How Do Invested Partners Become Invested? A Prospective Investigation of Fledgling Relationship Development

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Abstract

Investment—the feeling that one has put considerable resources into a relationship—is theorized to play a key role in relationship persistence. Yet, the development of investment is not well-understood. We recruited 256 individuals in new dating relationships and surveyed them each week for up to 25 weeks. This design allows us to test underlying theoretical assumptions about how people become invested in new dating partners. Some assumptions, such as the idea that investment increases over time, were confirmed. Other assumptions were not supported: Feelings of investment were quite high after only a few weeks of dating and were not strongly shaped by concrete relationship milestones. Rather, feelings of investment were strongly linked to other subjective indicators of relationship development, such as feeling attached to the partner and believing that the relationship had a good future. We discuss the implications of these findings for existing models of investment.

It has been over 40 years since the first seminal paper on the investment model was published (Rusbult, 1980). Drawing on interdependence theory, the central premise of the investment model is that investment helps shape commitment. The more resources a person has put into a relationship, the more dependent they are on that relationship and the less likely they are to leave. The power of investment to predict relationship outcomes, particularly commitment and persistence, is now well-established through hundreds of studies (see Le & Agnew, 2003; Tran et al., 2019 for meta-analyses). Yet, little is known about its antecedents or trajectories. How does the feeling of being invested in a partner first emerge, and where does that feeling come from?

The purpose of the current study was to explore how investment develops in the early dating stages of a relationship. We recruited people who went on a first date within the last month and emailed them a survey about their new dating relationship each week for up to 25 weeks. We measured specific resources placed into the relationship each week, such as time spent with the partner as well as a range of relationship milestones (e.g., meeting friends and family, planning future events together). We also measured subjective feelings of investment each week ("I have put a great deal into this relationship that I would lose if the relationship were to end"). This prospective design allowed us to probe assumptions about how the feeling of being invested develops over time. When a person feels that they have put a great deal into their relationship, what specifically have they put into it, and how long does it take for that feeling to emerge?

How Does Investment Develop?

According to the investment model (Rusbult, 1980, 1983), the central characteristic of investments—and what distinguishes them from rewards and costs that drive relationship satisfaction—is that investments cannot be easily removed from the relationship. Rather, they are tied to the relationship and are lost if the relationship is lost. Investments "increase commitment and help to 'lock the individual into his or her relationship' by increasing the costs to ending it. . . to abandon a relationship is to sacrifice invested resources" (Rusbult, 1983, p. 103). Examples provided in Rusbult's original work include time, disclosures, an intellectual life, a sense of personal identity, memories, recreational activities, relationships

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with family and friends, and other more tangible things such as children and homes (Rusbult et al., 1998). In short, an investment is any resource that becomes tied to the relationship such that it would be lost if the relationship were to end.

Based on this definition, it seems intuitive that investment should begin at a very low level when a dating relationship first begins, and then gradually develop as the partners' lives become increasingly intertwined. The more time and effort one spends on a particular relationship, and the more non-recoverable resources that become tied to that person, and the bigger the loss one would suffer in the event of a breakup. A couple who is married with a child, for example, should feel considerably more invested in their relationship than a couple who has been dating for only a few months.

Yet, early theorizing about investment is surprisingly agnostic about the manner and rate at which investment develops. In the first two published papers on the model (Rusbult, 1980, 1983), the trajectory of investment is mentioned briefly only once. Rusbult (1983) presents the first longitudinal test of the investment model, in which people in brand-new relationships (mean duration length of 4.15 weeks) were surveyed every 17 days for 7 months, for up to 12 surveys over the course of an academic year. Investment did increase over time, a finding the author notes within the discussion section as being consistent with the model: "It seems natural that investment size increases over time because a variety of resources require time for their investment" (p. 114).

Examining the descriptive data from this study, it is striking how much of that increase in investment occurred within the first month of the study. Investment at background, 4 weeks into the dating relationship, had a mean rating of 4.24 ($SD = 2.12$) on a scale ranging from 0 to 8. This mean rating jumps to 5.88 ($SD = 1.99$) by the second survey and 6.80 ($SD = 1.70$) by the third. Thus, participants were already reporting investment levels well above the midpoint of the survey only 2 months into their dating relationships. Given the fact that this scale includes items such as, "Compared to other people I know, I have invested a great deal in my relationship with my partner," it seems shocking that people feel invested that quickly. This descriptive pattern was not commented on by the author of the paper. The sample size in Rusbult (1983) was unfortunately quite small ($N = 30$), limiting the generalizability of the findings. Nevertheless, this study provides the earliest evidence that feelings of investment increase as a relationship develops. It also hints at the idea that this increase in feelings of investment happens very rapidly, a possibility that to our knowledge has not been tested further in the 40 years since this article was published.

Prospective investigations of new dating relationships have been limited, likely due to the logistical challenges associated with recruiting and retaining participants who are in the midst of such a fleeting dating phase (Joel & Eastwick, 2018). Instead, much of the existing work on relationship development has been hypothetical or retrospective in nature (e.g., Ellis, 1998; Joel & Charlot, 2022). One particularly useful retrospective approach to studying relationship development has been the relationship trajectories technique (e.g., Cate et al., 1986; Surra & Hughes, 1997). With this method, participants are asked to plot major relationship turning points (e.g., changes in their commitment to marry their partners) from when they first met their partner to a specified end point such as the current day, their wedding day, or the day the relationship dissolved if reporting on a past relationship. For example, Eastwick et al. (2018) used the relationship trajectories technique to plot the timing of specific relationship milestones. This series of studies provides detailed descriptive data on the order and timing of early relationship events that could reasonably be considered investment behaviors (e.g., meeting the partner's parents, spending the night with the partner for the first time). However, participants did not report on their subjective, global feelings of investment in these studies. Retrospective reports also have the limitation of being subject to retrospective bias (e.g., Frye & Karney, 2002), and are necessarily fully comprised of individuals whose relationships remained intact through the early stages.

A few studies have tracked people in new relationships prospectively as those relationships develop. Fletcher et al. (2000) surveyed 100 individuals in brand-new dating relationships (initially together for fewer than 4 weeks) 3 times over 9 months. Gere and Impett (2018) surveyed 59 newly dating couples (initially together for fewer than 4 months) twice over 3 months. Most recently, Gerlach et al. (2019) surveyed 763 participants twice over 6 months as they potentially transitioned from singlehood to couplehood (258 participants did so). These studies give us a rare glimpse into people's experiences with new dating relationships as they develop in real time. However, to our knowledge, none of these studies included measures of investment, operationalized either as subjective feelings of investment or as specific investment behaviors.

