

WE ASK MEN TO WIN AND WOMEN NOT TO LOSE: CLOSING THE GENDER GAP IN STARTUP FUNDING

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Male entrepreneurs are known to raise higher levels of funding than their female counterparts, but the underlying mechanism for this funding disparity remains contested. Drawing upon regulatory focus theory, we propose that the gap originates with a gender bias in the questions that investors pose to entrepreneurs. A field study conducted on question-and-answer interactions at TechCrunch Disrupt New York City during 2010 through 2016 reveals that investors tend to ask male entrepreneurs promotion-focused questions and female entrepreneurs prevention-focused questions, and that entrepreneurs tend to respond with matching regulatory focus. This distinction in the regulatory focus of investor questions and entrepreneur responses results in divergent funding outcomes for entrepreneurs whereby those asked promotion-focused questions raise significantly higher amounts of funding than those asked prevention-focused questions. We demonstrate that every additional prevention-focused question significantly hinders the entrepreneur's ability to raise capital, fully mediating gender's effect on funding. By experimentally testing an intervention, we find that entrepreneurs can significantly increase funding for their startups when responding to prevention-focused questions with promotion-focused answers. As we offer evidence regarding tactics that can be employed to diminish the gender disadvantage in funding outcomes, this study has practical as well as theoretical implications for entrepreneurship.

Female-founded firms constitute nearly 40% of all privately held companies in the United States (Amex, 2016), yet only 2% of U.S. venture capital financing is allocated to female founders (Pitchbook & National Venture Capital Association, 2016).

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Given financial resources are a crucial factor for both the success and growth prospects of new ventures (Cooper, Gimeno-Gascon, & Woo, 1994; Shane & Stuart, 2002), this paradoxical set of statistics demonstrates that female entrepreneurs face a key disadvantage in attempting to nurture large, well-known—as opposed to smaller “family” and “lifestyle”—businesses. Such gender disadvantages ultimately operate to the detriment of macroeconomic growth, as recent large-scale research studies support a link between women in top management positions and enhanced firm performance (Dezsö & Ross, 2012; Khan & Vieito, 2013; Peni, 2014).

Although sustained interest in gender distinctions by venture theorists suggests that a funding gap persists, the overall magnitude of the disparity and its underlying mechanism remain disputed (Eddleston, Ladge, Mitteness, & Balachandra, 2014). Some scholars argue that variance observed in funding

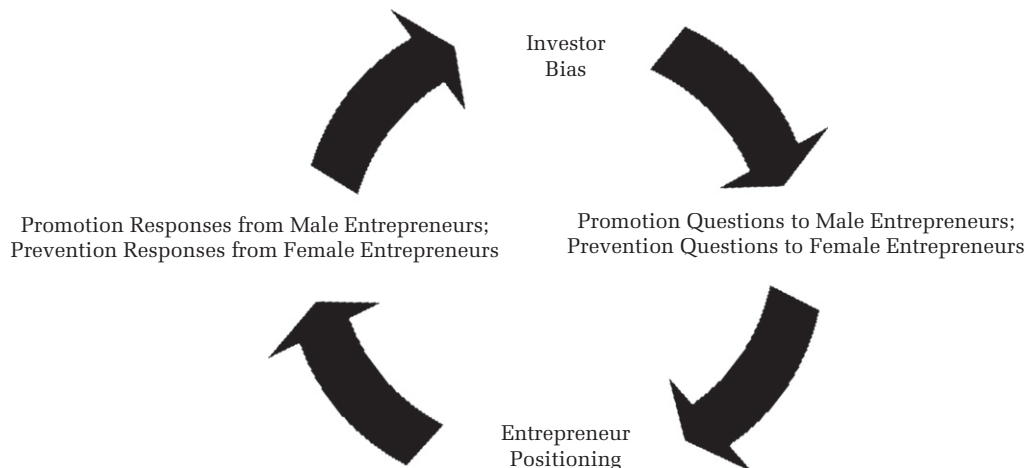
outcomes is the direct result of biased investors who choose to disproportionately provide capital to male entrepreneurs (Balachandra, Briggs, Eddleston, & Brush, 2013; Brooks, Huang, Kearney, & Murray, 2014). Others contend that gender differences in capital allocations are the byproduct of female entrepreneurs seeking and hence receiving less capital for their ventures (Coleman & Robb, 2009; Morris, Miyasaki, Watters, & Coombes, 2006). These scholars suggest it may not be unusual, and might even be expected, that female entrepreneurs receive lower amounts of financing than their male counterparts.

The former *investor-driven* explanations primarily point to direct biases in allocating capital whereby investors make decisions based on surface perceptions of overt characteristics, especially in contexts marked by an absence of data, such as venture capital. Observables that have been linked to venture capital outcomes across pitch competitions, funding platforms, and experimental settings include such characteristics as speech patterns, nonverbal gestures, displayed social competence, attractiveness, and—perhaps most readily observable—gender (Balachandra et al., 2013; Clark, 2008; Gorbatai & Nelson, 2015; Huang, Frideger, & Pearce, 2013). The latter *entrepreneur-driven* literature highlights the fact that women are more likely to be associated with less capital-intensive businesses, with lower tolerance for risk inherent in aggressive growth efforts, and hence less desire for the type of financial capital required to fund that level of growth (Cliff, 1998; Loscocco, Robinson, Hall, & Allen, 1991; Morris et al., 2006).

We contribute an integrated examination of the gender disparity in venture funding by considering both investor-driven and entrepreneur-driven factors to interpret, and perhaps reconcile, these alternative explanations. Absent from the literature is an embedded perspective that seeks to understand how investor-driven biases influence the perception of entrepreneur-driven differences. We test for the presence of a bias in investor questions, which prompts female entrepreneurs to respond in a manner that positions their ventures as being less growth-oriented than male-led enterprises. These responses, in turn, contribute to downstream biases from investors in the investment cycle. Our conceptual framework in Figure 1 illustrates how female entrepreneurs are compromised in their efforts to raise venture funding.

We examine this proposed framework through question-and-answer (Q&A) exchanges between venture capitalist (VC) and entrepreneur, an under-explored yet critical aspect of the capital allocation process, regardless of whether the interaction is taking place at a pitch competition or in the boardroom of a venture fund. The Q&A portion of the funding pipeline has been empirically overlooked by scholars, despite the acknowledgment that “the expert VC selection process is often highly personal in nature, with signals communicated during face-to-face meetings” (Mollick, 2013: 5), as well as industry efforts to highlight the importance of these Q&A sessions as part of the VC funding process (Gladstone & Gladstone, 2002). We explore the presence of message framing during the back-and-forth Q&A discussion by drawing from research on goal

FIGURE 1
Conceptual Framework



orientation. Specifically, our study observes regulatory focus framing, which reflects two distinct and independent self-regulatory concerns: promotion and prevention (Higgins, 1997, 1998).

Regulatory focus theory (RFT) states that individuals engaging in goal-directed behavior are motivated toward (a) attaining gains and changing to a better state for promotion or (b) maintaining non-losses and not changing to a worse state for prevention (Higgins, 1997, 1998; Higgins & Cornwell, 2016). Regulatory focus has been shown to impact outcomes in a variety of settings, including consumer purchasing behaviors (Werth & Foerster, 2007), leadership styles (Kark & Van Dijk, 2007), and even athletic performance (Plessner, Unkelbach, Memmert, Baltes, & Kolb, 2009). It stands to reason that RFT has strong implications for entrepreneurial investment decisions; VC questions articulated with a promotion focus emphasize attaining growth-oriented gains that are facilitated by capital (e.g., How do you intend to acquire customers? What does your revenue forecast look like?). In contrast, those articulated with a prevention focus emphasize maintaining non-losses and not losing capital (e.g., What does customer retention look like? Are you operating at breakeven?). By examining the Q&A portion of the funding pipeline for the salience of promotion or prevention, we confront the following questions: Do investors communicate differently depending upon whether they are addressing female as opposed to male entrepreneurs? How does an investor's question impact an entrepreneur's response? Can this interaction help to explain their divergent funding outcomes?

We find that a cognitive bias associated with stereotypic judgments leads investors to ask gendered questions. Our investigation demonstrates that investors present questions with a distinct regulatory focus depending upon the gender of the entrepreneur they address. More specifically, VCs tend to ask male entrepreneurs promotion-focused questions and female entrepreneurs prevention-focused questions. These questions, in turn, tend to induce responses of corresponding regulatory focus, whereby promotion questions beget promotion responses and prevention questions beget prevention responses. The regulatory focus of the resultant system—consisting of the types of questions and responses associated with male versus female entrepreneurs—helps explain disparities in their respective funding outcomes.

We observed regulatory focus at work in the venture community by examining the most prestigious

startup competition, TechCrunch Disrupt's Startup Battlefield. This event gathers the world's top early-stage startups onstage to compete for the Disrupt Cup cash prize, as well as the consideration of world-renowned investors and visibility from the broader media. The format of this competition—wherein entrepreneurs publicly address a panel of investor judges—allowed for the measurement of regulatory focus distinctions in questions posed to both genders, as well as responses provided by both genders. To test our hypotheses, we benefitted from the unique data set of authentic VC–entrepreneur interactions compiled from transcribing video footage across all years of this competition. The transcribed video footage of these interactions then served as the basis for a complementary experiment that manipulated the regulatory focus of both questions and responses to observe its funding consequences in a controlled setting. Turning to professional and ordinary investors as subjects, this experiment explored a potential intervention that may be used to improve funding outcomes for disadvantaged entrepreneurs.

Our study makes several contributions to the existing body of research. First, we offer new explanatory insight to the venture funding and gender literatures: our research helps bridge explanations for the gender-based funding gap by suggesting that investors may not have a direct and explicit bias against women based on their ascribed, or observable, characteristics (Alsos & Ljunggren, 2016; Jennings & Brush, 2013). Instead, investors may unwittingly offer female entrepreneurs fewer opportunities to present themselves in the same beneficial manner as their male colleagues. By framing questions differently, investors elicit less favorable responses from female than male entrepreneurs. Consequently, implicit bias occurs at multiple stages—once in the type of questions asked of an entrepreneur and then again in evaluating the entrepreneur based upon the answers to these questions. These observations further our understanding of subtle, as opposed to overt, biases that persist in professional domains (Joshi, Son, & Roh, 2015).

