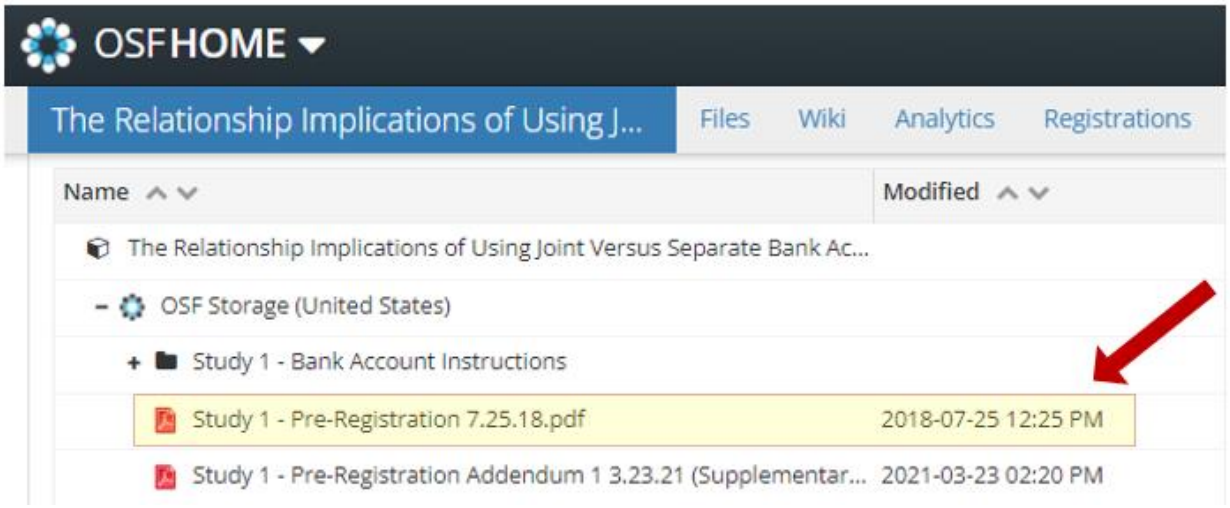
Update: March 1, 2022

This is an identical, but newly anonymized version of our original pre-registration document. Below is a screenshot confirming the original timestamp:



The Relationship Implications of Using Joint Versus Separate Bank Accounts

We began this project in 2013, before the benefits and procedures of pre-registration were widely understood in the behavioral science community. We did not pre-register our measures and planned analyses before collecting data. However, the benefits of pre-registration became clearer (to us, at least) over the course of our data collection. We completed the final wave of data collection in the spring of 2017, and now we are taking time to pre-register our analysis plans, before analyzing the data.

1) What's the main question being asked or hypothesis being tested in this study?

Our research is a longitudinal field experiment spanning two years with data collection at six time points. We have two primary research questions:

a. Does random assignment to joint account usage influence relationship well-being relative to separate account usage?
b. Does random assignment to joint account usage influence subjective financial well-being relative to separate account usage?

2) Describe the key dependent variable(s), specifying how they were measured.

Our two key dependent variables are relationship well-being and subjective financial well-being. We will create a composite measure (an average of all *z*-scored measures) of each construct at each time point. The composites will include the following scales/items:

Relationship well-being

a. Couples satisfaction index (32 items; Funk and Rogge 2007)
b. Conflict tactics scale (10 items; Straus, Hamby, Boney-McCoy, and Sugarman 1996)

c. High-maintenance interactions scale (4 items; Finkel, Campbell, Brunell, Dalton, Scarbeck, and Chartrand 2006)

Subjective financial well-being

a. Financial harmony scale (10 items; Rick, Small, and Finkel 2011)
b. Satisfaction with financial decisions
    i. How satisfied are you with the money management system you and your spouse CURRENTLY use? (1=very dissatisfied, 7=very satisfied)
    ii. In the past [“month” / “three months” / “year”, depending on the stage of the experiment], did you and your partner together spend too much money or save too much money? (1=Spent WAY too much, 4=Spent and saved an ideal amount, 7=Saved WAY too much; thus, for this item only, responses closer to the midpoint are indicative of greater satisfaction)
    iii. Are you happy with the amount of money that you and your partner together are saving for the future? (1=No, I wish we saved more, 4=Yes, I am happy with how much we’re saving, 7=No, I wish we saved less)
        i. Note: After the intake survey, we attempted to make the response scale easier to interpret at all follow-ups: 1=very unhappy, 7=very happy
        ii. We will recode the intake responses so that higher responses indicate greater happiness (as in all the follow-ups). Specifically, a 1 or 7 response at intake will be recoded as a 1; a 2 or 6 response at intake will be recoded as a 3; a 3 or 5 response at intake will be recoded as a 5; and a 4 response at intake will be recoded as a 7.
    iv. Are you happy with the amount of money that you and your partner together are routinely spending? (1=No, I wish we saved more, 4=Yes, I am happy with how much we’re saving, 7=No, I wish we saved less)
        i. Note: The scaling of this item changed from intake in exactly the same manner as the previous item, and we will recode the intake responses the same way.
    v. Relative to where you were [“three months” / “one year”] ago, would you say the state of your finances is worse, about the same, or better? (1=our finances are worse, 4=our finances are about the same, 7=our finances are better)

3) How many and which conditions were participants assigned to?