What Counts as an Investment?

To answer the question of how investment develops in a romantic relationship, it matters greatly which specific feelings, thoughts or behaviors are considered investments. Returning to Rusbult's (1980) definition, which aspects of a relationship can versus cannot be considered a non-recoverable resource that ties a person to a romantic partner? Rusbult (1980, 1983) considered a wide range of possibilities, including not only resources put directly into a relationship "such as time, emotional involvement, self-disclosure, money, and so on" (p. 174), but also resources that have become increasingly embedded as the partners' lives entwine, such as a home or mutual friends. Adopting the same theoretical lens, others have added dimensions that such investments can differ on, such as tangible versus intangible and past versus planned (Goodfriend & Agnew, 2008).

The widely used Investment Model Scale (Rusbult et al., 1998) includes five "facet" items and five global items. The facet items capture specific resources that one can place into the relationship: time, self-disclosure, a shared intellectual life, a shared identity, and shared memories with the partner. The global items capture an overall sense of having a lot invested in the relationship (e.g., "I feel very involved in our relationship—like I have put a great deal into it," "Compared to other people I know, I have invested a great deal into my relationship with my partner").

Interestingly, the facet items are not intended to be used in research but rather serve to illustrate and orient participants to the intended meaning of the global items. As noted by Rusbult and Martz (1995):

> facet items are utilized to enhance the comprehensibility of global items, thereby increasing their reliability and validity—the facet items are included solely to obtain good global measures of each investment Model construct. The global measures of each construct are the measures that are employed in formal tests of Investment Model hypotheses.

As such, in more recent research, the investment subscale is often shortened to include global items only (e.g., Etcheverry et al., 2013; Goodfriend & Agnew, 2008; VanderDrift et al., 2013). Thus, when researchers discuss the empirical and predictive value of investment as a construct, they are likely referring to global, subjective feelings of investment, rather than specific investment behaviors.

What Makes People Feel Invested?

Given a lack of research on new dating relationships (Joel & Eastwick, 2018), we know little about the antecedents or predictors of investment. There is clear evidence that global measures of investment (e.g., Rusbult et al., 1998)—which capture the gestalt, subjective experience of feeing tied to a romantic partner—are strong predictors of commitment and in turn relationship persistence (Le et al., 2010). But what, specifically, are those subjective feelings grounded in? One might expect global feelings of investment to be grounded in reaching specific relationship milestones, such as meeting each other's friends and family, saying "I love you" to each other, or planning upcoming vacations together as these are the behaviors that cannot easily be undone in the event of dissolution. In the present study, we consider this possibility by tracking the occurrence of such milestones prospectively (Eastwick et al., 2018). However, drawing on the idea of intangible investments (Goodfriend & Agnew, 2008), which hold that future expectations and current strong feelings also serve to add to the gestalt sense of being invested, it is also possible for feelings of investment to be shaped in part by other, more subjective relationship experiences. Specifically, in the present paper, we considered three such constructs that are theorized to help drive new relationship development, and may thus help to shape the feeling of being

tied to a new partner. Whereas not every dating relationship is undertaken with the goal of finding a long-term relationship, often short- and long-term relationships begin similarly and diverge later due to which goals are salient for the partners (Eastwick et al., 2018). As such, we selected constructs that may be especially useful in understanding how the sense of investment develops, as they provide insight into partners' goals for the future of the relationship.

Infatuation

When theorizing about how people come to feel invested in new relationships, it is important to consider that new romantic partners are deeply, intrinsically rewarding. Humans have a strong biologically based drive to form romantic attachment bonds (e.g., Fletcher et al., 2015; Fraley et al., 2005). People often experience intense feelings of infatuation for new dating partners (i.e., they experience a state of intense longing for union with another) (Hatfield & Sprecher, 1986; Tennov, 1979), which may motivate new partners to spend enough time together for an attachment bond to form (Hazan & Diamond, 2000; Zeifman & Hazan, 1997). The infatuation-related construct of sexual desire can motivate not only sex with a new partner (which is itself an intimacy-promoting behavior; Birnbaum & Gillath, 2006) but also self-disclosure (Birnbaum et al., 2017; Gillath et al., 2008). Together, this research suggests that feelings of infatuation may motivate a wide range of intimacy-seeking behaviors, in turn driving positive changes in investment over time.

Attachment

Drawing on the same theoretical tradition, the feeling of being psychologically tied to a romantic partner may in part be grounded in the perception that the partner is an important source of support and validation (Hazan & Shaver, 1987). Attachment theory posits that as a new relationship develops, people gradually form an attachment bond with their romantic partner, relying on that person both when they are distressed (safe haven) and when they are not (secure base). Although early theorizing assumed that such attachment bonds take years to form (Hazan & Zeifman, 1994), more recent research suggests that people can become attached to new romantic partners quite quickly; potentially within the first few months of dating (Fagundes & Schindler, 2012; Heffernan et al., 2012). Given the general dearth of empirical data on early relationship development—and no such studies that incorporate both the investment model and attachment theory—it is not yet known whether normative attachment typically precedes or follows a sense of being invested in the relationship.

Future Potential

Adopting a more cognitive perspective, it is possible that investment is shaped in part by the perception that the

relationship has long-term potential. Humans have a unique ability to mentally simulate future events (e.g., Aspinwall, 2005; Schacter et al., 2007) and to plan courses of action that will help them achieve desired outcomes (Ajzen, 1985; Gollwitzer, 1999). Thus, people may regulate their investment based on how likely they think a new relationship is to lead to desired outcomes. How compatible are they with this person, and how satisfying is this relationship likely to be long-term? Indeed, several studies suggest that people are more committed to a relationship when they believe that it will be satisfying in the future, over and above how satisfying it is at present (Baker et al., 2017; Lemay, 2016). People may similarly make future-oriented forecasts about brand-new dating relationships, and draw upon them when choosing how much time and energy to place into that relationship.