In contrast to prior research on venture funding, we apply a framework that examines the funding gap phenomenon from a process perspective rather than as singular events. This approach enables us to tease apart the entrepreneur-driven from the investor-driven streams, isolating the latter as precursor to the former. We conclude that both investors and entrepreneurs inadvertently contribute to the gender disparity in funding outcomes. Dissecting the

venture screening criteria, we identify a cyclical interaction that perpetuates gender bias in the venture community, one that is far more deeply ingrained and insidious than direct and explicit bias. In demonstrating that startups of equivalent quality and need raise markedly different amounts of funding due to gender bias in Q&A interactions, our studies have broader labor market implications: by handicapping high-quality female-led startups from surviving and growing to achieve their productivity potential, investors perpetuate inequality while placing downward pressure on employment and gross domestic product growth (Braunstein, 2008).

Our approach straddles the micro–macro divide, employing a sociopsychological mechanism to enhance the literature that lies at the intersection of venture screening and gender. This research contributes to our conceptual understanding of how gender bias at the individual investor level influences venture outcomes at the startup firm level. Inspecting the root cause and effect of investor bias, we are then able to introduce a novel intervention into the literature that can break the cycle of bias and yield more positive outcomes for those subjected to its adverse consequences. In doing so, we extend academic and applied knowledge of both the mechanisms and gender-neutralizing interventions that can help to promote gender parity (Hekman, Johnson, Foo, & Yang, 2017; Leslie, Mayer, & Kravitz, 2014).

THE VENTURE SELECTION PROCESS

Early-stage ventures rely on venture funding; without financial backing, ventures are constrained in their efforts to achieve high growth (Cooper et al., 1994). Given the critical role of venture funding in fueling the startup ecosystem, it is no surprise that criteria for evaluating new ventures for funding have been studied by venture selection scholars for over four decades (Baum & Silverman, 2004; Poindexter, 1975; Shepherd, 1999; Tyebjee & Bruno, 1984). This body of venture selection research reveals distinct criteria for “screening in” versus “screening out” ventures: the screening-in criteria are concerned with ranking decisions designed to approximate the likelihood of success (Khan, 1987; Riquelme & Rickards, 1992; Shepherd & Zacharakis, 2002), whereas screening-out criteria are designed to disqualify ventures by determining their likelihood of failure (Gorman & Sahlman, 1989; Meyer, Zacharakis, & De Castro, 1993).

Within the venture community, we see a common underlying thread among prominent VCs in terms of the questions posed to, and expectations placed upon, entrepreneurs when allocating capital. Practitioner evidence suggests VCs want entrepreneurs to take advantage of massive market opportunities, convey their vision about what their brands will become in the future, promote their uniqueness (Stengel, 2013), and, as VC Jalak Jobanputra of FuturePerfect Ventures has noted, “value growth at all costs” (Ramey, 2016). The academic criteria devoted to screening in ventures mirrors that of the venture capital industry, investigating the likelihood of success. This criteria list encompasses such factors as attractive target market characteristics, including size and growth potential (Bachher & Guild, 1996; Dixon, 1991; Rea, 1989); business opportunity, including performance indicators and proprietary nature of the product (Feeney, Haines, & Riding, 1999; Stuart, Hoang, & Hybels, 1999); expectation of maximizing returns (Roure & Keeley, 1990; Tyebjee & Bruno, 1981; Ueda, 2004); and growth strategy (Kirsch, Goldfarb, & Gera, 2009).

As early-stage opportunities are inherently risky, investors at times employ a competitive strategy that focuses on reasons to screen out prospects based on criteria for eliminating ventures from consideration (Poindexter, 1975; Tyebjee & Bruno, 1984). Franke, Gruber, Harhoff, and Henkel (2008) referred to these *conditio sine qua non*, or indispensable conditions, as “knock-out criteria.” MacMillan and colleagues revealed that investors rely on criteria that screen out ventures “where there is risk of failure due to unqualified management, where management may well be qualified but lack experience, where basic viability of the project is in doubt, and where there is high exposure to competitive attack and profit erosion before the investment can be recouped” (MacMillan, Zemann, & Subbanarasimha, 1987: 124).

In the absence of concrete performance metrics, both screening-in and screening-out criteria are receptive to various signals of quality (and inferiority) when forming decisions about early-stage ventures (Hsu & Ziedonis, 2008). Quality signals referenced in the venture screening literature include trusted referrals and network ties that serve as reputational endorsements (Shane & Cable, 2002; Stuart et al., 1999), founder backgrounds (Burton, Sørensen, & Beckman, 2002), and degree of passion and preparedness (Chen, Yao, & Kotha, 2009; Kirsch et al., 2009; Mitteness, Sudek, & Cardon, 2012). Given the face-to-face nature of the

venture funding process (Huang & Knight, 2017; Mollick, 2013), the means by which VCs utilize signals to assess venture quality are inevitably fraught with inherent biases, including those related to homophily (Ruef, Aldrich, & Carter, 2003), cognition (Zacharakis & Shepherd, 2001), geography (Stuart & Sorenson, 2003), and gender (Alsos & Ljunggren, 2016). We contribute to the literature residing at the cross-section of venture screening and gender bias by examining whether screening-in, as opposed to screening-out, criteria are typically applied to male, as opposed to female, entrepreneurs raising capital.

Gender and the Allocation of Capital

Upper echelons research showcases the positive influence of women in top management teams, including improved firm profitability metrics (Adler, 2001; Krishnan & Park, 2005; Smith, Smith, & Verner, 2006); managerial task performance (Dezsö & Ross, 2012); chance of survival (Faccio, Marchica, & Mura, 2016); and various shareholder wealth measures, including Tobin's q and post-IPO stock returns (Dezsö & Ross, 2008; Krishnan & Parsons, 2008). The literature attributes the advantages of women in top management teams to their understanding of consumer behavior and customer needs (Brennan & McCafferty, 1997); communication skills (Schubert, 2006); leadership style (Eagly & Carli, 2003); ethical sensitivity (Cumming, Leung, & Rui, 2015); and enrichment of informational and social diversity, fostering innovation (Dezsö & Ross, 2012). Despite these recognized benefits, recent research documents the fact that top management team hardships persist with regard to women's degree of representation (Cook & Glass, 2014); organizational rewards (Joshi et al., 2015); compensation (Blau & Kahn, 2017); and, notably, financing (Eddleston et al., 2014).

Although female entrepreneurs have been found to express demand for capital, they are rarely supplied with the requisite funds to aggressively grow their startups (Brush, Carter, Gatewood, Greene, & Hart, 2001). To understand how much—and what types of—capital female entrepreneurs demand in comparison to their male counterparts, one line of research has examined the *entrepreneur-driven* rationale arguing that female entrepreneurs have less appetite for external funding (Coleman & Robb, 2009) and equity financing, in particular (Orser, Riding, & Manley, 2006). Venture research offers a variety of

explanations for why this might be the case, including lower tolerance for risk (Cliff, 1998; Verheul & Thurik, 2001); lack of goal orientation toward achieving aggressive growth (Morris et al., 2006; Sexton, 1989); motivation relating to non-monetary factors (Hughes, 2006; Manolova, Brush, & Edelman, 2008); preference for less capital-intensive industries, favoring ventures in retail, consumer products, and services over those in high-tech, energy, and financial sectors (Du Rietz & Henrekson, 2000; Loscocco et al., 1991; Menzies, Diochon, & Gasse, 2004); and work-life balance considerations as a function of familial role expectations (Anna, Chandler, Jansen, & Mero, 2000; Heilman & Chen, 2003; Yang & Aldrich, 2014). In sum, this body of research rests on the premise that certain women are content to start modest “lifestyle” businesses with personal funds that cater to low-growth “female friendly” industries, driven by a perceived need to balance the competing demands of work and family.

An alternate stream of research challenges this notion that female entrepreneurs simply demand lower amounts of venture capital than their male peers, but similarly documents negative funding outcomes for women. This *investor-driven* research argues that, all else being equal, women may instead be facing a discriminatory disadvantage to men in the venture arena. According to Brooks and colleagues (2014), even when women and men present startup pitches with comparable content, investors demonstrate a preference for male-led startups. Investor discrimination may be a question of taste, which is typically a function of personal prejudice (Marom, Robb, & Sade, 2015); homophily, marked by male investor bonds to male entrepreneurs in male-dominated industries like venture funding (Greenberg & Mollick, 2016); or perception, based on stereotypical ascriptions whereby investors see entrepreneurship as a masculine-typed endeavor that women are incapable of successfully undertaking (Balachandra et al., 2013; Bird & Brush, 2002).

Across both streams of research, it is clear that women raise significantly lower amounts of venture funding than men. However, the two aforementioned rationales within the academic literature present different arguments as to why this is the case. We examine whether gender-based funding distinctions exist in a setting where both female and male entrepreneurs actively seek comparable amounts of venture funding to grow their startups.

By focusing on a sample of capital-intensive rather than lifestyle businesses, we have the opportunity to empirically disentangle the conflicting investor-driven from the entrepreneur-driven contentions present in the research streams to arrive at a baseline hypothesis:

Hypothesis 1. Male entrepreneurs raise significantly higher amounts of venture funding than female entrepreneurs who seek out comparable amounts of capital.

Regulatory Focus in Venture Setting

Examined through the lens of RFT (Higgins, 1997, 1998), we find that the venture screening literature's criteria for "screening in" ventures for funding consideration map well to promotion concerns, whereas the criteria for "screening out" ventures from funding consideration map well to prevention concerns. A *promotion* focus emphasizes hopes, accomplishments, and advancement needs; goals are viewed as ideals, where there is a concern for attaining gains (i.e., the presence of positives) and avoiding non-gains (i.e., the absence of positives). In contrast, a *prevention* focus emphasizes safety, responsibility, and security needs; goals are instead viewed as oughts, where there is a concern for maintaining non-losses (i.e., the absence of negatives) and avoiding losses (i.e., the presence of negatives). These states of promotion and prevention can be activated by situations and environments (Förster, Higgins, & Idson, 1998; Higgins, 2000). As the literature supports a stable, domain-specific regulatory focus in such contexts as organizational settings (Brockner & Higgins, 2001), we anticipate why this may be the case in early-stage investment settings as well.

