Article

JSPR

Journal of Social and
Personal Relationships
2021, Vol. 38(3) 935–949

DOI: 10.1177/0265407520977675
journals.sagepub.com/home/spr
SAGE

The role of self-control and sociosexual orientation in partner selection: A speed-dating study

Tila M. Pronk[1], Johan C. Karremans[2], Andrew Demetriou[3], Leander van der Meij[4], and Jaap J. A. Denissen[5]

Abstract

Self-control is a crucial factor in maintaining an established romantic relationship, but its role in relationship formation is understudied. The current study tested whether trait self-control is related to a more selective approach toward romantic partners. Over 4 years, we organized 11 speed-date events at which a total of 342 single, heterosexual participants met potential partners. Our results indicated that there was no main effect of self-control on selectivity. However, there was an interaction between self-control and sociosexual orientation (SOI) in predicting selectivity. Specifically, self-control was positively related to selectivity for people with a restricted SOI (i.e., interested in a long-term, stable relationship). For people with an unrestricted SOI (i.e., interested in a short-term, sexual relationship), however, self-control was related to *lower* selectivity. Our findings point to the flexibility of self-control in facilitating goal progress, stimulating people to refrain from—or act on—their impulses, depending on their own personal mating goals.

Keywords

Human mate selection, interpersonal attraction, mating strategies, romantic relationships, self-control, sociosexual orientation, speed-dating

[1] Tilburg University, the Netherlands
[2] Radboud University Nijmegen, the Netherlands
[3] Delft University of Technology, the Netherlands
[4] University of Technology Eindhoven, the Netherlands
[5] Utrecht University, the Netherlands

Corresponding author:
Tila M. Pronk, Department of Social Psychology, Tilburg University, Prof. Cobbenhagenlaan 225, 5037 DB Tilburg, the Netherlands.
Email: t.pronk@uvt.nl

There is little dispute that self-control is essential to making an existing romantic relationship function well (for overviews, see Karremans et al., 2015; Pronk & Righetti, 2015). For example, people with higher levels of self-control are more likely to show constructive behaviors toward their partner, resulting in more accommodation (Finkel & Campbell, 2001), forgiveness (Burnette et al., 2014; Pronk et al., 2010; Righetti et al., 2013), and sacrifice (Findley et al., 2014; Pronk & Karremans, 2014). While the role of self-control in maintaining a romantic relationship is thus well-documented, its potential role in *selecting* a partner is unexplored territory. In this paper, we investigate whether individual differences in trait self-control are related to the amount of selectivity people display when choosing a partner in a speed-dating setting.

Self-control helps people to override impulses in order to reach long-term goals (de Ridder et al., 2012). Indeed, people with high levels of self-control are less likely to act on the impulse to show behaviors that are momentarily rewarding yet destructive on the long-term, such as smoking (e.g., Berkman et al., 2011), excessive alcohol-intake (e.g., Muraven et al., 2005), over-eating (e.g., Keller & Siegrist, 2014), and procrastination (e.g., Ferrari, 2001). Also in the realm of a romantic relationship, self-control typically stimulates people to act in a more restrained manner. For example, people high in self-control are less likely to cheat on their partner (Pronk et al., 2011), or to act aggressively toward their partner when being provoked (e.g., Denson et al., 2012; Finkel et al., 2009).

Does the effect of self-control emerge only in established relationships, or will self-control predict behavior already at the phase when people are selecting partners to (potentially) form a relationship with? We suggest that self-control could be related to selectivity when choosing a partner. Arguably, at least in contemporary Western societies, the decision to select a partner often springs from a sudden and temporary feeling of attraction. Such an impulse of attraction may be the result of relatively trivial factors (e.g., a smile, pleasant eye-contact, and so forth) that spark attraction. Given the inverse relationship between self-control and impulsivity (e.g., Duckworth & Kern, 2011), we argue that an individual low in self-control should be more likely to act on such initial and impulsive feelings of attraction, which would make them relatively unselective in choosing a partner.

In contrast, people high in self-control may be more likely to inhibit gut feelings of attraction for the sake of deliberative considerations. For example, they may take the chance on rejection into account (e.g., "I don't think this person is attracted to me"), they may have moral or ethical concerns (e.g., "I already accepted another person for a date, I should see how that goes first"), or consider practical issues (e.g., "This person lives too far away"). Indeed, past research showed that people with a higher level of self-control tend to prefer elaborative cognitive activities (i.e., high need for cognition), which may lead them to be more rational and cautious in their decision-making process (Bertrams & Dickhäuser, 2009). We expect that this tendency will make high self-controlled individuals less likely to give in to initial sparks of attraction, and hence be more selective when choosing a partner.

When considering the link between self-control and selectivity, it seems important to consider that self-control generally aids goal-directed behavior (e.g., de Ridder et al., 2012). It could therefore be the case that self-control relates to selectivity *only* when being selective is a good strategy to reach one's personal mating goal. As put forward in

Sexual Strategies Theory, an evolutionary perspective on human mating (Buss, 1998; Buss & Schmitt, 1993), people differ in their mating goals: some are oriented toward forming long-term relationships, while others are oriented toward forming short-term, sexual relationships. This theory for example accounts for the widespread sex differences in human mating behavior: men have more interest in short-term sexual encounters with a variety of partners compared to women, because the investments and costs of offspring are lower for them (e.g., Bech-Sørensen and Pollet, 2016; Buss, 1998).