Present Research

In the current study, we recruited participants who went on a first date with a current dating partner fewer than 4 weeks ago. A total of 256 participants completed a short survey about their brand-new dating relationship each week for up to 25 weeks. We captured global feelings of investment in the relationship, perceptions of the partner's investment in the relationship, percentage of free time spent with the partner, and which specific milestones the relationship first achieved in the previous week. This design allowed us to directly test several assumptions of existing theoretical models of investment which, to this point, have been subject to limited empirical scrutiny.

We explore three key questions about the development of investment. First, how quickly do people feel invested in new dating relationships? We tested the assumption that subjective investment is relatively low at the beginning of a dating relationship and increases over time, according to each operationalization of investment. Second, what specific investment behaviors are people doing? We plotted the timing of milestones achieved during the first few months of dating. Finally, what contributes to the overall feeling of being invested? We tested the assumption that people's overall subjective sense of being invested in a relationship is shaped by the milestones that they have reached and the time spent with their partner, as these signify the concrete investment that they have put into that relationship over time. We further examined how feelings of investment might shape or be shaped by three additional variables of theoretical importance for relationship progression: infatuation, normative attachment, and the perception that the relationship has future potential.

Method

Participants and Procedure

We planned to recruit a total of 400 participants online via forums and social media platforms. To be eligible,

participants were required to be at least 18 years of age, be fluent in English, and to have gone on their first date with a current dating partner fewer than four weeks ago. For the first semester of recruitment, participants were required to live near Salt Lake City, Utah, USA. However, as preregistered, we broadened the location criterion to include all of the United States and Canada in January 2018. Participants were recruited with Facebook ads targeting audiences with a relationship status set to "single" or unstated. Potential participants were screened via email, then sent the initial intake survey, followed by a short survey each week for the next 25 weeks (approximately 6 months). Participants who broke up with their original partners received a survey about their single life to complete instead. Participants who began dating someone new were once again sent the relationships version of the survey. Participants were compensated with up to US$55 or $71.50 CAD based on the number of surveys completed.

A total of 256 participants were recruited between July 2017 and March 2020, at which point data collection was ceased due to the global pandemic. We excluded participants who indicated that they had been dating their romantic partner for longer than 2 months at the beginning of the study ($n = 44$)[1] or who indicated that their partner had also participated in the study, violating independence assumptions ($n = 28$, or 14 dyads). The final sample consisted of 195 participants (156 women, 35 men, 3 preferred not to say), with a mean age of 27 years old ($SD = 8.38$, range = 18-60). The sample was primarily white (68%), and also included East Asian (10%), Black (6%), Biracial (5%), Hispanic (3%), and Indigenous participants (3%). Religiosity was low ($M = 2.68$, $SD = 2.1$, range = 1-7), and the majority of participants identified as non-religious (54%); only 6 participants identified as Latter-day Saints (3%). Participants were primarily from the United States (49%) and Canada (35%).

Participants had been dating their current romantic partner for an average of 24 days at intake ($SD = 11.74$, range = 2-60 days); 176 participants were dating someone of a different gender (90%); 92 of the relationships dissolved partway through the study (47% of the sample), with breakups occurring an average of 9 weeks into the study. Participants completed an average of 12 weekly surveys reporting on their original dating partner ($SD = 9.38$, range = 1-28). Assuming hazard ratios of .75, this sample offers 65% power to predict breakups—the least sensitive effect of interest—using Cox regression (calculated with the "powerSurvEpi" package in R).

The study was preregistered on July 4, 2017. The preregistration included a series of confirmatory hypotheses about how individual differences (e.g., self-control) may shape investment decisions over time. For the most part, these hypotheses were unsupported. The current paper focuses on exploratory analyses testing more basic assumptions about how investment develops (see above). Results from the

preregistered models are presented in the Supplemental Material for transparency. Data, materials, and code are available on the Open Science Framework: https://osf.io/cb3de/.

Intake Measures

Investment Model (Rusbult et al., 1998). Five items each captured satisfaction (e.g., "My relationship is close to ideal," α = .92, *M* = 5.10, *SD* = 1.40, range = 1-7), investment (e.g., "I have put a lot into this relationship that I would lose if the relationship were to end," α = .87, *M* = 3.27, *SD* = 1.51, range = 1-7), and quality of alternatives (e.g., "If I weren't in this relationship, I would do fine; I would find another appealing person to date," α = .87, *M* = 3.91, *SD* = 1.51, range = 1-7), and seven items captured commitment (e.g., "I want this relationship to last forever," α = .90, *M* = 5.22, *SD* = 1.41, range = 1-7) at intake. This scale is not used in any key analyses but is presented here to provide baseline information about the sample.

Weekly Measures

All items were measured on a scale of 1 = *strongly disagree* to 7 = *strongly agree* unless otherwise noted. Scale properties are reported from Week 1 data. Qualtrics asked participants for the name of their dating partner and piped it into the questions (referred to in the text below as [partner]).

Investment. One item, taken from the Investment Model Scale (Rusbult et al., 1998), captured *global, subjective investment* feelings ("I have put a great deal into our relationship that I would lose if the relationship were to end").

Relationship Milestones. Weekly milestones in the new relationship were captured in two ways. One item captured *time spent with the partner* that week ("Overall, what percentage of your free time did you spend with [partner] this week? Please estimate from 0 to 100%"). A checklist of 19 items captured *specific milestones* the relationship may have achieved in the previous each week (e.g., "Introduce [partner] to your friends," "Take an overnight trip with [partner]," adapted from Eastwick et al., 2018). Once a specific milestone had been selected by a participant, it no longer showed in subsequent survey checklists as an option, so this measure assesses the first time each milestone was achieved.

Infatuation. Three items captured weekly feelings of infatuation for the partner (*M* = 5.40, *SD* = 1.40, α = .84). Two of these items are from the Passionate Love Scale ("I would rather be with [partner] than anyone else," "I have an endless appetite for affection from [partner]"; Hatfield & Sprecher, 1986), and one is a commonly used measure of sexual desire in daily experience studies ("I felt a great deal of sexual desire for [partner]"; Impett et al., 2008).

Future Potential. Four items captured weekly perceptions that the relationship has long-term potential (*M* = 5.10, *SD* = 1.20, α = .84). Two of these items were taken from the forecasted satisfaction scale ("I expect that our relationship has a good future," "I expect that I will experience more problems in this relationship in the future"; Lemay, 2016), and two were added to capture perceived compatibility ("I believe that [partner] and I make a good long-term match," "I can see [partner] and I fitting in well with my future life plans").