Given investors' aforementioned preference for advancement and growth over safety and security when in the mindset of allocating funds, one might expect to see VCs pose predominantly promotion-focused questions and primarily provide promotion-focused feedback to entrepreneurs. If an entrepreneur's goal is not only to receive funds but also to maximize funding for his or her startup, an accompanying promotion focus from the VC doling out funds will generate the highest chance of success for the entrepreneur. On the other hand, a prevention-focused Q&A session with a VC motivated to screen out ventures should result in a negative outcome in terms of funds raised. Prevention considerations of maintaining the status quo and not losing market

position are unattractive prospects for investors in nascent ventures with little track record or market share to defend.

But what if the regulatory focus of investor screening questions is not consistent for all requestors and instead differs according to the gender of the entrepreneur addressed? Research has found a double standard in screening bank loans whereby a different set of evaluative criteria and requirements (e.g., interest rates, collateral) is applied to women as opposed to men seeking funds (Eddleston et al., 2014). Orser and Foster (1994: 16) went so far as to claim that "supposedly objective criteria are applied in a subjective manner to the detriment of female entrepreneurs." Doubt has been cast on female founders' qualifications (Greene, Brush, Hart, & Saporito, 2001; Menzies et al., 2004), knowledge (Boden & Nucci, 2000; Carter, Williams, & Reynolds, 1997; Fairlie & Robb, 2009), and ability to manage for basic viability (Robb, 2002)—key elements of the criteria for "screening out" as opposed to "screening in" ventures.

We thus anticipate a regulatory focus distinction between investor questions asked of men versus women in our sample that corresponds to the "screening in" versus "screening out" criteria. Specifically, we expect that investors are more likely to ask male entrepreneurs promotion-focused questions, placing greater emphasis on the addressable market, potential for top-line growth, customer acquisition, and vision (i.e., "Is this opportunity big enough to maximize gains?"). In contrast, we anticipate investors are more likely to ask female entrepreneurs prevention-focused questions, expressing concern for the ability to execute while vetting progress to-date, customer retention, vigilance, and efficiency (i.e., "Let's see what can go wrong here so we can minimize losses").

Hypothesis 2. Investors are more likely to pose promotion-focused questions to male entrepreneurs and prevention-focused questions to female entrepreneurs.

Regulatory Focus and Venture Funding Outcomes

Given a promotion focus aims to "ensure hits and ensure against errors of omission," those with this orientation tend to execute opportunities more quickly and easily than those with a prevention focus who seek to "ensure correct rejections and ensure

against errors of commission” (Crowe & Higgins, 1997: 117). When faced with opportunities for gains, the promotion state’s concern for swiftness and volume of accomplishments overrides concern for the inherent risks involved. The prevention state is instead concerned with quality and accuracy over the swiftness and volume of accomplishments (Higgins & Spiegel, 2004).

Gamache, McNamara, Mannor, and Johnson (2015) found a distinction in regulatory focus among CEOs to influence their pursuit of acquisitions, with promotion-focused CEOs driven by a pressing concern for not missing out on any given purchase opportunity. This scenario is similar to venture investing in that acquisitions are, by definition, majority investments in corporations. In the context of entrepreneurship, Brockner, Higgins, and Low (2004) revealed that a promotion focus enables founders to acquire resources, while a prevention focus aids in identifying and rejecting unsound offers. They suggested that, “On the promotion front, getting others to provide financial resources requires the ability to make a persuasive case to potential investors. This may well require framing the venture in terms of ideals and aspirations, something lofty that will make investors choose the venture over others” (Brockner et al., 2004: 211).

On the other hand, as Brockner and colleagues go on to reason, “Prevention focus (with its emphasis on not making mistakes, ensuring non-losses)” concerns being “trusted to do things competently and with good intentions” (Brockner et al., 2004: 211). Reason dictates that promotion-focused (versus prevention-focused) questions will depict the venture in a beneficial light for the entrepreneur to acquire larger amounts of a crucial resource: venture capital. When VCs are motivated by a concern for commission-related errors (Crowe & Higgins, 1997), they will instead focus on potential reasons to *not* invest and will draw attention to ways in which the investment could potentially go awry (Lanaj, Chang, & Johnson, 2012), rather than why the investment might be successful. This prevention framing will impede the entrepreneur from acquiring venture capital.

Hypothesis 3a. Entrepreneurs who receive promotion-focused questions raise more funding than those who receive prevention-focused questions from investors.

Each additional prevention-focused question casts greater doubt on the entrepreneur’s ability to execute

and reinforces a loss- rather than advantageous gain-related orientation. We thus propose that an association with a higher degree of prevention questions will further penalize venture-seeking entrepreneurs due to the prevention state’s emphasis on the potential for enduring losses. To reiterate, we suspect there are significant differences in the amount of prevention-focused questions asked based upon entrepreneur gender, and we anticipate the presence of these questions will have a significant impact on startup funding outcomes. We can therefore also expect that the differential degree of prevention-focused questions asked of male versus female entrepreneurs will significantly predict funding outcomes. Phrased differently, we identify prevention focus as a possible mechanism through which funding is low for women relative to men. Consequently, this distinction in regulatory focus should explain the divergent funding outcomes for startups led by either gender.

Hypothesis 3b. The prevalence of prevention-focused questions mediates the relationship between entrepreneur gender and startup funding outcomes.

VCs’ interactions with entrepreneurs involve not only investor *questions* but also entrepreneur *responses*. Drawing from the literature on linguistic style matching, we formulate an argument as to how entrepreneurs will respond to investor questions. Linguistic style matching scholars study the ways in which humans nonconsciously match words in an intuitive effort to coordinate with one another when conversing (Gonzales, Hancock, & Pennebaker, 2009), where matching occurs on a word or conversation level (Niederhoffer & Pennebaker, 2002). This matching includes such linguistic facets as grammar, syntax, categories of speech, and word choice (Clarke, 1983). Linguistic style matching has been observed in a variety of settings, from romantic partnerships (Bowen, Winczewski, & Collins, 2016) to police interrogations (Richardson, Taylor, Snook, Conchie, & Bennell, 2014) and crisis negotiations (Rogan, 2011). Perhaps most applicable for investor and entrepreneur Q&A activity, Niederhoffer and Pennebaker (2002) found that a speaker’s word use can prime a listener to respond in a specific manner.

It stands to reason that the presence of regulatory focus in the words used by an investor can likewise prime the regulatory focus word use of an entrepreneur’s response. Beyond the linguistic style matching explanation for word matching, there is a strong motivational

force driving the “motivational matching” of regulatory focus messages. The literature on regulatory fit reveals that “when there is fit, people engage more strongly in what they are doing and ‘feel right’ about it” (Higgins, 2005: 209). Motivated toward regulatory fit, we expect that entrepreneurs will respond to investors with messages that match the orientation of questions posed.

Hypothesis 4a. Investor questions induce entrepreneur responses of matching regulatory focus, whereby promotion-focused questions beget promotion-focused responses and prevention-focused questions beget prevention-focused responses.

Neurolinguistic programming techniques (O'Connor & Seymour, 2011) apply verbal (and nonverbal) matching to establish rapport, build trust, and influence others in settings such as telemarketing (Nancarrow & Penn, 1998) and sales (Connell, 1984). In terms of regulatory focus, however, we expect matching techniques will only yield positive outcomes for the entrepreneur when the orientation of the funding dialogue is that of promotion. Recall from our reasoning in Hypothesis 3 that a greater degree of prevention focus in the types of questions asked of entrepreneurs will adversely impact their funding outcomes.

This logic can also encompass the negative influence of prevention-focused responses. Turning again to regulatory fit, we recognize that the impact of regulatory focus depends on its match with salient situational characteristics—that is, promotion focus in the gain-maximizing context of venture funding (Higgins, 2000). Prevention-focused responses will only serve to increase the predominance of prevention in a given dialogue. This incongruent type of response will continue to degrade, rather than improve, performance (Plessner et al., 2009). However, if an entrepreneur were to respond to a prevention-focused question with a promotion-focused answer, this would serve as an opportunity to reframe and redirect the dialogue toward situational congruency for regulatory fit (Brockner et al., 2004).

Hypothesis 4b. Entrepreneurs who respond to prevention-focused questions with promotion-focused answers raise more funding than those who respond to prevention-focused questions with prevention-focused answers.

OVERVIEW OF STUDIES

We conducted two studies to test the above hypotheses, the first *correlational* and the second

causal. Study 1 was a field study that observed Q&A interactions between VCs and entrepreneurs at TechCrunch Disrupt Startup Battlefield competitions. The “real-world” environment of this field study allows for generalizability to a variety of investment decision-making contexts, while providing the benefit of direct and consistent observation of comparable startups with similar needs across multiple years of observation. Study 2 utilized an experimental design to orthogonally manipulate the regulatory focus of investor questions and entrepreneur answers. This experiment allows for replication on additional subject populations, consisting of professional angel investors¹ and representative ordinary investors. Employing an experimental design, we isolated the effect of Q&A regulatory focus on funding allocations while controlling for the quality and stage of the startup, as well as verbal and nonverbal variations of the entrepreneur. Lastly, we were able to obtain rich insights into the rationale behind investing decisions through the use of open-ended questions.

STUDY 1: FIELD STUDY

Setting

TechCrunch Disrupt Startup Battlefield is widely regarded as the most prestigious setting in which startups can launch. The 623 startups that presented at TechCrunch competitions across all locations—including such industry darlings as Dropbox, Fitbit, and Mint—have raised an aggregate \$6.6 billion, with 83 exits (initial public offerings and acquisitions) among them. Judges include prominent VCs from around the world. The competition takes place over the course of three days, allocating six minutes for each participant’s pitch,² followed by another six minutes for VCs to ask questions of the contestants.

Sample

Our sample constitutes the data set of startups that participated in the TechCrunch Disrupt Startup

¹ “Angel investors” are wealthy individuals who invest their own capital into early-stage ventures.

² In addition to the Q&A sessions, we also analyzed all entrepreneur pitches and found no significant distinction in the regulatory focus of male versus female entrepreneur pitch presentations (see “Additional analyses”).

