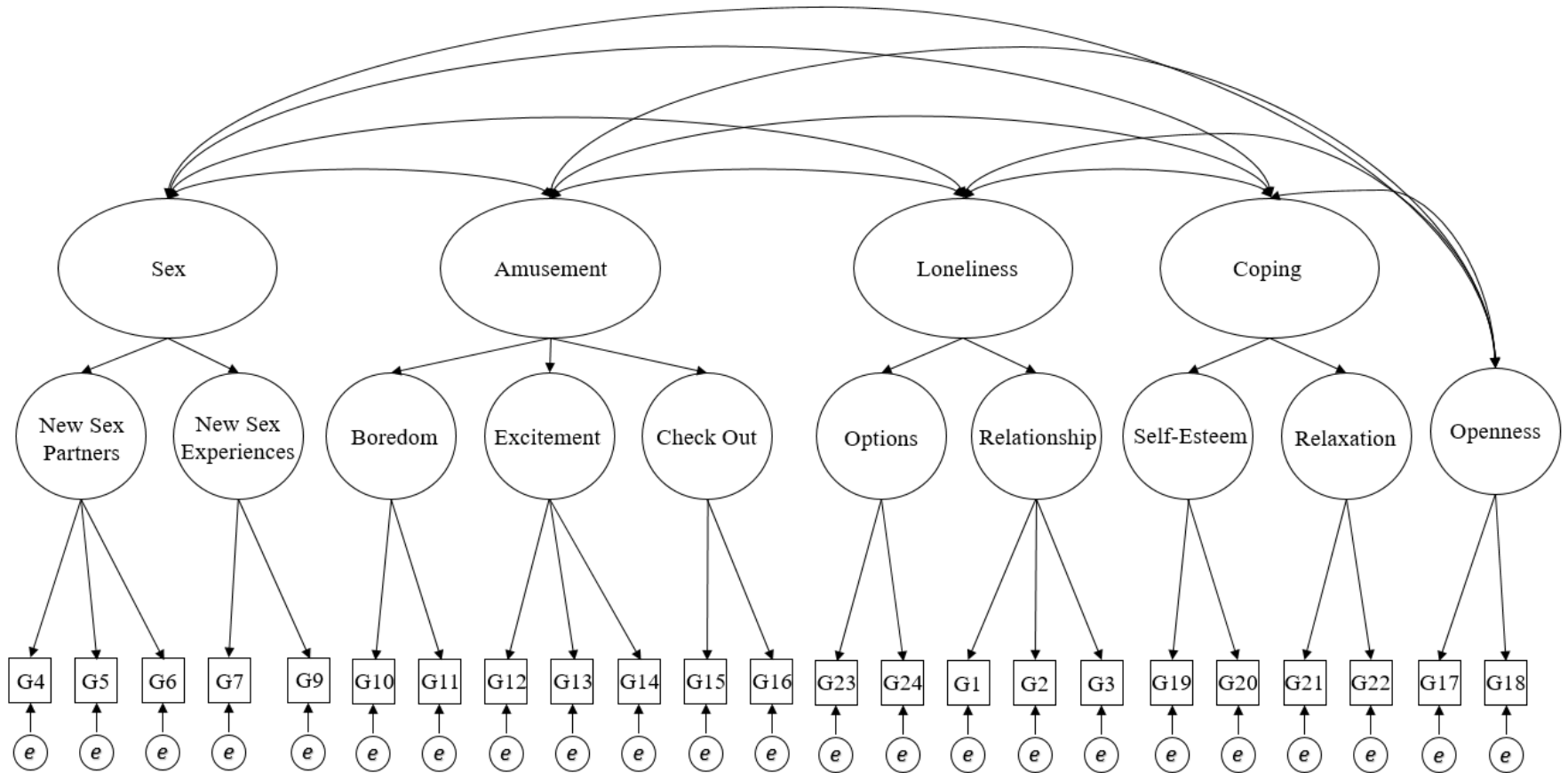
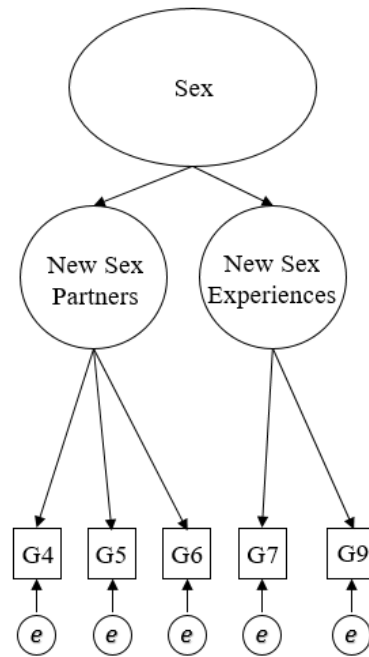*Figure 2.* Proposed higher-order for geosocial app motivations.