Personality also plays an important role in explaining individual variation in mating strategies. One crucial factor in this regard is *sociosexual orientation* (SOI; Penke & Asendorpf, 2008; Simpson & Gangestad, 1991), which captures the amount of restrictions people place on engaging in sexual encounters. Individuals with an *unrestricted* SOI have an overall promiscuous behavioral tendency, and pursue relationships with the main goal of having sexual intercourse. Individuals with a *restricted* SOI, on the other hand, require a greater degree of emotional closeness and commitment before engaging in sexual intercourse, and pursue long-term romantic relationships (e.g., Simpson & Gangestad, 1991). Recent research showed that sociosexuality can even account for some of the long-standing sex differences in mating strategies (Hallam et al., 2018), thereby stressing the importance of taking this measure into account when testing within-person variation in sexual strategies.

Although we expect that high self-control will generally relate to high selectivity in partner selection, variations in sociosexual orientation may play a key role in this relationship. People with an unrestricted SOI are interested in increasing one's chances on casual sexual relationships, and they may therefore profit from a mating strategy in which *more* potential partners are selected. People with a restricted SOI on the other hand do not necessarily benefit from selecting many partners. Instead, a more selective approach may help them to find a good long-term relationship partner. The proposed relationship between self-control on selectivity may therefore depend on SOI, such that self-control would promote selectivity particularly among people pursuing a long-term relationship (i.e., with a restricted SOI).

The present study

The current research tested the associations between self-control, sociosexual orientation and selectivity in a speed-dating setting. Speed-dating is a good context to study relationship formation, because romantic attraction can be studied in real time with participants that are genuinely interested in starting a romantic relationship (see Finkel & Eastwick, 2008; Finkel et al., 2007). In speed-dating, single participants have a series of brief one-on-one conversations (dates) with potential romantic partners (Finkel et al., 2007). After each date, participants indicate their interest in going on a future date with their interaction partner. The tendency to say "yes" to this question is thought to reflect someone's general desire toward potential partners, known as the *actor effect* (Ackerman et al., 2015). The inverse score of the actor effect reflects someone's level of selectivity.

Our main goal was to test whether higher levels of trait self-control are related to higher levels of selectivity. Additionally, we investigated a potential interactive effect of self-control and SOI on selectivity. Specifically, we tested whether the proposed positive

association between self-control and selectivity would be even more pronounced for people with a restricted SOI. Given that past research showed that women are generally more selective when choosing a mate as compared to men (e.g., Asendorpf et al., 2011; Fisman et al., 2006; Overbeek et al., 2013), we additionally explored the potential moderating role of gender. We expected there to be a main effect of gender in predicting selectivity, but we did not have any a priori expectations about the role of gender in the proposed associations between self-control, SOI and selectivity.

Method

The data presented in this study were collected from 2014 to 2017 in two Dutch cities. Samples 1 ($n = 79$) and 2 ($n = 92$) were collected in Amsterdam in 2014 and 2015, in a bar at the campus of the university. All instructions and questionnaires of these samples were in English, since part of the participant pool consisted of international students. Samples 3 ($n = 111$) and 4 ($n = 60$) were collected in a bar in the city center of Tilburg, in 2016 and 2017. Given that all participants spoke Dutch, all instructions and questionnaires of these samples were in Dutch. A total of 11 speed-date events were organized (Sample 1: 2 events; Sample 2: 3 events; Sample 3: 4 events; Sample 4: 2 events). Each event was attended by approximately 15 male and 15 female participants, meaning that every participant had approximately 15 speed-dates ($M = 14.70$, $SD = 1.15$; range 11–17 dates). We received ethical approval for all the research presented in this paper.

Below we described the general methodology used in the study, but note that there is some between-sample variation in the procedure and materials that were used. A complete list of all the variables we assessed in each sample can be found on the Open Science Framework (OSF; https://osf.io/nzdwg/?view_only=e8eaa9497fc947cea19d2380459439eb). We included various variables in the specific samples to address unrelated research questions. This project was not pre-registered (pre-registration was not common practice when we started this research project in 2013), however—as can be seen in the supplemental materials posted on OSF—self-control and sociosexual orientation are the *only* personality variables that were assessed in all four samples, and these factors were indeed our main focus throughout this research project. The datafiles and R script are also posted on OSF (https://osf.io/u43we/?view_only=61d6f650f23545baa903b22fadf2bd2a).

Participants

Participants were recruited by handing out flyers at the university campus, through promotional talks that were held before the start of university lectures, and via e-mail and social media channels. Participation in the speed-date study was voluntary, and participants were told that they could stop their participation at any given moment. The speed-date study was free of charge, and included a drink afterward. Depending on the sample, participants additionally received a monetary compensation (Samples 1 and 2) or study credits (psychology students in Samples 3 and 4).

To participate in the speed-date study, participants could send an e-mail containing some descriptive information (e.g., age, relationship status, gender, sexual orientation). Based on this information, participants were selected for the speed-date events and received an e-mail with information about the event (i.e., location, date and time), and the informed consent.