Battlefield for all years the competition has run in New York City, since its inception in 2010 through the latest available year of 2016, for a total of 189 companies. The founder and CEOs were asked 1,857 questions for a total of 28,213 transcribed words. Investor questions gave rise to 1,718 unique responses for a total of 36,642 transcribed words. Table 1 showcases the descriptive characteristics of the startups and investors that participated.

TechCrunch Disrupt serves as a strategic sample that offers several benefits, including (a) standardization and completeness of TechCrunch Disrupt video footage for all startup presentations and venture capital Q&A sessions, with an enforced time frame for presentations and Q&A format that is consistent across all years; (b) gender identification of speakers for attribution of all transcribed words, including those spoken by entrepreneur presenters and VC judges; (c) pairing of video footage with TechCrunch's Crunchbase data, including information on the founding date, company description, funds raised, and operating status; and (d) criteria for participation, helping to reject the demand-side question, "Are women asking for less money because they simply found companies with lower capital needs?" as only startups with a demonstrated need for venture capital are accepted.³

Methods

To construct a measure of regulatory focus, our methods consisted of a computer-aided textual analysis and a manual coding analysis, both of which entail the textual examination of video transcripts. The management literature reflects a rich history of applying content tools to examine the impact of attributes, cognitions, and motivations on various firm outcomes (Eggers & Kaplan, 2009; Nadkarni & Barr, 2008). Similarly, there is ample precedent for performing linguistic analysis, or the content analysis of word usage, to assess regulatory focus strength (Gamache et al., 2015; Johnson, Lanaj, Tan, & Chang, 2012) in such a way as to avoid self-assessment bias (Johnson & Steinman, 2009).

³ See "Capital needs"; note the nonsignificant difference between the distributions of female- versus male-dominated industries served by the female versus male founders in the sample (United States Department of Labor, 2015).

TABLE 1
Field Study Sample Descriptive Statistics

Field Summary	
Startups	189
Operating	106
Closed	57
Acquired	24
Initial Public Offering	2
U.S. Headquartered	165
Raised Funds	151
VC Participation	118
Serial Entrepreneurship	108
Female Entrepreneurs	23
Investors	140
Female Investors	56

The combination of our two complementary content analysis techniques⁴ that test the same hypothesis via different approaches—the frequency count and the qualitative approach—results in more meaningful measurements of our construct of interest and enhances the validity of our analysis through triangulation (Jehn & Doucet, 1997; Weber, 1990). This union of computer-aided textual analysis and manual coding that we embrace in our study has been found to address many of the reliability concerns traditionally associated with manual coding (Gephart & Wolfe, 1989) while resulting in acceptable levels of semantic validity (Morris, 1994). The first of our methodologies involves mechanically analyzing the Q&A transcripts for frequency of promotion versus prevention lexicon. This methodology, sometimes referred to as "FC" for frequency count, represents the foundation of content analysis (Holsti, 1969; Klaus, 1980).

For our frequency count or "mechanical" analysis, we relied upon the dictionaries of 27 promotion and 25 prevention words developed and validated by Gamache et al. (2015) in their study analyzing the prevalence of these terms across CEO shareholder letters; see Appendix A (Table A) for the specific regulatory focus words. We uploaded these respective dictionaries into Linguistic Inquiry and Word Count (LIWC) software to determine their frequencies (Pennebaker, Booth, & Francis, 2007). To illustrate the results, we include here examples of transcribed text for which LIWC registered promotion versus prevention terms. During the Q&A

⁴ We used these two methodologies ($r = .71$) to arrive at one validated measure of regulatory focus, which we applied to predict funding outcomes for Hypotheses 3 and 4.

session with a particular male entrepreneur, a VC asked, “And where do you want to get if everything is fine . . . what is your **aspiration?**” (promotion term bolded; zero prevention terms). Conversely, a VC asked a particular female entrepreneur the following question during Q&A: “How do you **prevent** people from gaming your game?” (prevention term bolded; zero promotion terms).

There are, however, certain limitations associated with this methodology as LIWC does not distinguish between phrases related to the consumer, which is not meaningful to our analysis, and the entrepreneur and his or her startup, which are relevant. One such example involves the concept of pain points; when a question asks about a consumer’s pain point that the entrepreneur and his or her startup is seeking to solve, the word “pain” classifies as a prevention-focused term, but the essence of the question is actually promotion focused. Similarly, LIWC cannot recognize prevention questions that are related to the security industry. For instance, inquiries about a security platform should not appear as prevention-focused questions directed toward an entrepreneur because the safety and security of the startup is not in doubt. Lastly, the dictionary approach leaves LIWC vulnerable to a low detection rate; the software is not sensitive enough to capture intentions that do not directly overlap with the very specific 52 words in the regulatory focus dictionary (Gamache et al., 2015).

These limitations led us to also perform a more nuanced analysis, allowing for the translation of 1,857 VC questions and corresponding 1,718 entrepreneur answers into blind codes of gains/non-gains and losses/non-losses (Summerville & Roese, 2008), following the Weber protocol (Weber, 1990). Unlike LIWC, human coders considered the venture context and understood the meaning of how each term was used in this specific situation. In other words, coders were blind to the gender of the judge and the entrepreneur, but not blind to the overarching concepts inherent to venture funding. Promotion (*prevention*) coding distinctions emblematic of our rubric include customer acquisition (*customer retention*), sales (*net margin*), market size (*market share*), growth (*stability*), strategic vision (*operating efficiency*), and promotion of entrepreneur presenting (*vetting the team*); see the coding rubric in Appendix B (Tables B1 and B2).

Measures

Independent variable. We utilized both continuous and binary measures of regulatory focus. The computerized method provides a frequency output that calculates the proportion of promotion and prevention terms appearing in a sample of transcribed words. The resulting measure is continuous, calculated as the difference between the promotion and prevention score yielded by LIWC, with a differential variable range from -2.08 and 2.50 . Our manual method relied upon the independent blind coding of the questions and answers into binary promotion versus prevention intentions by two raters, who achieved a .97 intercoder agreement based on an overlapping random sample of 1,000 combinations (Tinsley & Weiss, 2000).⁵

Applying the binary code counts for each startup, we then constructed a firm-level regulatory focus measure of all questions and answers associated with each entrepreneur by taking the difference in the number of promotion and prevention intentions, in line with prior research (Cesario & Higgins, 2008). Based on the sign of the continuous variable, we translated this measure into a binary (promotion/prevention) code for each firm that we then tied to funding outcomes. We also utilized a continuous measure of firm-level prevention questions, hypothesized to influence firm funding outcomes, in effort to leverage both binary and continuous measures of regulatory focus.

Dependent variable. Our field study seeks to understand whether there is a correlational relationship between the types of conversations startups have with investors and the funds they raise. TechCrunch Disrupt represents a generalizable field setting, providing a rarely available window into the typical discussions investors have with entrepreneurs across boardrooms, online funding platforms, and competitions every day. As this Q&A is emblematic of the discussions startups have over the entire course of their lifetimes, it makes sense to likewise link these discussions with the total funds raised by these startups over the course of their lifetimes. For the

⁵ 1,057 questions coded as promotion focused, 637 as prevention focused, and 163 as neutral (those with repeated intentions and those that lacked a distinct focus); 911 responses coded as promotion focused, 474 as prevention focused, and 333 as neutral (single-word acknowledgments and other answers lacking distinct focus).

continuous measure of the outcome variable, we thus utilized funds raised as the total U.S. dollar value of funding received by each of the startups across various funding rounds, including seed, angel, and venture-led rounds. We verified our funding measure against a variety of sources, encompassing Crunchbase, AngelList, press releases (including TechCrunch and VentureBeat coverage), as well as representatives of the startups. We also log transformed the total dollar value of funds raised in order to account for skewed distributions when interpreting patterns in the data (Tabachnick & Fidell, 2007).⁶

Controls

As control variables that can impact funds raised, we utilized *startup age*, representing the total time since the startup's founding through the observed funding period; *startup quality score*, provided by the AngelList platform that rates startups on a scale of 0 to 10 based upon a proprietary measure encompassing key performance indicators; *past experience* or "serial entrepreneurship," a binary measure of whether or not the startup has one or more members previously affiliated with startups; and *capital needs*, for a binary measure of capital requirements associated with each startup and particular industry segment served.

Capital needs. This measure is based on the weight that both practitioners and academics place upon indicators of scalability and intellectual property (IP) when evaluating capital needs. As TechCrunch Disrupt requires startups to exhibit a strong baseline (low) need for capital, we have assigned a binary (0,1) value of medium versus high capital needs if one or more terms found to indicate the need for capital appear in the company description from a single source, Crunchbase, that is available for all startups in the sample. The presence of any of the following scalability and IP terms equates to a "1"

value for startup capital needs: 3D, aggregation, AI, API, application, broadband, computing, device, engineering, hardware, infrastructure, IP, machine learning, malware, marketplace, patent, platform, programming, real-time, robotics, SaaS, scale, software, solution, supercomputing, system, technology, and tools.⁷

Results

The descriptive statistics and intercorrelations for these capital needs and other relevant variables are depicted in Table 2. The table reveals that *capital needs* are significantly and positively correlated with the *natural log of funding* and with *quality*, while having a positive, nonsignificant correlation ($p = .25$) with *female entrepreneurship*. This result supports baseline Hypothesis 1 that we observe a set of startups with comparable capital needs regardless of gender. We can deduce that variations in funding are the result of capital supply-driven differences and not capital demand-driven differences as female-led entrepreneurs do not have a lower need for capital; in fact, they have a higher mean capital need ($M = .86$) than male-led startups ($M = .75$) in the sample.

Quality also has a nonsignificant correlation ($p = .69$) with *female entrepreneurship*, providing more evidence against entrepreneur-driven differences. Likewise, *predominant promotion focus* of investor questions is not correlated ($p = .20$) with *startup quality*, refuting the counterargument that the regulatory focus of investor questions is driven by startup

⁶ Note that the log values also employ a $\text{Log}(\text{funds} + 1)$ transformation for all values of zero funds raised. As an alternative dependent variable to funds raised, we also explored whether the regulatory focus of VC questions predicted successful contest outcomes. TechCrunch Disrupt audience choice, finalist, runner-up, and winner designations were coded as "success." Welch's *t*-test revealed startups that received promotion-focused questions had significantly more successful contest outcomes than those that received prevention-focused questions, with $t(187) = 2.14, p < .05$.