*Figure 3.* Deconstructed sexual motive higher-order model for geosocial app.
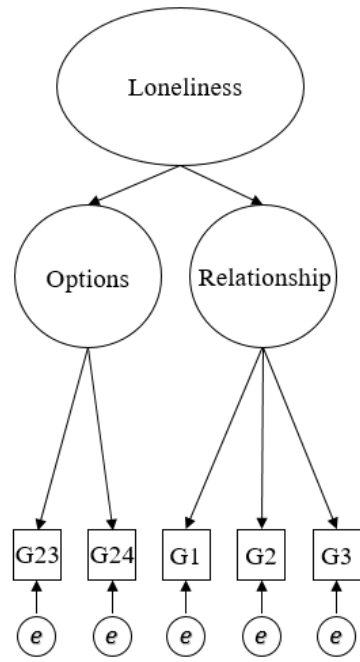
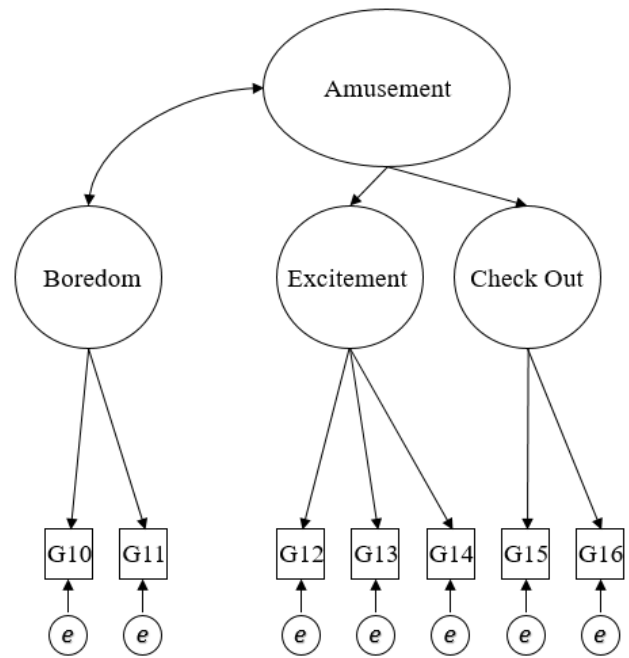*Figure 4.* Deconstructed loneliness motive higher-order model for geosocial app.

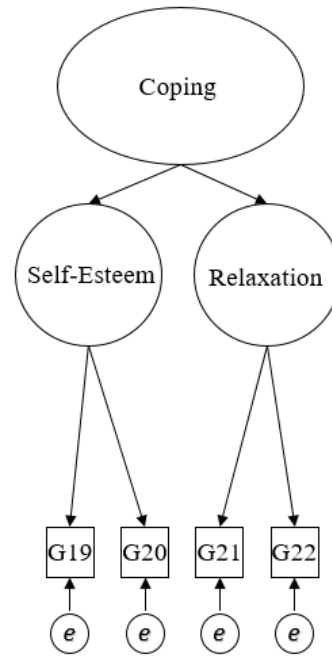*Figure 5.* Deconstructed amusement motive higher-order for geosocial app.