Couples were randomly assigned to one of three conditions:

a. Separate condition: Couples were instructed to maintain and use only separate checking and savings accounts over the course of the two-year experiment.
b. Joint condition: Couples were instructed to open and use only joint checking and savings accounts over the course of the two-year experiment.
c. No-Guidance condition: Couples received no instructions on how to manage their money over the course of the experiment. They were free to use any account structure they wanted.

4) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

Couples in all conditions were asked to complete follow-up surveys 3 months, 6 months, 9 months, 12 months, and 24 months after completing an intake survey. Both partners completed each survey independently. Thus, the data are repeated measures (t0-t5, “time”) nested within partners nested

within couples. To account for nonindependence, we will use multilevel modeling (MLM) to assess the effects of our manipulation.

To examine longitudinal effects (e.g., how relationship well-being changes over time), we will use growth curve modeling, a specific application of MLM for repeated measures. We will assess the effects of our experimental manipulation by fitting linear and non-linear models to the data.

We plan to run both per-protocol and intent-to-treat analyses to assess the effects of our experimental manipulation. This pre-registration document focuses on our planned per-protocol (PP) analyses, which quantify treatment effects among those who complied with our instructions. We provide greater detail regarding compliance below.

Following our initial PP data analyses, we plan to conduct Intent-to-treat (ITT) analyses. ITT analyses require tracking all couples who initially enrolled in the experiment. However, despite our best efforts, we could not track all of the couples who initially enrolled. Some couples stopped participating and became non-responsive as soon as they completed the intake survey and learned about their randomly assigned experimental condition. Others dropped out later (e.g., divorce, death). Handling these missing data will likely require a multiple imputation approach (e.g., Sinharay, Stern, and Russell 2001). We will pre-register the specifics of this approach in a follow-up document.

Which couples will be included in the per-protocol analyses? In other words, which couples will be considered "compliant"?

At each time point, couple members reported whether they currently maintained fully separate, fully merged, or partially separate/partially merged ("mixed") accounts.

In the Separate condition, if the couple indicated that their accounts were fully separate in the last follow-up survey that they both completed, we will categorize the couple as having complied with our instructions. However, we will also look for "switch-backs," as described below.

In the Joint condition, if the couple indicated that their accounts were mixed or fully merged in the last follow-up survey that they both completed, we will categorize the couple as having complied with our instructions. (Here, too, we will look for "switch-backs," as described below.) Note that this is a somewhat liberal definition of compliance. We could, more conservatively, categorize only couples who fully merged as compliant. We prefer the more liberal classification because we believe that fully merging finances, and completely discontinuing the use of separate accounts, may simply be too difficult for many couples (at least within our two-year window). We anticipate that couples who adopt mixed accounts are likely to have some of the same conversations about money as couples who adopt fully merged accounts. However, given that both categorization rules are defensible, we will run the analyses both ways (treating partially merged couples as either compliant or non-compliant) and report both sets of results.

Note that in both the Separate and Joint conditions, we will use participants' self-reports to determine compliance. In the Joint condition, we asked couples to submit one bank statement within three months to prove that they had opened a new joint account. However, these statements cannot speak to if and when participants closed their other separate account(s), or how much couples used the joint account over the course of the experiment. Thus, we must rely on self-report to determine compliance in both the Separate and Joint conditions.

In all conditions, if neither member of the couple completed any follow-up survey, we will categorize the couple as non-compliant.

What if partners disagree about their current account set-up (in the last follow-up survey they both completed)?

We will look at their previous follow-up responses to determine if this was a one-time mouse-click error by one partner. If the partners agree in previous surveys, we will use that previous response.

What if the disagreement is seemingly genuine (repeated across surveys)?

This may be because one partner is thinking of an account the other partner is not thinking of (e.g., one partner's secret personal checking account). To understand further, we will examine responses to the "Thus far, have you been able to follow the instructions we provided?" item and, if applicable, the open-ended response that follows (about how they haven't been able to follow our instructions). If one partner's responses reveal some form of non-compliance (e.g., one partner mentions opening a joint checking account in the Separate condition), then the couple will be considered non-compliant.

