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The Gray Areas of Romance: A Measure of Presumptuous Romantic Intentions

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To capture the attention of a romantic partner requires thoughtful selection of effective pursuit strategies. Sometimes, these strategies err on the side of caution; in other instances, pursuers can take a bolder approach to their courtship endeavors. In the present research, we developed a measure capturing the degree to which a romantic pursuer intends to take a presumptuous course of action. Across five studies ($N_{total} = 2,137$), we validated a 13-item self-report measure: the presumptuous romantic intentions (PRI) scale. First, we used a training set to refine item content and explore factor structures. Then, using a validation set, we confirmed a bifactor solution with one general and three auxiliary factors. We then observed test–retest reliability over periods of 3 and 4 weeks, found strict measurement invariance across both relationship status (single and partnered individuals) and across gender (women and men). We also found that PRI predicted actual presumptuous romantic behavior over the subsequent month. Finally, we established a pattern of convergent and discriminant associations with relationship measures, socio-emotional outcomes, executive function, dark personality traits and more. This new measure may be of interest to researchers studying intimate relationships, partner violence, and the gray area in between.

Public Significance Statement

We validated a measure tapping into the bold romantic strategies individuals intend to employ, irrespective of reciprocation. We found that these intentions are related to greater narcissism, entitlement, and impulsivity, among other characteristics. These intentions predict actual relationship behaviors and can be accurately assessed in single or partnered individuals. It may be of interest to stakeholders seeking to understand potential precursors for problematic relationship behaviors (e.g., coercion, abuse, stalking).

Keywords: scale development, romantic relationships, courtship, stalking, measurement invariance

As volumes of popular art and media demonstrate with vibrancy, pursuing a romantic relationship is no easy task. What makes relationship formation so challenging is that pursuers must not only select a suitable romantic partner (e.g., Sprecher et al., 2018), but they must also identify and effectively enact strategies

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All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent was obtained from all individual participants

that will facilitate that relationship's formation and subsequent maintenance (Clark et al., 1999). Further complicating things, the person being pursued ultimately dictates whether a given pursuit strategy is effective—thus making relationship pursuit an inherently dyadic endeavor.

included in the study.

All supplemental analyses, data, materials, and code are available at https://osf.io/6wecp/.

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Failure to responsively pursue a romantic relationship can come with outsize consequences. Waiting too long to act on a mutually reciprocated romantic interest can leave everyone involved regretting what might have been (Roese & Summerville, 2005). Conversely, boldly projecting romantic signals to a romantic interest who fails to reciprocate them could be burdensome for the rejector (Bohns & DeVincent, 2019) and even constitute criminal stalking behavior (Spitzberg & Cupach, 2014). In the present research, we aim to quantify the degree to which individuals pursue relationships as though their romantic gestures will be reciprocated. Specifically, we aim to develop a new measure capturing the degree to which a romantic pursuer takes a presumptuous course of action to attract the attention of a romantic interest.

Presumptuousness can be thought of as an approach a romantic pursuer takes when selecting strategies to attract the attention of or enhance closeness toward a romantic interest, irrespective of what the person being pursued thinks or feels. Numerous romantic tactics can be enacted presumptuously, for example, grandly proclaiming affection, snooping through old social media posts, or hastily making lewd overtures. In all cases, the hallmark of these advances is that they can be enacted regardless of reciprocation and are presumed to be a worthwhile strategy for enhancing closeness. In the absence of reciprocation, a romantic pursuer who takes a presumptuous course of action might be regarded as a "bit pushy," or "creepy," whereas in the presence of reciprocation, they might merely be regarded as "bold" or a "risk-taker." Put simply, presumptuousness is about the rashness and impetuousness with which one can pursue a relationship-not how these strategies ought or are likely to be received.

Measuring romantic pursuit in this manner has largely eluded researchers. Relationship scientists have focused on identifying traits and preferences that describe who pursuers find attractive (Joel et al., 2017) but have spent comparatively less time thinking about how individuals pursue those relationships or what happens when those strategies run amok. On the other hand, criminological work highlighting the most aggressive and coercive relationship maintenance tactics (specifically stalking behavior; Spitzberg, 2002) has taken the opposite approach, relying primarily on informant and survivor reports of victimization (Langhinricheen-Rohling, 2012). Although this work has been effective in creating taxonomies of behaviors (e.g., Ali et al., 2016) and typologies of perpetrators (Meloy, 1999) centering on being the recipient of unwanted pursuit tactics (Williams & Frieze, 2005), it neglects the importance of studying the pushiness that pursuers intentionally enact and that individuals-particularly women, trans, and nonbinary people-encounter with relative regularity (Davis et al., 2012).

The present research focuses on the gray area between aggressive and quotidian behavior in romantic relationship pursuit. Understanding presumptuous relationship pursuit can contribute to both our understanding of how normative relationship pursuit can go wrong, as well as how there may be everyday origins in violent relationship behaviors (e.g., stalking). We aim to develop a measure that captures the presumptuous behaviors pursuers enact. Such a measure may be of interest to those studying relationship pursuit processes, as well as what happens when those processes go awry.

Presumptuous Behaviors in the Context of Romantic Scripts

Presumptuousness is, at least in part, dictated by the social norms of what constitutes appropriate courtship (Simon & Gagnon, 1986). Research on the societal construction of courtship demonstrates that sexual scripts arbitrate which behaviors are acceptable by providing a coherent set of guidelines and a code of conduct to aid in the selection and enactment of romantic behaviors (Yanowitz & Yanowitz, 2012). For example, sexual scripts surrounding the persistent pursuer and the passive gatekeeper are prevalent and have been shown to normalize and even encourage romantic persistence. Indeed, Becker et al. (2021) found that identical courtship behaviors were viewed as more acceptable (and less likely to be labeled as stalking) when the romantic target had a prior relationship with the pursuer. Collectively, context bounds the appropriateness of any courtship behavior.

There is also reason to believe that relationship pursuers, which in Western contexts has been a role traditionally assigned to men (Seal & Ehrhardt, 2003), are often willing to act boldly and assertively (Sinclair & Frieze, 2005). Pursuers can exhibit a reduction in sensitivity toward rejection (Malamuth & Brown, 1994) and demonstrate a bias toward perceiving signals from targets as evidence of reciprocation—up to and including even an explicit rejection (Muehlenhard & Rodgers, 1998). Moreover, it appears that pursuers are not very good at forecasting how their romantic advances will be received after they have been communicated (Bohns & DeVincent, 2019). These processes suggest courtship is contextually bound (Williams & Frieze, 2005) and thus to truly assess presumptuousness we must measure these closeness-enhancing strategies irrespective of how they are received by the recipient.

Presumptuous Behavior at the Intersection Between Courtship and Stalking

Enduring unwanted relationship behaviors may even constitute stalking behavior (Spitzberg & Cupach, 2014), which is defined as repeated, unwanted attempts by one person to threaten, approach, or harass another person, causing fear or annoyance in the target (Tjaden & Thoennes, 1998). Though pervasively experienced, scholarly inquiry into the origins of stalking is sparse relative to other forms of intimate partner violence (Davis et al., 2012). Until only a few decades ago, research on the psychological underpinnings of stalking behavior remained entirely elusive. By developing a measure of presumptuousness, we provide a framework for investigating how disruptions in normative courtship can develop into more problematic patterns of stalking behaviors (i.e., presumptuousness may be a risk factor for stalking behavior).