Sample size was determined by the maximum number of participants we could recruit and accommodate in the various samples, while keeping the gender ratio equal. A total of 342 people participated, but we excluded 24 participants from our working data file because of missing data on one of the key variables (i.e., selectivity, self-control or SOI). Our final dataset thus consisted of 318 participants; 166 men and 152 women. All participants in this research were heterosexually oriented and single, and in the age range 18 to 30 ($M = 22.75$, $SD = 2.43$).

We used R (R Core Team, 2012) and paramtest (Hughes, 2017) to perform a post-hoc power analysis using simulations. Corresponding with an average effect found in social psychology (Richard et al., 2003), we assumed an effect size of $-.21$ for self-control and a standardized interaction effect of either .11 or .26, corresponding to respectively a subtle and a clear interaction effect (Champoux & Peters, 1987). This analysis indicated that we have between 96% and 97% power to detect the hypothesized main effect of self-control, 49% power to additionally detect a relatively subtle interaction, and more than 99% to detect a clear-cut interaction.

Procedure

The procedure of the event was based on the speed-date procedure of Luo and Zhang (2009). Participants arrived and enlisted themselves, men and women were guided to separate locations so that they had no chance to get acquainted with one another before the actual speed-date started. Each participant received an ID number in the form of a sticker which they were asked to put visibly on their clothing. The participants received a printed version of the informed consent form which they were asked to carefully read and sign. After signing, participants received a questionnaire consisting of several measures, including trait self-control and sociosexual orientation.

Women were seated at separate tables and men randomly took place on the opposite side of one of the women. The experimenters explained the rules and regulations. During the speed-dates participants were free to talk about any subject. The experimenters indicated the end of each speed-date, which lasted 3 minutes. After each speed-date participants indicated on a form if they were interested in going on another date with the person they just met (yes or no). They also answered questions about their interest in this person as either a short-term sexual partner, or a long-term relationship partner. Depending on the sample, all participants moved one place to the left after each date (Samples 1 and 2) or only the men moved one place to the left and the women remained seated (Samples 3 and 4). After the last speed-date participants handed in the forms, were thanked for their participation and received a drink voucher.

Participants who mutually indicated that they were interested in one another received an e-mail shortly after the event had taken place with the contact details of their matches (name, telephone number, and e-mail address).

Materials

Each sample contained a variation of measures, most of which are not relevant for the main research line that is described in the current manuscript (for an overview of all the measures we used, see https://osf.io/nzdwg/?view_only=e8eaa9497fc947cea19d2380459439eb). The relevant measures are described below.

Self-control. Self-control was assessed with the Self-Control Scale (Tangney et al., 2004), or with a Dutch translation of this scale (Finkenauer et al., 2005). This scale consisted of 13 items (e.g., "I am good at resisting temptation"; "I am able to work effectively toward long-term goals"; $\alpha = .80$). Participants indicated their answers on 7-point Likert-type scales (1 = *completely disagree*, 7 = *completely agree*). The mean of all items constituted our indicator of self-control ($M = 4.07$, $SD = 0.87$; range 2.27–6.54).

Sociosexual Orientation Inventory (SOI). Sociosexual orientation was assessed with the Revised Sociosexual Orientation Inventory (SOI-R; Penke & Asendorpf, 2008), or with a Dutch translation of this scale (Papies et al., 2015). This scale contained 9 items ($\alpha = .87$), including questions on sociosexual behavior (e.g., "With how many different partners have you had sex within the past 12 months?"), sociosexual attitude (e.g., "Sex without love is OK") and sociosexual desire (e.g., "How often do you have fantasies about having sex with someone you are not in a committed romantic relationship with?"). Participants indicated their answers on 9-point Likert-type scales. The mean of all items was our indicator of SOI, with a higher score referring to a more unrestricted SOI ($M = 4.51$, $SD = 1.54$; range 0.86–8.44).

Selectivity. In line with previous research (e.g., Kurzban & Weeden, 2005), the degree of selectivity was calculated by adding the number of times participants during the speed-date event said "yes" to the following statement: "I would like to go on a date with this person." Given that not all participants took part in an equal amount of dates, the total amount of "yesses" was divided by the number of dates the participant had. We then subtracted this number from 1. Our indicator of selectivity thus is a number between 0 and 1, with a higher score referring to a higher level of selectivity ($M = 0.52$, $SD = 0.25$; range 0 to 1).

Selectivity for short-term sexual versus long-term romantic partners. To get some insight into the motivation for participants to select a person as a mate, we additionally asked questions about their interest in someone as either a short-term, sexual partner, or a long-term, romantic partner. In Samples 1 and 2, participants answered the questions: "How would you rate this person as a short term sexual partner?" and "How would you rate this person as a long term romantic partner?" on either a 7-point (Sample 1) or 8-point (Sample 2) Likert scale, ranging from "low" to "high." In Samples 3 and 4, participants responded with "yes" or "no" to the questions: "I can imagine having a short-term, sexual relationship with this person" and "I can imagine having a long-term, romantic relationship with this person."

Table 1. Gender differences in main variables.

Variable	M_{men}	SD_{men}	M_{women}	SD_{women}	F	p
1. Selectivity	0.39	.23	0.64	.22	93.16	<.001
2. Self-control	3.92	0.84	4.05	0.87	1.85	.174
3. SOI	4.94	1.38	4.04	1.57	32.42	<.001

Table 2. Means and correlations among study variables.

