STAGE 1 REGISTERED REPORT

PRE-SUBMISSION DRAFT

Associations between relationship power and personality traits differ across relationship-
types

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Abstract

Power is fundamental to romantic relationships; Relationship Power (RP) affects personal and relationship outcomes. The current goals are to examine a) associations between RP and personality and Masculinity/Femininity, and b) effect relationship context (same-sex or opposite-sex relationship) has on these associations. We will run multiple regressions, separately, for each personality, Masculinity, and Femininity trait to evaluate a) the main effect on RP controlling for age covariates, and b) the interaction effect between the respective trait and relationship-type on RP. Significant associations between the 7 traits under investigation and RP would confirm the hypotheses. Significance of the interaction term for personality showing greater association in same-sex couples, as well as significance of mas/fem showing greater associations with RP in opposite-sex couples would confirm the hypotheses regarding the importance of relationship context.

Keywords: Relationship Power, Personality, Masculinity/Femininity, Individual Differences, LGBTQ+ Relationships

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1. Introduction

Power in social dynamics has been noted by philosophers to be akin to energy in physics: to understand social dynamics we must speak in terms of power (Russell, 1938). In the context of romantic relationships, specifically, power can be defined as “the ability or capacity to change another person’s thoughts, feelings, or behavior so they align with one’s own desired preferences, along with the ability or capacity to resist influence attempts imposed by another person” (see Simpson, Farrell, Oriña, & Rothman, 2015: 409). Consistently, an individual’s subjective sense of how much power they have is greater than their resources or status; feeling powerful can act above and beyond what objective resources available to an individual would suggest (for a review see Simpson, Farrell, Oriña, & Rothman, 2015). Power has a fundamental role in romantic relationships because partners depend on each other to fulfill key needs and influence whether their partner will realize needs and goals (Overall & Cross, 2019). In the current research, the questions addressed relate to what may be related to our power perception in our romantic relationships. What individual differences predict relationship power? And how may relationship-level contexts affect these associations?

We will draw our understanding of how power operates in intimate relationships from the Dyadic Power-Social Influence Model, which posits that power within a relationship is both affected by and in turn affects both individual and dyadic characteristics (Simpson et al., 2015)¹.

¹ Key phrases to find power-relevant research differs by subfield. Previous work in the close relationships, communications, and family studies fields have studied influence strategies as a means to understand power (Falbo

It is also important that we develop an understanding of power within romantic relationships that addresses diverse couple-types. In previous relationships research, often a qualifier for the study was being in a heterosexual relationship. We will refer to these as opposite-sex relationships and its counterpart as same-sex relationships. These terms will be used, because they describe the relationship context and do not presume the individuals' sexuality². We will consider the relationship-type (opposite-sex or same-sex) as one relationship context that may affect how individual's characteristics may relate to the individual's relationship power.

1.1. Consequences of Power within Romantic Relationships

Power impacts positive and negative relationship behaviors and outcomes, both narrowly defined and in general. Lower relationship power is consistently associated with lower relationship satisfaction and personal well-being (Gray-Little & Burks, 1983³; Kifer, Heller, Perunovic, & Galinsky, 2013⁴; Sprecher, Schmeeckle, & Feinlee, 2006). Within opposite-sex relationships, condom use- an important relationship health behavior and dyadic decision- is more strongly influenced by individuals higher in relationship power, dispositional dominance, and by men, even after controlling for the couple's aggregated intentions to use condoms (VanderDrift, Agnew, Harvey, & Warren, 2013). Individuals higher in power are more resistant to negative emotion, or drops in self-esteem, following partner hostility (Kuehn, Chen, & Gordon, 2015) and are less likely to sacrifice for their lower power partner (Righetti, Luchies, van Gils, Slotter, Witcher, & Kumashiro, 2015). Conversely, individuals lower in power are

& Peplau, 1980), observed decision-making tasks to evaluate power (Dunbar & Burgoon, 2005), and used self-report single item "power" measures (Hall & Knox, 2017).