Normative Attachment. Four items from the WHOTO scale (Fraley & Davis, 1997) captured the extent to which people were relying on their new dating partner as an attachment figure (*M* = 4.60, *SD* = 1.60, α = .92). One captured separation distress ("My partner is a person whom I do not like to be away from"), two captured use of the partner as a safe haven (e.g., "My partner is the first person that I think of when I have a problem"), and one captured use of the partner as a secure base ("If I achieved something good, my partner is the person that I would tell first").

Confirmatory factor analyses examining the items meant to capture infatuation, future potential, and normative attachment showed that a three-factor structure fit the data reasonably well, CFI = .96, RMSEA = .09, SRMR = .05, whereas a one-factor structure did not, CFI = .76, RMSEA = .22, SRMR = .09. Thus, we treated these measures as three separate constructs in the present analyses.

Results

Correlation Table

Correlations are displayed in Table 1. Investment model scale scores are taken from the baseline questionnaire, and the weekly measure scores are taken from the Week 1 survey. All variables were moderately to highly correlated with each other, with the exception of one pair of variables (quality of alternatives and time spent with the partner).

When Are People Feeling Invested?

How quickly did people feel invested in their new dating relationships? Using multilevel growth modeling, we tested the assumption that investment levels are low at the beginning of a new dating relationship and increase as the relationship progresses. Because some relationships dissolved over the course of the study, we present these trajectories separately for people whose relationships dissolved versus stayed intact over the course of the study. Data were structured at the weekly level, such that each participant had up to 28 rows of data. Analyses included relationship length in weeks (Level 1, uncentered), breakup status (Level 2, 0 = survived, 1 = dissolved), and their interaction as predictors. The dependent measure was the weekly, single-item measure of subjective, global feelings of investment. For relationships

Table 1. Associations Between Relevant Measures.

	2	3	4	5	6	7	8	9
1. Satisfaction	.45	−.36	.69	.49	.44	.55	.60	.62
2. Investment		−.28	.56	.70	.32	.38	.32	.58
3. Quality of alternatives			−.57	−.32	−.09	−.26	−.25	−.33
4. Commitment				.63	.30	.59	.60	.62
5. Subjective investment					.35	.56	.42	.66
6. Time spent with partner						.29	.39	.47
7. Infatuation							.65	.69
8. Future potential								.68
9. Normative attachment								

Note. All correlations are significant at $p < .001$, except for the association between quality of alternatives and time spent with partner ($p = .20$).
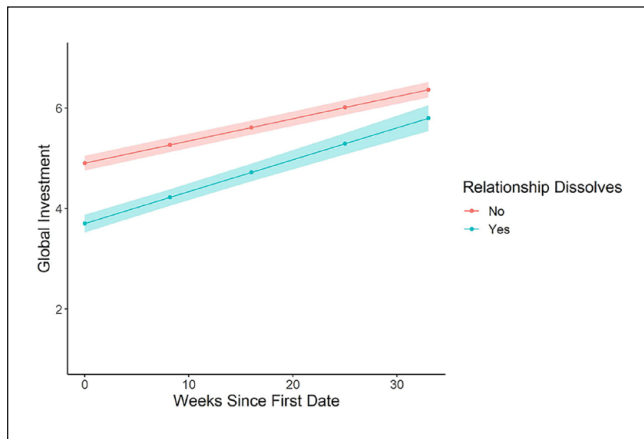
Figure 1 Global Feelings of Investment Each Week

that dissolved, data are included until the week of the breakup for that participant (e.g., if a breakup occurred on Week 8, that participant's data for Weeks 1 to 7 would be included in analyses). Thus, both the "survived" and "dissolved" trajectories include only data collected when the relationship was intact. Missing data were handled with listwise deletion. All analyses were conducted with the lme4 package in R (Bates et al., 2015).

The model predicting subjective investment is displayed on Figure 1. The intercept was above the midpoint of the scale, $b = 4.30$, suggesting that participants generally felt quite invested in their relationships at the beginning of the study. There were significant main effects for relationship length, $b = .05$, $SE = .004$, $p < .001$, and relationship status, $b = −.60$, $SE = .11$, $p < .001$, as well as a significant interaction between those variables, $b = .01$, $SE = .004$, $p = .03$. Simple effects analyses indicated that subjective, global feelings of investment increased significantly as the relationship progressed both for those who stayed together, $b = .04$, $SE = .003$, $p < .001$, and for those who broke up, $b = .06$, $SE = .008$, $p < .001$.

Investment increased significantly as relationships developed. This was particularly true for participants whose

relationships survived for the duration of the study. However, investment still increased significantly for those whose relationships ultimately ended. Participants in relationships that survived also had higher investment levels to begin with compared with those in relationships that dissolved. Mean levels of subjective investment were high at the very beginning of the study: Those whose relationships lasted rating their subjective investment at 4.90 on a 7-point scale just weeks after their first date with their partners. This mean is consistent with much of the published literature on the mean levels of investment found among established, long-term relationships. For example, in two recently published samples that were comparable to our study in demographics and reported on the investment item in question ("I have put a great deal into our relationship that I would lose if the relationship were to end"), the dating sample (together 3 years on average; Study 2) reported a mean score of 5.76 a 7-point scale (range = 1–7, $SD = 1.39$), and the married sample (together 8 years on average; Study 3) reported a mean score of 5.81 on a 7-point scale (range = 1–7, $SD = 1.59$; Joel et al., 2021). Together, these descriptives suggest that the subjective feeling of being invested in a partnership may reach an empirical ceiling quite early.

What Are People Investing?

Which specific investment behaviors do people tend to make during the early dating stages of a relationship? We measured two concrete investment behaviors that people could make: weekly percentage of free time spent with the partner, and 19 relationship milestones drawn from Eastwick et al. (2018).