Variable	M	SD	1	2	3
1. Selectivity	.51	.26	—		
2. Self-control	3.98	0.86	.07	—	
3. SOI	4.51	1.54	−.03	−.31**	—

**$p = <.001$.

To create an overall score for short-term sexual and long-term romantic selectivity, we recoded the scores from participants in Samples 1 and 2 to a binary scale (ratings < 4 = no; ratings > 4 = yes). Given that not all participants took part in an equal amount of dates, the total amount of "yesses" was divided by the number of dates the participant had. We then subtracted this number from 1. Our indicator of selectivity for short-term sexual and long-term romantic partners is thus a number between 0 and 1, with a higher score referring to a higher level of selectivity.

Results

Main effects of gender

We first tested the main effects of gender on all the key variables. Table 1 shows that women were more selective than men, thereby replicating findings of earlier studies (e.g., Asendorpf et al., 2011; Fisman et al., 2006; Overbeek et al., 2013). Men also had a more unrestricted SOI compared to women, which is again in line with previous literature (e.g., Back et al., 2011; Penke & Asendorpf, 2008; Simpson & Gangestad, 1991). There was no main effect of gender on self-control.

Correlations between self-control, SOI and selectivity

Secondly, we calculated the correlations between the key variables, see Table 2. Replicating previous research (Gailliot & Baumeister, 2007), self-control was negatively related to SOI, $r(313) = -.31$, $p < .001$, indicating that people with higher levels of self-control generally had a more restricted SOI. SOI was not significantly related to selectivity, however, $r(313) = -.03$, $p = .619$, which is also in line with previous research (Asendorpf et al., 2011; Back et al., 2011). Importantly, we did not find evidence for our hypothesized association between self-control and selectivity, $r(313) = .07$, $p = .202$.

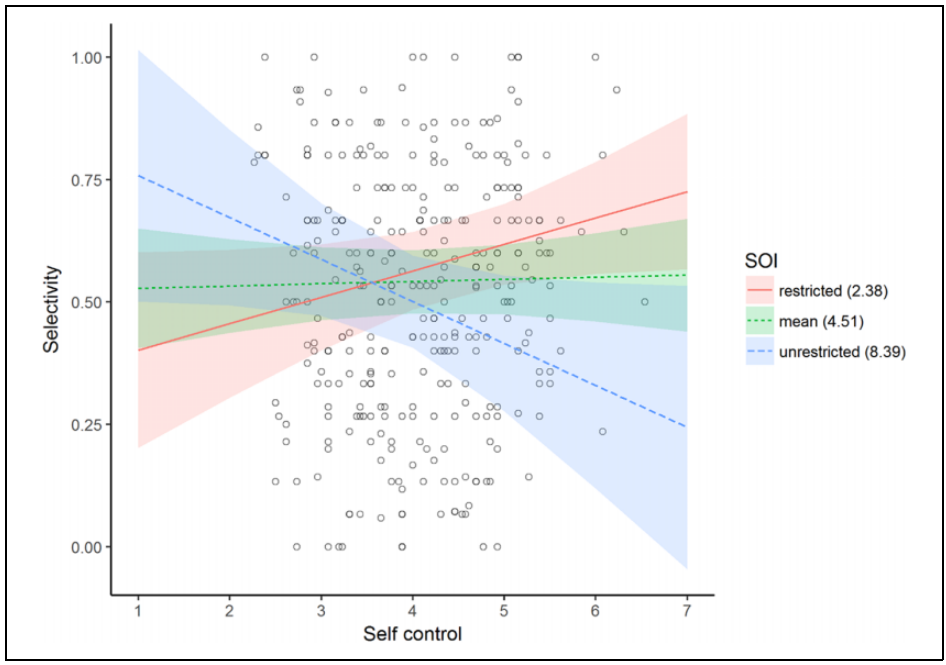

Figure 1. The effect of self-control on selectivity for various levels of SOI. A higher score on selectivity refers to a higher chance of saying "no" to potential partners.

Interaction between self-control and SOI in predicting selectivity

Because data from participants in the same speed-dating event are not independent, we ran a multilevel analyses to investigate whether the association between self-control and selectivity depends on SOI. Specifically, we conducted a multilevel analysis using the lme4 package (version 1.1-21) in R (version 3.5.1) to test whether trait self-control, SOI, and the interaction between self-control and SOI predicted selectivity. We only modeled random intercepts but not random slopes. Lme4 estimates an unstructured variance-covariance matrix. For more information about the statistical procedures (e.g., estimators) and assumptions associated with this package, see Bates et al. (2014).

In contrast with our expectations, results showed that the main effect of self-control on selectivity was not significant, $\beta = .02$, $t(318) = 0.38$, $p = .704$. The main effect of SOI on selectivity was also not significant, $\beta = -.06$, $t(318) = -1.00$, $p = .321$. However, in line with our expectations, there was a significant interaction effect of self-control and SOI in predicting selectivity, $\beta = -.11$, $t(318) = -2.06$, $p = .041$. We depicted the unstandardized interaction effect in Figure 1.

