Beyond Passive Observation:

When Do We "Affordance Test" to Actively Seek Information about Others?

by

Cari M. Pick

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Steven L. Neuberg, Chair Douglas T. Kenrick Stephen G. West David C. Funder

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ABSTRACT

Humans are highly interdependent, living and working in close proximity with many others. From an affordance management perspective, the goal of social perception is to assess and manage potential opportunities and threats afforded by these close others. Social perceivers are thus often motivated to assess particular affordance-relevant characteristics in a target. Frequently, perceivers assess these characteristics via passive observation. Sometimes, however, making such an assessment via observation can be difficult. In these cases, perceivers may instead "affordance test": actively manipulate the target's circumstances to reveal (or notably not reveal) cues to the characteristic of interest. There are multiple factors hypothesized to affect whether a perceiver is more likely to passively observe or affordance test that characteristic, including factors related to the characteristic of interest, the situation, the perceiver, and the target. Here, four core hypotheses of this affordance testing framework are tested. In a Preliminary Study (analyzed N = 1301), Study 1 (analyzed N = 559), and Study 2 (analyzed N = 572), highly consistent correlational and experimental evidence was found in support of Hypothesis 1, that the less observable a characteristic is believed to be, the more likely a perceiver is to assess it via affordance testing. In the Preliminary Study, evidence supported Hypothesis 2, that the more important a characteristic is believed to be, the more likely it is to be affordance tested. In Studies 1 and 2, mixed evidence supported Hypothesis 3, that the more urgency or time pressure a perceiver feels, the more likely they are to assess the characteristic of interest via affordance testing. And in Studies 1 and 2, evidence did not support Hypothesis 4, that believed observability and felt urgency interact, such that even characteristics of moderate believed observability are highly

likely to be affordance tested under higher felt urgency. Implications of these findings for the affordance testing framework, limitations of the studies, and potential future directions are discussed. In sum, the present work provides promising initial progress in understanding foundational factors that affect when perceivers are likely to affordance test—an important, yet previously understudied, component of the social informationseeking process.

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Beyond Passive Observation: When Do We "Affordance Test" to Actively Seek Information about Others?

Imagine you play on a highly successful rugby team and you need to find out before your competitive season starts—which of this year's new teammates you can count on to not "choke" under pressure in critical moments. Or imagine you are in a romantic relationship that you feel has gotten serious. Your partner's lease soon ends, and you are eager to ask them to move in with you, but first you need to make sure they are as committed to the relationship as you are.

In social perception, we allocate significant mental effort toward assessing the opportunities and threats others potentially afford us-e.g., whether our teammate will be reliable or our romantic partner, committed. When we are able to make such affordance inferences accurately, we are much better able to successfully navigate our complex social world. Frequently, we can make such inferences through the observation of cues that (imperfectly) predict other people's characteristics and intentions, such as when we infer formidability from a muscular upper body, paired with aggressive intent from an angry facial expression. Often, however, due to a lack of adequate cues, observation does not allow us to effectively make necessary affordance-relevant inferences. For example, cues of dishonesty are likely to be overwhelmed by cues of honesty because even highly dishonest people are honest most of the time. Cues to unpopular beliefs are often veiled because people typically work to conceal them. We rarely find ourselves in settings where we can observe cues of vengefulness, because few situations elicit such feelings. Finally, sometimes cues to a characteristic would become available given time, but must be assessed soon—as when we need to assess a new teammate's reliability before the

season starts, or a romantic partner's commitment before asking them to move in with us. Under circumstances such as these, when passive observation is not effective, how do we assess the affordance potential of others?

I propose that social perceivers "affordance test"—they actively manipulate a target's circumstances to reveal (or notably fail to reveal) behavioral cues to a particular characteristic of interest (Pick & Neuberg, 2021). In my dissertation, I assess several factors that I predict increase the likelihood of information-seeking through affordance testing rather than through passive observation. First, I predict that when a characteristic is not highly observable, a perceiver is more likely to affordance test to assess it. Second, when the stakes are high, and the presence (or absence) of a characteristic is particularly important for a perceiver's own outcomes, the perceiver is more likely to affordance test for it. Third, when a perceiver feels strong situational urgency, they are more likely to affordance test. Finally, I predict that a perceiver's feelings of situational urgency will interact with the observability of a characteristic, such that even characteristics that are moderately observable will be affordance tested when urgent assessment is called for.

Social Information-Seeking Strategies

Social information-seeking plays a critical role in the successful navigation of ultrasocial human life. Interdependent living in close proximity with so many others not only provides benefits (e.g., resource sharing, alloparenting, skill specialization) but also poses costs (e.g., free riding, stealing, physical violence) (Alexander, 1974; Campbell, 1982; Richerson & Boyd, 1995). From an affordance management perspective, the goal of social perception is to assess and manage the potential opportunities and threats others afford us (McArthur & Baron, 1983; Neuberg et al., 2010, 2011; Neuberg & Schaller, 2015; Zebrowitz & Montepare, 2006). Beyond a broad vigilance for social threats and opportunities, perceivers are often motivated to assess other people for particular characteristics that are likely to aid or hinder the perceiver in accomplishing his or her own social goals. For example, when a target wishes to enter a group, perceivers must assess whether the target has characteristics necessary to facilitate the group's aims, or characteristics likely to disrupt the group's goals. We therefore continually seek information about others who may afford us potential opportunities or threats, and especially about those with whom we currently have, or are considering establishing, a highly interdependent relationship.

How Do People Gather the Information They Need?

Once a social perceiver is motivated to assess a characteristic in a target, several strategies are available to them as part of the social information-seeking process.

Passive Observation

Frequently, perceivers seek such affordance information through the passive observation of behavioral cues that (imperfectly) predict others' abilities and intentions. One can collect a great deal of information via passive observation, and at low effort. Indeed, via passive observation, social perceivers make a wide array of inferences about characteristics ranging from abilities (e.g., intelligence, strength; Borkenau et al., 2004; Sell et al., 2008) to personality traits (e.g., extraversion, trustworthiness; Borkenau et al., 2009; Kenny et al., 1992; Willis & Todorov, 2006) to intentions and inclinations (e.g., aggression, sexual interest; e.g., Bzdok et al., 2011; Estes, 1938; Kramer et al., 2012; Miller, 1970; Naumann et al., 2009; Winston et al., 2002).

Sometimes, however, inference via passive observation is difficult. Some affordance-relevant characteristics are easier to assess via the observation of behaviors than are others (Ajzen & Fishbein, 1975; Jones & Davis, 1965; Reeder & Brewer, 1979; Rothbart & Park, 1986). Cues to some affordance-relevant characteristics are much more difficult to observe than are others (Rothbart & Park, 1986). Additionally, some characteristics have more diagnostic cues associated with them than do others: How strong a link there is between a characteristic and related observable behavior depends greatly on the characteristic (Ajzen & Fishbein, 1975; Jones & Davis, 1965; Reeder & Brewer, 1979; Rothbart & Park, 1986). Rothbart and Park (1986) describe several factors that influence how readily a perceiver can use the observation of behaviors to confirm or disconfirm whether a target has a characteristic: (a) whether the characteristic has straightforward, observable behaviors linked to it, (b) how frequently situations arise in everyday social interaction that would permit the observation of confirming or disconfirming behaviors, and (c) how many behaviors must be encountered before a perceiver can confirm or disconfirm a characteristic. Rothbart and Park (1986) find, for example, that being "boring" has fewer "specific, observable behaviors" linked to it than does being "aggressive"; that situations that evoke behaviors linked to being "generous" arise more often than those associated with being "revengeful"; and that perceivers must observe more behavioral cues before concluding that someone is "kind" versus "jealous." Consequently, research shows that people do typically draw less accurate inferences about characteristics associated with fewer observable cues (Funder & Dobroth, 1987; Kenrick & Stringfield, 1980).

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When passively observing, a perceiver will only witness naturally-occurring behaviors in the situation they and the target find themselves in—a situation that may or may not elicit cues to the characteristic of interest. Thus, observation can prove an ineffective (or at least inefficient) strategy for assessing a number of characteristics for which behavioral cues do not regularly arise in common interactions. Despite the low effort required to passively observe a target, relying on observation can therefore cost the perceiver a great deal of time if the perceiver aims to assess a difficult-to-observe characteristic.¹ When passive observation's costs outweigh its benefits, what is a social perceiver to do?