⁷ We rely on industry guidance and the scholarly literature to provide a rationale for incorporating the scalability and IP terms into our measure. According to the National Venture Capital Association Yearbook (Haque, 2016), "a business concept needs to ... have superb scalability ... and be truly innovative" in order to qualify for venture funding. In terms of scalability, Marks, Robbins, Fernandez, and Funkhouser (2005: 462) defined this term as "a characteristic of a new business concept that entails the growth of sales and revenues with a much slower growth of organizational complexity and expenses" and goes on to reiterate that "venture capitalists look for scalability in the startups they select to finance." The academic literature echoes this emphasis on innovation and scalability in publications on funding criteria (Hsu, 2007; Morris et al., 2006); Hsu (2007: 722) specified that, "for entrepreneurs of new ventures, particularly those with intangible, primarily intellectual property-based assets, venture capital is an important source of funding for the ongoing operations of the enterprise."

TABLE 2
Field Study Variable Statistics

		Mean	SD	2	3	4	5	6	7	8	n
1	Ln Funds	13.85	4.11	0.47***	-0.38***	0.20*	0.20*	0.23*	0.20*	-0.58***	136
2	RF (Promo. = 1)	0.78	0.41		-0.66***	0.22**	-0.01	0.11	0.11	-0.51***	189
3	Prevention Count	3.32	2.18			-0.11	-0.04	-0.12	-0.03	0.51***	189
4	Past Experience	0.65	0.48				0.12	0.07	0.05	-0.07	166
5	Capital Needs	0.77	0.43					0.32***	0.03	0.08	188
6	Quality	5.85	2.73						0.04	-0.03	143
7	Startup Age	5.11	2.88							-0.17*	189
8	Entrep. (F = 1)	0.12	0.33								189

Notes: Ln Funds = natural log of funding; RF = regulatory focus; Promo. = promotion focus; F = female.

* $p < .05$

** $p < .01$

*** $p < .001$

quality rather than entrepreneur gender. In support of our main theses, *predominant promotion focus* and *prevention count* have significantly negative ($r = -0.51$) and positive ($r = .51$) correlations with *female entrepreneurship*, respectively, both at $p < .001$ levels. Likewise, the *natural log of funding* is positively correlated with *predominant promotion focus* ($r = 0.47$) and negatively correlated with both *female entrepreneurship* ($r = -0.58$) and *prevention count* ($r = -0.38$), all at $p < .001$. Lastly, the significant negative correlation ($r = -0.66$, $p < .001$) between *predominant promotion* and *prevention count* confirms the sensitivity of predominant regulatory focus to the continuous measure of prevention question count. In sum, we find ample support for our investor-driven argument and against the entrepreneur-driven argument.

We leveraged the above variables to perform a multiple linear regression analysis that evaluated the explanatory power of our field variables on funding variance. Across Models 1 through 6, regulatory focus exerts the strongest influence on the natural log of funding, driving variance in funding outcomes. When examining the effects of regulatory focus in the presence of startup age, quality, capital needs, past experience, and entrepreneur gender, Table 3 indicates that Model 6 explained a significant amount of variance in funding ($R^2 = 43\%$, $p < .001$).⁸

⁸ Robustness checks reveal multiple linear regression results using a continuous regulatory focus (promotion-prevention count) rather than predominant regulatory focus (binary value of promotion vs. prevention) measure are all significant at $p < .001$ level.

Hypothesis testing. Welch's t -test supported baseline Hypothesis 1 for the existence of a "supply side" funding gap—that is, a significant difference in the amount of funding supplied to startups with similar capital needs led by men versus women. The findings revealed a significant main effect of gender on funding in which startups led by male entrepreneurs raised significantly greater amounts of funding than those led by female entrepreneurs ($t(134) = 2.18$, $p = .03$).

Both methodologies applied to our field data supported Hypothesis 2: male entrepreneurs are more likely to be asked promotion-focused questions, whereas female entrepreneurs are more likely to be asked prevention-focused questions. Via LIWC, a linear mixed-effects model⁹ conducted by nesting investor questions within firm confirmed a significant main effect of entrepreneur gender on investor regulatory focus, with $t(186) = 3.04$, $p = .00$. This model also revealed the main effect was not qualified by an interaction of entrepreneur gender and investor gender, with $t(186) = 0.05$, $p = .96$. Collectively, these findings imply that both male and female investors are likely to address male entrepreneurs with promotion-focused questions and female entrepreneurs with prevention-focused questions.

A linear mixed-effects model conducted with manual coding further confirmed the regulatory focus of investor questions was significantly different for questions posed to male versus female entrepreneurs, given $t(186) = 8.62$, $p < .001$. Like the mechanical results, this main effect of entrepreneur gender on

⁹ We utilized the lme4 package in R to enable nesting within firm (Bates, Maechler, Bolker, & Walker, 2014).

TABLE 3
Field Study Multiple Linear Regression

	Natural Log of Funding					
	1	2	3	4	5	6
Regulatory Focus	3.75*** (0.62)	3.68*** (0.62)	2.85*** (0.68)	3.00*** (0.68)	4.56*** (1.14)	3.22** (1.19)
Startup Age		0.42 [†] (0.22)	0.55* (0.25)	0.50* (0.24)	0.49 (0.32)	0.66* (0.31)
Quality			0.25* (0.10)	0.21* (0.10)	0.05 (0.17)	0.10 (0.16)
Capital Needs				1.67 [†] (0.88)	0.51 (1.64)	0.53 (1.54)
Past Experience					0.12 (0.84)	0.19 (0.78)
Female Entrepreneur						-3.48* (1.35)
Constant	11.09*** (0.55)	10.60*** (0.60)	9.73*** (0.86)	8.41*** (1.03)	9.30*** (2.00)	10.22*** (1.90)
Observations	136	136	110	110	106	106
R^2	0.21***	0.23***	0.23***	0.27***	0.33**	0.43***

Note: Robust standard errors clustered by firm in parentheses.

[†] $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$

regulatory focus of investor questions obtained via manual coding was not qualified by an interaction of entrepreneur gender and investor gender, with $t(186) = 0.35$, $p = .73$. In other words, field results obtained via both methods indicated that the gender of the entrepreneur predicts the regulatory focus of the investor question posed, and that both male and female VCs display gender bias against women.

Our field study provided significant support for Hypothesis 3a. Welch's t -test revealed a significant main effect of investor regulatory focus on the natural log of entrepreneur funding, with $t(134) = 3.79$, $p < .001$. Comparing dollar funds raised, we note that startups raised an average of \$16.8 million when investors asked predominantly promotion questions, 7.21 times more funding than the average \$2.3 million raised by those asked predominantly prevention questions. In addition to examining the funding impact based on the binary measure of predominance, we also regressed the natural log of total funds raised on the continuous measure to which predominant regulatory focus is sensitive: the number of prevention-coded questions that investors asked entrepreneurs.

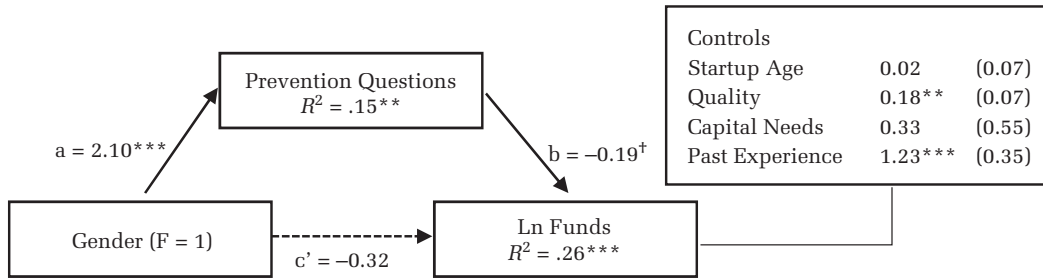
Results revealed that degree of prevention focus, as measured by the number of investors' prevention-focused questions, adversely affects funding outcomes

for entrepreneurs, with $F(1, 134) = 22.59$, $R^2 = 0.15$, $p < .001$. Aside from performing the analysis based on the log value of funding, we also examined the total dollar amount of funds raised. When interpreting the regression coefficient of this analysis, we note that entrepreneurs raised \$3.8 million less funding for each additional prevention question asked of them.

To test Hypothesis 3b, we checked for the presence of an indirect effect of entrepreneur gender on the natural log of funds raised, calculating 95% confidence intervals (CIs) with 10,000 bootstrap samples utilizing the PROCESS Macro for SPSS via the manual coding method (Preacher & Hayes, 2004, 2008). With startup age, quality, capital needs, and past experience as covariates, mediation Model 4 revealed significant support for Hypothesis 3b: the prevalence of prevention-focused questions fully mediated the effect of entrepreneur gender on funding outcomes based on a bootstrapped confidence interval that did not contain zero (indirect effect = -0.40 ; $SE = 0.23$; $CI_{95} [-1.09, -0.08]$).¹⁰

¹⁰ Per the stipulations of a full mediation, the direct effect of gender on funding decreased to direct effect = 0.32 ; $SE = 0.60$; $CI_{95} [-0.87, 1.51]$ for a confidence interval that no longer excludes zero.

FIGURE 2
Field Study Path Analysis



Notes: Indirect effect = -0.40 ; $SE = 0.23$; $CI_{95} [-1.09, -0.08]$ (Preacher & Hayes, 2004, 2008).

$\dagger p < .10$

** $p < .01$

*** $p < .001$

To test Hypothesis 4a regarding the regulatory focus matching of responses to questions asked, we first analyzed our field data utilizing the mechanical method for promotion–promotion and prevention–prevention Q&A pairings. Based on a simple linear regression performed with LIWC, we found that the regulatory focus of investor questions significantly predicted the regulatory focus of entrepreneur responses ($F(1, 187) = 14.22, R^2 = 0.07, p < .001$). Upon further investigation via the manual method, we learned that 160 (85%) of the 189 entrepreneurs matched the regulatory focus of their responses to the regulatory focus of the questions they were asked. The manual method confirmed that matching, as opposed to switching, of answers was again significant; regulatory focus of investor questions was predictive of entrepreneur responses, this time with $F(1, 187) = 65.75, R^2 = 0.26, p < .001$.