² For instance, someone who is bisexual can be in an opposite-sex relationship at the time of the study and later be in a same-sex relationship, or someone with strong same-sex attraction can also be in an opposite-sex relationship. We will not presume their sexual orientation from the context of the relationship they will report on.

³ Power was measured using one behavioral interaction.

⁴ Power was measured using the Sense of Power scale (Anderson, John, & Keltner, 2012).

more likely to prioritize partner's goals (Laurin et al., 2016), comply with the partner whether it is in their own best interest or not (Knudson-Martin, 2013), and not communicate their own needs regarding relationship issues (Samp & Solomon, 2001).

Those with higher relative power can promote positive outcomes (such as by being more forgiving or attending to their partner's needs) in their relationship; this was found to be enhanced by relationship motivation and pro-relationship behaviors (see Kim, Visserman, & Impett, 2019). However, in general, equality in relationships is highly valued (Galliher et al., 1999; Peplau & Cochran, 1980). Egalitarian relationships, those reporting more equal divisions of responsibility, show greater trust and commitment (Grauerholz, 1987), happiness and security (Walster, Walster, & Traupmann, 1978) and highest relationship satisfaction (Gray-Little & Burks, 1983). Overall, having power balance appears to be more ideal and show better relationship, health, and emotional outcomes.

1.2. The Dyadic Power-Social Influence Model

The Dyadic Power-Social Influence Model (DPSIM) relates how actor and partner characteristics, power perceptions, influence strategies, and outcomes interact and influence one another. Individual characteristics of the partners as well as the interaction of partner characteristics (within dyad characteristics) lead to power perceptions. Then, in turn power affects the influence strategies enacted by the actor and the partner. Finally, the strategies used affect the relational outcomes of the actor and the partner (Simpson et al., 2015).

Figure 1. A conceptual diagram of relationship power, its antecedents, and relationship outcomes. It relates individual's traits to power within a romantic relationship. The current study tests the left side of the diagram, specifically how a within-dyad variable, relationship-type, will interact with individual characteristics to influence relationship power.

Individual characteristics (what you come to the relationship with) and dyadic characteristics (contextual to the current relationship) lead to power perceptions, as illustrated in Figure 1. Once people are in a relationship their outcomes are affected by both one's own characteristics, power, and influence strategies and their partner's characteristics, power, and influence strategies. The relational outcome should, also, be affected by the decisions made for the dyad. Now, we can consider what individual characteristics might relate to having higher, lower, or equivalent power within romantic relationships. Then, we can examine whether relationship-level differences exist in the associations between relationship power and individual characteristics.

1.3. Individual Characteristics Influence Power Perceptions

As a psychological trait which may be expected to vary between individuals, we may ask what other individual characteristics might relate to perceived relationship power. Two core domains of individual characteristics not yet thoroughly examined in conjunction with perceived power in the context of intimate relationships are gender and personality.

Limited work with other measures of power suggest no sex differences in self-reported power within romantic relationships (Hall & Knox, 2017; Farrell, Simpson, & Rothman, 2015) or platonic, same-sex relationships (Anderson, John, & Keltner, 2012). This result might be slightly counter intuitive to some who note that gender gaps do exist in faculty jobs (Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012), CEOs, and leaders (Hill, 2016). Women are still the underdog in leadership and prestigious roles. Extensive work has been done on power strategies within intimate relationships that indicate sex differences exist in the strategies used to influence each other (Falbo & Peplau, 1980). However, it is unclear whether gender differences exist in the perception of relationship power, itself. Some research by Anderson and colleagues (2012) would suggest no gender differences in their “sense of power”, a very generalized perception of power, defined as psychological power that goes beyond status and resources. It is clear that interpersonal power processes are impactful on both interpersonal and individual outcomes, so it is important to note if there are differences on average based on gender alone. Now if we hope to understand differences present in diverse couple-types, we may be better-served asking whether our gender roles may relate stronger to our relationship power. This approach allows us to use continuous measures with variation across individuals. One way in which we may investigate gender role differences in relationship power across LGBTQ+ individuals is to measure the traits masculinity and femininity.