We determined the cut-off points for the significance of the slopes via Johnson-Neyman's regions of significance—a technique that reveals at which exact values of the moderator the simple slope of the predictor is statistically different from zero (Bauer & Curran, 2005). For participants with a restricted SOI (scoring an average of 2.38 on SOI, i.e. 1.38 SD lower than the mean), a higher level of self-control was related to a higher

level of selectivity, $\beta = .19$, $t(318) = 1.97$, $p = .050$, 95% CI = [.000, .371]. In contrast, for participants with an unrestricted SOI (scoring an average of 8.39 on SOI, i.e. 2.52 SD higher than the mean), a higher level of self-control was related to a lower level of selectivity, $\beta = -.30$, $t(318) = -1.97$, $p = .050$, 95% CI = [−.589, .000].

Interaction between gender, self-control, and SOI. We ran multilevel analyses to investigate the associations between gender, self-control, SOI and selectivity. The interaction effect of gender and self-control in predicting selectivity was not significant, $\beta = -.04$, $t(318) = -.37$, $p = .711$, 95% confidence interval (CI) = [−.251, .171], and neither was the interaction effect of gender and SOI in predicting selectivity, $\beta = .002$, $t(318) = .02$, $p = .988$, 95% confidence interval (CI) = [−.211, .214]. The three-way interaction of self-control * SOI * gender on selectivity was also not significant, $\beta = .05$, $t(318) = .49$, $p = .626$, 95% confidence interval (CI) = [−.111, .296]. After including the interaction effect with gender, the interactive effect of self-control and SOI on selectivity was similar to the main analysis, but no longer significant, $\beta = -.12$, $t(318) = -1.39$, $p = .165$.

Short-term sexual and long-term romantic selectivity as outcome variables. We repeated the analyses with selectivity for short-term sexual partners and long-term romantic partners as outcome variables.

For short-term sexual selectivity, we found a strong gender effect, with women being more selective in short-term sexual relationships compared to men, $\beta = 1.20$, $t(318) = 13.15$, $p < .001$. While self-control did not significantly predict short-term sexual selectivity, $\beta = .03$, $t(318) = .45$, $p = .651$, SOI did predict lower levels of short-term sexual selectivity, $\beta = -.29$, $t(318) = -4.16$, $p < .001$, indicating that participants with unrestricted SOI are more interested in short-term sexual relationships. The interaction between SOI and gender reached marginal significance, $\beta = .17$, $t(318) = 1.78$, $p = .08$, suggesting that the negative association between SOI and sexual selectivity was stronger for men than for women. Furthermore, we found a marginally significant interaction between self-control and SOI, $\beta = -.13$, $t(318) = -1.74$, $p = .083$, suggesting that for participants with unrestricted SOI, a higher level of self-control was related to lower selectivity for short-term, sexual relationships. This is in line with the findings on our main outcome variable.

For long-term romantic interest, we only found two main effects. First, we again found a strong gender effect, with women being more selective in long-term romantic relationships compared to men, $\beta = 1.00$, $t(318) = 9.30$, $p < 0.001$. Second, SOI predicted *higher* levels of long-term romantic selectivity, $\beta = .25$, $t(318) = 3.00$, $p = .003$, indicating that participants with unrestricted SOI are less interested—and thus more selective—in long-term romantic relationships.

Discussion

Is self-control associated with selectivity when choosing a partner? Contrary to our expectation, current findings suggest that people high in self-control were not more (or less) selective as compared to people low in self-control. Our expectation of a positive

relationship between self-control and selectivity was based on the overall tendency of high self-controlled individuals to refrain from acting on temporary impulses (de Ridder et al., 2012). However, it is important to note that in most research showing this link, impulse control benefited a certain long-term goal (i.e., improving health, protecting an ongoing relationship). According to Sexual Strategies Theory (Buss, 1998; Buss & Schmitt, 1993), people's goals in the starting phase of a relationship vary: while some people benefit from a selective approach, others benefit from a more accepting attitude toward potential partners. In line with recent research (Hallam et al., 2018), our research suggested that it might be fruitful to take these individual differences in personal mating goals into account.

Our results revealed that sociosexual orientation plays a crucial role in the relationship between self-control and selectivity. Specifically, for people with a restricted SOI, higher levels of self-control were related to higher selectivity. Being more selective should particularly serve the goal of finding a long-term partner, and current findings suggest that self-control aids this process. At the same time, higher levels of trait self-control were associated with *lower* selectivity for people with an unrestricted SOI. People that are primarily interested in finding a short-term sexual partner often switch partners (see Ostovich & Sabini, 2004; Penke & Asendorpf, 2008), and increasing the number of partners to choose from may therefore be a good mating strategy. Consistent with this possibility, we found a marginally significant interaction effect between self-control and SOI in predicting acceptance of short-term sexual opportunities. Self-control seems to enable unrestricted SOI individuals to select more partners, which in turn may help them reach their personal mating goals.

Our findings demonstrate that self-control does not "blindly" stimulate people to respond in a certain way to potential partners. Instead, it enables them to be either selective or unselective depending on their personal mating goal. It is important to note that in both cases, goal achievement requires self-control—either because attraction needs to be suppressed, or because attraction needs to be acted upon. This finding is in line with recent insight into the workings of self-control as not simply a tool to restrict impulses, but as the capacity to flexibly adjust one's responses to reach a certain goal (e.g., de Ridder et al., 2012).