When testing Hypothesis 4b for the consequence of switching focus in the field, we confirmed that entrepreneurs who received prevention-focused questions and switched focus by responding in promotion raised significantly more funding than those who matched focus with a prevention response ($F(1, 27) = 8.55, R^2 = 0.24, p < .01$). More specifically, we found that those who switched focus raised \$7.9 million in funding on average, 14.03 times more than the \$563,270 raised on average by those who matched. We devised an experiment, in part, to isolate regulatory focus as the causal mechanism for this funding increase.

Additional analyses. By conducting our field study on comparable companies and controlling for variables known to impact funding outcomes,

Study 1 found support for entrepreneur gender influencing the regulatory focus of Q&A discussions, and for these discussions affecting startup funds raised. However, the possibility remains that these relationships may be a consequence of unobserved differences in the nature of female- and male-led startup opportunities and the way in which these opportunities are presented. Recall from Table 2 that quality was predictive of funding yet had a nonsignificant correlation with gender ($p = .69$). Given the modest sample of 23 female entrepreneurs, we conducted a power test using R Package *pwr* that revealed a $\pi = .80$, exceeding research standards for power adequacy (Cohen, 1988).

Having ruled out differences in the nature of the startups, we also investigated whether there were gendered regulatory focus distinctions in the startup pitches that may have acted as an antecedent to the regulatory focus of investors' questions. We found a positive nonsignificant correlation between predominant promotion focus and female presenter ($p = .79$), with a $\pi = .80$. We also conducted power tests on the nonsignificant interactions between entrepreneur gender and judge gender whereby we refuted the presence of any homophilous effects ($\pi = .82$ for male vs. female judges' questions to female entrepreneurs, and $\pi = .81$ for those posed to male entrepreneurs). As 140 judges each evaluated four to five opportunities, we did not observe a VC concentration issue; in the event that judges played a role, we performed a Hausman test comparing judge fixed effects against random model estimates, with a nonsignificant p value of .26

indicating we use a random effects model as it pertains to judges (Greene, 2008).

STUDY 2: EXPERIMENTAL TEST

Our field study's correlational findings and inherent limitations inspired the development of a controlled experiment intended to establish causality and address any remaining concerns related to alternative explanations for the field effects. We designed the experiment to accomplish several specific goals, as follows: (a) to control for all entrepreneur-driven differences, isolating regulatory focus as the causal mechanism for variation in funding outcomes; (b) to observe equal samples of male- and female-led startups; and (c) to demonstrate that the effect of regulatory focus on funding is present among all evaluators of investment opportunities, including both accredited and non-accredited investors with varying degrees of experience.¹¹

Participants

Although venture capital represents a considerable dollar portion of U.S. funds raised, these deals are infrequent; angel and other seed (i.e., earliest-stage) financings involving affluent individual investors, family, and friends constitute the majority of U.S. funding deals (Pitchbook & National Venture Capital Association, 2016). In effort to generalize our findings across all such classes of investors participating in the funding ecosystem, we sought to replicate the significant VC results from the field using both accredited angel investors and representative ordinary seed investors as our experimental subjects. As such, we circulated an investor survey to two separate samples, running each as an independent experiment: (1) 194 angel investors¹² (70% men)

¹¹ To qualify as an accredited individual investor, one must have a net worth (or joint worth with spouse) of at least one million U.S. dollars, excluding the value of one's primary residence, or have an annual income of at least \$200,000 (\$300,000 combined income if married) in each of the two most recent years according to SEC Rule 501 of Regulation D (Hazen, 2016: 85).

¹² Participating angels belonged to one of 14 angel investor groups (average investor age = 46.9, average years of investing experience = 9.3) located in the Mid-Atlantic region of the United States that primarily invest in high-technology startups at the pre-seed and seed stages, with an average investment per startup of \$30,000.

attending a monthly angel investor meeting who provided 776 funding allocations and (2) 106 potential seed investors¹³ (53% men) from Amazon Mechanical Turk who provided 424 funding allocations.

Procedures

All experimental participants were given the same scenario:

You work for a venture fund that has pre-vetted four ventures and determined each one meets the fund's investing criteria in terms of industry, geography, and stage of development. You now have the opportunity to hear the founder and CEO of each venture respond to 10 questions posed by a partner of your fund. After listening to each Q&A session, you will be given the opportunity to allocate a sum to each venture as you see fit (out of \$400,000 in total available funds).

Design

Our experiment manipulated the regulatory focus of investor questions and entrepreneur responses through the use of audio scripts consisting of promotion and prevention combinations.¹⁴ Having confirmed a lack of evidence for any gender difference with regard to regulatory focus of entrepreneur pitches in Study 1, we were able to entirely remove pitches from this experimental setting, further isolating the impact of regulatory focus by only exposing participants to the Q&A interactions. The within-subjects, counterbalanced design is a two (promotion-focused vs. prevention-focused questions) by two (promotion-focused vs. prevention-focused answers) by two (female vs. male entrepreneurs as respondents) factorial. We designed the experiment to simulate the TechCrunch Disrupt Q&A experience that consisted of investor judges evaluating multiple startups, posing an average 9.8 questions to each in a six-minute time frame.

¹³ Amazon Mechanical Turk's cross-section of the broader U.S. population (Buhrmester, Kwang, & Gosling, 2011) is representative of the "non-accredited investors" or "everyday citizens" who were given the right to invest in private startups via Title IV (Small Company Capital Formation) of the U.S. Jumpstart Our Business Startups Act. Since Title IV's passing in 2015, the general public constitutes a growing source of seed financing through online crowdfunding and offline means.

¹⁴ Regulatory focus has been induced in the lab through such activities as essay writing (Freitas & Higgins, 2002).

For each of the four regulatory focus conditions, we created six-minute audio file vignettes of a male-voiced VC asking 10 questions to male- versus female-voiced entrepreneurs who provided 10 answers on behalf of their fictitious ventures.¹⁵ The audio scripts allowed us to maintain consistent speech patterns, while the audio (as opposed to video) clips enabled us to remove any influence of nonverbal gestures. By relying upon a single female and a single male voice for our gender distinction, we were also able to maintain consistency of vocal inflection to control for individual modulations of intonation and pitch. We used actual questions and answers from TechCrunch Disrupt transcripts as the basis for the audio clips, redacting the dialogue for any startup specifics and standardizing the clips for startup progress in order to control for any variations in quality and stage. As such, we removed all references to specific figures on market size, revenue, operating margins, number of users, and growth rates.

Measures

Independent variable. We manipulated regulatory focus for each condition containing the following pairs of investor questions and entrepreneur answers: promotion question–promotion answer, prevention question–prevention answer, prevention question–promotion answer, and promotion question–prevention answer.

Dependent variable. The experiment used participant responses for “funds allocated” to startups associated with each of the Q&A conditions, out of a hypothetical total of \$400,000 in available funds, as the continuous measure of the outcome variable.

Results

As our experiment employed a within-subjects repeated-measures design, we performed a linear mixed-effects analysis using R’s lme4 package to control for variance associated with random factors and enable nesting within subject (Bates et al., 2014). Examining the influence of regulatory focus on the continuous variable of funding, our results revealed significant support for the predictions regarding participants’ allocations that were associated with investor questions and entrepreneur responses manipulated for regulatory focus.

Hypothesis testing. Our experimental study confirmed the field results in support of Hypothesis 3a; the linear mixed effects model results revealed that the regulatory focus of investor questions significantly predicted funding allocations, with $t(191) = 12.14$; $p < .001$ for the accredited angel investors and $t(103) = 6.65$, $p < .001$ for the potential seed investors. Among accredited angel investors, the conditions with promotion questions were allocated a mean of \$133,259 out of \$400,000, 2.00 times more funding than the \$66,741 mean allocated to conditions with prevention questions. Potential seed investors similarly allocated \$124,151 to conditions with promotion questions, 1.64 times more funding than the \$75,849 allocated to the prevention question conditions. Notably, the experimental study—across both samples—confirmed the field results in support of Hypothesis 4b regarding the consequence of switching regulatory focus as a potential intervention to increase funding.

We observed a significant interaction between question regulatory focus and answer regulatory focus, with $t(191) = 3.78$, $p < .001$ for angels and $t(103) = 4.06$, $p < .001$ for seed investors. This interaction indicated a significant funding increase derived from switching answers to the beneficial promotion-focused response. Accredited angel investors allocated an average \$81,113 to the “prevention question–promotion answer” condition of switching focus, 1.55 times the average allocation of \$52,369 for the “prevention question–prevention answer” condition of matching focus. Likewise, potential seed investors allocated \$96,321 to the “prevention question–promotion answer” condition of switching focus, 1.74 times the average allocation of \$55,377 for the “prevention question–prevention answer” condition of matching.

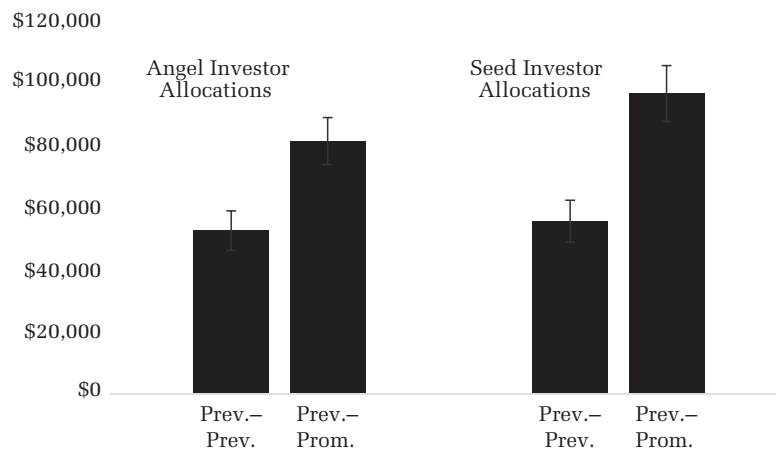
The open-ended questions in our experiment provided insights into the funding implications of the hypotheses above. In support of our conceptual framework, participants’ direct quotes in Appendix C (Table C) revealed that a prevention question–prevention response combination positions entrepreneurs at a disadvantage to startups in the promotion question–promotion response condition. Qualitatively, we observed participants did not trust that entrepreneurs in the former condition were as confident as those in the latter about their firms’ growth prospects.