A Theory of Planned Behavior Approach to Measuring Presumptuous Romantic Behaviors

In the present research, we assume that some people willfully behave presumptuously in the romantic context. The rich literature on planned and goal-directed behavior allows us to unpack the factors that undergird these behaviors. Decades of research suggest that intentions are rather good predictors of behavior (Ajzen, 1985, 1991), making it a particularly important area of focus in our work. Intentions are a person's self-instructions to exert effort toward enacting a given behavior (Conner & Armitage, 1998). Consistent with this approach, we define presumptuous romantic intentions (PRI) as the instructions individuals give themselves to engage in behaviors that are believed (by the enactor) to maintain and enhance emotional, cognitive, and physical closeness to a romantic interest. Further, we assume that these intentions can exist independent of their interpretation by the recipient¹ and regardless of whether the recipient is a prospective or current romantic partner. This definition is conceptualized broadly to capture both normative aspects of developing closeness in the context of a relationship, as well as more problematic elements drawn from the unwanted pursuit literature (Williams & Frieze, 2005).

Our approach offers theoretically meaningful advantages. First, a measure of intentions, as opposed to a recall or informant report of presumptuousness, allows us to leverage understandings of both relationship research and research on self-regulation to make key predictions about where romantic advances can go wrong. Second, although bountiful research supports the notion that intentions are strong predictors of behavior, an equally rich literature focuses on the so-called intention-behavior gap (Gollwitzer, 1993; Sheeran, 2002), emphasizing the unexplained variance between intentions and subsequent behavior. Developing a measure of intentions affords the unique opportunity to quantify the degree to which intentions actually explain variance in subsequent behaviors. This kind of analysis is theoretically novel in this area and would allow researchers to investigate the diverse mechanisms that facilitate problematic pursuit-for instance, when these behaviors become habitual (Sheeran, 2002), or when moderators such as social norms (Sheeran et al., 1999) or deficits in person perception (Vorauer & Ratner, 1996) constrain or amplify problematic behaviors.

Related Measures and Frameworks

Although there are already measures tapping into unwanted pursuit behaviors (e.g., Sinclair et al., 2011), most rely on enactors recalling past behavior or targets reporting behaviors enacted upon them (Spitzberg & Cupach, 2014). The obsessive relational intrusion perspective (ORI; Cupach & Spitzberg, 1998) serves as a useful point of departure for conceptualizing PRI. Cupach and Spitzberg (1998) define ORI as "repeated and unwanted pursuit and invasion of one's sense of physical or symbolic privacy by another person, either stranger or acquaintance, who desires and/or presumes an intimate relationship" (pp. 234-235). The ORI framework has been used in a range of other contexts including target-report and retrospective recall of perpetration. While previous research has employed a self-report approach (Cupach et al., 2011), the authors note underreporting of recalled behavior. Others have also attempted to use a Likert-style response format (Sinclair et al., 2011), but little work has closely evaluated its psychometric properties. In sum, while we view presumptuousness as a conceptually distinct construct, the ORI framework serves as a useful perspective from which we can harvest potential items to adapt in the development of our measure.

Assumptions and Aims of the Present Research

Given meta-analytic evidence suggesting that half of all stalking occurs in the romantic context (Spitzberg & Cupach, 2014), development of a reliable and valid measure of self-reported PRI may hold important theoretical insights into romantic relationship pursuit, stalking-like behavior, and the context differentiating the two.

We identify five key assumptions critical to the creation of a valid PRI measure. First, this measure should represent a diverse array of strategies varying in appropriateness and effectiveness depending on the context. Second, the content of the response format should capture planned behavior, thereby allowing us to quantify the intentionality of presumptuous behavior. Third, we aim to develop a unidimensional measure of general presumptuousness. Nevertheless, we envision different characteristic varieties of presumptuousness. For example, these intentions may be driven by sociocultural notions of traditional assertiveness, underlying insecurities, or lack of intimate boundaries (Sinclair & Frieze, 2005; Spitzberg & Cupach, 2014). Fourth, we believe presumptuousness can exist within courtship (e.g., "that creepy guy at the bar") or relationship maintenance (e.g., "sometimes my boyfriend can't take a hint"). Finally, we expect this measure to correlate with constructs linked to bolder relationship pursuit strategies (e.g., Davis et al., 2012; Spitzberg & Cupach, 2014): extraversion, neuroticism, reduced relationship functioning, worse social and emotional functioning, worse executive function, and dark personality orientations.

Accordingly, in five studies, we developed a measurement tool for researchers to better understand individuals' intentions to engage in presumptuous romantic behaviors. In Study 1, we adapted items from the previously validated Obsessive Relational Intrusion checklist (ORI; Cupach & Spitzberg, 1998) to a self-report format. Next, we examined the factor structure and reduced the number of items in the final measure. We also explored dimensionality and the potential facets of presumptuousness. We then confirmed a bifactor solution with three auxiliary factors (Chen et al., 2012) based on the exploratory factor analyses. In Study 2, we examined test-retest reliability over a period of 3 weeks. Because, we also anticipated that these behaviors might be evaluated differently depending on key demographic differences; in Study 3, we examined measurement invariance across relationship status and gender. Finally, in Study 4, we explored whether our measure of PRI predicted actual behaviors and replicated our test-retest reliability findings from Study 2. Across all five studies, we replicated the confirmatory factor structure and examined convergent and discriminant associations with the PRI, including one preregistered report (Study 5).

Overview of Method for All Studies

Each of the five samples in the present research was recruited following the same procedure, conducted in accordance with an ethics board-approved protocol. Participants comprised students from the psychology participant pool of a large, private urban university collected each semester between January 2019 and December 2020, apart from Study 5 which was collected using the online participant recruitment tool Prolific in January 2022. Studies 1–4 were collected as part of a multipurpose battery of questionnaires including a preliminary pool of PRI items,² several convergent and discriminant validity measures, and several additional irrelevant measures. Study 5 was a standalone preregistered study and not part of a multipurpose battery. For each sample, we

¹ In support of this assumption, prior research (Back et al., 2011) suggests that although reciprocation is important, it may not be necessary in order to understand important processes of relationship formation.

² In Studies 4 and 5, we only include the final 13-item form and not the entire pool of preliminary items.

Study	Ν	Final N	% Women	% White ^a	% Partnered
Study 1 training	227	225	62.67	22.77	_
Study 1 validation	227	222	69.78	19.11	_
Study 2	452	445	66.07	27.54	29.87
Study 2 follow-up	111	60	68.33	22.64	60.00
Study 3	379	370	68.56	25.75	27.84
Study 4	508	483	68.46	22.64	27.84
Study 4 follow-up	240	202	70.81	21.05	37.04
Study 5	404	394	47.56	64.36	52.31

Table 1Overview of All Sample Characteristics

Note. ^a For brevity, we only report percentage of White participants. The average percentage of racial/ethnic groups across all five studies is as follows: 28.23% White, 10.14% Black, 36.90% Asian, 13.14% Latin, 8.42% multiracial, and 3.06% another racial/ethnic group not listed.

removed several participants due to item missingness (\geq 75%) or a lack of variance in responses, and where relevant, failed attention checks. Table 1 displays demographic information about each sample and materials available on the open science framework (OSF; https://osf.io/6wecp/) and contains additional sample demographics, as well as cleaning/preprocessing information.