Some limited research has highlighted potential associations between individual-level power measures and personality outside of the context of romantic relationships. The personal sense of power measure, previously mentioned, was correlated with personality using both the Big Five Inventory in 316 undergraduates (BFI; John, Donahue, & Kentle, 1991) and the NEO-PI-R in 184 undergraduates (Costa & McCrae, 1985). The results showed the strongest

association with extraversion ($r = 0.43 - 0.49$), followed by conscientiousness, open-mindedness⁵, and negatively associated with negative emotionality⁶, ranging from 0.25 to 0.37. Only Agreeableness showed a nonsignificant correlation less than 0.10. This generalized psychological trait measure of power was, also, shown to be correlated equivalently with personality across different relationships (e.g. sorority, dormitory, same-sex friends, same-sex parent; Anderson et al., 2012). A similar but weaker relationship was seen between Big Five factors and leadership emergence- not necessarily the most effective leaders but those that tend to be in leadership roles (Judge, Bono, Ilies, & Gerhardt, 2002). When leadership is broken up by sample the student leadership emergence approaches the correlations in Anderson and colleagues' (2012) study.

The previous examples show individual-level power is related to personality across non-romantic relationships. Results in the various samples showed internal consistency of power-related beliefs even where there was no specific context given to the relationship. Many power-related studies do not report gender differences in power, whether that is due to not analyzing group differences or non-significance is not clear. Furthermore, within romantic relationships, where partners are reliant on each other, we do not yet know if similar patterns will emerge. In our study we seek to compare same-sex relationships and opposite-sex relationships in order to see if there are differences in the association of relationship power with personality and masculinity/femininity when the partners are matched or mismatched.

1.4. Context Matters: Within-dyad Characteristics Influence Power Perceptions

⁵ Open-mindedness is also known as Openness to experience.

⁶ Negative emotionality is also known as Neuroticism.

What research currently exists on the dynamics of power within the context of romantic relationships relies overwhelmingly on heterosexual participants (or participants currently in opposite-sex relationships). So, results that we take to represent couples, in general, only support generalizations to opposite-sex relationships. Beyond being exclusionary, only focusing on opposite-sex couples ignores one major potential confound of power- gender roles. Inclusion of participants in same-sex relationships and those with more diverse gender and sexual identities can help inform whether individual differences in power are due to gender roles (such as social/cultural norms) or if differences are due to relatively stable characteristics of the individual, like personality. Gender differences cannot be appropriately analyzed when they are exclusively nested within male-female pairs. Outside of the domain of romantic relationships, meta-analytic research has reported gender differences of the Big Five traits, largest being for negative emotionality and agreeableness (mean $ds = .34, .40$ respectively), with women rating higher on average (Lippa, 2010). While neither the sense of power nor the relationship power measures reported gender differences, the studies also used smaller samples and did not compare male-to-male, female-to-female, male-to-female, and female-to-male combinations. Our approach will be to use the continuous measures of masculinity and femininity rather than using categorical gender to investigate how gender roles relate to power.

Situational constraints on behavior and personality that arise in opposite-sex relationships may not apply similarly to same-sex couples. For example, if we assume opposite- and same-sex relationships operate the same, then we should see little to no relationship violence in lesbian couples where there is no man involved. A common belief of domestic violence is that largely the perpetrator is male. However, we see rates of domestic violence are similar across couples (Halpern, Young, Waller, Martin, & Kupper, 2004), even lesbian relationships (Little &

Terrance, 2010). Another example is the division of household labor which still shows a gender gap with women reporting doing 1.6 times the housework that men do (Bianchi, Sayer, Milkie, & Robinson, 2012). There are some results that suggest housework is divided more equally in same-sex couples (Goldberg, Smith, & Perry-Jenkins, 2012), yet same-sex couples are still aware of the hetero-gendered norms and evaluate themselves against these gendered roles (Goldberg, 2012). However, this does not mean they always find themselves dividing up into the gendered financial role and housework role. Individual strengths and time play a part in deciding who does what.