We first examined the time course by which participants made these concrete investments. Again, we present the trajectories separately for those who dissolved and those who remained intact. A model predicting weekly percentage of free time spent with the partner is displayed on Figure 2. The intercept, representing the mean percentage of free time participants spent with their new partners at the beginning of the study, was 33.49. There was no main effect for relationship length, $b = .002$, $SE = .10$, $p = .98$, but there was a main
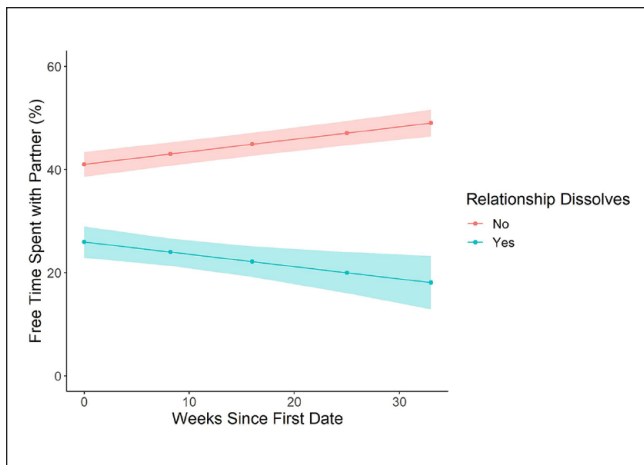
Figure 2. Percentage of Free Time Spent With Partner Each Week.

effect for relationship status, $b = -7.53$, $SE = 1.94$, $p < .001$, as well as a significant interaction between those variables, $b = -.24$, $SE = .10$, $p = .01$. Simple effects analyses indicated that time spent together increased significantly as the relationship progressed for those who stayed together, $b = .24$, $SE = .07$, $p < .001$ but not for those who ultimately broke up, $b = -.24$, $SE = .18$, $p = .19$.

Regarding relationship milestones: At background, participants checked off each milestone they had already reached. Then, each week, they selected any additional milestones they had reached within the previous 7 days. Table 2 shows the number and percentage of participants who reported having reached each milestone at background and over the course of the weekly surveys (sorted by background frequency). For milestones reported in the context of the weekly surveys, we also calculated participants' mean and median relationship length on the week when they reported it. We plotted the specific milestones by frequency and relationship length, grouped by relationship status (survived versus dissolved); see Figure 3. Next, we constructed a model predicting cumulative milestones achieved (up to and including the current week), displayed on Figure 4. Note that this model was conducted as a mixed effects Poisson model because the dependent measure is a count variable. There were significant main effects for relationship length, $b = .02$, $SE = .001$, $p < .001$, and relationship status, $b = -.21$, $SE = .04$, $p < .001$, as well as a significant interaction between those variables, $b = .003$, $SE = .001$, $p = .03$. Simple effects analyses indicated that the cumulative number of specific milestones achieved in the relationship significantly increased both for those who stayed together, $b = .01$, $SE = .001$, $p < .001$, and for those who broke up, $b = .02$, $SE = .003$, $p < .001$. Many specific milestones were achieved quite early on in the relationship. By the background survey—which occurred an average of 24 days after the first official date—most participants had already told

their friends about their partner, met their partner's friends, had sex with their partner, spent the night with their partner, and become exclusive with their partner. Other milestones, such as saying "I love you" to their partner, were more commonly reported on during the weekly surveys as the relationship progressed. Finally, particularly serious milestones were quite uncommon at any point in the study (e.g., moving in together, making a major purchase together, getting engaged, getting married), suggesting that we did indeed manage to recruit a sample of participants in relatively new dating relationships.

What Makes People Feel Invested?

What contributes to the feeling of having a lot to lose in a dating relationship? Here, we directly test the assumption that feelings of global, subjective investment are shaped by how many resources one has put into a relationship. Each predictor of interest was centered in two ways. First, we aggregated participants' ratings across all their weekly reports and subtracted the grand mean to create a grand-mean-centered score, representing each participant's aggregated rating across weeks relative to that of other participants. Second, we subtracted participants' aggregated ratings from each weekly score to create a person-centered score, representing their rating on a given week relative to their own typical rating across weeks. We used two-level multilevel models to predict subjective investment from week to week.

Time Spent With Partner. We first examined how time spent with the partner was associated with global, subjective investment from week to week. The two versions of time spent with the partner were entered as predictors. Time spent with the partner significantly predicted subjective investment both as an aggregated score across weeks, $b = .03$, $SE = .004$, $p < .001$, and as a person-centered score from week to week, $b = .006$, $SE = .001$, $p < .001$. That is, participants who spent more time with their partners throughout the study tended to feel more invested in their relationships. Furthermore, participants felt particularly invested on weeks when they spent more time with their partners than they usually did.

Relationship Milestones. We next examined how relationship milestones were associated with global feelings of investment. Number of milestones reached in the relationship on aggregate and from week to week were entered as predictors. Milestones on aggregate did not predict subjective investment, $b = .26$, $SE = .33$, $p = .42$. That is, people who reached more relationship milestones over the course of the study than the average participant did not tend to feel more invested in the relationship overall. Furthermore, weekly milestone achievement was *negatively* associated with subjective investment in this model, $b = -.10$, $SE = .04$, $p = .006$. That is, people felt *less* invested in their relationships

Table 2. Frequency and Timing of Specific Relationship Milestones.

	At background		At weekly			
	Frequency		Frequency		Relationship length (in weeks)	
	#	%	#	%	M	Med
Tell friends about your relationship	169	87%	18	9%	4.94	4.50
Become sexually intimate with [partner]	131	67%	16	8%	8.75	7.75
Spend the night together with [partner]	121	62%	31	16%	7.55	6.00
Try a novel activity with [partner] (i.e., something one or both of you have never done before)	118	61%	36	18%	7.10	5.50
Become exclusive with [partner] (i.e., not dating other people)	117	60%	24	12%	7.48	6.00
Meet [partner]'s friends	111	57%	34	17%	8.62	6.50
Introduce [partner] to your friends	98	50%	30	15%	7.98	4.10
Plan a future activity with [partner] more than 1 month in advance (e.g., vacation, concert)	98	50%	45	23%	7.10	6.00
Post a photo of yourself with [partner] on social media	62	32%	43	22%	10.43	9.00
Meet [partner]'s parents	55	28%	39	20%	11.38	9.00
Introduce [partner] to your parents	47	24%	40	21%	13.04	12.00
Say "I love you" to [partner]	47	24%	57	29%	8.99	7.00
Discuss the possibility of marriage with [partner]	44	23%	34	17%	11.90	10.00
Take an overnight trip with [partner]	40	21%	51	26%	10.63	10.00
Set your relationship status to "in a relationship" on Facebook	31	16%	28	14%	11.48	9.50
Make a major purchase with [partner] (e.g., pet, car, house, cell phone plan)	8	4%	17	9%	16.06	15.00
Move in with [partner]	6	3%	24	12%	16.21	14.50
Get engaged to [partner]	1	<1%	7	4%	11.71	12.00
Marry [partner]	1	<1%	3	2%	13.30	12.00

than usual on weeks when they reached more relationship milestones than they usually did.