Affordance Testing

In such cases, I propose that people "affordance test": they actively manipulate another person's circumstances to reveal cues to hard-to-observe characteristics. An effective affordance test elicits (but does not compel) diagnostic behavioral cues. The circumstances of the effective affordance test provide an opportunity for such behavioral

¹ Other information-seeking strategies that appear to be more efficient—direct inquiry and third-party inquiry—each have their own downsides. Direct inquiry (i.e., directly asking the target whether they possess the characteristic of interest) is only effective if one trusts the target to respond in a manner that is neither influenced by social desirability concerns nor otherwise deceptive. Third-party inquiry (i.e., directly asking a mutual acquaintance whether the target possesses the characteristic of interest) is only effective (a) if the perceiver has a mutual acquaintance with the target, (b) if that mutual acquaintance is inclined to portray the target honestly, and (c) if the acquaintance has had the chance themselves to observe the target in a situation that would call for a display of behavioral cues to the characteristic of interest (which may be difficult for the same reasons that the perceiver is unable to observe such cues). Further, third-party inquiry requires the perceiver is interested in, and perhaps obligating the perceiver to the mutual acquaintance in the future.

cues to arise, but do not require them (e.g., as when the norms of the situation are so strong that the behaviors are expected of everyone). An effective affordance test also provides discriminant validity, such that the evoked behavioral cues are diagnostic of the characteristic of interest and only that characteristic.

An effective affordance test thus allows a social perceiver to assess hard-toobserve characteristics more efficiently than does passive observation. However, affordance testing comes with its own costs, and is thus only employed when these costs are outweighed by the benefits. Compared to passive observation, affordance testing requires more effort, as when the perceiver must arrange for the target to be placed in the affordance testing circumstances. Further, if the target discovers that they are being covertly affordance tested, there may be social costs for the perceiver, who the target may then view as manipulative or cynical.

Do People Affordance Test?

We see evidence across multiple domains suggesting that people do affordance test in a variety of ways, and in a variety of contexts. In educational settings, people's knowledge acquisition is regularly assessed through formal exams (e.g., Bloom, 1956; Krathwohl, 2002). In job interviews, people are tested for certain personality traits through unstructured interviews (e.g., Blackman & Funder, 2002), and they are tested for skills and knowledge through skills-based tests, structured interviews, and situational interviews (e.g., Latham et al., 1908; McDaniel et al., 1994; Payne & Harvey, 2010).

In coming-of-age rituals in small-scale societies, adolescent boys in communities that engage in warfare undergo painful rituals (e.g., scarification, bullet ant gloves) to be tested for bravery and pain endurance (e.g., Bosmia et al., 2105; Dunham et al., 1986; Ember & Ember, 2010; Sosis et al., 2007). Additionally, adolescent girls in communities that depend on women for subsistence farming are tested for their competence in those activities (Brown, 1963).

In group initiations, incoming sports team members undergo physical challenges and pain during hazing to test for physical endurance and determination (Keating et al., 2005). Pledges to Greek-letter organizations are required to perform embarrassing and socially deviant tasks during hazing to test for willingness to conform to group norms and maintain group confidentiality (Keating et al., 2005). In gang initiations, initiates are impelled to be beaten, harm others, or commit crimes to test their willingness to break laws and to engage in and endure violence (e.g., Descormiers & Corrado, 2016; Vigil, 1988). Additionally, in military hazing, humiliating and physically uncomfortable tasks are used to test group loyalty and obedience (Winslow, 1999).

In addition to group contexts, we see evidence of testing in dyadic relationships. For example, in friendships, people test each other's romantic interest when one or both partners are uncertain about the other's intention to transition to a romantic relationship (Afifi & Burgoon, 1998). In existing romantic relationships, partners test each other's sexual fidelity and commitment to the relationship, for example, by having attractive friends tempt one's partner, or by antagonizing one's partner to test the limits of their commitment (e.g., Baxter & Wilmot, 1984; Bell & Buerkel-Rothfuss, 1990).

The research literature thus reveals the presence of affordance testing in multiple domains, yet does not put forth a broad framework for understanding the circumstances under which affordance testing is more likely to happen, characteristics that are more likely to be tested for, or people who are more likely to test and be tested. I, in collaboration (Pick & Neuberg, 2021), propose such a framework, which predicts the factors affecting the cost and benefit trade-offs of using passive observation versus affordance testing as social information-seeking strategies.

The Affordance Testing Framework

In Pick and Neuberg (2021), we propose a model of the social informationseeking process that predicts when a perceiver is likely to implement passive observation versus affordance testing. As depicted in Figure 1, we predict that when a social perceiver is motivated to assess a particular characteristic, their default strategy is often observation. However, we propose multiple factors that might disincline a perceiver to use passive observation, e.g., due to a diminished ability to use passive observation to efficiently and effectively draw clear inferences about the characteristic. Broadly, these factors are related to the characteristic the perceiver is motivated to assess, the situation that the perceiver is in, features of the perceiver him/herself, and features of the target being assessed.

Figure 1



Information-Seeking via Passive Observation and Affordance Testing

Note. A flowchart of the social information-seeking process proposed by Pick and Neuberg (2021). Social perceivers who are motivated to assess potential opportunities or threats posed by others often employ passive observation. We propose that certain factors reduce a perceiver's ability to use passive observation to make clear inferences, which, in turn, motivates affordance testing. Additional factors affect how one affordance tests. If a perceiver is able to draw a clear inference through affordance testing, the perceiver then responds behaviorally to the target (e.g., by embarking on or severing a relationship with the target) and, if the relationship with the target continues, resumes monitoring the target. If a perceiver is unable to draw a clear inference through affordance testing, the perceiver may test again, may resume passively observing, or may sever the relationship with the target.

Here, I give examples of several hypothesized factors for which we already find preliminary support in the broader literature (see Pick & Neuberg, 2021, for full list of hypothesized factors). I then highlight several foundational hypotheses that are yet untested. Finally, I present a series of studies exploring these previously untested foundational hypotheses.

Factors Affecting the Likelihood of Observing vs. Affordance Testing Hypotheses with Preliminary Support

Preliminary evidence in the research literature supports several hypotheses proposed to affect the likelihood of affordance testing versus passively observing when seeking social information. Here, I briefly discuss two such hypotheses, which relate to perceiver-target interdependence and uncertainty during times of transition.

Interdependence. When the behavior of a target may significantly affect the outcomes of an interdependent perceiver, the perceiver is especially likely to be motivated to gather accurate affordance-relevant information about the target (Neuberg, 1989; Neuberg & Fiske, 1987). When interdependence means a perceiver's outcomes depend on whether a target possesses a specific characteristic, and especially when that characteristic is difficult to assess via passive observation (as discussed above), I hypothesize that the perceiver will be especially motivated to affordance test, because of the relatively higher efficiency and effectiveness of gathering information through affordance testing compared to observation.

In the literature, we find support for increased affordance testing related to groupbased interdependence. As alluded to above, various rituals and initiations may constitute community-level affordance testing. In small-scale societies where community members rely on young men to defend against violence from neighboring communities, we see painful male rites of passage (e.g., tattooing, scarification, teeth pulling, circumcision). These tests assess whether adolescent boys are brave and can be depended on to withstand the pain and trials that men endure in defense of the community (Bosmia et al., 2015; Dunham et al., 1986; Ember & Ember, 2010; Sosis et al., 2007). Similarly, in small-scale societies where community members rely on women's subsistence activities, girls are tested during initiation rites for the competence and knowledge necessary in those activities (Brown, 1963). In sum, we begin to see evidence in support of perceivers affordance testing when their outcomes depend greatly on particular characteristics of the target.

Uncertainty During Transitions. Times of transition in an existing relationship or group are often particularly fraught with uncertainty and thus especially likely to induce affordance testing of important target characteristics. For example, platonic friends transitioning to a romantic relationship and newer romantic partners transitioning to higher levels of commitment experience particularly elevated levels of relational uncertainty, as in our opening example (Afifi & Burgoon, 1998). These feelings may, in turn, lead to a higher likelihood of affordance testing. Indeed, researchers find that people experiencing relational uncertainty (e.g., about their partner's relationship goals, or about the current state or future of the relationship) often test their partner's goals and beliefs about the relationship to resolve this uncertainty (Knobloch & Solomon, 1999, 2002).