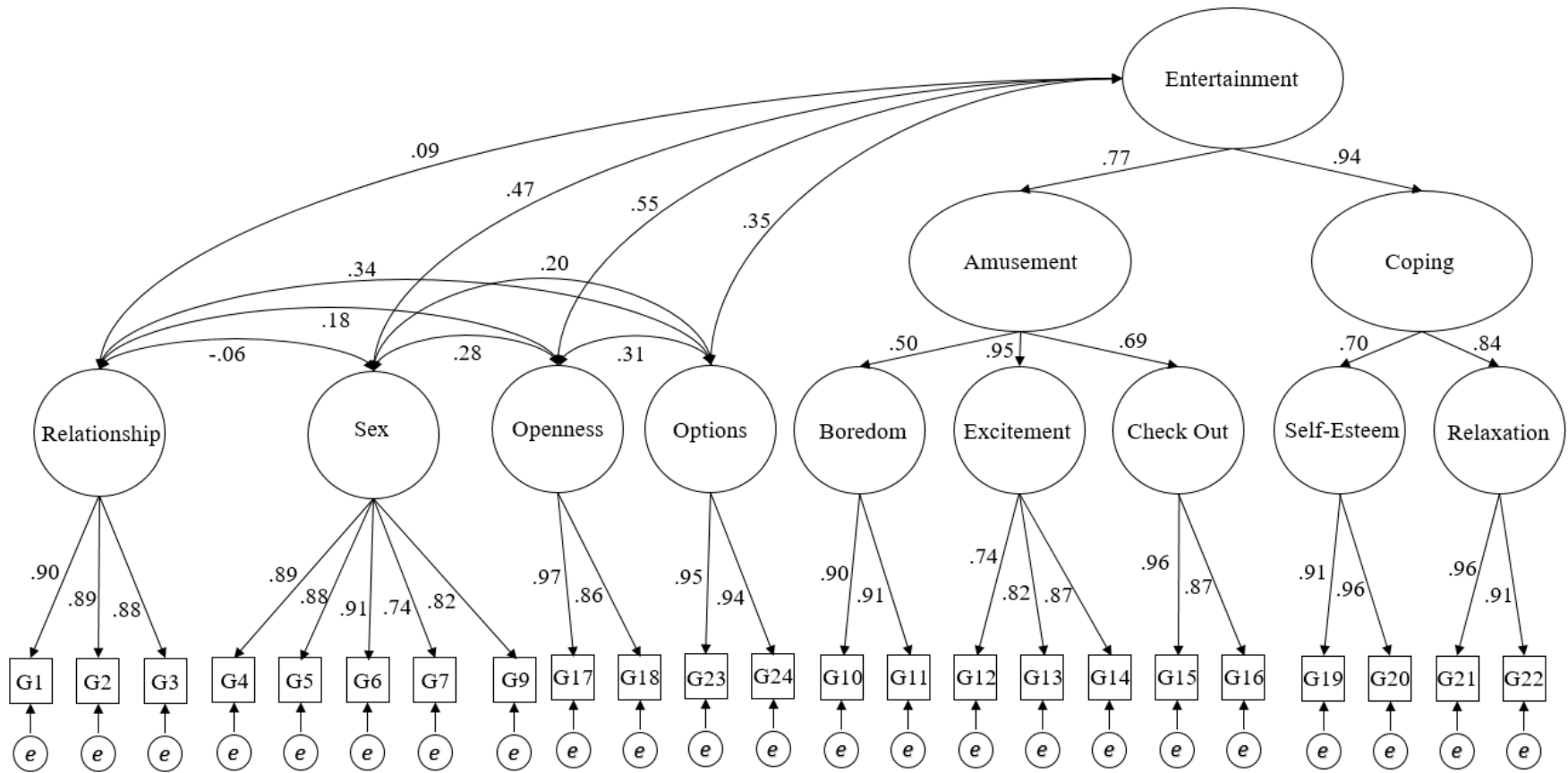*Figure 6.* Deconstructed coping motive higher-order for geosocial app.