Adapting and Preparing Items

Prior to data collection, we first adapted a victim-report checklist (Cupach & Spitzberg, 1998) to a prospective, pursuer-report format. The original checklist was measured on a 0–4 range, where 0 = never, 1 = once since the age of 18, 2 = rarely (i.e., 2–4 times since the age of 18), 3 = sometimes (i.e., 5–9 times since the age of 18), and 4 = frequently (i.e., more than 10 times since the age of 18). We modified the response format to fit a Likert-type response with responses ranging from 1 (*not at all likely*) to 7 (*extremely likely*) and updated the instructions. Participants were now asked to report how likely they would be to engage in the behaviors listed.

Importantly, we then made a variety of linguistic and grammatical alterations to the original 63 items (e.g., "call to check up on you" was changed to "call to check up on them"). We rephrased some items to avoid socially desirable responses (e.g., "made things up about your past relationships" was changed to "embellished or fabricated parts of your relationship"), and made some minor adjustments to reflect more contemporary concepts (e.g., "leave frequent messages on your answering machine" was changed to "leave frequent messages on your voicemail"). We modified a total of 14 items. Additionally, some items could not be readily altered and were subsequently removed. These adaptations resulted in 53 items of high internal consistency ($\alpha = 0.94$; see OSF for full list; https://osf.io/6wecp/).

Study 1: Exploration, Item Reduction, and Initial Confirmatory Model

To prevent overfitting of our exploratory factor analyses, we split Study 1 into a training and validation set. We did this by randomly choosing a subset of 50% of the Study 1 sample to be used in exploratory analyses (training set) and reserving the other randomly selected subset for confirmation of our model (validation set).

Item Reduction and Exploratory Factor Analyses

We first used the Study 1 training set to reduce the number of items and explore potential factor solutions. We began by examining the intercorrelations among all 53 items and identified two items with a raw correlation of greater than 0.80-to reduce redundancy we removed the item with the lower mean endorsement (Simms & Watson, 2007). It appeared that many of the remaining 52 items were either too extreme to be endorsed or were obscured by social desirability pressures to be useful. Thus, we removed 14 items with a mean endorsement of less than or equal to 1.8 on the 7-point Likert scale. We then visually examined the scree plot (see https://osf.io/ 6wecp/) to evaluate potential factor solutions in conjunction with parallel analyses and found that anywhere from two to eight factors may be reasonable. We used maximum likelihood estimation and a *Promax* rotation³ to extract factor solutions and evaluated each, beginning first with the simplest structure and iteratively increasing complexity. We found that extracting more than five factors failed to yield a factor structure with conceptual clarity.

We then focused on retaining items with high item-total correlations, items with factor loadings greater than 0.40, and items without highly negative cross-loadings (Matsunaga, 2010). Upon closer inspection of the three-, four-, and five-factor solutions, the fourfactor solution initially appeared to produce the clearest structure. All subsequent factor solutions lacked a well-defined factor structure and were thus not considered. We continued to examine the four-factor solution in subsequent analyses, first removing 13 items with low loadings or highly negative cross-loadings. After reextracting a four-factor solution on the remaining 25 items, a lack of conceptual clarity led us to focus on a three-factor solution. We removed seven items with low loadings, highly negative crossloadings, or low item-total correlations. Then, in a final three-factor extraction, we removed five additional items with highly negative cross-loadings.

The factor structure, all item factor loadings, and the final PRI items are displayed in Table 2. We identified the first factor as *conspicuous* behaviors, which comprised five items tapping into riskier tactics like making surprising or unexpected appearances in the target's life. The four items of the second factor constituted *insecure* behaviors, which are characterized by paranoia and fear of

³ We also extracted factors using an Oblimin rotation and found nearly identical results; therefore, we only present Promax results in Table 2.

Table	2
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Study 1	Training	Set. PR	I Item	Loadings.	and	Descriptive Statistics	1

Item	F1	F2	F3	M(SD)
(F1) Conspicuous				
1. Send them cards or letters without telling them ^a	0.83	-0.12	0.03	3.20 (1.92)
2. Send them lots of gifts	0.69	-0.03	0.10	2.95 (1.74)
3. Surprise them by showing up unannounced ^a	0.68	0.02	0.14	3.28 (1.83)
4. Show up before or after they get off work	0.65	-0.02	-0.04	4.43 (1.87)
5. Show up before/after their social activities ^a	0.54	0.38	-0.14	3.36 (1.98)
(F2) Insecure				
1. Ask them about their relationships with other people ^a	-0.09	0.76	0.21	3.68 (1.87)
2. Watch them from a distance	-0.09	0.75	-0.08	2.71 (2.00)
3. Check up on them through mutual acquaintances/friends	0.05	0.70	-0.15	3.76 (1.95)
4. Go through their private things	0.14	0.42	0.07	1.86 (1.37)
(F3) Crude				
1. Send explicit images to them	0.07	-0.19	0.77	2.62 (1.90)
2. Touch them in an intimate way ^a	0.14	0.13	0.60	3.83 (2.19)
3. Describe sex acts to them	0.11	0.07	0.60	2.56 (1.75)
4. Use profanity and/or obscenities when talking to them	-0.22	0.16	0.57	3.26 (2.04)

Note. PRI = presumptuous romantic intentions. Promax rotation with Kaiser normalization. Bold values indicate highest loading items for each factor. ^a Item is used in the five-item short version.

rejection or abandonment. Finally, we identified a third factor, *crude* behaviors, as characteristically sexual or vulgar (e.g., describing sex acts or use profanity). Items for the final scale were selected based on factor loadings, thematic consistency, and conceptual clarity regarding each subscale (see Table 2). This resulted in the 13-item PRI. Because we designed this measure to be of broad interest, including applied researchers who conduct large-scale surveys, we also created a short five-item version of the PRI. To arrive at a short form, we selected a high loading item from each subcomponent, as well as the two items with the highest item-total correlations. This strategy allowed us to build a shortened version optimized for consistency, while still preserving thematic representativeness and high correlation with the 13-item version.

Confirmatory Factor Analysis

We found evidence suggesting varied manifestations of presumptuous intentions, as indicated by the multidimensionality in the exploratory factor analyses. However, we were also theoretically motivated to create a unidimensional measure of the presumptuousness construct. A bifactor model (Chen et al., 2012) may be one useful solution for this purpose. Bifactor models estimate multidimensional constructs wherein a primary, general factor—in our case, PRI—explains variation in the items and additional subfactors account for residual variance shared by certain subsets of items. The general factor and all orthogonal secondary dimensions are estimated simultaneously. These secondary dimensions can be interpreted as the variation explained in item responses after adjusting for the general factor (DeMars, 2013). In our case, the three exploratory factors, we extracted in the training set—conspicuousness, insecurity, and crudeness—would each capture additional variance above and beyond general presumptuousness. Though other theoretical models necessitate different analytic solutions (Sellbom & Tellegen, 2019), we were most interested in testing a bifactor because it enabled us to retain a primarily unidimensional structure, while still acknowledging the presence of factors that may explain meaningful variation in our items.