Research on same-sex relationships finds that one positive aspect unique to the context of same-sex relationship is that partners report having equality consistent with their values and freedom from gender roles within their relationships (see examples Riggle, Rostosky, McCants, & Pascale-Hague, 2011; Rostosky, Riggle, Dudley, & Comer Wright, 2006; a review Rostosky & Riggle, 2017). Freedom from gender roles would be more impactful for women, who are archetypically the lesser powered partner in the relationship. Women, more than men, report valuing equality in the relationship and deemphasize having more power (Fablo & Peplau, 1980). In the same study Fablo & Peplau, also, found heterosexuals- men and women- to overall report having somewhat greater power than their partner (1980). There is some support for this idea that female same-sex couples over male same-sex couples and opposite-sex couples report equality in their contribution, treatment, commitment, and power (Kurdek, 2003; Kurdek 2001). Looking across relationship-types will support a more conclusive analysis of gender roles and personality's relation to power within romantic relationships.

2. The Current Study

The current study will examine, first, how relationship power within romantic relationships relates to gender roles and personality, and second, how the associations between relationship power and those individual characteristics (i.e. masculinity/femininity and personality) might differ across relationship contexts. In particular, we aim to expand the scientific understanding of relationship dynamics beyond the typical focus on opposite-sex relationships. Motivated by our prior stated aims- understanding individual differences that might lead to power differentials in close relationships and including LGBTQ+ individuals- we will address the following research questions:

RQ 1) To what extent do individual characteristics (i.e., femininity, masculinity, and the Big Five personality traits) correlate with self-reported relationship power?

Hypothesis 1a: We expect little to no difference between categorical men vs. women on relationship power. The original study by Farrell and colleagues (2015) saw no significant gender differences, and we hope to replicate this finding in a larger and more diverse sample given adequate power to detect reasonably small effect sizes ($d = 0.10$). We do expect larger effects of femininity and masculinity correlated separately with relationship power, although to our knowledge no prior quantitative literature exists to allow us to estimate the potential effect size. We therefore predict that the relationship between masculinity or femininity and relationship power will be of similar magnitude to effects observed for personality traits ($|r| > 0.2$).

Hypothesis 1b: We expect relationship power to be most closely related to extraversion, followed by open-mindedness and conscientiousness, and negatively related to negative emotionality (all $|r| > 0.2$). Agreeableness is expected to account for little variance in relationship power ($|r| < 0.1$).

RQ 2) To what extent is the association between individual characteristics and power moderated by relationship-type (opposite-sex versus same-sex)?

Hypothesis 2a: The relationship between Masculinity and Femininity and Relationship Power is moderated by relationship-type, such that Masculinity and Relationship Power are more strongly related when in the opposite-sex relationship context than in the same-sex relationship context. Differences in power related to masculinity/femininity will be reduced in same-sex couples, meaning if there are power differences, they will be contextual to opposite-sex relationships.

Hypothesis 2b: The relationships between Big Five personality traits and relationship power are moderated by relationship-type, such that the personality traits and relationship power are more strongly related in the same-sex relationship context than in the opposite-sex relationship context. Personality correlates of relationship power will be strengthened in same-sex couples, in which individuals do not have different stereotyped gender roles to default to.

2.1. Methods

2.1.1. Participants and Design

Individual participants will be collected from an online Qualtrics survey posted in subreddits and in open access online formats geared to oversample non-heterosexual participants. Informed consent document will be waived for the online survey as signed documents would be the only identifiable material collected. Informed consent information will be read at the start of the survey, including details of the research aims, and clicking next signifies consent to participate (see Supplementary Materials C). Data collection will halt after whichever comes second, either the minimum participants needed is reached or four weeks have passed. Purposive