While our findings show that individuals high and low in self-control did not diverge in *overall* selectivity, they may select *different* partners: people low in self-control may choose partners based on impulsive attraction (e.g., selecting physically attractive partners), while people high in self-control may choose partners based on deliberative considerations (e.g., selecting partners that seem a good match). Similarly, unrestricted people may be especially interested in potential partners they expect to be interested in short-term sexual encounters, while restricted people may be more likely to select partners they expect to be interested in a serious, long-term relationship. In follow-up research, it would therefore be interesting to take participants' deliberations and perceptions of potential partners into account when testing the working of self-control and SOI in selectivity. Factors that we deem especially interesting to test in follow up research, are level of attractiveness of the potential partners, and perceived personality of potential partners (e.g., trustworthiness, SOI).

Current findings shed new light on previous inconsistencies in the literature regarding the role of SOI in partner selection. People with an unrestricted SOI have the overall goal to pursue short-term sexual partners, and may thereby profit from a rather unselective approach (as we argue in the current paper). In line with this rationale, previous research showed that unrestricted individuals tend to have more different sexual partners over 1 year (Penke & Asendorpf, 2008), as well as a higher number of lifetime sexual partners (Ostovich & Sabini, 2004), and a stronger tendency to flirt with opposite-sex strangers (Penke & Asendorpf, 2008). At the same time, past research did *not* find a direct relationship between SOI and selectivity in a speed-dating setting (Asendorpf et al., 2011; Back et al., 2011). We replicated this seemingly surprising finding in the current research. Additionally, our results showed that SOI was negatively associated with sexual selectivity, but positively with long-term romantic selectivity—i.e. resulting in diverging tendencies that appear to have canceled each other out. It thus seems that not all unrestricted individuals follow up on the strategy of being rather unselective to increase their mating chances—only those with high levels of self-control do so, and only to pursue short-term sexual relationships.

Apart from sociosexual orientation, there may be other moderators or confounding variables at play that may account for the fact that we did not find a direct relationship between self-control and selectivity. For example, speed-dating involves rather intense self-presentational concerns and may overall be anxiety provoking. This may set off a tendency to protect oneself, and the initial response may therefore be to refrain from future interactions—perhaps especially for avoidantly attached individuals (e.g., Schindler et al., 2010). If this were to be the case, self-control may aid in overcoming this first avoidant urge for people with an avoidant attachment style, and instead facilitate a more accepting attitude. Follow-up research is needed to test the various—possibly contradictory—desires and urges that are at play when searching for a romantic partner, and how self-control may interact with these factors as people navigate dating contexts.

In line with past literature, we used SOI as an indicator of mating strategies (for a review, see Simpson et al., 2004). One may wonder though whether someone's SOI always corresponds to *current* mating goals. It may be the case that someone who can be identified as having an unrestricted SOI based on previous behavior, attitude, and desire, currently has the goal of finding a long-term relationship partner. Future research with a more direct measure of current mating goals (e.g., directly asking participants what type of relationship they would prefer at this moment in their lives) is needed to further unravel the association between self-control and partner selection.

Instead of showing the hypothesized simple relationship between self-control and selectivity, our findings revealed that this association depended on SOI. It is of course important for future research to confirm and test the robustness of this finding. Also, important follow-up questions on the potential underlying mechanisms of the effect need to be addressed. For example, it is yet unclear whether people with a restricted SOI experience less *attraction* toward potential partners when they have high levels of self-control (perhaps because they divert their attention or engage in cognitive appraisal strategies), or whether they experience the same amount of attraction, but are less likely to act on it. Also, it is unclear whether high self-control people with an unrestricted SOI actively broaden their scope of partner-selection (perhaps as a deliberate strategy to

improve their chances on success), or whether this is a more automatic process. Future research is needed to explore these, and other, underlying mechanisms explaining the interactive effect of self-control and SOI on partner-selection.

An intriguing question this research raises is whether higher levels of selectivity may lead to "better" partner choices. Does self-control help people to select only those individuals that they are most likely to end up in a (satisfying) relationship with? This question may be addressed by research in which participants from speed-date events are followed over time to test whether trait self-control can predict the likelihood that (restricted) participants have a—successful—follow-up date, and perhaps even get involved in a romantic relationship with one of their matches. If future research would find evidence to support this idea, this would shed new light on existing research showing that people high in self-control generally have more satisfying romantic relationships (e.g., Vohs et al., 2011). Specifically, the overall more prosperous relationships that self-controlled individuals tend to report (i.e., involving more constructive relationship behaviors and higher levels of relationship satisfaction; see also Pronk et al., 2019), may be partly *due to* their higher selectivity when trying to find the "right" match—especially for people that are restricted in their mating goals. This intriguing possibility should be studied in future research.