We thus conducted confirmatory factor analysis (CFA) to confirm the factor structure of the PRI in the Study 1 validation set—a sample independent from the training set we used to explore potential factor solutions. Using the *lavaan* package in R (Rosseel, 2012), we evaluated several fit indices and their conventional cutoff values (Hu & Bentler, 1999)—comparative fit index (CFI) ≥ 0.90 , square root mean square residual (SRMR) \leq 0.08, and root mean square error of approximation (RMSEA) \leq 0.08. First, we used the validation set from Study 1 to examine three models: a single dimension model; a three-factor model with a factor for each facet described above; and a bifactor model which specifies both a general dimension, as well as three auxiliary facets (Chen et al., 2012). As can be seen in Table 3, we found that the

Table 3

Study 1 Validation Set Coefficient Omegas, Intercorrelations^{*}, and Descriptive Statistics, for General Factor, Subscores, and Five-Item Short Scale

Scale	General	Conspicuous	Insecure	Crude	Five item	ω
General	3.28 (1.09)	0.95	0.91	0.91	0.92	0.88
Conspicuous	_	3.51 (1.23)	0.81	0.78	0.94	0.86
Insecure	_		3.06 (1.09)	0.75	0.80	0.70
Crude	_			3.21 (1.20)	0.79	0.77
Five item	_	_	_		3.64 (1.40)	0.75 ^{&}

Note. Diagonal represents M (SD).

[&] indicates Cronbach's α . * all correlations, p < .001.

bifactor model fit best—significantly better than the three-factor model, which fit significantly better than the single-factor model. In a replication of this confirmatory factor structure using the Study 2 sample, we again found evidence suggesting that the bifactor model fit best. The wide range in item means ($M_{\min} = 1.73$, $M_{\max} = 4.84$) suggests that some items are easier for participants to endorse, while others are more difficult (see OSF materials for a visual depiction).

Scoring and Interpretation of PRI Scores

Bifactor models allow for several possible approaches for scoring and interpretation (DeMars, 2013; Reise et al., 2013). Because we are especially interested in a unidimensional measure of presumptuousness, we evaluated omega total and omega hierarchical coefficients to examine dimensionality of the general PRI factor score (Rodriguez et al., 2016). Omega total was 0.881, which suggests that 88.1% of the variance in item scores can be explained by the general factor and subfactors. On the other hand, omega hierarchical was 0.696, which suggests 69.6% of variance is the proportion of variance in item scores that can be explained by the general factor and treats variation attributable to group factors as error variance. It appears there is a dominant general factor, which suggests it is appropriate to use the factor score extracted from the model. For simpler applications, a composite score based on the arithmetic mean of all 13 items is also appropriate, given the high variance accounted for by the general factor.

There may also be instances in which subfactors themselves may be of interest-for example, if a researcher wanted to understand whether certain kinds of presumptuousness are predictive of certain outcomes. To examine reliability and stability of subfactors to facilitate such investigations, we examined omega subscale (omegaS) and omega hierarchical subscale (omegaHS) for each dimension; both indices are analogous to the omegas we used for the general factor, only adjusting for variance due to the general factor. Here, less evidence of stability emerged. The relative size of omegaHS can be compared to omegaS to approximate whether variance in items scores is stably captured by each subfactor. We found that omegaS was larger than omegaHS for all factors (ome $gaS_{conspicuous} = 0.86 > omegaHS_{conspicuous} = 0.10; omegaS_{insecure} =$ $0.70 > \text{omegaHS}_{\text{insecure}} = 0.45; \text{omegaS}_{\text{crude}} = 0.77 > \text{omegaHS}_{\text{crude}} =$ 0.45), indicating that subfactors alone are not reliable. Thus, in situations where these subfactors are of interest, we recommend using the Haberman (2008) method to create subscores based on a composite of the total score and the factor score. Note, because the auxiliary factors were deemed not to be stable on their own, these subscores reflect a factor-adjusted presumptuousness and are not intended to be analyzed concurrently with the general factor or other subscores.

In all subsequent analyses, except where noted, we will use the simple arithmetic mean approach for calculating the general score and total score-adjusted scores for each factor.⁴ Basic descriptive information about the general factor and each subscale can be seen in Table 4. However, we note there are other approaches to scoring and interpreting bifactor scores (see DeMars, 2013), and future work using the PRI should more thoroughly examine theoretical and conceptual implications of relying on different interpretations.

Study 2: Confirmatory Factor Analysis and Test–Retest Reliability

In addition to replicating the confirmatory factor structure, we also sought to understand the temporal stability of the PRI. To do this, in Study 2, we asked participants to complete the same items 3 weeks later.⁵ We then examined test-retest reliability for the general PRI factor and each subfactor. Generally, PRI did not exhibit considerable stability, r = 0.61, t(52) = 5.55, p < .001, 95% CI[0.41, 0.75]. Each of the three subcomponents were similarly stable: conspicuous romantic intentions, r = 0.62, t(52) = 5.65, p <.001, 95% CI[0.42, 0.76], insecure romantic intentions, r = 0.64, t(52) = 6.01, p < .001, 95% CI[0.46, 0.78], and crude romantic intentions, r = 0.61, t(52) = 5.51, p < .001, 95% CI[0.41, 0.75], all displayed moderate instability. The short form PRI was the least stable among our measures, r = 0.53, t(54) = 4.63, p < .001, 95% CI[0.31, 0.70]. Taken together, these estimates suggest that individuals' intentions to engage in presumptuous romantic behaviors are not especially stable over a period of 3 weeks and can fluctuate considerably. Implications for the (in)stability of the PRI scores are discussed below.

Study 3: Invariance Across Relationship Status and Gender

In Study 3, we tested measurement invariance across two key demographics: relationship status and gender. Measurement invariance is a method for examining the degree to which the meaning of a construct varies across groups or time points (Putnick & Bornstein, 2016). To test for measurement invariance, we compared the bifactor model above across each demographic group, increasing constraints between the groups in step-wise fashion. As indicated by Δ CFI, Δ SRMR, and Δ RMSEA decreases in model fit across constrained models indicate different meanings across groups. CFI decreases by ≤ 0.01 , SRMR decreases by ≤ 0.03 , and RMSEA decreases by ≤ 0.02 , suggest there is measurement invariance across each nested model of increasing constraint (Cheung & Rensvold, 2002; Putnick & Bornstein, 2016).

With respect to relationship status, we found evidence for complete invariance, as can be seen in Table 5. In other words, it appears that single individuals and partnered individuals do not differ in model fit for factor structure (configural), factor loadings (metric), item intercepts (scalar), or residual variances (strict). Importantly, this suggests that single individuals' scores on our measure can be compared to partnered individuals.⁶ These results

⁴ Materials on OSF contain more extensive analyses of: (a) commonly evaluated indices of dimensionality, (b) the stability of general and sub-factors across all studies, and (c) comparisons between the factor score and the simple average approach for presumptuousness.

⁵ Due to an administrative error during recruitment and data collection, 49.5% of the follow-up sample did not complete a baseline measure. Those participants were omitted from analysis. Because of this reduction in power, we used composites for the general factor and subscores.