sampling procedures will allow statistical power to detect group differences, which is a key purpose of this study. Demographics of our participants will include age, gender (woman, man, non-binary and prefer to self-describe), race (open text field), country, education (using appropriate options for Internet samples), employment status (select multiple: unemployed; unable to work; student; self-employed; employed), supervisor or leader role (yes, no, unsure), relationship status (single; openly dating multiple partners; exclusively dating partner; cohabitating with partner; engaged/married), relationship-type (same-sex, opposite-sex, or prefer to self-describe), and sexual orientation (straight, gay or lesbian, bisexual, asexual, unsure, prefer to self-identify). Race, country, education, employment status, relationship status, and sexual orientation percentages of the total sample will be reported here (see Supplementary Materials B for demographics associated with power). The self-report questionnaires will include continuous measures of relationship power, personal power, personality, and traditional masculinity and femininity. See Table 1 for demographics and descriptive statistics of the continuous measures. All participants will fill out the survey online beginning with demographics, followed by the measures listed in order below.

2.1.2. Measures

Relationship Power Inventory. Farrell, et al.'s (2015) overall relationship power inventory (RPI) is 20-items measuring the general power dynamics of a couple as reported by one partner. It was conceptualized directly following the DPSIM framework. It taps into the dyadic nature of power, and looks at process power (i.e. "I tend to lead and structure discussions"; "My partner tends to bring up issues") and outcome power (i.e. "I get the final say when making decisions"; "My partner tends to give in to my preferences"). The Overall RPI was closely related to the more comprehensive domain-specific measure of power ($r = 0.70$), and was

shown to be as equally strong a predictor of behavior as the Relationship Domains RPI. Items are rated 1 (*never*) to 7 (*always*) with midpoint 4 (*sometimes*). Partner items are reverse scored and added to the actor's items for a cumulative total of the individual's power within the relationship (Farrell et al., 2015).

Big Five Inventory-2-S. BFI-2 short form (Soto & John, 2017) is a 30-item inventory. The short form assesses the 15 facets of the Big Five factors with two items apiece. The five factors are extraversion (facets: sociability, assertiveness, and energy level), agreeableness (compassion, respectfulness, and trust), open-mindedness (intellectual curiosity, aesthetic sensitivity, and creative imagination), conscientiousness (organization, productiveness, and responsibility), and negative emotionality (anxiety, depression, and emotional volatility). The items are brief definitions, adjectives, or synonyms of traits (i.e. "Is complex, a deep thinker.") that participants will respond 1 (*disagree strongly*) to 5 (*agree strongly*) that they are "someone who..." (Soto & John, 2017). Trait-level averages will be obtained from the corresponding items.

Traditional Masculinity-Femininity. The TMF measures the core concepts of masculinity/femininity (i.e., gender-role adoption, gender-role preference, and gender-role identity) on unidimensional scales. Six items ask participants to rate their interests, attitudes and beliefs, behavior, appearance, and how they consider themselves from 1 *not at all masculine* to 7 *totally masculine*. An identical 6 questions are rated from *not at all feminine* to *totally feminine* (Kachel, Steffens, & Niedlich, 2016). Standardized scores will be obtained for masculinity trait and femininity trait.

Sense of Power Scale. The personal sense of power (Anderson et al., 2012) is an 8-item measure assessing relative power of the individual. The scale asks participants to rate whether

they get their way or whether their opinions are heard (e.g. “I can get him/her/them to listen to what I say”, and “My ideas and opinions are often ignored”). It has been used in different contexts- a laboratory group interaction, relationship with specific individuals (e.g. mother, friend, or date), group relationships (e.g. sorority or dormitory/ residence hall), and generalized relationship across all people. Half of the items are reverse scored. An average of the items is then obtained.

2.1.3. Statistical Analyses

Missingness. We will exclude any participants that respond with an age less than 18. For the regression analysis, we will exclude those that do not complete the dichotomous relationship-type item. Then, for each of the individual difference measures (Big Five personality traits and Masculinity/Femininity) addressed by six questions apiece participants missing at least one question will not be included in the respective regressions ($\approx 83\%$ threshold). Participants who complete less than 80% of the questions assessing Relationship Power will be deleted in the respective regressions, which means skipping four questions. For participants with missingness missing less than the threshold set, we will take the average based on the 5 or 6 items they do complete. No other exclusion criteria are set.