Research demonstrates that individuals use a variety of communication strategies to reduce such uncertainty about their partner's feelings or attitudes (Berger & Bradac,

1982; Berger & Calabrese, 1975; Baxter & Wilmot, 1984; Knobloch & Solomon, 1999, 2002). One such strategy is directly asking one's partner about their intentions and beliefs about the relationship. However, Baxter and Wilmot (1985) show the most "taboo" topic in a relationship is often the "state of the relationship" itself, which means direct relationship talk is infrequent and often intentionally avoided (Baxter & Wilmot, 1985; Cline, 1979; Wilmot, 1980). Indeed, only about half of important relationship "turning points" appear to be achieved through direct talk (Baxter & Bullis, 1986). Instead, romantic partners often employ "secret tests"—affordance tests—such as "endurance tests" and "separation tests" to test a relationship's limits and the partner's commitment, "indirect suggestion tests" to test the state of relationship, and "triangle tests" of fidelity and jealousy (Baxter & Wilmot, 1984; Bell & Buerkel-Rothfuss, 1990). We thus begin to see evidence supporting the use of affordance testing to assess important characteristics (e.g., a target's intentions and beliefs about a relationship) due to increased uncertainty during transitions.

Testing Foundational Hypotheses of the Affordance Testing Framework

We see promising preliminary evidence in support of several hypotheses of the affordance testing framework, including those described above. However, other hypotheses remain untested. Here, I turn our focus to four core hypotheses to be tested by my dissertation, exploring how the believed observability of the characteristic of interest, the believed importance of the characteristic, and the situational urgency felt by the perceiver will affect the perceiver's likelihood of affordance testing.

Hypothesis 1: Characteristics believed to be less observable are more likely to be affordance tested. Characteristics such as honesty, loyalty, and commitment are likely less observable than friendliness, kindness, and sense of humor. Yet characteristics that are less observable may still be highly affordance-relevant, and critical for successfully interacting with a target. Thus, when a perceiver is motivated to assess a characteristic that is less observable, I hypothesize that the perceive will be more likely to rely on affordance testing, rather than passive observation.

As described above, several factors determine the observability of a characteristic (Rothbart & Park, 1986). First, observable behavioral cues to some characteristics arise infrequently. For example, situations rarely call for acts of bravery. Indeed, research shows that people explicitly understand that typical social interactions are more likely to evoke cues to certain characteristics (e.g., "thoughtful") compared to others (e.g., "frivolous") (Rothbart & Park, 1986). To effectively assess less observable characteristics (e.g., bravery), perceivers may need to affordance test—for example, by putting a target in a situation where cues to bravery have the opportunity to manifest.

Similarly, cues to highly technical characteristics or skills (e.g., skills in math, computer language coding, auto repair, golf, or gardening) might not generally be revealed in the course of everyday social interaction. To evaluate such a skill, a perceiver must create opportunities for the performance of specific tasks that allow such skills to be displayed (e.g., job interviews, tests in classrooms). Indeed, whole industries have emerged to provide and improve upon such (affordance) testing. For example, employment interviews are often designed to specifically test particular skills. In situational interviews, an employer (perceiver) assesses job-related skills and characteristics by asking prospective employees (targets) how they would respond in carefully designed situations (e.g., Latham et al., 1980). In task-focused interviews, prospective employees are asked to actually perform specific tasks that would be required for the job (e.g., Payne & Harvey, 2010). And, in employment probationary periods, new employees' performance can be repeatedly assessed under specific circumstances (e.g., De Corte, 1998)—essentially one long affordance test.

Second, the cues available to assess certain characteristics are often not sufficiently diagnostic. For example, even people prone to dishonesty are nonetheless predominantly honest. Therefore, witnessing multiple instances of honesty does not necessarily disconfirm dishonesty. Indeed, certain characteristics (e.g., "smug") require fewer observed behaviors to be confirmed, whereas others (e.g., "sincere") require more (Rothbart & Park, 1986). To effectively assess characteristics such as dishonesty or sincerity that are less observable, perceivers may be particularly likely to affordance test—for example, by putting targets in situations that readily enable a target to display dishonesty or insincerity.

Hypothesis 2: Characteristics believed to be more important (i.e., that have higher costs when assessed incorrectly) are more likely to be affordance tested. Some characteristics are more important than others. That is, the incorrect assessment of some characteristics may impose greater costs on the perceiver than others. Social perceivers believe that some characteristics, such as trustworthiness, are highly important across a variety of interdependent relationships (Cottrell et al., 2007). Additionally, some characteristics are highly important in particular domains. For example, how nervous a person is may be much more relevant on a debate team than in a friendship; how brave a person is may be much more relevant in the military than in a business office. When a leave their success in assessing that characteristic up to the chance to passively observe cues to it in spontaneously arising everyday situations. I thus predict that characteristics the perceiver believes to be more important (those that have steeper consequences when judged incorrectly) are more likely to be affordance tested.

Hypothesis 3: As a perceiver feels more situational urgency, they are more likely to affordance test a characteristic of interest. When assessing a characteristic through passive observation, a perceiver must wait for the spontaneous occurrence of situations that will readily elicit cues to that characteristic. However, sometimes there is a particular deadline motivating the assessment of that characteristic and/or many targets may need to be assessed at once. For example, an employer may feel urgency to fill a job opening, or sorority members may feel time pressure to select new members at the beginning of an academic year. In circumstances such as these, waiting for an affordancerevealing situation to arise spontaneously may not be feasible, necessitating affordance testing.

Other times, perceivers feel urgency due to informal deadlines, such as when urgency is caused by an upcoming important decision or event. For example, in romantic relationships, affordance testing may be particularly likely when partners are considering moving in together or getting married. Additionally, urgency can be tied to upcoming decisions in community affordance testing "rites of passage," as when community members must decide whether an adolescent can be formally accepted as an adult in the community. To make their decision, the community must assess whether the adolescent approaching adulthood is capable of and willing to take on the responsibilities of an adult role in the community. Thus, I hypothesize that a perceiver's increased felt situational

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urgency, such as that due to an approaching deadline or decision, increases the likelihood that the perceiver will affordance test to assess a characteristic.

Hypothesis 4: A perceiver's felt situational urgency will interact with a characteristic's believed observability to predict likelihood of affordance testing. A perceiver's feeling of high situational urgency is likely to interact with their beliefs about a characteristic's observability. Although a given characteristic might be discoverable via passive observation given sufficient time, when an assessment must be made urgently, even characteristics that are moderately observable are likely to be affordance tested. For example, through typical workplace interactions, it might be easy enough to observe whether an employee has the necessary skills for a job, or whether they are courteous under pressure. However, if the employer is considering promoting the employee to an important position in customer service, the employer may design circumstances to quickly test how courteous the candidate is under pressure instead of waiting for a naturally occurring opportunity to observe cues to courtesy under pressure. Indeed, employers use different types of interviews to assess characteristics that would be fairly easy to assess given additional time (e.g., agreeableness, conscientious, emotional stability in unstructured interviews; job-related skills in structured interviews) (for reviews, see Blackman & Funder, 2002). I predict, therefore, that perceivers who feel increased situational urgency will be more likely to affordance test even moderately observable characteristics, due to testing's greater efficiency. On the other hand, under low felt urgency, perceivers may be particularly unlikely to affordance test moderately observable characteristics, given the potential costs of affordance testing (e.g., increased effort, potential to be perceived as manipulative). Therefore, I predict that lower versus

higher felt urgency will have a stronger differential effect on characteristics of moderate believed observability (compared to on those of low or high believed observability). Specifically, I predict that under high felt urgency, perceivers are more likely to affordance test a moderate-believed observability characteristic than would otherwise be expected, and under low felt urgency, perceivers are less likely to affordance test a moderate-believed observability characteristic than would otherwise be expected (see Figure 2 for visual representation of the two hypothesized main effects of observability, urgency, and their interaction).

Figure 2

Hypothesis 4: The Predicted Interactive Effects of Observability and Urgency on Information-Seeking Strategy



Note. The effect of felt urgency is predicted to be particularly strong when a perceiver is motivated to assess a moderately observable characteristic, such that under situations of high urgency, the perceiver will be especially likely to affordance test a moderately observable characteristic (which they would otherwise be able to passively observe given sufficient time), and is less likely to affordance test for the characteristic in situations of low urgency.