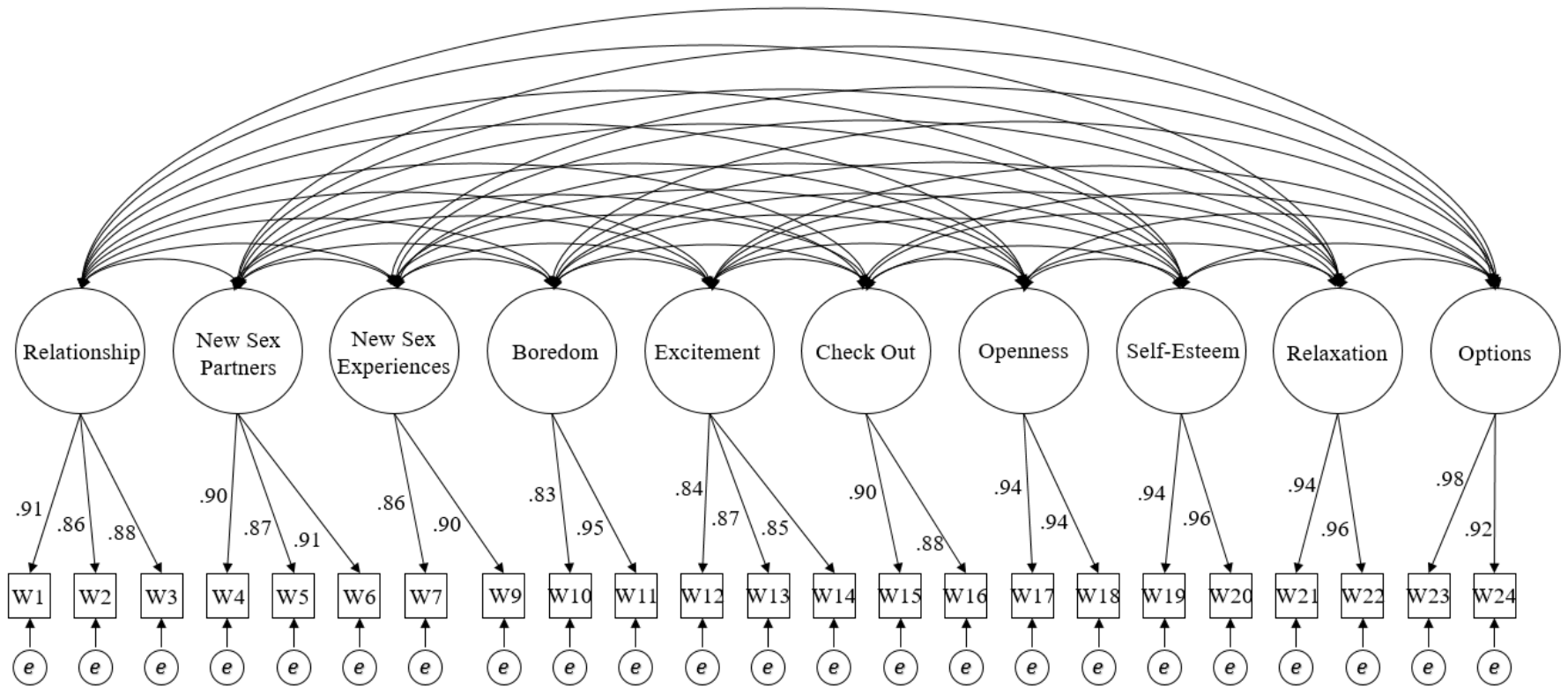*Figure 7*. Higher-order model for geosocial app motivations.