Proposed Analytic Strategy. The full analytic script to answer our research questions will be available at: <https://osf.io/bs68d/>. Complete results of all analyses, correlation matrices, and descriptive statistics will be made publicly available at the same OSF project once data is collected. Given the sensitive nature of gender and sexual orientation items, we will not make full raw data available.

Trait scores for the Big Five, the total relationship power score, masculinity score, femininity score, and relationship-type factor with two levels (0 same-sex, 1 opposite-sex) will be used in subsequent analyses. Descriptive statistics, including means, standard deviations, and mean differences between men and women will be reported for each of the collected measures (see Table 1 below). Correlations and Cronbach's alpha for all continuous variables will be reported (see Table 2 below). Pairwise missingness will be used to handle missing variables on analysis-by-analysis basis.

First, a base model (m0) will be estimated separately examining the relation between power and each individual difference variable and situational variable (i.e. same-sex or opposite-sex relationship-type). We will include age and the interaction of age and our variables of interest (personality traits, mas/fem, and relationship-type) as covariates. We will not be interpreting the age effects on relationship power. The respective base model, m0, will be interpreted to fully answer Research Question 1. Next, we will add to the base model of each individual difference controlling for the main effect of relationship-type (m1), to examine in turn the relationship between power and each of femininity, masculinity, open-mindedness, conscientiousness, extraversion, agreeableness, and negative emotionality. Finally, we will examine the interaction between relationship-type and each of the target individual differences in turn (m2), controlling for the main effects of both relationship type and the target individual difference (see Table 4 below). The respective interaction model, m2, will be interpreted to fully answer Research Question 2.

Multiple test corrections. In order to correct for multiple testing, we will correct the overall significance threshold of $\alpha = 0.05$ for the effective number of tests using R-package "Meff" (Derringer, 2018), which will allow for the correction of multiple testing without the

assumption of independence of tests (i.e., compared to the conservative Bonferroni correction). The “meff” correction will be made within each set of individual difference variables, and summed across the two sets, and applied similarly to interpretation of the main and interactive effects. From the development of the Traditional Masculinity-Femininity Scale (Kachel et al., 2016), the correlation between masculinity and femininity was estimated to be -0.85, indicating an effective number of tests of 1 using the “meff” correction. The Big Five factors are correlated together, so using publicly available data (MIDUS wave 1 dataset) we created a correlation matrix indicating an effective number of tests of 3.75, rather than one test per trait. Therefore, the effective number of tests for m0 will be 5.75 (main effects of relationship-type and 7 traits), m1 will be 4.75 (main effects of 7 traits controlling for relationship-type), and m2 will be 4.75 (interaction effects controlling for main effects). We will correct for the approximate intercorrelation of all traits yielding an estimate of 15.25 tests across all target personality traits. Therefore, the corrected threshold for statistical significance will be $p < .003$. Because interpretation of both the main and interactive effects is planned a priori, we will use this same corrected threshold for declaring statistical significance in interpretation of both the main and interactive effects.

Statistical power analyses. A conservative power analysis using R package, “paramtest” (Hughes, 2017), was used to calculate the sample size needed to detect medium-sized ($b = 0.20$) interaction effect sizes with at least 95% power given a small main effect ($b = 0.10$). Given these values, we will need a sample size of 2,200. The composition of the sample split between opposite-sex and same-sex does affect the power estimates moderately. The closer to an even split the lower the sample needed. The 2,200 was estimated assuming a conservative 35% same-sex to 65% opposite-sex split. A more generalized power analysis using Cohen’s f^2 statistic and

R package “pwr” (Champely, 2018) suggests a minimum sample of 1,600, given a small expected effect size ($f^2 = 0.02$). Therefore, we will set 1,600 as the absolute minimum sample sized needed during the two months allotted for collection. Online surveys see most responses within hours of posting, so re-posting and cross-posting during the two months will hopefully achieve a sample closer to 2,200.