Overview

Social perceivers are often motivated to assess a particular characteristic in a target. There are multiple factors that affect whether a perceiver is more likely to passively observe or affordance test for that characteristic. Here, I provide a test of four core hypotheses of the affordance testing framework. First, I present evidence from a Preliminary Study: I examine how the believed observability and believed importance of 23 characteristics relate to perceivers' likelihood of affordance testing versus passively observing each (Hypotheses 1 and 2). Study 1 then explores both the independent and interactive effects of felt situational urgency and believed observability on a perceiver's likelihood of affordance testing in a particular social context (a work setting) (Hypotheses 1, 3, and 4). Study 2 provides a conceptual replication of Study 2, increasing generalizability by examining the same hypotheses but regarding different characteristics of interest in a new social context (a social group) (Hypotheses 1, 3, and 4).

Preliminary Study

In a Preliminary Study focusing on 23 target characteristics (e.g., honest, brave, trustworthy, friendly), I used a between-subjects design to assess participants' beliefs about the observability of those characteristics, beliefs about the importance of those characteristics, and whether they were more likely to passively observe versus affordance test when assessing each characteristic (see Appendix A for full Preliminary Study methods and results; see Appendices B-D for Preliminary Study materials and full list of characteristics). These characteristics were selected in an effort to include characteristics that varied on several dimensions, such as their believed observability and believed importance, and their hypothesized relevance to different social groups whose initiations

have been reviewed as part of this framework (e.g., Greek-letter organizations, sports teams, gangs).

First, I assessed Hypothesis 1: That the less observable a characteristic is believed to be, the more likely it is to be affordance tested. One set of participants (analyzed N =863) rated how observable they believed each characteristic to be, on a 7-point scale (see Appendix A for means and standard deviations; see Appendix B for items). A second set of participants (analyzed N = 374) described, in their own words, how they would assess each characteristic. These participants then read an explanation of how multiple social information-seeking strategies exist, and the participants were given several examples of strategies that fall on a continuum from passive observation to more "active 'testing." Finally, each participant viewed their own previous response describing how they would assess each of the 23 characteristics and then rated their information-seeking strategy responses on a scale from 1-*Observation* to 8-*Active "testing"* (see Appendix A for means and standard deviations; see Appendix C for study materials).

Next, I assessed the correlation between the mean believed observability ratings of the 23 characteristics and the mean information-seeking strategy ratings for the 23 characteristics. In support of Hypothesis 1, a characteristic's average believed observability was significantly negatively correlated with participants' average likelihood of affordance testing (versus observing) when assessing that characteristic (r (21) = -.59, p = .003). That is, as predicted, characteristics believed to be more observable were more likely to be assessed through observation, whereas characteristics believed to be less observable were more likely to be assessed through affordance testing (Figure 3).

Figure 3



Preliminary Study: Believed Observability by Information-Seeking Strategy

Note. The relationship between the mean believed observability ratings and the mean information-seeking strategy ratings for 23 characteristics. A characteristic's believed observability was measured on a 7-point scale, with higher scores in this figure indicating higher observability. Participants rated their information-seeking strategy for each characteristic on an 8-point scale, with higher scores indicating more affordance testing and lower scores indicating more passive observation.

Next, I assessed Hypothesis 2: That the more important a characteristic is believed to be, the more likely it is to be affordance tested. A third set of participants (analyzed N = 64) rated how important they believed each characteristic to be, on a 7point scale (see Appendix A for means and standard deviations; see Appendix D for items). I assessed the correlation between the mean believed importance ratings of the 23 characteristics and the mean information-seeking strategy ratings for the 23 characteristics. In support of Hypothesis 2, a characteristic's average believed importance was significantly positively correlated with participants' average likelihood of affordance testing (versus observing) when assessing that characteristic (r (21) = .46, p = .03). That is, as predicted, characteristics that were believed to be more important were more likely to be assessed through affordance testing, whereas characteristics believed to be less important were more likely to be assessed through passive observation (Figure 4). For a visual comparison of characteristics' mean ratings of believed (lack of) observability, believed importance, and likelihood of using affordance testing (vs. observation) as an information-seeking strategy, see Figure A1.

Figure 4





Note. The relationship between the mean believed importance ratings and the mean information-seeking strategy ratings for 23 characteristics. A characteristic's believed importance was measured on a 7-point scale, with higher scores indicating higher importance. Participants rated their information-seeking strategy for each characteristic on an 8-point scale, with higher scores indicating more affordance testing and lower scores indicating more passive observation.

In sum, the Preliminary Study provides correlational evidence that characteristics believed to be less observable are more likely to be affordance tested (Hypothesis 1), and that characteristics believed to be more important are more likely to be affordance tested (Hypothesis 2). Next, two experiments test additional aspects of the model.

Study 1 was designed to test Hypothesis 1) that characteristics believed to be less observable are more likely to be affordance tested; Hypothesis 3) that perceivers who feel more urgency to draw a useful inference about a target are more likely to affordance test when seeking information; and Hypothesis 4) that a perceiver's felt situational urgency and a characteristic's believed observability will interact to affect the likelihood of affordance testing, wherein the effect of felt urgency will be particularly strong when a perceiver is motivated to assess a moderately observable characteristic, such that under situations of high urgency, the perceiver will be especially likely to affordance test a moderately observable characteristic (which they would otherwise be able to passively observe given sufficient time), and will be less likely to affordance test for the characteristic in situations of low urgency.

Study 2 is a conceptual replication of Study 1. Study 1 experimentally assesses Hypotheses 1, 3, and 4 in one social context—a work setting—and focuses on three characteristics chosen to be of comparable levels of importance but varying levels of observability in that context. Study 2 focuses on a different social context—an exclusive social group—and focuses on three new characteristics chosen, in parallel, to be of comparable levels of importance but varying levels of observability in that context.

Selection of Characteristics for Studies 1 and 2

The designs of Studies 1 and 2 each required three characteristics that were comparable on believed importance but varied in believed observability. Past research shows an asymmetry in people's responses to the same stimuli framed as negative costs (to be avoided) versus negative rewards (to be approached)—for example, people tend to be more eager to avoid penalties than they are to seek comparable rewards (Tversky & Kahneman, 1981). Therefore, to avoid potential confounding of results due to asymmetries in people's perceptions of negatively versus positively framed characteristic words, only negatively framed characteristics were used (e.g., cowardly but not brave, pessimistic but not optimistic). Preliminary study data did not include assessments of enough negative characteristics to provide two sets of characteristics of sufficiently varied believed observability but comparable believed importance. Therefore, I collected additional data assessing these dimensions for 27 negative characteristics (e.g., unforgiving, greedy, self-centered) (see Appendix E for full list of characteristics and materials).

Data were collected from 176 undergraduate participants at Arizona State University. Fifty-five participants did not pass the attention check (i.e., "Please select 'Strongly disagree' on the scale below") and were excluded from analyses (total analyzed N = 121, 86 female). Participants' mean age was 21.45 years (SD = 4.00) in the analyzed sample (see Appendix F for additional demographic information). In a within-subjects design, participants responded to the following items for each characteristic: "Imagine that you are able to follow someone around for one week, <u>observing</u> everything they do, but you are unable to interact with them in any way. How likely is it that by the end of the week, you will be able to tell whether this person is **[characteristic]**?" (1-*Extremely unlikely*, 7-*Extremely likely*), and "In general, how important is it for you to know how [characteristic] another person is?" (1-*Extremely unlikely*, 7-*Extremely likely*). Characteristics were presented in randomized order, and participants were randomly assigned to answer questions regarding believed observability or believed importance first.

Based on these data, for Study 1, "mentally weak," "tense," and "messy" were selected as the low, medium, and high believed observability characteristics, respectively. *Mentally weak* (M = 4.03, SD = 1.80) was believed to be significantly less observable than *tense* (M = 5.17, SD = 1.57) (t (120) = -6.29, p < .001, *Cohen's* d = -0.57). *Tense* was believed to be significantly less observable than *messy* (M = 5.96, SD = 1.42) (t (120) = -4.77, p < .001, *Cohen's* d = -0.43). These characteristics were also selected to be of moderate believed importance, and to be as comparable on importance as possible. Indeed, *messy* (M = 4.26, SD = 1.80) did not significantly differ from *mentally weak* (M =4.52, SD = 1.76) (t (120) = 1.21, p = .22, *Cohen's* d = 0.11) or *tense* (M = 4.06, SD =1.55) (t (120) = -1.06, p = .29, *Cohen's* d = -0.10). *Mentally weak* and *tense* did significantly differ (t (120) = 2.63, p = .01, *Cohen's* d = 0.24). However, of the set of characteristics assessed here, *mentally weak*, *tense*, and *messy* provided the best balance of high variability in believed observability yet similarity in believed importance. See Appendix F, Figure F1, Table F1 for full list of means and standard deviations.