⁶ One of three fit indices (Δ CFI) reflects a decrease in fit consistent with partial scalar invariance. DIF analysis and examination of item means across each group reveals that the item "Check up on them through mutual acquaintances/friends" may be differentially interpreted by single individuals and individuals in relationships. Allowing this item to vary freely led to scalar and strict measurement invariance, mirroring the RMSEA and SRMR thresholds. See OSF materials, for DIF analyses and partial invariance fit indices.

	:	Study 1—Validation		Study 2	Study 3	Study 4	Study 5
Fit index	1 factor	3 factor	Bifactor	Bifactor	Bifactor	Bifactor	Bifactor
χ^2 (df)	301.20 (65)	108.93 (62)	76.28 (52)	173.97 (52)	133.27 (52)	234.70 (52)	179.57 (52)
χ^2 diff (df)		192.27 (3)	32.66 (10)				_ ` `
CFI	0.725	0.945	0.972	0.939	0.945	0.921	0.906
SRMR	0.100	0.056	0.044	0.049	0.050	0.057	0.064
RMSEA	0.128	0.058	0.046	0.074	0.065	0.085	0.080

 Table 4

 Fit Indices Across All Five Confirmatory Models

Note. CFI = comparative fit index; SRMR = square root mean square residual; RMSEA = root mean square error of approximation.

imply that any observed mean differences across groups are *not* due to response biases but rather conceptually meaningful processes. We observed significant mean differences in PRI. In particular, we find that single individuals (M = 3.21), compared to partnered individuals (M = 3.54), reported significantly weaker PRI, t(163.57) = 2.42, p = .018.

With respect to gender (as indicated by an inherently limited binary gender measure), we again observed evidence of complete invariance, as can be seen in Table 5.⁷ Men and women do not differ in factor structure (configural), factor loadings (metric), item intercepts (scalar), or the residual variances (strict), which again suggests that these men and women can be meaningfully compared. Here, we find that men (M = 3.48) reported significantly stronger PRI than women (M = 3.23), t(204.06) = 1.99, p = .048. Notably, relationship status did not differ significantly across men ($N_{single} = 68$, $N_{partnered} = 34$) and women ($N_{single} = 78$, $N_{partnered} = 185$), χ^2 (1) = 0.31, p = .58.

Study 4: Testing Intention–Behavior Relations

In Study 4, we aimed to establish construct validity by quantifying the degree to which our presumptuous romantic *intentions* measure predicts actual relationship *behaviors*. Such a pattern would replicate classic effects from motivation science on intention–behavior links (Ajzen, 1985, 1991). Accordingly, we expected stronger intentions to better predict participants' actual future behaviors. This design also allowed us to replicate the test–retest reliability results from Study 2 over a period of 1 month.

Method

After completing the same initial multipurpose battery of questionnaires, we asked participants to complete a follow-up survey 1 month later. In the follow-up survey, we asked participants to describe their current relationship status, to again complete the 13-item PRI, and to recall their romantic behaviors over the past month. More specifically, we asked participants "how often, if ever, you have done any of the following (behaviors) in the past 4 weeks to get the attention of" a romantic target they had specified.⁸ Informed by prior research (Cupach & Spitzberg, 1998), participants responded to 30 different romantic behaviors ranging from innocuous (e.g., "look at their social media profiles or account") to more extreme (e.g., "send explicit pictures"). Importantly, because Study 4 was conducted in fall of 2020 during the COVID-19 pandemic, we selected behaviors that would be relatively less affected by COVID-related stay-athome and social mitigation measures. Response options included

0 (never), 1 (once or twice), 2 (a few times), 3 (a few times a week), 4 (or daily). After observing positive skew in endorsement of these behaviors, we discretized each behavior into a binary "enacted—did not enact" indicator over the course of the month. We then computed a sum of these discretized items, where higher scores indicated more behaviors enacted over the past month. See OSF materials for more details.

Results

Replication of Test-Retest Reliability

As can be seen in Table 3, we again replicated the confirmatory factor structure. We also replicated test–retest results from Study 2, we found a similar pattern of stability over a period of 1 month. The general factor again exhibited minimal stability, r = 0.55, t(182) = 8.82, p < .001, 95% CI[0.44, 0.64]. Each of the three subcomponents were similar in terms of stability: conspicuous romantic intentions, r = 0.52, t(182) = 8.16, p < .001, 95% CI[0.40, 0.62], insecure romantic intentions, r = 0.56, t(182) = 9.16, p < .001, 95% CI[0.45, 0.65], and crude romantic intentions, r = 0.56, t(182) = 9.21, p < .001, 95% CI[0.46, 0.66]. The short form, though similarly stable, was the least stable of our measures, r = 0.52, t(194) = 8.34, p < .001, 95% CI[0.41, 0.62]. Taken together, these results suggest that after 1 month the PRI is not especially stable.

Using PRI to Predict Behavior

On average, participants enacted 10.24 out of a possible 30 behaviors over the course of the month (SD = 6.77). Unsurprisingly, people in relationships reported enacting (M = 14.46) significantly more behaviors than single individuals (M = 8.03), t(138.22) = 7.05, p < .001, 95% CI_{diff} [4.62, 8.23]. However, men (M = 10.20) did not report a significantly different number of behaviors than women (M = 10.28), t(73.70) = -0.07, p = .95, 95% CI_{diff} [-2.47, 2.30].

Presumptuousness at the initial time point significantly predicted behaviors over the following month, b = 2.50, SE = 0.52, t(177) =

 $^{^{7}}$ Unlike the other fit indices, the Δ CFI index suggests loadings are different across men and women. DIF analysis looking at item loadings for each factor, across each group suggests that the item "Show up before or after they get off work" loads more strongly onto presumptuousness for men and "Go through their private things" loads more strongly onto presumptuous for women. See OSF materials, for DIF analyses and partial invariance fit indices.

⁸ A total of 13 participants reported a change in relationship from Time 1 to Time 2; nine of whom entered a relationship and four of whom exited relationship.

Relationship type					Gender			
Fit index	Configural	Metric	Scalar	Strict	Configural	Metric	Scalar	Strict
χ^2	173.58	198.28	228.71	256.71	200.775	243.145	253.45	266.112
χ^2 diff (<i>df</i>)	_	24.71 (22)	30.42 (9)	28.00 (13)	_	42.37 (22)	10.31 (9)	12.66 (13)
CFI	0.952	0.950	0.946	0.935	0.936	0.922	0.921	0.921
SRMR	0.051	0.062	0.065	0.068	0.054	0.075	0.076	0.078
RMSEA	0.060	0.056	0.056	0.063	0.071	0.071	0.069	0.066

Table 5Tests of Measurement Invariance

Note. CFI = comparative fit index; SRMR = square root mean square residual; RMSEA = root mean square error of approximation.