One potential problem with this model is that, as participants progress in their relationships, the availability of new milestones to complete decreases whereas the seriousness of the remaining milestones increases. A week in which a person achieves three relatively small milestones may not feel as meaningful as a week in which a person achieves one major milestone (e.g., getting engaged). Controlling for the total number of milestones achieved across the whole study does not address this confound. Thus, we also tested a model that instead controlled for cumulative milestones achieved prior to the given week (as a Level 1 uncentered predictor). This variable more accurately captures the degree of progress that a person had made in their relationship by a certain week. Indeed, in this model, people felt *more* invested than usual on weeks when they achieved more milestones in their relationship than usual, $b = .19$, $SE = .04$, $p < .001$. People also felt more invested as the cumulative number of milestones increased, $b = .19$, $SE = .01$, $p < .001$.

We next explored whether the impact of milestones may depend on what specific milestone was achieved. Each of the 19 milestones was entered as a dummy-coded variable ($1 =$ milestone was achieved that week, $0 =$ milestone was not achieved that week) in a model predicting weekly subjective investment. Here again, we entered cumulative number of milestones achieved prior to that week as Level 1 control variable. Of the 19 predictors, only 4 were significant, and all in the positive direction. Participants felt more invested on weeks when they became exclusive with their partner, told their partner they loved them, planned a future activity with their partner, or made a significant purchase with their partner.

Infatuation. Might infatuation contribute to feelings of investment in a relationship? We entered grand-mean-centered and group-mean-centered infatuation into a model predicting weekly subjective investment, and both were significant. Participants who experienced greater infatuation for their partners over the course of the study felt significantly more invested from week to week, $b = .71$, $SE = .09$, $p < .001$. Furthermore, participants felt particularly invested in their relationships on weeks when they felt particularly infatuated with their partners, $b = .62$, $SE = .04$, $p < .001$.
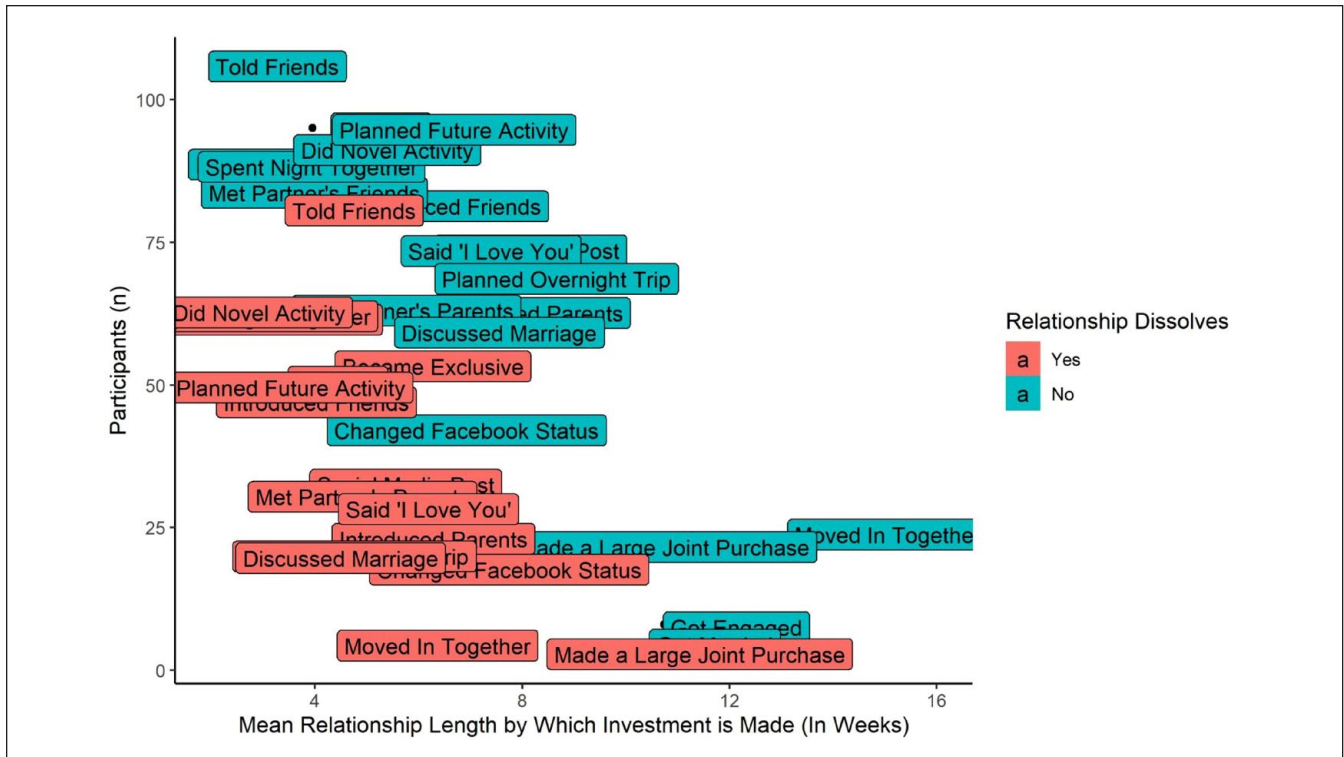
Figure 3 Specific Milestones Plotted by Frequency and Relationship Length
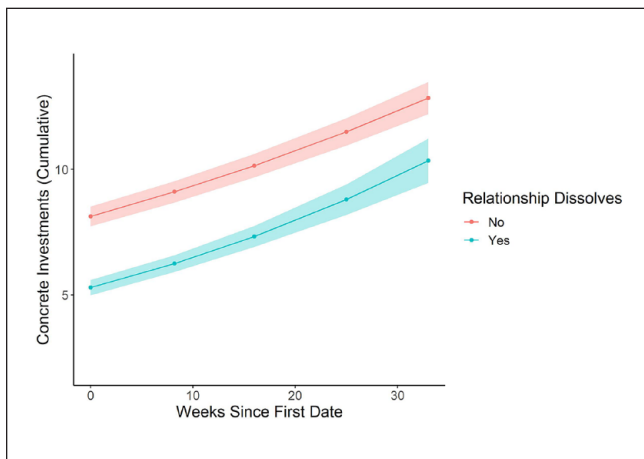*Note.* This figure combines both background and weekly reports.