For Study 2, "cowardly," "smug," and "loud-mouthed" were selected as the low, medium, and high believed observability characteristics, respectively. *Cowardly* (M = 4.20, SD = 1.62) was believed to be significantly less observable than *smug* (M = 4.67, SD = 1.55) (t(120) = -2.97, p = .004, Cohen's d = -0.27). Smug was believed to be significantly less observable than loud-mouthed (M = 6.09, SD = 1.42) (t(120) = -10.25, p < .001, Cohen's d = -0.93). These characteristics were also selected to be of moderate believed importance, and to be as comparable on importance as possible. Indeed, cowardly (M = 4.21, SD = 1.64) did not significantly differ from smug (M = 4.42, SD =1.57) (t(120) = -1.22, p = .22, Cohen's d = -0.11) or loud-mouthed (M = 4.40, SD = 1.68) (t(120) = -0.97, p = .33, Cohen's d = -0.09), and smug and loud-mouthed did not significantly differ (t(120) = 0.10, p = .92, Cohen's d = 0.01).

Study 1: A New Paramedic Coworker

The Preliminary Study assessed Hypothesis 1, that characteristics believed to be less observable are more likely to be affordance tested, in a correlational manner and absent of social context. In Study 1, I now aim to experimentally assess Hypothesis 1, and in a specific social context: in a paramedic work setting. Additionally, Study 1 assesses the prediction that greater felt urgency is predicted to lead to more affordance testing (Hypothesis 3), and that a perceiver's felt urgency will interact with a characteristic's believed observability (Hypothesis 4). Specifically, the effect of felt urgency is predicted to be particularly strong when a perceiver is motivated to assess a moderately observable characteristic, such that under situations of high urgency, the perceiver will be especially likely to affordance test a moderately observable characteristic (which they would otherwise be able to passively observe given sufficient time), and is less likely to affordance test for the characteristic in situations of low urgency.
Study 1 Methods

Participants

U.S. participants were recruited for Study 1 via the online survey platform Prolific in February 2021, and they were paid \$1.60 (at a rate of \$12/hour for an 8-minute study). G*Power 3.1.9.2 (Faul et al., 2007) was used to find the sample size required to detect a small-to-medium effect size (Cohen's $f^2 = .15$) with an alpha of .05 and power of .8 to detect an omnibus interaction in a 2 x 3 ($df_{numerator} = 2$) between-subjects ANOVA, which yielded a required sample size of 432 (72 per condition). Because the predicted interaction will require more power to detect, and because a number of participants were expected to fail attention checks, I recruited a larger sample size of 600 participants (100 per condition).

Of the 600 participants, 559 passed all attention checks and reading comprehension checks and were thus included in analyses (see below for attention check details, see Appendix G, Table G1 for detailed breakdown of participants excluded by condition).² The analyzed sample contained 284 female, 269 male, and 6 other participants. Participants were all 18 years or older, with a mean age of 32.57 years (*SD* = 12.08). Participants identified Caucasian/White (n = 410), Asian/Asian-American (n =

² The exclusion of participants due to failed attention checks may threaten random assignment if there is non-random loss of participants across conditions. Following Jurs and Glass (1971), I ran analyses aiming to assess whether participant loss may have been nonrandom. Results were inconclusive, but suggested that participants' pattern of felt urgency across conditions may have differed for excluded versus included participants. However, relatively few participants were excluded (6.8% of participants in Study 1), and analyses suggested that the pattern of results for principal dependent variables (i.e., self-rated and independently coded information-seeking strategy) did not significantly differ for excluded participants versus included participants (Appendix G, Tables G3 and G4).

88), Latino/Latina/Hispanic (n = 54), African/African-American (n = 41), Native American (n = 10), Middle Eastern/Middle-Eastern-American (n = 2), and other (n = 1). 539 participants identified as native English speakers.

Procedure

Participants selected the survey, listed on Prolific as "An 8-minute study on learning about friends."³ Participants were permitted to complete it on a computer or tablet, not on a smartphone, which might hinder typing an answer to the free response portion of the study's main dependent variable (details below). Study materials were granted an "exemption" by the Arizona State University Institutional Review Board (Appendix H). After providing informed consent, participants read a vignette asking them to imagine a scenario in which they were working as a paramedic and shift leader, and they needed to evaluate another paramedic who had recently been hired to the team (see Appendix I for complete materials).

Participants were then randomly assigned to conditions in a 2 ("urgency": low, high) x 3 ("observability": low, medium, high) between-subjects design. Participants in the high situational urgency condition had just one week to evaluate the new paramedic, whereas in the low urgency condition, they had two months. Participants were asked how they would assess whether the paramedic was *mentally weak* (in the low observability

³ Participants for Studies 1 and 2 were recruited simultaneously and randomly assigned to participate in either Study 1 or Study 2. This ensured that no participants would participate in both Studies 1 and 2, which might confound results if participants read the explanation of information-seeking strategies (i.e., observation versus affordance testing) and the debriefing of one study before participating in the other study. Further, random assignment to the two studies would allow for the conduct of exploratory analyses pooling participants from both samples.

condition), *tense* (medium observability condition), or *messy* (high observability condition). As described above, these three characteristics were chosen based on their low, medium, and high average believed observability and their fairly comparable, moderate levels of believed importance, as rated by an independent sample of participants.

After reading the vignette, participants responded to two reading comprehension questions (presented in randomized order) that served both as attentions check and to reinforce key information from the urgency and observability conditions the participant was assigned to. Reading comprehension questions included, "How long will the new paramedic's probationary period last?" (*Until the end of the week; Six months; Two years*), and "Of the following, which characteristic do you need to assess before the end of the probationary period?" (*How mentally weak the paramedic is; How tense the paramedic is; How messy the paramedic is;* response choices presented in randomized order). Participants who did not answer both questions in ways that matched their assigned conditions were excluded from analyses.

Next, participants each responded to two questions, presented in randomized order, that served as both a manipulation check and to reinforce their felt sense of urgency. They were asked: "How urgently do you feel that you need to find out whether the new paramedic is [mentally weak/tense/messy]?" (1-*Not at all urgently*, 7-*Extremely urgently*) (M = 5.68, SD = 1.32), and "How much time pressure do you feel to find out quickly whether the new paramedic is [mentally weak/tense/messy]?" (1-*No time pressure at all*, 7-*A great deal of time pressure*) (M = 5.32, SD = 1.49). These items were

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highly correlated (r (556) = .70, p < .001) and were averaged to form a "felt urgency" composite (M = 5.50, SD = 1.29).

Participants then gave free response answers to describe what they would do to assess the characteristic of interest (i.e., mentally weak, tense, or messy, depending on their assigned condition) in the new paramedic. This was followed by an attention check item: "Please select 'Extremely negative" on the scale below," (1-*Extremely negative*, 7-*Extremely positive*). All participants who did not choose 1-*Extremely negative* for this item were excluded from analyses.

Next, as in the Preliminary Study, participants read a description of the variety of information-seeking strategies that people often use, explaining that these strategies range from passive observation to more "active testing," and they were provided examples of both (see Appendix I for full text of explanation). Each participant was then shown their own response regarding how they would assess the paramedic for the characteristic of interest, and they rated their own response on a scale from 1-*Observation* to 7-*Active* "*testing.*" Additionally, participants' written responses describing how they would assess the characteristic of interest were coded by a team of research assistants (more details below).

Next, each participant rated their belief about the observability of and their belief about the importance of the characteristic of interest, in the context of the imagined scenario. They were randomly assigned to answer questions about observability or importance beliefs first. To assess believed observability, participants responded to two items (1-*Extremely unlikely, 7-Extremely likely*), presented in randomized order: "Imagine you have [until the end of the week/six months] to simply observe the new paramedic during their shifts. [At the end of the week/After six months], how likely is it that you will be able to tell whether the new paramedic is [mentally weak/tense/messy]?" (M = 4.74, SD = 1.40), and "If you could only watch the new paramedic at work without interacting with them in any way—[until the end of the week/for six months], how likely is it that you would be able to tell whether the new paramedic is [mentally weak/tense/messy] [by the end of the week/after six months]?" (M = 4.37, SD = 1.55). These items were highly correlated (r (557) = .74, p < .001) and were averaged to form a "believed observability" composite (M = 4.55, SD = 1.37).