4.82, p < .001, 95% CI[1.48, 3.52]. Importantly, this accounted for 11.66% of the variance in romantic behaviors, F(177) = 23.33, p <.001. After accounting for general presumptuousness, neither conspicuous romantic intentions, b = 0.51, SE = 0.59, t(174) = 0.86, p = .39, 95% CI[-0.66, 1.69], nor crude romantic intentions in the initial survey, b = 0.33, SE = 0.58, t(174) = 0.58, p = .56, 95% CI[-0.81, 1.49], significantly predicted romantic behaviors over the following month. However, after adjusting for general presumptuousness, insecure romantic intentions significantly predicted romantic behaviors over the following month, b = 1.19, SE =0.56, t(174) = 2.13, p = .034, 95% CI[0.09, 2.28]. This means that the degree to which a pursuer displays an insecure romantic tendency further predicted whether they are likely to enact behaviors over the following month. Considering the full multidimensional model including conspicuous, insecure, and crude subfactors, the PRI explained a total of 14.47% of the variance in behaviors over the following month, F(174) = 7.36, p < .001.

Given concerns about the effect of COVID-19 on individuals' tendencies to engage in romantic behaviors, it appears as though presumptuousness remained a significant predictor regardless of whether the romantic behaviors were primarily digital, b = 0.64, SE = 0.19, t(181) = 3.32, p = .001, 95% CI[0.26, 1.02], or in person, b = 0.24, SE = 0.06, t(181) = 3.92, p < .001, 95% CI [0.12,0.36]: in both instances, PRI factor scores explained 11.24% and 13.16% of the variance, respectively. Furthermore, the results we present here are not better accounted for by any COVID-19-related variable (see OSF materials). These results suggest that the PRI is a strong and robust predictor of subsequent romantic behaviors.

Study 5: Further Construct Validation

We finally sought to better understand the individual differences and beliefs associated with PRI. Because data from Studies 1–4 were part of a large multiquestionnaire battery, we explored associations with several constructs of interest in those studies. However, we also conducted a preregistered Study 5 to examine a variety of convergent and discriminant associations directly relevant to PRI. We followed the same procedure as previous studies with several modifications, which we describe below (see https://osf.io/6wecp/ for preregistration).

Participants and Procedure

In Study 5, we recruited one cross-sectional sample via the online recruiting platform prolific. To be eligible for this study, participants had to be at least 18 years old ($M_{age} = 33.17, SD_{age} = 13.42$), English

speakers, and located in the United States. Based on an a priori sensitivity analysis, recruiting a sample of 255 would enable us to detect a correlation as small as r = 0.20 with 90% power. However, because participant attention tends to wane with increased survey length, particularly in online samples (Buhrmester et al., 2011), we aimed to display a subset of scales to keep survey length short. Participants first completed the PRI, followed by a random subset of 9 out of the 13⁹ scales of interest, and finally demographic questions (see Table 1, for demographics). Importantly, to obtain at least 255 participants for each pair-wise correlation, we needed to (over) recruit at least 368 participants. Furthermore, we overrecruited approximately 10% beyond this amount to account for participants who failed attention checks. Our final recruited sample size was 404 participants, compensated at \$1.70 per survey.

Hypotheses and Measures Across All Studies

Table 6 contains psychometric properties, descriptive information, and hypotheses for relevant measures. In addition to measures from Study 5, we also analyzed measures from Studies 1–4. For brevity and clarity, we describe here only the most relevant measures: relationship functioning, socioemotional outcomes, executive function, and dark personality orientations. Additional associations can be found in the OSF materials.

We hypothesized PRI would be associated with greater extraversion and stronger endorsement of romantic beliefs (Sprecher & Metts, 1989), given their tendency to boldly give gifts and show up at places unannounced. We expected PRI to correlate with neuroticism, given their tendency to act on suspicions and paranoid fears. Similarly, we anticipated PRI to correlate with greater entitlement and sexual narcissism, given their tendency to make lewd declarations and engage in vulgar acts. Previous research has also found links between unmet psychological needs and obsessive romantic pursuit (Valshtein et al., 2020), and we accordingly expect that, in general, individuals higher in PRI should have stronger unmet social needs (e.g., need to belong, need for shared reality, need for sharedness) and a greater commitment to pursue their relationships-especially in light of the link between behavioral intentions and commitment suggested in the goals literature (Gollwitzer, 1993). Finally, we anticipate that PRI, as a measure of intentions, will correlate with common measures of executive functioning (Mischel et al., 1996). More specifically, someone whose romantic strategy selection involves

⁹ Due to an error in display logic, two scales (relationship commitment and commitment readiness) were incorrectly presented to participants. We omitted those results from this report.

Table 6

Psychometric Properties and Hypotheses for Relevant Construct Validation Measures

Measure	Reference	Hypothesized association	Study	Range	$M (SD)^*$	α (No. of items)
Personality						
Extraversion	Ehrhart et al. (2009)	small, positive	5	1-7	3.32 (1.69)	(2)
Neuroticism	Ehrhart et al. (2009)	small, positive	5	1-7	3.79 (1.47)	(2)
Relationship						
Sexual narcissism	Hurlbert et al. (1994)	small-to-medium, positive	5	1-7	3.50 (1.32)	0.82 (5)
Relationship quality	Fletcher et al. (2000)	small, positive	3	1–7	5.42 (1.23)	0.96 (18)
Commitment to pursue	Valshtein (2021)	small-to-medium, positive	3	1–7	4.09 (1.33)	0.90 (4)
Mate retention	Buss et al. (2008)	medium, positive	5	0-80	32.23 (15.20)	0.91 (38)
Anxious attachment	Fraley et al. (2011)	small, positive	5	1-5	2.67 (0.96)	0.94 (18)
Avoidant attachment	Fraley et al. (2011)	small, positive	5	1-5	2.19 (0.77)	0.95 (18)
Romantic beliefs	Sprecher and Metts (1989)	medium, positive	5	1-7	3.99 (0.97)	0.88 (15)
Socioemotional	• · · · · · · · · · · · · · · · · · · ·					
Need to belong	Leary et al. (2013)	small, positive	2	1–7	3.20 (0.67)	0.81 (10)
Need for shared reality	Hardin and Higgins (1996)	small, positive	2	1–7	5.07 (1.07)	0.66 (3)
Need for sharedness	Tindale and Kameda (2000)	small, positive	3	1-7	3.91 (1.38)	0.80 (4)
Intellectual humility	Porter and Schumann (2018)	small, negative	5	1–7	5.16 (0.78)	0.76 (9)
Empathic concern	Davis (1983)	small, negative	3	1-5	3.82 (0.73)	0.83 (7)
Compassion	Hwang et al. (2008)	small, negative	5	1-7	5.02 (1.33)	0.92 (5)
Submissive compassion	Catarino et al. (2014)	small, negative	5	1-7	6.41 (0.80)	0.88 (10)
General entitlement	Campbell et al. (2004)	small-to-medium, positive	5	1-7	3.90 (1.03)	0.84 (9)
Executive functioning	•					
Behavioral activation	Jorm et al. (1998)	small, positive	1	1-4	3.32 (0.48)	0.78 (5)
Self-control	Tangney et al. (2004)	small, negative	4	1-5	2.87 (0.67)	0.83 (13)
Attentional impulsiveness	Patton et al. (1995)	small, positive	4	1-4	2.27 (0.53)	0.73 (8)
Motor impulsiveness	Patton et al. (1995)	no association	4	1-4	2.00 (0.39)	0.62 (11)
Non-planning impulsiveness	Patton et al. (1995)	small, positive	4	1-4	2.09 (0.42)	0.67 (11)
Dark personality		· .				
Machiavellianism (Dark Triad)	Jones and Paulhus (2014)	small, positive	5	1-7	2.76 (0.75)	0.82 (9)
Psychopathy (Dark Triad)	Jones and Paulhus (2014)	small, positive	5	1-7	2.39 (0.61)	0.72 (9)
Narcissism (Dark Triad)	Jones and Paulhus (2014)	small-to-medium, positive	5	1–7	3.11 (0.69)	0.76 (9)
Psychopathy	Levenson et al. (1995)	small, positive	2	1-5	2.36 (0.54)	0.85 (26)
Narcissism	Ames et al. (2006)	small-to-medium, positive	3	0-14	4.02 (3.03)	0.73 (16)
Narcissistic vulnerability	Pincus et al. (2009)	small-to-medium, positive	5	1—7	3.58 (1.11)	0.90 (16)
Narcissistic grandiosity	Pincus et al. (2009)	small-to-medium, positive	5	1—7	3.99 (1.00)	0.84 (12)
Narcissistic admiration	Back et al. (2013)	small-to-medium, positive	4	1-6	3.74 (0.96)	0.86 (9)
Narcissistic rivalry	Back et al. (2013)	small-to-medium, positive	4	1–6	1.98 (0.81)	0.64 (9)