Figure 4 Cumulative Milestones Each Week

Future Potential. We next examined whether people might feel more invested in their relationships when they also believe that the relationship has good long-term potential. Grand-mean-centered potential, $b = .83$, $SE = .07$, $p < .001$, and group-mean-centered potential, $b = .40$, $SE = .03$, $p < .001$, were each predictors of weekly subjective investment. That is, participants felt more invested in their relationships overall if they felt that their relationship had stronger potential over the course of the study, and they felt particularly

invested on weeks when they perceived greater potential than they usually did.

Attachment. Finally, we examined the association between normative attachment to the partner (i.e., relying on their new dating partner as an attachment figure) and subjective investment. Indeed, participants who experienced greater normative attachment toward their partners over the course of the study also experienced greater subjective investment, $b = .72$, $SE = .08$, $p < .001$, and participants felt particularly invested on weeks when they felt more attached than they usually did, $b = .71$, $SE = .03$, $p < .001$.

Cross-Lagged Panel Model. Thus far, we have only been examining how variables predict feelings of subjective investment. However, feelings of investment could also feedback to influence any of these variables. We next probed directionality by entering all variables of interest into a single cross-lagged panel model. In this model, each variable is treated as both a predictor and an outcome, allowing the researcher to explore how a group of variables shape changes in each other over time.[2] We again structured this as a two-level multilevel model with a separate random intercept for each person.

"Last week" versions of each variable were used as predictors (T_1) and "this week" versions were used as outcome variables (T_2). Data were restructured so that each of the

Table 3. Lagged Panel Analyses of Key Variables Week to Week.

Predictor	Infatuation (this week)			Future potential (this week)			Milestones (this week)			Subjective investment (this week)			Attachment (this week)		
	b	SE	P	b	SE	P	b	SE	P	b	SE	p	B	SE	p
Infatuation (last week)	.77	.02	<.001	.07	.02	.001	.006	.02	.74	.02	.02	.38	.09	.03	<.001
Future potential (last week)	.06	.02	.009	.71	.02	<.001	.02	.02	.37	.10	.02	<.001	.07	.02	.002
Milestones (last week)	−.03	.03	.36	−.03	.03	.39	.11	.03	<.001	−.08	.03	.004	−.03	.03	.27
Subjective investment (last week)	.03	.01	.04	.04	.01	.001	−.03	.01	.03	.73	.01	<.001	.05	.01	<.001
Attachment (last week)	.06	.02	.001	.07	.02	<.001	−.002	.02	.92	.07	.02	<.001	.75	.02	<.001

Note. SE = standard error.

five outcome measures—infatuation, future potential, milestones, subjective investment, and attachment at T_2—were combined into a single dependent variable column. Each participant had up to 120 rows in the dataset: one for each dependent measure on each of 24 weeks (Week 1 is excluded because it is missing "last week" variables). Five new dummy columns were created to indicate which rows correspond to which DVs. The model thus had a total of 30 predictors: each of the five dummy columns, plus each of the five dummy columns multiplied by each of the five Time 1 predictors. This analysis strategy allows us to model all time change effects simultaneously in one model. Results are presented in Table 3.

Strikingly, the behavioral milestones that people reached in their relationships each week did not positively shape, nor were they shaped by, subjective relationship measures. In fact, achieving more milestones on 1 week was negatively associated with feeling invested the following week. This pattern of results remained unchanged when cumulative milestones were included as a covariate. These results suggest that subjective investment in a new relationship is not necessarily anchored to the specific milestones that relationship has reached.

In contrast, subjective investment *was* predicted by less tangible indicators of relationship progression. Feelings of attachment to the partner, as well as beliefs about the relationship's future potential, both predicted positive changes in investment the following week (although feelings of infatuation did not). These effects were bidirectional in that subjective investment positively predicted changes in other subjective indicators of relationship progression. People who felt more invested in their relationships on 1 week tended to feel more infatuated with their partners, more attached to their partners, and more positively about the relationship's future the following week.

General Discussion

The goal of this research was to test underlying theoretical assumptions about how feelings of investment develop in new dating relationships. In a prospective longitudinal study, we recruited people who had gone on a first date with a new dating partner within the past month and tracked them each week for an average of 12 weeks as those new relationships developed. We used these data to explore the answers to three relatively basic research questions.

> **Research Question 1 (RQ1):** How quickly do people tend to feel invested in new dating relationships?
> **Research Question 2 (RQ2):** What specific investment behaviors do people tend to make and when?
> **Research Question 3 (RQ3):** What makes people feel invested in their new relationships?

People Feel Invested Quickly

We first tested the assumption that feelings of investment increase as a relationship progresses. Indeed, we found that as a relationship develops people feel increasingly subjectively invested in their relationships, even those whose relationships ended over the course of the study. At the same time, people felt quite highly invested in their relationships (means around 5 on a 7-point scale) at the very beginning of the study, when participants had just begun dating their new partners within the past few weeks. Our findings are reminiscent of the original investment model findings, in which participants' average global investment was above the scalar midpoint in brand-new relationships, and rapidly increased to nearly the ceiling of the scale within just a few weeks (Rusbult, 1983).

We also found that many specific investment behaviors were made quite early in fledgling relationships. Within the first month after the couple's first date, most participants reported having reached several milestones with their partner, including telling friends about the relationship, becoming sexually intimate, spending the night, and becoming exclusive with their partners. Some participants (i.e., approximately 25%) even reported having met each other's parents, said "I love you" and discussed the possibility of marriage within the first month. More normatively, however, these

milestones came later in the relationships. Among participants who had not already reached those milestones at background, they reached them, on average, within the second or third month or the relationship. Predictably, more serious investment milestones that signify changes in relationship status (e.g., cohabiting, engagement, marriage) occurred among the smallest percentages of participants in this sample.

We do not know what types of relationships our sample had prior to beginning their dating relationships in the current study. As approximately two thirds of new daters say they began as friends (Stinson et al., 2022), it would be valuable to see how trajectories of investment differed for those partnerships that began as friends from those who did not start as such. Given the increases in trajectories we saw over time, and the number of milestones reached within the dating relationship, we expect the two patterns to be relatively similar, but nevertheless, future research on what makes people feel invested could consider the pre-romantic relationship.