Conclusion

While there is general consensus about the important role of self-control in established partner relationships (see Karremans et al., 2015; Pronk & Righetti, 2015), its role in relationship formation so far received hardly any attention. Past research did hint at the benefits of self-control in initiating a relationship, for example through impression management during a first date (see Vohs et al., 2005), or by invoking trust in a new partner (see Righetti & Finkenauer, 2011). We contributed to this emerging literature by showing that—when taking SOI into account—self-control affects behavior in the very first phase of a relationship: selecting a partner. Our findings additionally suggest that self-control may either increase or decrease mate selectivity, depending on one's mating goal. This points not only at the possible benefits of self-control in many phases of a romantic relationship, but also to its utility as a flexible resource to pursue one's goals.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Tila M. Pronk https://orcid.org/0000-0001-5235-6955

Open research statement

As part of IARR's encouragement of open research practices, the authors have provided the following information: This research was not pre-registered. The data used in the research are available. The data can be obtained at https://osf.io/u43we/?view_only=61d6f650f23545baa903

b22fadf2bd2a. The materials used in the research are available. The materials can be obtained at https://osf.io/nzdwg/?view_only=e8eaa9497fc947cea19d2380459439eb.

References

Ackerman, R. A., Kashy, D. A., & Corretti, C. A. (2015). A tutorial on analyzing data from speed-dating studies with heterosexual dyads. *Personal Relationships*, *22*, 92–110.

Asendorpf, J. B., Penke, L., & Back, M. D. (2011). From dating to mating and relating: Predictors of initial and long-term outcomes of speed-dating in a community sample. *European Journal of Personality*, *25*, 16–30.

Back, M. D., Penke, L., Schmukle, S. C., Sachse, K., Borkenau, P., & Asendorpf, J. B. (2011). Why mate choices are not as reciprocal as we assume: The role of personality, flirting and physical attractiveness. *European Journal of Personality*, *25*, 120–132.

Bates, D., Mächler, M., Bolker, B., & Walker, S. (2014). *Fitting linear mixed-effects models using lme4*. arXiv preprint arXiv:1406.5823.

Bauer, D. J., & Curran, P. J. (2005). Probing interactions in fixed and multilevel regression: Inferential and graphical techniques. *Multivariate Behavioral Research*, *40*(3), 373–400.

Bech-Sørensen, J., & Pollet, T. V. (2016). Sex differences in mate preferences: A replication study, 20 years later. .*Evolutionary Psychological Science*, *2*(3), 171–176. https://doi.org/10.1007/s40806-016-0048-6

Berkman, E. T., Falk, E. B., & Lieberman, M. D. (2011). In the trenches of real-world self-control: Neural correlates of breaking the link between craving and smoking. *Psychological Science*, *22*, 498–506.

Bertrams, A., & Dickhäuser, O. (2009). High-school students' need for cognition, self-control capacity, and school achievement: Testing a mediation hypothesis. *Learning and Individual Differences*, *19*(1), 135–138.

Burnette, J. L., Davisson, E. K., Finkel, E. J., Van Tongeren, D. R., Hui, C. M., & Hoyle, R. H. (2014). Self-control and forgiveness: A meta-analytic review. *Social Psychological and Personality Science*, *5*(4), 443–450.

Buss, D. M. (1998). Sexual strategies theory: Historical origins and current status. *Journal of Sex Research*, *35*(1), 19–31. https://doi.org/10.1080/00224499809551914

Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, *100*(2), 204–232.

Champoux, J. E., & Peters, W. S. (1987). Form, effect size and power in moderated regression analysis. *Journal of Occupational and Organizational Psychology*, *60*, 243–255.

Denson, T. F., DeWall, C. N., & Finkel, E. J. (2012). Self-control and aggression. *Current Directions in Psychological Science*, *21*, 20–25.

de Ridder, D. T., Lensvelt-Mulders, G., Finkenauer, C., Stok, F. M., & Baumeister, R. F. (2012). Taking stock of self-control: A meta-analysis of how trait self-control relates to a wide range of behaviors. *Personality and Social Psychology Review*, *16*, 76–99.

Duckworth, A. L., & Kern, M. L. (2011). A meta-analysis of the convergent validity of self-control measures. *Journal of Research in Personality*, *45*, 259–268.

Ferrari, J. R. (2001). Procrastination as self-regulation failure of performance: Effects of cognitive load, self-awareness, and time limits on 'working best under pressure'. *European Journal of Personality*, *15*, 391–406.

Findley, M. B., Carvallo, M., & Bartak, C. P. (2014). The effect of self-control on willingness to sacrifice in close relationships. *Self and Identity*, *13*, 334–344.

Finkel, E. J., & Campbell, W. K. (2001). Self-control and accommodation in close relationships: An interdependence analysis. *Journal of Personality and Social Psychology*, *81*, 263–277.

Finkel, E. J., DeWall, C. N., Slotter, E. B., Oaten, M., & Foshee, V. A. (2009). Self-regulatory failure and intimate partner violence perpetration. *Journal of Personality and Social Psychology*, *97*, 483.

Finkel, E. J., & Eastwick, P. W. (2008). Speed-dating. *Current Directions in Psychological Science*, *17*(3), 193–197.

Finkel, E. J., Eastwick, P. W., & Matthews, J. (2007). Speed-dating as an invaluable tool for studying romantic attraction: A methodological primer. *Personal Relationships*, *14*, 149–166.

Finkenauer, C., Engels, R. C. M. E., & Baumeister, R. F. (2005). Parenting behaviour and adolescent behavioural and emotional problems: The role of self-control. *International Journal of Behavioral Development*, *29*, 58–69.