To assess believed importance, participants responded to two items, presented in randomized order: "How important is it to know whether the new paramedic is [mentally weak/tense/messy]?" (1-*Not at all important,* 7-*Extremely important*) (M = 6.39, SD = .95), and "How much of a problem would it be for you if you were wrong about whether your new paramedic coworker is [mentally weak/tense/messy]?" (1-*Not a problem at all,* 7-*Very much a problem*) (M = 5.80, SD = 1.34). These items were highly correlated (r (557) = .52, p < .001) and were averaged to form a "believed importance" composite (M = 6.10, SD = 1.00).

Participants then responded to another attention check item: "Please select 'Extremely positive' on the scale below," (1-*Extremely negative, 7-Extremely positive*). All participants who did not choose 7-*Extremely positive* for this item were excluded from analyses. For exploratory purposes, participants were next asked several questions not related to the present hypotheses, regarding how likely they were to do the assessment technique they described, and how manipulative or cynical they would find someone who used a similar technique. Finally, participants were asked whether they have ever served as a paramedic or emergency medical technician (EMT),⁴ completed several demographic items (e.g., age, sex, educational attainment, race), and were fully debriefed.

Independent Coding of Information-Seeking Strategies. As prefaced above, in addition to each participant coding their own information-seeking strategy response on a scale from 1-Observation to 7-Active "testing," each participant's response was coded by five independent undergraduate research assistant coders. Ten research assistants were each randomly assigned to code a subset of participants' responses such that each response was coded five times. Due to error, four responses were coded six times. Sixteen responses were initially only coded four times; an additional independent research assistant then coded these responses. The study hypotheses and the participants' assigned conditions were masked for research assistants. (Although they may have gleaned the characteristic of interest from some participants' written responses, the research assistants were unaware of the study's focus on the "observability" dimension of the characteristic.)

Coders rated each response on a scale from 1-*Passive observation* to 7-*Active testing* or marked the response as unable to be rated. A response may have been unable to be rated if, for example, it was too brief, vague, or confusing, or if the participant merely

⁴ Seven of the 559 participants in the analyzed sample indicated that they had served as a paramedic or EMT, and two participants were not sure if they had. When principal analyses were conducted with only the subsample of participants who had never served as a paramedic or EMT (n = 550), conclusions remained unchanged (Appendix J, Tables J2 and J3). Participants who had served as a paramedic or EMT were retained in the final analyzed sample.

said they would ask a mutual acquaintance (e.g., a fellow paramedic coworker) for their assessment of the new paramedic. 437 participants' responses were rated by all 5 coders; these ratings had high inter-rater reliability (*Cronbach's* α = .96). All responses rated by at least one coder (N = 548) were averaged to form a composite rating for each participant's response (M = 2.86, SD = 2.04). Of those 548 responses, 515 were from participants who passed all attention checks. These 515 independently coded information-seeking strategy scores were significantly positively correlated with the participants' self-rated information-seeking strategy scores (r (513) = .66, p < .001).

Study 1 Results

All analyses were conducted using SPSS version 27.

Information-Seeking Strategies Across Conditions

Participants' Self-Rated Information-Seeking Strategies. To assess whether participants' self-rated information-seeking strategies differed significantly across urgency and observability conditions, I conducted a 2 (urgency: low, high) by 3 (observability: low, medium, high) between-subjects ANOVA. Providing support for Hypothesis 1, that characteristics believed to be less observable are more likely to be affordance tested (rather than passively observed), there was a significant main effect of observability condition on self-rated information-seeking strategy (F(2, 553) = 8.43, p <.001, *partial*- $\eta^2 = .03$). In support of Hypotheses 3, that greater felt urgency will lead to more affordance testing (rather than passive observation), there was a significant main effect of urgency condition on self-rated information-seeking strategy (F(1, 553) = 4.95, p = .03, partial- $\eta^2 = .01$). Contrary to Hypothesis 4, however, there was no significant interaction between observability and urgency conditions (F(2, 553) = 0.66, p = .52, *partial*- $\eta^2 = .002$). See Table 1 for means and standard deviations of participants' self-

rated information-seeking strategies by condition; see Figure 5.

Table 1

Study 1 Self-Rated Information-Seeking Strategy Marginal Means (and SD) and Sample

Size by Condition

	Observability Condition			
	Low	Medium	High	
	Mentally Weak	Tense	Messy	
Urgency Condition	Mean (SD) n	Mean (SD) n	Mean (SD) n	
Low Six Months	3.67 (2.08) 94	3.22 (2.10) 91	2.78 (1.89) 95	
High One Week	3.87 (2.13) 95	3.89 (2.05) 91	3.08 (2.18) 93	

Note. Marginal means and standard deviations of participants' self-rated informationseeking strategies by observability and urgency condition. Information-seeking strategies were rated on a scale from 1-*Observation* to 7-*Active "testing.*" The number of participants who passed attention checks in each condition is indicated by *n*.

Figure 5

Study 1 Average Self-Rated Information-Seeking Strategy by Urgency and Observability

Conditions



Note. Mean levels of participants' self-rated information-seeking strategies by urgency and observability conditions. Information-seeking strategies were rated on a 7-point scale, with higher scores indicating affordance testing, and lower scores indicating passive observation. Error bars indicate ± 1 standard error.

Independently Coded Information-Seeking Strategies. I then conducted a 2

(urgency: low, high) by 3 (observability: low, medium, high) between-subjects ANOVA to assess the conditions' effects on independently coded information-seeking strategies. In this analysis, there were again significant main effects of both observability (F (2, 509) = 4.23, p = .02, partial- $\eta^2 = .02$) and urgency (F (1, 509) = 4.91, p = .03, partial- $\eta^2 =$.01) in support of Hypotheses 1 and 3. Again, contrary to Hypothesis 4, there was no significant interaction between observability and urgency conditions (F (2, 509) = 1.00, p = .37, *partial*- η^2 = .004) (see Table 2 for means and standard deviations of independently

coded information-seeking strategies by condition; see Figure 6).

Table 2

Study 1 Independently Coded Information-Seeking Strategy Marginal Means (and SD)

and Sample Size by Condition

	Observability Condition				
	Low	Medium	High		
	Mentally Weak	Tense	Messy		
Urgency Condition	Mean (SD) n	Mean (SD) n	Mean (SD) n		
Low Six Months	3.08 (2.23) 87	2.66 (1.82) 85	2.29 (1.70) 84		
High One Week	3.14 (2.15) 88	3.34 (2.04) 86	2.73 (2.10) 85		

Note. Marginal means and standard deviations of independently coded informationseeking strategies by observability and urgency condition. Information-seeking strategies were rated on a scale from 1-*Observation* to 7-*Active "testing."* For each cell, *n* indicates the number of participants who passed attention checks and whose responses were able to be rated by coders.

Figure 6

Study 1 Average Independently Coded Information-Seeking Strategy by Urgency and



Observability Conditions



Felt Urgency and Believed Observability

Study 1 was designed to manipulate participants' sense of urgency and their beliefs about the observability of a characteristic of interest across conditions. To assess whether these manipulations were effective, I first ran a two-way between-subjects ANOVA to test whether participants' self-reported felt urgency composites differed across urgency conditions (as intended) or across observability conditions. As intended, participants' felt urgency in the low urgency (six months) condition (M = 4.97, SD =1.37) was indeed significantly lower than felt urgency in the high urgency (one week) condition (M = 6.03, SD = 0.95) (F (1, 553) = 114.07, p < .001, partial- $\eta^2 = 0.17$). As expected, felt urgency did not significantly differ across observability conditions (F (2, 553) = 1.62, p = .20, partial- $\eta^2 = 0.01$), and there was no significant interaction between urgency and observability conditions (F (2, 553) = 1.12, p = .33, partial- $\eta^2 = 0.004$).

Next, a second two-way between-subjects ANOVA revealed that participants' composite beliefs about characteristics' observability did significantly differ across the three observability conditions ($F(2, 556) = 10.70, p < .001, partial-\eta^2 = 0.04$). Post hoc Tukey HSD comparisons indicated that, as intended, the believed observability of *messy* (i.e., high observability condition, M = 4.92, SD = 1.25) was significantly greater than the believed observability of both *mentally weak* (i.e., low observability condition, M = 4.40, SD = 1.41) (p < .001, 95% CI [0.20, 0.83]) and *tense* (i.e., medium observability condition, M = 4.32, SD = 1.39) (p < .001, 95% CI [0.27, 0.92]). However, the believed observability of *mentally weak* (low) and *tense* (medium) did not significantly differ in the paramedic context (p = .83, 95% CI [-0.22, 0.40]).