2.2. Timeline

After stage 1 of the registered report is accepted and IRB approval is obtained, we will begin collection. We will allot two months for data collection. The cutoff stated prior will be to stop collection after the second happens- either four weeks pass, or minimum number of participants complete the survey. This allows an extra month, if needed, to reach the minimum participants, or we will cut down on the number of tests for the planned project. The first to cut down would be to make the TMF a single bipolar measure. Next, we will drop the traits with the smallest correlation with relationship power. The script for analyses is prepared at the OSF link, so we will allot one month to run the script. Any deviations from the original plan due to sample size will be noted. Write-up for the final report will take an additional four months. Altogether, the timeline will be to be done seven months after the stage 1 report is accepted.

Table 1. Descriptive statistics

Demographics	Total	Men	Women	Non-binary	Intersex
Sample size	n	n	n	n	n
Age	M(<i>sd</i>)	M(<i>sd</i>)	M(<i>sd</i>)	M(<i>sd</i>)	M(<i>sd</i>)
Relationship-type					
Opposite-sex	x.00%	x.00%	x.00%	x.00%	x.00%
Same-sex	x.00%	x.00%	x.00%	x.00%	x.00%
Missing	n	n	n	n	n
RPI		M	<i>sd</i>	<i>N</i>	<i>d</i>
Relationship Power		x.00	x.00	n	x.00
Actor process power		x.00	x.00	n	x.00
Actor outcome power		x.00	x.00	n	x.00
Partner process power		x.00	x.00	n	x.00
Partner outcome power		x.00	x.00	n	x.00
BFI		M	<i>sd</i>	<i>N</i>	<i>d</i>
Extraversion		x.00	x.00	n	x.00
Agreeableness		x.00	x.00	n	x.00
Conscientiousness		x.00	x.00	n	x.00
Negative Emotionality		x.00	x.00	n	x.00
Open-mindedness		x.00	x.00	n	x.00
TMF		M	<i>sd</i>	<i>N</i>	<i>d</i>
Masculinity		x.00	x.00	n	x.00

Femininity	x.00	x.00	n	x.00
Overall M-F	x.00	x.00	n	x.00
SoP	M	<i>sd</i>	<i>N</i>	<i>d</i>
Sense of power	x.00	x.00	n	x.00

The Cohen's d statistic reflects differences between women and men on the scale measures.

[illegible]

Table 3. Main Effects Model Results (m0)

Regression Model	Covariate Age β (SE) p	Covariate Interaction β (SE) p	Main Term β (SE) p	R^2
1. Relationship-type	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
2. Extraversion	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
3. Agreeableness	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
4. Conscientiousness	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
5. Negative Emotionality	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
6. Open-mindedness	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
7. Masculinity	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
8. Femininity	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx

*Full regression results for research question 1, including age as a covariate and the interaction of age and each variable as a covariate. Each regression model is power ~ age + age*variable + variable. Under covariate is the main effects of age. The covariate interaction term is age*variable of interest. The main term is the main effect of interest. The R^2 represents the amount of variance in relationship power accounted for by the three terms.*

* $p < .003$

Table 4. Interaction Model Results (m2)

Regression Model	Covariate Age β (SE) p	Covariate Interaction β (SE) p	Main Term β (SE) p	Interaction Term β (SE) p	R^2
9. Extraversion	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
10. Agreeableness	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
11. Conscientiousness	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
12. Negative Emotionality	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
13. Open-mindedness	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
14. Masculinity	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx
15. Femininity	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	x.xx() .xxx	xx.xx

Full regression results for research question 2, including age as a covariate and the interaction of age and each variable as a covariate. Models 1-7 include the trait of interest and the interaction of each trait and relationship-type (power ~ age + age*relationship-type + age*trait + relationship-type + trait + type*trait). Under covariate is the main effects of age. The covariate interaction term is age*variable of interest. The main term is main effect of the variable of interest. The interaction term is the interaction of interest between relationship-type and the trait of interest. The R^2 represents the amount of variance in relationship power accounted for by all terms.