DISCUSSION

This study investigated the influence of investor regulatory focus on entrepreneur positioning and

¹⁵ Given the field study revealed similar patterns for male and female investors, we utilized a single consistent male investor voice, representative of the industry standard, to achieve greater statistical control.

FIGURE 3
Experiment Funding Allocations by Condition



Notes: All values significant at $p < .001$. Prev. = prevention; Prom. = promotion.

funding outcomes as a function of gender. Narrowing our attention to the Q&A portion of the investing process, we evaluated the distinct promotion versus prevention focus of VC questions directed toward male versus female entrepreneurs, as well as the focus of the responses those questions induced. When constructing our theory of gendered distinctions in investor regulatory focus, we hypothesized *why* investors might tailor their questions based on the gender of the entrepreneur they are addressing, as well as *how* this tailoring impacts funding outcomes for entrepreneurs.

In doing so, we developed a conceptual framework for systemic bias—a process in which both investors and entrepreneurs are complicit—that jeopardizes female entrepreneurs. We tested and found support for our framework and its predictions. First, we confirmed our baseline hypothesis that female entrepreneurs raise significantly less funding than male entrepreneurs with similar funding needs. Second, we found support for investors' regulatory focus as the mechanism for this disparity. Lastly, we revealed that entrepreneur responses to investor questions help perpetuate this disparity, which can be reduced by implementing our proposed “switching” intervention. Together, these confirmations broaden the application of regulatory focus into the body of research at the crossroads of *gender* and *venture capital*.

Gender Distinctions in Venture Funding

In contrast to past investor-driven literature primarily focused on the pitch portion of the investor

process (Balachandra et al., 2013; Clark, 2008; Pollack, Rutherford, & Nagy, 2012), we theorized a new mechanism grounded instead in the Q&A component. Our study embraced a micro-level approach to examine the psychology underlying the macro-level funding ecosystem, specifically analyzing the critical component of the funding pipeline that relates to exchanges between VCs and entrepreneurs. This cross-disciplinary perspective—uniting social psychology with performance-related outcomes in venture capital—answers a recent call to further bridge the micro–macro divide in gender inequality research (Joshi et al., 2015).

The study's baseline contribution helps resolve a longstanding debate in the literature about whether the gender gap in financing is driven by entrepreneurs or investors. As such, our work responds to the Diana Project's agenda to better understand the interplay between demand- and supply-side forces responsible for the gender gap (Brush, Carter, Gatewood, Greene, & Hart, 2004). We contribute to the investor-driven theory within the gender inequality literature in four ways: (1) by selecting a sample of ventures with comparable funding needs to eliminate variance in entrepreneur preferences as an explanation (Morris et al., 2006); (2) by calling further attention to an entrenched and implicit, as opposed to direct and explicit, bias (Alsos & Ljunggren, 2016); (3) by demonstrating how the venture capital selection process, operationalized as the framing of investor questions, influences the perception of differences in entrepreneur's

motivational positioning (Coleman & Robb, 2009); and (4) by introducing a novel intervention for entrepreneurs and VCs alike, which answers recent calls for organizations and scholars to help foster gender parity in male-dominated contexts (Briscoe & Joshi, 2016).

Drawing upon research at the intersection of regulatory focus and entrepreneurship (Brockner et al., 2004), we developed and tested a conceptual framework that identifies distinctions in venture screening (screening-in vs. screening-out criteria) and maps these distinctions onto the regulatory focus (promotion vs. prevention focus) of investor questions and entrepreneur responses. We confirmed that investors displayed a distinct regulatory focus when interfacing with female versus male entrepreneurs. In contrast to previous venture research findings on homophily (Greenberg & Mollick, 2016; Ruef et al., 2003; Stuart & Sorenson, 2007), we found that female VCs varied their regulatory focus based on the gender of the entrepreneur they were addressing just as male VCs did. In other words, female VCs were more likely to ask promotion questions when interacting with male entrepreneurs and prevention questions when interacting with female entrepreneurs.

As biased behavior is being enacted by all investors—both male and female—this finding is suggestive of a stereotype at play, fueled by widely held beliefs shared among members of the social group of investors (Tajfel, 1981). Heuristics offer explanatory insight into the use of stereotypes, given the tendency to rely upon such information-processing shortcuts in making judgments under uncertainty (Tversky & Kahneman, 1975). When assessing early-stage startups, marked by a lack of available information, evaluators access heuristics to form their investing decisions (Wickham, 2003). Notably, the representativeness heuristic reasons that investors will perceive a higher likelihood of object A (men) over object B (women) belonging to class C (venture-funded entrepreneurs) if object A is more representative of (i.e., similar to) the stereotype of class C than object B is (Tversky & Kahneman, 1975). As such, we expect to see stereotype-driven implicit bias in questions posed toward women in contexts where two conditions are present: (1) women are significantly underrepresented and (2) there is a high degree of uncertainty.

Practical Implications and Future Directions

Our results suggest an unintentional double standard at play in the venture capital industry. Female

entrepreneurs are implicitly expected to prove they can execute a safe return of capital to the investor, whereas male entrepreneurs are instead expected to show the opportunity can grow. The fact that both male and female VCs display implicit bias, holding men and women to different standards, implies that the funding disparity cannot be corrected by merely ensuring that more female VCs are in a position to evaluate investment opportunities. This observation challenges the “industry representation” contention that more female VCs will clear the path for more funded female entrepreneurs (Brush et al., 2001).

Unfortunately, the double standard inherent in investors’ questions induces likeminded responses from entrepreneurs, serving to undermine confidence and trust in female entrepreneurs while breeding confidence and trust in male entrepreneurs with similar growth prospects (based on our experimental feedback). Entrepreneurs intuitively match their responses to the regulatory focus of the investor questions asked of them. This downstream induction aggravates the gender gap by prompting female respondents to position their startups as “playing not to lose” and male respondents to position themselves as “playing to win.” In turn, that positioning influences investor opinions, perpetuating the perception that women lack the appetite for growth.

Despite the gender disadvantages supported by our data on funding outcomes, our study indicates there is a silver lining for female entrepreneurs if these findings are applied in entrepreneurship training. Our field and experimental intervention results provide compelling evidence for a tactic entrepreneurs can use in order to level the playing field in venture funding. Armed with the knowledge that regulatory focus impacts funding outcomes, entrepreneurs can respond to prevention-focused questions with a promotion rather than prevention focus in order to elicit more positive results for their startups. For example, when asked a question about defending market share in a competitive market, the entrepreneur can respond by referencing the startup’s unique ability to gain advantage in a sizable, fast-growing market that is so attractive to new entrants. Likewise, informed VCs can now balance the promotion versus prevention orientation of their questions to more effectively screen entrepreneurs seeking capital.

Notably, our study also extends research on RFT by examining regulatory focus in the uncharted context of venture funding, answering calls to further investigate the influence of regulatory focus on entrepreneurship (Brockner et al., 2004). By analyzing

question and answer combinations, our investigation of VC–entrepreneur interactions also broadens RFT to encompass the understanding of a behavior we coin “motivational matching.” We welcome interest in pursuing this new regulatory focus concept to understand the prevalence of these behaviors and the contexts in which matching versus switching yields positive outcomes. Our study only observes the benefits of promotion over prevention in a generalized investment setting where entrepreneurs cater to a variety of industries and end users. Specialized contexts such as social entrepreneurship and corporate social responsibility that emphasize protection, responsibility, and reduction of harm may instead reward companies that engage in prevention-oriented investment discussions. Given the proliferation of crowdfunding platforms (e.g., Kickstarter, Indiegogo, GoFundMe), future research can explore whether the regulatory focus of investor questions varies by gender in online settings lacking the vivid element of face-to-face interaction that is most conducive to observing gender. Additional opportunities exist to study the regulatory focus of questions and answers entirely outside the context of venture funding, investigating settings in which women are either not a minority or the high degree of uncertainty inherent in early-stage startups is reduced by the presence of historical track record availability. Lastly, our experiment examines funding allocations directly after exposure to Q&A interactions; future studies may observe whether the effect is strengthened or tempered under various conditions of temporal delay.

CONCLUSION

Research has documented gender distinctions in funding outcomes, yet the magnitude of the fundraising gap and its underlying mechanism have been widely contested by scholars, practitioners, and policymakers alike. This study helps foster a better understanding of the VC and entrepreneur dynamic so that key constituents can mitigate the negative consequences of gender bias within the investing process. Our results unearth an important distinction in the types of investor questions asked of entrepreneurs that explains disparities in their respective funding outcomes. We show how this distinction prompts female entrepreneurs to position their startups as *playing not to lose* and male entrepreneurs to position their startups as *playing to win*, perpetuating the gender gap. By calling attention to the role of regulatory focus in Q&A sessions, we give VCs and entrepreneurs the tools to ask and answer questions for the

benefit of their funds and startups, respectively. Over time, small changes in reframing questions and answers can promote gender parity so that the most deserving startups—regardless of whether they are led by men or women—receive the funding they need to thrive. Ultimately, such improvements can have a positive impact on the labor market, enabling female business owners to not only launch their companies but also successfully grow their workforces.

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APPENDIX A: LIWC DICTIONARIES

TABLE A
Regulatory Focus Words^a

Promotion Focus		Prevention Focus	
1 Accomplish	15 Improve	28 Accuracy	42 Obligation
2 Achieve	16 Increase	29 Afraid	43 Ought
3 Aspire	17 Momentum	30 Anxious	44 Pain
4 Aspiration	18 Obtain	31 Avoid	45 Prevent
5 Advancement	19 Optimistic	32 Careful	46 Protect
6 Attain	20 Progress	33 Conservative	47 Responsible
7 Desire	21 Promotion	34 Defend	48 Risk
8 Earn	22 Promoting	35 Duty	49 Safety
9 Expand	23 Speed	36 Escape	50 Security
10 Grow	24 Swift	37 Escaping	51 Threat
11 Gain	25 Toward	38 Evade	52 Vigilance
12 Hope	26 Velocity	39 Fail	
13 Hoping	27 Wish	40 Fear	
14 Ideal		41 Loss	

^a Source: Gamache et al. (2015).