What if partners never both complete the same follow-up survey (e.g., he only completes the first follow-up survey, and she only completes the second follow-up survey)?

Here, we would not know how to interpret disagreement – there could be genuine disagreement, or the account structure could have changed sometime between when the partners completed their different follow-up surveys. In such cases, we will need to rely on the response of the partner who completed the most recent follow-up survey.

What if couples have "switch-backs"?

A couple's compliance status might change over the course of the experiment. This is not necessarily problematic. For example, a couple in the Joint condition might transition from purely separate accounts to partially merged accounts and then to fully merged accounts. However, couples might also move both toward and away from joint accounts over the course of the experiment (which we will call a "switch-back"). For example, a couple in the Joint condition might initially transition to only using joint accounts (as instructed), then learn that they do not like using joint accounts, and then transition back to using separate accounts. If we detect switch-backs, we will run two sets of analyses, treating these couples as compliant in one analysis and non-compliant in the other analysis. We will report both sets of results.

There may be other patterns of questionable compliance that are difficult to anticipate. If we detect such patterns, we will run the analyses treating those couples as either compliant or non-compliant and report both sets of results.

5) Any secondary analyses?

Our No-Guidance condition also allows us to imperfectly address some other questions: Does being randomly assigned to joint account usage influence relationship well-being and subjective financial well-being relative to actively choosing to start using joint accounts? Likewise, does being randomly assigned

to maintain separate account usage influence relationship well-being and subjective financial well-being relative to actively choosing to maintain separate account usage? Do couples who actively choose to start using joint accounts experience different levels of relationship well-being and subjective financial well-being than couples who actively choose to keep using separate accounts? Of course, any analysis involving the No-Guidance condition confounds the effects of using a particular account structure and selection effects. Thus, while these analyses will convey some information about the effectiveness of our experimental manipulation, they must be interpreted with extreme caution.

6) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

We attempted to recruit a minimum of 50 couples per experimental condition for a total of 150 couples. We ultimately recruited a total of 230 couples.

230 couples completed intake survey and received instructions for their randomly assigned condition
Couples were randomly assigned to a No Guidance, Joint, or Separate condition
Random sequence: NG J S J NG J S (we oversampled Joint given high anticipated drop-out in that condition)
sequence means approximately 2/7 got assigned to No Guidance, 2/7 got assigned to Separate, and 3/7 got assigned to Joint

Sample timeline (some couples started later):
Enroll (complete intake survey, receive instructions) in January 2014
Follow-up 1 (F1) in April 2014 (3 months later)
F2 in July 2014 (6 months later)
F3 in October 2014 (9 months later)
F4 in January 2015 (12 months later)

	No Guidance (original N=68)	Joint (original N=96)	Separate (original N=66)
Exited immediately and never returned (i.e., did not complete any follow-up surveys after initial intake)	4	36	10
Completed F1 and never returned	3	2	3
Completed F1,2 and never returned	1	0	1
Completed F1,2,3 and never returned	0	0	2
Completed F1,2,3,4 (one year) and never returned	2	3	3
Completed F1,2,3,4,5 (all follow-ups)	**53**	**30**	**41**
Completed F5, but skipped earlier F(s)	4	17	5
Provided irregular, partial data (each couple in this group had a unique participation history)	1	8	1

7) Anything else you would like to pre-register? (e.g., data exclusions, variables collected for exploratory purposes, unusual analyses planned?)

There are some aspects of the data that are not completely unknown to us at the time of this pre-registration:

We tracked completion and drop-out rates by condition as the experiment proceeded (see question 6) . At the time of this pre-registration, we know that the drop-out rate was particularly high in the Joint condition.

In the summer of 2017, [Author 1] and [Author 4] met in [city] so [Author 1] could get better acquainted with multilevel modeling of dyadic datasets. To ensure that [Author 1] would be equipped to do analyses on their own following the meeting (i.e., to make sure that data were being read properly by

the statistical software), [Author 1] and [Author 4] conducted a small number of ad hoc analyses during that meeting. These analyses did not provide any sort of deep insight into the dataset, but they do violate the strictest versions of preregistration.

For a separate paper, [Author 1] and [Author 2] analyzed some exploratory items from the one-year follow-up. These items measured participants' self-reported responsibility for four household tasks (e.g., managing and paying bills; shopping) and participants' confidence in dealing with financial matters (e.g., "I have the skills required to make sound financial investments"). The analyses were blind to participants' experimental condition, their responses to the key dependent variables, or their responses to any other exploratory measure.