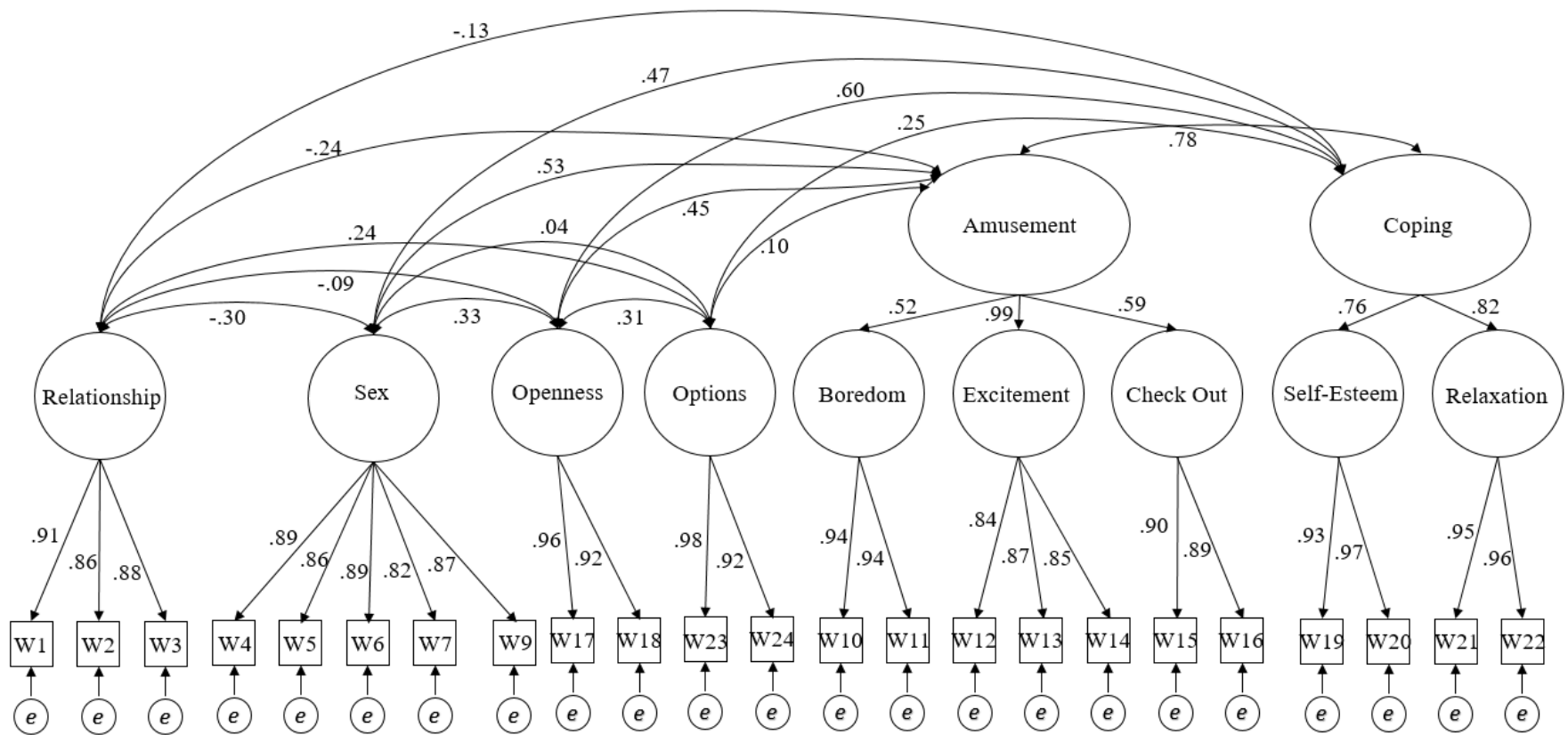
*Figure 8.* Dating website 10 factor model.

*Figure 9.* Higher-order model for dating website motivation.