APPENDIX B: REGULATORY FOCUS MANUAL CODING

TABLE B1
Promotion Codes

Concept	Description	RF Explanation	Example
Customer acquisition	Acquire, obtain, onboard, onboarding process	Gains, growth	<ul style="list-style-type: none"> • “How do you want to acquire customers?”
Go-to-market strategy	Launch, roll-out, market entry, speed to market, product positioning, branding, advertising, marketing campaign, partnership, distribution plans, approach, building out a base, gain momentum	Gains, speed, momentum	<ul style="list-style-type: none"> • “So, how do you think you’re going to get at this market?” • “I have a question about distribution plans. You obviously are distributing directly through your website. Do you also have plans to go into wholesale?”
Market opportunity	Addressable market, market size, market demand, market characteristics, target demographics, verticals targeted, market potential, geographic expansion, platform extensions, network effects, viral growth, critical mass, home run, eyeballs	Expansion, growth	<ul style="list-style-type: none"> • “Do you think that, that your, um, target market is, is a growing market?” • “Are you thinking, I guess, geographically? Like, you’ll focus on one country specifically?”
Assets	IP, intellectual property, differentiation, uniqueness, secret sauce, tangible assets, intangible assets	Ideal state	<ul style="list-style-type: none"> • “Can you talk more about the IP potential here?”
Self-promotion	Experience, background, genesis, story, your brand	Ideal self	<ul style="list-style-type: none"> • “Can you tell us a little bit about yourself?” • “So why you?”
Sales	Sales leads and prospects, purchase, business model, buyers, customers, clients, monetization, pitch, pricing, price point, charge, timing of future releases, bookings, commercialization, revenue, top line, conversions, business development	Gains, growth	<ul style="list-style-type: none"> • “Can you tell us a little bit about the business model?” • “Do you plan to license the technology?” • “How do you plan to monetize this?” • “What’s the price?” • “Are there any thoughts on scaling up your sales process?”
Usage	End users, use case, product/feature extensions, value proposition	Gains, expansion, progress	<ul style="list-style-type: none"> • “What do you anticipate being the core use case?” • “Do you see the government using this?”
Vision	Vision, dream, wish, story, inspiration, aspiration, genesis, idea, ideal scenario, plan, ingenuity, desire, end goal, intent, mission	Hopes, ideals, aspirations	<ul style="list-style-type: none"> • “What’s the brand vision?” • “What is your aspiration?” • “And where do you want to get to if everything is fine?”
Forecast	Growth trajectory, milestones targeted, projections, proposed milestones, forecast, success	Hopes, accomplishments, rewards, advancement	<ul style="list-style-type: none"> • “What major milestones are you targeting for this year?” • “What does success look like?”

APPENDIX B: REGULATORY FOCUS MANUAL CODING

TABLE B2
Prevention Codes

Concept	Description	RF Explanation	Example
Execution	Vetting execution, execution risk, quality control, testing, quality assurance, logistics, process, progress to date, key performance indicator statistics, response time, measurement, device support, integration issues, competence, avoiding careless mistakes, covering all your bases, due diligence, errors, feasibility, friction, impediments, validation	Vigilance, responsibility	<ul style="list-style-type: none"> • “What percentage of the time can people tell it’s fake?” • “Have you Turing tested this?” • “What’s your typical response time?” • “Is this Hudson River water quality?” • “Have you support for four different devices?” • “Do you tie the profiles of customers in your brick-and-mortar stores to online profiles?” • “How are you doing that sort of data integration? Um, where is that stored?”
Safety and security	Disaster recovery, contingency plans, policies and procedures in place, infrastructure, critical business functions, processing capacity, server maintenance	Safety, security, responsibility, protection, rules	<ul style="list-style-type: none"> • “What safeguards do you have against that?” • “Do you feel that the infrastructure is mature enough that, for something as mission critical as security, you can build a whole system on it at this stage?”
Liability	Consumer privacy, privacy protection, data protection, fraud, legality, regulatory concerns	Oughts, responsibility, rules, protection	<ul style="list-style-type: none"> • “Are you able to share that cross company because of the privacy issues?” • “What are the opportunities for leakage?”
Competition	Competitive threat, competition, competitors, lost market share, protecting share, copycat threat, defensibility	Losses, defense, threats	<ul style="list-style-type: none"> • “Can you talk a little bit about the competitive environment?” • “But Foursquare already announced they’re gonna bring their badges web-wide”
Operating efficiency	Cost, cost effectiveness, saving money, monthly overhead, margins, EBITDA, operating income, bottom line, break-even, cost savings, cost per user, cheaper, bootstrapping, unit economics, CPA	Losses, security	<ul style="list-style-type: none"> • “The \$299, does that build in a margin? Or do you—Is that like, costs, or do you make a margin on that?” • “How long will it take you to break even?”
Customer retention	Not losing customers, retain, retention rates, turnover, attrition, daily active users/monthly active users, stickiness, time spent on site/in app, engagement	Losses, protection	<ul style="list-style-type: none"> • “Are people coming back?” • “How long do they stay?” • “How many daily and monthly active users do you have?”
Team capabilities	Vetting the team background, outsourcing, in-house, internal skill set, offshore, developing capabilities, backend support	Vigilance, checking	<ul style="list-style-type: none"> • “How much of this are you actually doing in-house?” • “What’s the background of the rest of the team, why are those guys best positioned to try to solve this?” • “Who can code?”

APPENDIX C: FUNDING ALLOCATION RATIONALE

TABLE C
Experiment “Most Funded” vs. “Lead Funded” Commentary

Why did you allocate the highest amount of your funding to this startup?	Why did you allocate the least amount of your funding to this startup?
<ul style="list-style-type: none"> • “The speaker for [Promotion-Promotion Condition] sounded extremely competent, knowledgeable, and prepared compared to the other speakers. I was actually amazed after listening to the rest of them how ill-prepared some of them sounded. I would definitely trust the founders to launch a successful product.” • “[Promotion-Promotion Condition] sounded very convincing that they will be successful and make good profits.” • “I think it had the best potential for growth and for widespread use.” • “The fact that it had the best looking future and largest target audience. More people can use it and the prospects sounded very positive.” • “They had a long term vision and were working towards it.” • “The enthusiasm of the person asking questions, the ability of the person to answer those questions and make a reasonable case for the likelihood of success, and the hints that there was already substantial progress towards finding customers.” • “The project has a good target market, good pricing procedure, good distribution ideas, good experience, well-thought out plan.” • “I think this project had the most potential to make a lot of money” • “I think [Promotion-Promotion Condition] is the most interesting and most likely to succeed.” • “I really liked [Promotion-Promotion Condition] the best because I think it had the most opportunity for growth. The market was essentially limitless, and already being used. It’s simple enough for multiuse, and has a very strong team behind it. Their product is not only ready for market, but right there, and I predict it will grow well.” • “It seemed ready to go and also ready to attack a huge market.” • “I think the [Promotion-Promotion Condition] is what most people will be wanting today.” • “I could see the product as being something useful and actually having a market.” • “Very smooth presentation with a clear idea of what their idea was, how it was going to be used and implemented and a clear plan on why it will work.” • “Seemed the most steady and probably business model to succeed.” • “The person had a strong plan for an area that I think is the wave of the future.” • “After hearing all of the choices I think [Promotion-Promotion Condition] sounded like it had the highest future scaling. Also they really knew about their product, market, and other businesses. Sounded like it had the most potential so I really upped my money for that one.” • “The core concept of the project and the industry that it’s directed at seemed like a more ready project that will deliver returns sooner than the other projects.” 	<ul style="list-style-type: none"> • “[Prevention-Prevention Condition] was not so convincing in his answers. There was some hesitation so I didn’t feel very confident in this particular project.” • “There seemed to be a lack of confidence at times. They also had a long ways to go with some of the issues that were brought up.” • “They did not seem ready nor fully confident.” • “It has many issues that need to be solved, both technical and marketing wise. Too much chance for competition from established companies.” • “The speaker didn’t really seem sure of herself at times which didn’t give me a great feeling about it.” • “Nothing they said seemed visionary and I didn’t see much of a way of return on investment. It’s just crowd sourcing data essentially. I didn’t see the chance to scale and more importantly didn’t see the chance to make a lot of money.” • “The feasibility of the project and the technical issues came into play.” • “Seems to have a lot of barriers and doesn’t really know if their product will take off.” • “The women just didn’t seem like she could focus very well on the discussion and made me doubt the whole project.” • “This project seems too complicated and has not been tested so it is riskier.” • “The project that I gave the least to was the project whose goals I understood the least, and, who, from what I understood, would have the most technical hurdles to get over.” • “It’s something that is highly risky, in my opinion, because it requires a lot of data input, and trusting a lot of people to do good work.” • “It seemed further away from being able to make money and seemed like a lot of hurdles needed to be jumped.” • “Seemed like it had many road blocks and like it would run into problems.” • “Too much needed to be developed and overcome before it could really see any income. I honestly can see it failing in the long run.” • “Lack of detail with dealing with potential problems.” • “Sounded completely unprepared—they acknowledged issues without offering solutions, and offered excuses instead of workarounds for problems.” • “It seemed as if security and retrieving data might be a problem in the future and it has not yet been developed to that point. The presenter didn’t seem to be concerned about it, but I think users would be.” • “It had some very high hurdles to cross and put a large burden on the merchants.” • “I felt it wasn’t as innovative as the others and wouldn’t have as wide an appeal.” • “She talked about still being in a lot of R&D phase where they have some issues they still have to iron out.” • “Too many problems with the product and how they were be able to integrate it.” • “There were too many issues to fix with them.”

TABLE C
(Continued)

Why did you allocate the highest amount of your funding to this startup?	Why did you allocate the least amount of your funding to this startup?
<ul style="list-style-type: none"> • “[Promotion-Promotion Condition] seems like it has the best odds of success because it seemed to be the most useful and had a solid plan laid out.” • “I felt that confident answers were given, and that the market was well defined.” • “I was influenced by how successful I thought the project would be, how innovative I thought it was, and whether I thought it could be a potential game-changer.” 	<ul style="list-style-type: none"> • “Not a very large market, technical issues in the development and implementation.” • “Seemed pretty unorganized and inefficient. This will cost a lot of time and money.”

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