presuming reciprocation and acting from presumptuousness, we expect PRI to correlate with worse self-control, greater impulsivity, and worse self-regulation.

Given our characterization of presumptuousness as a construct that exists in the gray area between appropriate courtship and more problematic behaviors, we anticipate that the PRI will be correlated with socially aversive traits (e.g., Marcus & Zeigler-Hill, 2015). Specifically, presumptuousness would be expected to be associated with the lack of regard for others' autonomy and well-being, as has been found in the work linking stalking, psychopathy, and romantic relationships (Golmaryami et al., 2021). Similarly, the attenuated empathic response found to be associated with narcissism has been previously linked to viewing stalking-like behaviors as more acceptable (Asada et al., 2004), and narcissistic grandiosity is associated with aggressive behavior in the romantic context (Keller et al., 2014). Thus, we expect people higher in PRI to report higher levels of Machiavellianism, psychopathy, and narcissism.

To rule out the possibility that PRI is merely tapping into attachment anxiety (e.g., individuals high in PRI are merely high in anxious proximity-seeking), we assessed attachment styles (Fraley et al., 2000). Similarly, we also aim to demonstrate that PRI is not simply a reflection of individuals' tendency toward arrogance or indifference toward others; accordingly, we expect to find no association with intellectual humility (Porter and Schumann), compassion (Catarino et al., 2014; Hwang et al., 2008), or empathic concern (Davis, 1983).

Results and Discussion

As can be seen in Table 7, although most of the associations observed were small, many of our predictions bore out as expected, with some exceptions. Although we observed reliable associations with extraversion and neuroticism, relationship variables, measures of executive function, and dark personality traits, we observed somewhat mixed evidence for PRI's relationship with socioemotional variables. Importantly, we found PRI to be correlated with sexual narcissism, perceived relationship quality, commitment to pursuing a relationship, and mate retention behaviors. Consistent with our expectation of weak executive function, we observed greater behavioral activation, worse self-control, and more impulsiveness. We also found associations with Machiavellianism, psychopathy, and narcissism. Notably, however, we did not find the expected associations with underlying social needs, except for the need to belong. In evidence of discriminant validity, we observed a negative association with empathy and no association with either

Personality	Extravers	sion	Neuroticism	1					
Presumptuous Conspicuous Insecure Crude	0.12* 0.10 0.17** 0.07	*	0.16* 0.09 0.21*** 0.15**						
Relationship	Sex. Narc.	Rel. Quality	Com	nitment	MR	Anx. Attach	Avoid Attach	RBS	
Presumptuous Conspicuous Insecure Crude	0.25^{***} 0.24^{***} 0.24^{***} 0.24^{***}	$0.11^{*} \\ 0.13^{*} \\ -0.01 \\ 0.15^{**}$	0.2 0.2	8*** 6***	0.35*** 0.32*** 0.35*** 0.29***	0.16 ^{**} 0.08 0.13 [*] 0.26 ^{***}	-0.07 -0.10 -0.07 -0.01	0.19** 0.20*** 0.15* 0.16**	
Socioemotional	NB	NSR	NS	IH	Empathy	Compassio	on Submissi	ve Entitle	ement
Presumptuous Conspicuous Insecure Crude	0.15** 0.11* 0.20*** 0.11*	0.06 0.06 0.02 0.09	0.06 0.07 0.15** -0.05	-0.10 -0.10 -0.08 -0.12*	-0.12* -0.12* -0.11* -0.10	0.02 0.05 0.02 -0.03	0.28*** 0.28*** 0.25*** 0.25***	6 0.29 6 0.30)***)***
Executive function	ing BAS	Self-co	ontrol	Impulsive-A	Impuls	sive-M In	npulsive-NP		
Presumptuous Conspicuous Insecure Crude	0.14 [*] 0.16 [*] 0.11		**	0.12** 0.04 0.19*** 0.13**	0.23 0.20 0.25 0.20)***)***	0.03 -0.01 0.06 0.04		
Dark personality	SD3-Mach	SD3-Psycho	SD3-Narc	Psychopat	hy NPI	PNI-Vuln.	PNI-Grand.	NARQ-Adm	NARQ-Riv
Presumptuous Conspicuous Insecure Crude	0.15* 0.09 0.13* 0.20**	0.26*** 0.22*** 0.28*** 0.23***	0.31*** 0.35*** 0.23*** 0.25***	0.18*** 0.14** 0.18*** 0.19***	0.14** 0.13*	0.14^{*} 0.23^{***}	0.31*** 0.28*** 0.28*** 0.31***	0.19^{***} 0.18^{***} 0.19^{***} 0.14^{**}	0.18*** 0.12** 0.17*** 0.25***

Table 7				
Correlations Between	PRI	and	Validation	Constructs

Note. All values are standardized correlations between arithmetic mean PRI scale score and PRI subscores and validation constructs, respectively; Sex. Narc = sexual narcissism, MR = mate retention, Anx. Attach = anxious attachment; Avoid Attach = avoidant attachment; RBS = romantic beliefs; NB = need to belong; NSR = need for shared reality; NS = need for sharedness; IH = intellectual humility; Empathy = empathic concern; BAS = behavioral activation scale; Impulsive-A = attention impulsiveness; Impulsive-M = motor impulsiveness; Impulsive-NP = nonplanning impulsiveness; SD3-Mach = Machiavellianism; SD3-Psycho = psychopathy; SD3-Narc = narcissism; NPI = narcissistic personality inventory; PNI-Vuln = narcissistic vulnerability; PNI-Grand = narcissistic grandiosity; NARQ-Adm = narcissistic admiration; NARQ-Riv = narcissistic rivalry. * p < .05. ** p < .01.

compassion or intellectual humility; though, we did find an unexpected medium-sized positive association with submissive compassion. Consistent with expectations, anxious attachment is minimally correlated, and avoidant attachment is uncorrelated, suggesting PRI is distinct from typical relationship strategies.