* $p < .003$

Figures 2. Graphs of interaction effects for each trait.

Interaction plot of random simulated data for Relationship Power, trait “X”, and the moderator-relationship-type. One for each of the 7 traits will be graphed. 0- same-sex 1- opposite-sex.

A. Supplemental Methods.

Discussion of the DPSIM model as originally written.

Where we will disagree with the conceptual model is that the partners' outcomes in turn influence the characteristics of the partners. We would suggest a recursive model that would only consider individual characteristics that are theoretically present prior to the relationship. For instance, one argument would be that we come to the relationship with our personality, so the relational outcomes will not influence either partner's traits at the outset of the relationship. While we may mature or have state changes throughout the relationship, a clearer argument is that what we bring to the relationship will affect our power which directly will affect our relational outcomes, or indirectly power will influence strategies used and the dyadic decision will affect relational outcome. Our dyadic decisions, or the compromises/decisions reached as a couple, can in turn affect our power perceptions. At the beginning and the end of the diagram dyadic processes should be affecting the perceptions and the outcomes of the partners. Moreover, we do note the DPSIM model diagram is non-recursive and is unlikely to be falsifiable. Below in Figure 1 we include a slightly modified diagram. The focus of this research will be on the left-hand side of the figure. Specifically, where does our power come from--looking at the individual characteristics and within-dyad variables that lead to power perceptions. We will examine the personal characteristics of the actor, take into account a within dyad variable, and predict actor power perceptions.

Expanded discussion of the measurement of power.

Simpson and colleagues (2015) note four key features to include in a measure of power. determinants of power vary across domains; two forms of power/influence to consider (outcome and process); power is a dyadic process; and influence-ability and resistance to influence are

both considerations. First, the determinants of power will vary across domains. In an egalitarian partnership, both individuals do not necessarily undertake identical roles or tasks. For example, one partner might organize weekly activities/chores while the other handles planning for their future. In a traditional relationship example, the husband controls financial decisions and the wife holds power over child-rearing. Considering only one domain (e.g., finances, leisure, life values, household chores) might show a different power dynamic than assessments of another domain. In the egalitarian example, asking time-specific questions about current decisions in the household would underrate the second partner's power. In addition, the importance of the domain can vary by relationship. For example, a dating couple would not consider child-care to be an important domain, but child-care can become extremely important if later in the relationship they have a child. Power is not stable across domains or across time (Simpson et al., 2015; Farrell, Simpson, & Rothman, 2015), so one-shot decisions and domain-specific power assessments are not ideal for considering the whole of the relationship.

Second, there is both outcome and process power that must be considered. It is important to consider how the decisions are made, not only the result of the decision-making process. Individuals can have power by both bringing issues to their partner's attention and by voicing the ultimate resolution. The former is process power, or when one partner opens a discussion and lays out the options (Davis & Rigaux, 1974). The latter is outcome power, or the control over the decision made (Galliher, Rostosky, Welsh, & Kawaguchi, 1999). Solely considering the outcome of decision-making misses the dynamic process by which couples resolve issues. Both the outcome and the process are necessary for a complete assessment of the power dynamic. Third, a dyadic approach to power considers that one individual's power is not simply the opposite of the other partner's power. So, scales using anchors partner to self are not ideal assessment tools. For

instance, if the item was “Handles the discipline of our child”, and the responses are 1- *partner*, 3- *equal*, and 5- *self*. Instead there is a dependent relationship between couples’ power (Langner & Keltner, 2008). As we previously said power is relational to others; therefore, any measure of power would ideally involve a dyadic component. Lastly, power includes the ability to influence the partner’s actions and the ability to resist giving into the wishes of the partner (Simpson et al., 2015). Being able to veto the partner’s ideas is as important as the ability to lead discussions or make decisions.

B. Supplemental Material

Supplement Table 1. Correlations of Demographics related to Relationship Power

Note. Based on self-report. The variables were coded dichotomous (0 = no, 1 = yes).

Supplement Figures 1. Distributions of Masculinity and Femininity Scales, separately.