Additionally, there was an unintended significant difference in believed observability across urgency conditions ($F(1, 553) = 28.88, p < .001, partial-\eta^2 = 0.05$), such that believed observability was higher in the low urgency condition (M = 4.85, SD =1.37) compared to the high urgency condition (M = 4.25, SD = 1.32). I return to consider the potential implications of this "leakage" of the urgency manipulation in the Discussion. As intended, there was no significant interactive effect of the urgency and observability conditions ($F(2, 553) = 2.32, p = .10, partial-\eta^2 = 0.01$).

Participants' Self-Rated Information-Seeking Strategies. I next used ordinary least squares linear regression to test Hypotheses 1, 3, and 4 using these more direct

measures of participants' felt urgency, their beliefs about the observability of a characteristic, and their interaction ($R^2 = .04$). Each predictor was mean-centered and the interaction term was created from the centered predictors. In support of Hypothesis 1, when accounting for other predictors in the model, believed observability significantly predicted self-rated information-seeking strategy, such that the less observable the characteristic was believed to be, the more likely the participant was to report affordance testing (vs. passively observing) (standardized $\beta = -0.20$, unstandardized b = -0.31, $SE_b = 0.07$, t (555) = -4.72, p < .001, 95% CI [-0.44, -0.18]). However, contrary to Hypotheses 3, felt urgency did not significantly predict self-rated information-seeking strategy (standardized $\beta = 0.03$, unstandardized b = 0.04, $SE_b = 0.07$, t (555) = 0.61, p = .54, 95% CI [-0.10, 0.19]). And, contrary to Hypothesis 4, there was no significant linear interaction between believed observability and felt urgency (standardized $\beta = 0.03$, unstandardized b = 0.05, t (555) = 0.67, p = .51, 95% CI [-0.06, 0.13])⁵ (Figure 7).⁶

⁵ The Friedrich procedure described in Aiken and West (1991) was used to correctly calculate the standardized betas for interactions in all regression analyses.

⁶ Characteristics were chosen to be of comparable pre-rated believed importance (when free of context). However, participants in Study 1 rated their believed importance of the characteristic of interest in the paramedic context, and a one-way between-subjects ANOVA revealed significant differences in believed importance across characteristics (F(2, 556) = 16.47, p < .001, $\eta^2 = .06$) (see Appendix K for means, standard deviations, and post hoc Tukey HSD comparisons). Therefore, I ran an OLS linear regression analysis predicting participants' self-rated information-seeking strategy from believed importance, believed observability, felt urgency, and all the two-way and three-way interactions between them (all predictors were centered and interaction terms created from centered predictors), and I repeated the analysis predicting independently coded informationseeking strategies. Results for both analyses showed no significant interactions and no

Figure 7

Study 1 Self-Rated Information-Seeking Strategy Predicted by Felt Situational Urgency



and Believed Observability

Note. Participants' felt situational urgency (centered) predicting participants' self-rated information-seeking strategy at the mean of believed observability and at one standard deviation above and below the mean. All variables were measured on 7-point scales. Higher scores indicate greater felt situational urgency and greater believed observability. Higher information-seeking scores indicate affordance testing, and lower scores indicate observation.

Independently Coded Information-Seeking Strategies. I again used OLS linear

regression to predict independently coded information-seeking strategies from felt urgency, believed observability, and their interaction (predictors were mean-centered, and the interaction term was created from centered predictors) ($R^2 = .05$). Again supporting

significant prediction of information-seeking strategy by believed importance. Further, believed observability remained a significant predictor and felt urgency remained a non-significant predictor in both analyses (see Appendix K for full details of regression analyses).

Hypothesis 1, believed observability significantly predicted independently coded information-seeking strategy (standardized $\beta = -0.22$, unstandardized b = -0.33, $SE_b =$ 0.07, t (511) = -4.94, p < .001, 95% CI [-0.46, -0.20]). Again contrary to Hypotheses 3 and 4, neither felt urgency (standardized $\beta = 0.02$, unstandardized b = 0.03, $SE_b = 0.07$, t (511) = 0.39, p = .70, 95% CI [-0.11, 0.17]) nor the interaction term (standardized $\beta =$ 0.04, unstandardized b = 0.05, $SE_b = 0.05$, t (511) = 1.02, p = .31, 95% CI [-0.05, 0.15]) significantly predicted independently coded information-seeking strategy (Figure 8).

Figure 8

Study 1 Independently Coded Information-Seeking Strategy Predicted by Felt Situational Urgency and Believed Observability



Note. Participants' felt situational urgency (centered) predicting independently coded information-seeking strategy at the mean of believed observability and at one standard deviation above and below the mean. All variables were measured on 7-point scales. Higher scores indicate greater felt situational urgency and greater believed observability. Higher information-seeking scores indicate affordance testing, and lower scores indicate observation.

Mediation Analyses

Participants' Self-Rated Information-Seeking Strategies. Finally, I used mediation analyses as more powerful tests of the effects of believed observability and felt urgency on self-rated information-seeking strategies, as mediation analyses capture variance explained by both the assigned manipulation conditions and the self-report variables they are designed to affect.⁷ First, I assessed whether the relationship between urgency condition and self-rated information-seeking strategy was statistically mediated by felt urgency. There was no significant mediation of the relationship between urgency condition and self-rated information-seeking strategy (indirect effect unstandardized *b* = 0.07, *SE*_{*b*} = .09, 95% CI[-0.09, 0.24]), which is unsurprising given that felt urgency did not predict self-rated information-seeking strategy (see Figure 9 for full mediation analysis).

⁷ All mediation analyses were conducted using the PROCESS version 3.5.3 macro (Hayes, 2017) for SPSS 27. Confidence intervals for the mediated effects (indirect effects) were calculated using the distribution-of-the-product method via the RMediation package (Tofighi & MacKinnon, 2011).

Figure 9

Mediation of the Relationship Between Urgency Condition and Participants' Self-Rated

Information-Seeking Strategy by Felt Urgency in Study 1



Indirect effect: 0.07, (.09), 95% CI[-0.09, 0.24]

Note. There was no significant statistical mediation of the relationship between participants' randomly assigned urgency condition (low, high) and their self-rated information-seeking strategy by participants' self-reported felt urgency. All coefficients are unstandardized, with standard errors in parentheses. *p < .05, **** p < .0001

I assessed whether the relationship between observability condition and self-rated information-seeking strategy was statistically mediated by participants' self-reported believed observability. Given the ordinal nature of the observability conditions, sequential coding was used to compare each level of the observability condition to the level below it (i.e., medium observability condition was compared to low, and high observability condition was compared to medium) (Hayes & Preacher, 2014). There was significant statistical mediation of the effect of observability condition on self-rated information-seeking strategy by believed observability when comparing the high versus medium observability conditions (indirect effect unstandardized b = -0.17, $SE_b = .05$, 95% CI[-0.29, -0.08]), but not when comparing the medium versus low observability conditions (indirect effect unstandardized b = 0.22, $SE_b = .04$, 95% CI[-0.06, 0.11]) (see Figure 10 for full mediation analysis).

Figure 10

Mediation of the Relationship Between Observability Condition and Participants' Self-Rated Information-Seeking Strategy by Believed Observability in Study 1



Indirect effect: Med vs. low: 0.22 (.04), 95% CI[-0.06, 0.11] High vs. med: -0.17 (.05), 95% CI[-0.29, -0.08]

Note. Sequential coding was employed to characterize participants' randomly assigned observability condition (i.e., low vs. medium observability condition, medium vs. high observability condition). There was significant statistical mediation of the effect of observability condition on participants' self-rated information-seeking strategy by self-reported believed observability when comparing the high versus medium observability conditions, but not when comparing the medium versus low observability conditions. All coefficients are unstandardized, with standard errors in parentheses. *p < .05, **p < .01, ****p < .0001

As there was no significant interaction between observability condition and

urgency condition on self-rated information-seeking strategy, nor between believed

observability and felt urgency on self-rated information-seeking strategy, no moderated mediation models were tested.