Ultimately, PRI correlates with several measures of interest, but not so highly as to be conceptually indistinguishable from related constructs. These associations demonstrate a clear picture of what presumptuousness looks like: more extraverted, higher relationship quality, stronger need to belong, the type of person one might call "a romantic," more highly committed to pursuing their relationships, and more behaviorally active. Yet, on the other hand, they are more neurotic, more entitled (sexually and generally), report worse selfcontrol, engage in more possessive romantic tactics, have greater impulsivity, show reduced empathy, and greater Machiavellianism, psychopathy, and narcissism.

General Discussion

Across five studies, we developed a new measure of PRI, drawing on principles from motivation science, close relationship research, criminological approaches and beyond. We confirmed a 13-item bifactor solution featuring three auxiliary factors, which we characterized as conspicuous, insecure, and crude romantic intentions. In addition to replicating the confirmatory factor structure, we also observed strict measurement invariance across gender and relationship status, observed a modest test–retest reliability, and found that intentions explained more than 14% of the variance in actual romantic behaviors. Finally, we established a series convergent and discriminant validity. This measure may be of interest to researchers studying relationship development and maintenance (Eastwick et al., 2019), interpersonal goal pursuit more broadly (Fishbach et al., 2016), and the gray area between romance and stalking (Yanowitz & Yanowitz, 2012).

Implications

Substantial variability in presumptuous romantic behaviors can be explained by individuals' intentions. However, a greater proportion of the variance in presumptuousness is ostensibly *not* intentional. This means, individuals' preference for presumptuous, stalking-like behaviors may be explained by other dynamic processes including self-regulatory failure, failure to attend to situational cues, or other automatic processes. As has been the case in other analyses of planned behavior, future research should focus on identifying the predictors, mechanisms, and processes to explain the remaining 86% of unexplained variance. This marks an important step toward understanding the degree to which bold and potentially problematic relationship strategies are planful, exacting, and intentional.

We observed that people in relationships endorsed stronger PRI than single individuals (Study 3), and they also reported enacting more of these behaviors over a month-long period (Study 4). While one might be inclined to conclude that these are merely normative behaviors for enhancing closeness, we caution away from this interpretation. First, measurement invariance implies that these differences were not explained by bias in the items, such as if partnered individuals viewed these behaviors as more acceptable and thus were more willing to endorse them. These results, in addition to the correlations with sexual narcissism, numerous measures of narcissism, Machiavellianism, and psychopathy, as well as weak or nonexistent correlations with anxious and avoidant attachment, compassion, and empathic concern, suggest that these are not merely normative relationship behaviors. Nevertheless, partnered individuals hold (presumably) greater security in their already-developed relationships relative to single individuals who may be insecure about a nascent relationship, these mean differences seem reasonable, albeit potentially alarming. Given the majority of stalking perpetration is committed by current or former intimate partners (Spitzberg & Cupach, 2014) and identical behaviors are considered more acceptable when enacted in a monogamous romantic relationship (Becker et al., 2021), PRI may warrant particularly careful investigation in future research-especially as a potential risk factor for later intimate partner violence and stalking behavior.

Some of the convergent and discriminant associations we observed raise interesting conceptual questions about the nature of romantic presumptuousness-in particular, the motives underlying presumptuous intentions remain unclear. While the need to belong (Leary et al., 2013) correlated with PRI, neither the needs for sharedness (Tindale & Kameda, 2000) nor shared reality (Hardin & Higgins, 1996) were associated. Because presumptuousness involves a lack of responsiveness to the boundaries of the person being pursued, it is perhaps plausible that endorsement of PRI does not associate with seeking to develop shared reality. Furthermore, PRI was uncorrelated with compassion (Hwang et al., 2008) but positively associated with submissive compassion (being compassionate to be liked; Catarino et al., 2014), suggesting a possible egoistic focus. Nevertheless, this mixed evidence suggests complexity or, minimally, ambiguity in the underlying motives for pursuing relationships presumptuously.

Limitations and Future Directions

There are several shortcomings worth noting. First, in Study 4, we observed lower mean endorsement relative to the other samples, perhaps because data collection occurred amidst the height of the COVID-19 pandemic. This would be consistent with recent work finding that PRI decreased during the pandemic (Valshtein et al., 2022). Moreover, because social mitigation measures and norms left individuals confined to their homes and more averse to meeting new partners, we may have observed an even larger intention–behavior gap than would otherwise be anticipated. Nevertheless, that we

found intentions predict behaviors is a strong indicator of the effectiveness of our measure. Future research should investigate the intention–behavior relations found in Study 4 under nonpandemic circumstances—when such behaviors are both more commonplace and acceptable.

We observed minimal stability in PRI. Over periods of 3 weeks and 1 month, only 29%-37% of the variance in PRI at a second time point can be explained by PRI at an initial time point. While there is some stability in PRI, it is not a highly stable construct at intervals of 3 weeks or 1 month and we caution researchers from using this measure to conceptualize individuals who report PRI as exhibiting stable personality-like patterns of behavior. These results imply the possibility of within-person variability (Inauen et al., 2016; Valshtein et al., 2022), in PRI and, moreover, uncovers substantive theoretical questions about how enduring these intentions are, and what timeframe is most optimal for understanding whether and how they translate to behaviors. Future research on presumptuousness should focus on identifying conceptual boundary conditions on the stability of PRI-be it an exploration of other timeframes, or the creation of a revised measure for assessing a stable presumptuous orientation.

The PRI does not ask individuals to consider situational features that may signal acceptable contexts for presumptuousness, nor if individuals themselves believe these behaviors to be effective, nor whether these behaviors are desired by the romantic target. Research from the theory of planned behavior suggests that attitudes toward a behavior, subjective norms about the behaviors, and perceived behavioral control all should influence intentions and the enactment of respective behavior. All of this underscores the importance of conducting not only analyses of antecedents of intentions, but also dyadic research that can more effectively parse the relationship between the pursuer's behavior, the pursuer's understanding of courtship, and the target's beliefs about courtship and responses to such advances.

Future work should more carefully examine the role of social scripts in dictating individuals' levels of presumptuousness (e.g., Simon & Gagnon, 1986). We collected data on college students and an online community sample. Although these samples overrepresent nonheterosexual and nonwhite participants, future work must seriously grapple with the ways in which culture influences romantic behavior (Carey & Markus, 2017), especially given the role cultural norms play in modulating expressions of love. Future research must also more seriously grapple with the role of gender (specifically masculinity) in predicting PRI. Our test of measurement invariance was constrained to a binary conception of gender-future work should also incorporate more expansive and rigorous explorations of gender in the context of PRI. The PRI offers a useful empirical framework to complement the theoretical work establishing how sociocultural and gender norms enable perpetration of unwanted romantic pursuit (Langhinrichsen-Rohling, 2012).

In sum, the formation and maintenance of a romantic relationship is a complex self-regulatory challenge: deciding how and when to develop closeness requires thoughtful strategy selection. Research across disciplines suggests there is meaningful variability in these strategies and in the present research we developed a measure to capture intentions to behave presumptuously. Studying PRI unlocks new avenues for research to better understand basic social–cognitive relationship processes, and it begins to bridge the gap between normative relationship behaviors and more coercive romantic strategies.

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