Fisman, R., Iyengar, S. S., Kamenica, E., & Simonson, I. (2006). Gender differences in mate selection: Evidence from a speed dating experiment. *Quarterly Journal of Economics*, *121*, 673–697.

Gailliot, M. T., & Baumeister, R. F. (2007). Self-regulation and sexual restraint: Dispositionally and temporarily poor self-regulatory abilities contribute to failures at restraining sexual behavior. *Personality and Social Psychology Bulletin*, *33*, 173–186.

Hallam, L., De Backer, C. J., Fisher, M. L., & Walrave, M. (2018). Are sex differences in mating strategies overrated? Sociosexual orientation as a dominant predictor in online dating strategies. *Evolutionary Psychological Science*, *4*(4), 456–465.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.

Hughes, J. (2017). Paramtest: Run a function iteratively while varying parameters. R package version 0.1.0. https://CRAN.R-project.org/package=paramtest

Karremans, J. C., Pronk, T. M., & van der Wal, R. C. (2015). Executive control and relationship maintenance processes: An empirical overview and theoretical integration. *Social and Personality Psychology Compass*, *9*, 333–347.

Keller, C., & Siegrist, M. (2014). Successful and unsuccessful restrained eating. Does dispositional self-control matter? *Appetite*, *74*, 101–106.

Kurzban, R., & Weeden, J. (2005). HurryDate: Mate preferences in action. *Evolution and Human Behavior*, *26*, 227–244.

Luo, S., & Zhang, G. (2009). What is attractive: Similarity, reciprocity, security or beauty? Evidence from a speeddating study. *Journal of Personality*, *77*, 933–964.

Muraven, M., Collins, R. L., Shiffman, S., & Paty, J. A. (2005). Daily fluctuations in self-control demands and alcohol intake. *Psychology of Addictive Behaviors*, *19*, 140–147.

Ostovich, J. M., & Sabini, J. (2004). How are sociosexuality, sex drive, and lifetime number of sexual partners related? *Personality and Social Psychology Bulletin*, *30*, 1255–1266.

Overbeek, G., Nelemans, S. A., Karremans, J., & Engels, R. C. (2013). The malleability of mate selection in speed-dating events. *Archives of Sexual Behavior*, *42*, 1163–1171.

Papies, E. K., Pronk, T. M., Keesman, M., & Barsalou, L. W. (2015). The benefits of simply observing: Mindful attention modulates the link between motivation and behavior. *Journal of Personality and Social Psychology*, *108*, 148–170.

Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: A more differentiated look at sociosexuality and its effects on courtship and romantic relationships. *Journal of Personality and Social Psychology*, *95*, 1113–1135.

Pronk, T. M., Buyukcan-Tetik, A., Iliás, M., & Finkenauer, C. (2019). Marriage as a training ground: Examining change in self-control and forgiveness over the first 4 years of marriage. *Journal of Social and Personal Relationships*, *36*, 109–130.

Pronk, T. M., & Karremans, J. C. (2014). Does executive control relate to sacrificial behavior during conflicts of interests? *Personal Relationships*, *21*, 168–175.

Pronk, T. M., Karremans, J. C., Overbeek, G., Vermulst, A. A., & Wigboldus, D. H. (2010). What it takes to forgive: When and why executive functioning facilitates forgiveness. *Journal of Personality and Social Psychology*, *98*, 119–131.

Pronk, T. M., Karremans, J. C., & Wigboldus, D. H. J. (2011). How can you resist? Executive control helps romantically involved individuals to stay faithful. *Journal of Personality and Social Psychology*, *100*, 827–837.

Pronk, T. M., & Righetti, F. (2015). How executive control promotes happy relationships and a well-balanced life. *Current Opinion in Psychology*, *1*, 14–17.

R Core Team. (2012). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing.

Richard, F. D., Bond, C. F., Jr., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively described. *Review of General Psychology*, *7*(4), 331–363.

Righetti, F., & Finkenauer, C. (2011). If you are able to control yourself, I will trust you: The role of perceived self-control in interpersonal trust. *Journal of Personality and Social Psychology*, *100*, 874–886.

Righetti, F., Finkenauer, C., & Finkel, E. J. (2013). Low self-control promotes the willingness to sacrifice in close relationships. *Psychological Science*, *24*, 1533–1540.

Schindler, I., Fagundes, C. P., & Murdock, K. W. (2010). Predictors of romantic relationship formation: Attachment style, prior relationships, and dating goals. *Personal Relationships*, *17*(1), 97–105.

Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology*, *60*, 870–883.

Simpson, J. A., Wilson, C. L., & Winterheld, H. A. (2004). Sociosexuality and romantic relationships. In J. H. Harvey, A. Wenzel, & S. Sprecher (Eds.), *Handbook of sexuality in close relationships* (pp. 87–112). Erlbaum.

Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, *72*, 271–324.

Vohs, K. D., Baumeister, R. F., & Ciarocco, N. J. (2005). Self-regulation and self-presentation: Regulatory resource depletion impairs impression management and effortful self-presentation depletes regulatory resources. *Journal of Personality and Social Psychology*, *88*, 632–657.

Vohs, K. D., Finkenauer, C., & Baumeister, R. F. (2011). The sum of friends' and lovers' self-control scores predicts relationship quality. *Social Psychological and Personality Science*, *2*, 138–145.