Feeling Invested Is Largely Intangible

Our data include global investment measures along with specific milestones and subjective indicators of relationship progression. As our sample was drawn from a population of people in fledgling relationships, we have considerable variability in all these measures, giving us unique insight into the psychological nature of feelings of investment. We found inconsistent evidence that subjective feelings of investment are grounded in concrete behaviors. On one hand, people felt more invested when they spent more time with their partners, both across the study and from week to week. Furthermore, when controlling for how many milestones had been reached already, people did feel more invested than usual on weeks when they reached more milestones in their relationship than usual, and people also felt more invested as the cumulative number of milestones increased. On the other hand, only four specific milestones were associated with feelings of investment among our sample: becoming exclusive with their partner, telling their partner they loved them, planning a future activity with their partner, and making a significant purchase with their partner. Of those, only one is tangible (i.e., making a purchase), whereas the other three are intangible. Number of milestones reached also did not emerge as a lagged predictor of investment in the cross-lagged panel model.

More influential in the development of subjective feelings of investment are other subjective indicators of relationship progression, such as feelings of attachment and the belief that the relationship has a future. In that way, our data suggest investment derives more from believing one is in an exciting, promising relationship than from having irrevocably tied concrete resources to that relationship. The associations among relationship progression indicators and subjective investment were bidirectional, such that feelings of investment predicted positive changes in infatuation, attachment, and future potential, which in turn predicted greater feelings of investment.

Investment as a Progression Mechanism

One theoretical interpretation of these results is that feeling invested serves an adaptive function in relationships. Within the framework of the progression bias, humans are equipped with a suite of cognitive, biological, and motivational mechanisms that help propel new relationships toward commitment (Joel & MacDonald, 2021). One such tool may be the tendency to feel subjectively, deeply invested in relationships that, in objective terms, are still relatively fledging. Even when few real tangible resources have been placed into a relationship, people may nevertheless *feel* like they have already put a great deal into a relationship, and that perception may motivate people to continue to tie themselves to that relationship.

This framing of investment as a commitment device is consistent with all the key findings from the current paper, including (a) people's tendency to report high levels of subjective investment very early in their relationships, (b) the weak, inconsistent links between subjective investment and relationship milestones, and (c) the fact that higher subjective investment on 1 week predicted positive changes in other relationship progression indicators the following week (infatuation for the partner, attachment to the partner, and perceived future potential of the relationship). It is also consistent with Goodfriend and Agnew's (2008) conceptualization of investment as encapsulating future plans. Investment represents not only what one has already put into the relationship but also what one *might* put in down the road: It is in part a future-oriented construct that captures one's hopes for the relationship, and perhaps a desire and intention to continue investing in the relationship long-term.

Investment as an Example of the Field's Measurement Challenges

A more methodological interpretation of the current findings is that they pose a threat to the validity of investment as a construct. For decades, relationship researchers have been aware of the phenomenon of *sentiment override*: people's tendencies to project their global sentiments about a relationship (i.e., how do I feel about this relationship generally?) and onto more specific relationship evaluations (Fincham et al., 1995; Weiss, 1980). Thus, when people rate an item such as, "I have put a great deal into this relationship that I would lose if the relationship were to end," they may be drawing not on their recollections of specific, relevant relationship experience ("How much time and energy have I spent with this person?") but rather on their gestalt feelings about the relationship ("I like my dating partner a lot, so I have probably put a lot into this relationship").

Consider the uncomfortable possibility that many relationship measures capture sentiment override, in addition to (or even instead of) the constructs they are intended to capture. Regarding the current study, let us imagine that subjective investment primarily captures global relationship sentiments, as do the other measures reported (infatuation, attachment, and future relationship potential). If this were the case, and given that people in fledgling relationships tend to feel quite positively about their new dating partners, we would expect all measures to be rated quite highly early on in the relationship. We would expect the relationship measures to be quite correlated with each other. Furthermore, we would expect people's ratings to rise and fall together from week to week: on weeks when people feel generally more positively about their relationship, they rate all of these measures more highly. Finally, we would expect these subjective measures—those most prey to method biases such as sentiment override—to be distinguishable from concrete measures that more directly require participants to reflect on their actual relationship experiences (e.g., specific relationship milestones reached each week). Indeed, all of this is exactly what we found in this paper.

As the first study to directly test the theoretical underpinnings of investment (i.e., how and when does it emerge), we believe this study begins to respond to calls for the field to take construct validity more seriously (e.g., Flake & Fried, 2020; Wang & Eastwick, 2020). It is worth revisiting whether established measures are truly capturing what we think they are capturing. Researchers who wish to build on this in future work would be wise to collect dyadic data, which may help to overcome the shared method bias problems that plague self-report studies collected from a single person.

Conclusion

Investment, the central construct in the investment model, is typically defined as the costs associated with ending a romantic relationship. Based on this conceptualization of investment, one might expect investment to gradually increase over the course of a dating relationship as a function of the time, energy, and other resources that are placed in that relationship. Yet, in a prospective study of new dating relationships, we found that people tended to feel quite invested only weeks after their first date with their romantic partners. We also found inconsistent evidence that global, subjective feelings of investment were grounded in specific investment behaviors. We did find evidence for the idea that subjective investment is bidirectionally related to other subjective indicators of relationship progression, including infatuation, normative attachment, and the perceived future potential of the relationship. These findings raise new questions about what investment truly represents, both as a construct and as a measure.

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Supplemental Material

Supplemental material is available online with this article.

Notes

1. Although participants were initially required to have been dating their new partner for fewer than 4 weeks, several weeks sometimes elapsed between the point when participants first inquired about the study and when they completed the intake questionnaire. We, therefore, relaxed the exclusion criteria to 8 weeks to account for the time it took to screen and enroll participants.
2. The cross-lagged panel model presented in the main text is highly similar to the preregistered model presented in the supplement. The key difference is that in the preregistered model, two operationalizations of investment—concrete investment and time investment—were combined into a single composite variable. This decision turned out to be unadvisable, as the two investment measures are weakly correlated ($r = .07$) and behave quite differently. In the modified model presented in the main text, we have replaced this composite variable with two separate investment measures that are of the most theoretical interest for the current paper: concrete investment and subjective investment.

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