Independently Coded Information-Seeking Strategies. Finally, I conducted mediation analyses to assess the effects of believed observability and felt urgency on independently coded information-seeking strategies. Again, there was no significant mediation of the relationship between assigned urgency condition and independently coded information-seeking strategy by participants' self-reported felt urgency (indirect effect unstandardized b = 0.08, $SE_b = .09$, 95% CI[-0.09, 0.20]), which is unsurprising given that felt urgency did not predict independently coded information-seeking strategy (see Figure 11 for full mediation analysis).

Figure 11

Mediation of the Relationship Between Urgency Condition and Independently Coded

Information-Seeking Strategy by Felt Urgency in Study 1



Indirect effect: 0.08 (.09), 95% CI[-0.09, 0.25]

Note. There was no significant statistical mediation of the relationship between participants' randomly assigned situational urgency condition (low, high) and the independently coded information-seeking strategy by participants' self-reported felt urgency. All coefficients are unstandardized, with standard errors in parentheses. *p < .05, ****p < .0001

I again conducted a mediation analysis assessing whether the relationship between observability condition and independently coded information-seeking strategy was mediated by believed observability, using sequential coding to compare the medium observability condition to low, and to compare the high observability condition to medium. Again, there was significant statistical mediation of the effect of observability condition on independently coded information-seeking strategy by believed observability when comparing the high versus medium observability conditions (indirect effect unstandardized b = -0.17, $SE_b = .06$, 95% CI[-0.30, -0.07]), but not when comparing the medium versus low observability conditions (indirect effect unstandardized b = .03, $SE_b = .05$, 95% CI[-0.06, 0.13]) (see Figure 12 for full mediation analysis).

Figure 12

Mediation of the Relationship Between Observability Condition and Independently

Coded Information-Seeking Strategy by Believed Observability in Study 1



Indirect effect: Med vs. low: .03 (.05), 95% CI[-0.06, 0.13] High vs. med: -0.17 (.06), 95% CI[-0.30, -0.07]

Note. Sequential coding was employed to characterize the participants' randomly assigned observability condition (i.e., low vs. medium observability condition, medium vs. high observability condition). There was significant statistical mediation of the effect of observability condition on independently coded information-seeking strategy by self-reported believed observability when comparing the high versus medium observability conditions, but not when comparing the medium versus low observability conditions. All coefficients are unstandardized, with standard errors in parentheses. *p < .05, ***p < .001, ****p < .0001

There was no significant interaction between observability condition and urgency condition on independently coded information-seeking strategy, nor between believed

observability and felt urgency on independently coded information-seeking strategy, so again no moderated mediation models were tested.

In sum, in Study 1, we see a failure of the study design such that, when considered in the context of a paramedic work setting, the believed observability of the characteristics in the assigned "low" versus "medium" observability conditions did not significantly differ in believed observability. Despite this flaw in the study design, in support of Hypothesis 1, there is a consistent main effect of observability on informationseeking strategy, such that lower believed observability predicts increased affordance testing. For both participant self-rated and independently coded information-seeking strategies, we see a significant main effect of observability condition, and believed observability is a significant predictor of both. Further, when considering the medium versus high observability conditions (which significantly differed on believed observability, as intended), believed observability significantly statistically mediates the relationship between observability condition and information-seeking strategy (both selfrated and independently coded).

In Study 1 we see mixed support for Hypothesis 3, that greater felt urgency is associated with more affordance testing. For both participant self-rated and independently coded information-seeking strategies, we see a significant main effect of urgency condition, but felt urgency is not a significant predictor of either. Finally, contrary to Hypothesis 4, we do not see a significant linear interaction between urgency and observability in predicting information-seeking strategy in any analysis.

In Study 2, then, I conceptually replicate Study 1, again testing Hypotheses 1, 3, and 4 but in a new context (an exclusive, high-end social club) and focusing on three new characteristics (cowardly, smug, and loud-mouthed). This conceptual replication aims to allow for a better test of the hypotheses by creating low and medium observability conditions that differ in participants' self-reported believed observability, while also expanding our understanding of how these factors affect information-seeking strategies in a different domain of social life: a social group.

Study 2: A New Social Group Member

Study 2 Methods

Participants

U.S. participants were recruited via Prolific in February 2021 and were paid \$1.60 (at a rate of \$12/hour for an 8-minute study). The same power analysis was conducted for Study 2 as in Study 1, wherein G*Power 3.1.9.2 was used to find the sample size to detect an effect of *Cohen's* $f^2 = .15$ in a 2 x 3 between-subjects ANOVA, given alpha = .05, power = .08, which yielded a desired sample size of 432 participants. 601 participants were recruited to ensure enough power to detect the predicted interaction and because a number of participants were expected to fail attention checks.

Of the 601 participants recruited for the study, 572 passed all attention checks and reading comprehension checks and were thus included in analyses (see below for attention check details, see Appendix G, Table G2 for detailed breakdown of participants excluded by condition). The analyzed sample contained 295 female, 267 male, and 10 other participants. Participants were all 18 years or older, with a mean age of 32.98 years (SD = 12.43). Participants identified as Caucasian/White (n = 441), Asian/Asian-American (n = 80), Latino/Latina/Hispanic (n = 54), African/African-American (n = 34),

Native American (n = 12), Middle Eastern/Middle-Eastern-American (n = 6), and other (n = 7). 557 participants identified as native English speakers.

Procedure

The procedure followed in Study 2 was similar to that of Study 1, except that participants were asked to imagine a different scenario and were asked to assess one of three new characteristics of interest. Participants selected the survey, listed on Prolific as "An 8-minute study on learning about friends," and were permitted to complete it on a computer or tablet, not on a smartphone. Participants were randomly assigned to participate in Study 1 or 2. Study materials were designated "exempt" by the Arizona State University Institutional Review Board (Appendix H). After providing informed consent, participants read a vignette asking them to imagine a scenario in which they were part of an "exclusive, high-end social club" and in charge of the organizing committee for an annual fundraiser, and they needed to evaluate another group member who had recently joined (see Appendix L for complete materials).

Participants were then randomly assigned to conditions in a 2 ("urgency": low, high) x 3 ("observability": low, medium, high) between-subjects design. Participants in the high situational urgency condition had just one week to evaluate the new group member, whereas in the low urgency condition, they had two months. Participants were asked how they would assess whether the group member was *cowardly* (in the low observability condition), *smug* (medium observability condition), or *loud-mouthed* (high observability condition). As described above, these three characteristics were chosen based on their low, medium, and high average believed observability and their comparable, moderate levels of believed importance, as rated by an independent sample of participants.

After reading the vignette, participants responded to two reading comprehension questions (presented in randomized order) that served both as an attention check and to reinforce key information from the urgency and observability conditions the participant was assigned to. Reading comprehension questions included, "How long will the new group member's probationary period last?" (*Until the end of the week; Six months; Two years*), and "Of the following, which characteristic do you need to assess before the end of the probationary period?" (*How cowardly the group member is; How smug the group member is; How loud-mouthed the group member is; response choices presented in randomized order*). Participants who did not answer both questions in ways that matched their assigned conditions were excluded from analyses.

Next, participants each responded to two questions, presented in randomized order, that served as both a manipulation check and to reinforce their felt sense of urgency. They were asked: "How urgently do you feel that you need to find out whether the new group member is [cowardly/smug/loud-mouthed]?" (1-*Not at all urgently*, 7-*Extremely urgently*) (M = 5.27, SD = 1.43), and "How much time pressure do you feel to find out quickly whether the new group member is [cowardly/smug/loud-mouthed]?" (1-*Not at all urgently*]?" (1-*No time pressure at all*, 7-*A great deal of time pressure*) (M = 5.02, SD = 1.62). These items were highly correlated (r (570) = .75, p < .001) and were averaged to form a "felt urgency" composite (M = 5.14, SD = 1.43).

Participants then gave free response answers to describe what they would do to assess the characteristic of interest (i.e., cowardly, smug, or loud-mouthed, depending on their assigned condition) in the new group member. This was followed by an attention check item: "Please select 'Extremely negative" on the scale below," (1-*Extremely negative, 7-Extremely positive)*. All participants who did not choose 1-*Extremely negative* for this item were excluded from analyses.

Next, as in the Preliminary Study and in Study 1, participants read a description of the variety of information-seeking strategies that people often use, explaining that these strategies range from passive observation to more "active testing," and they were provided examples of both (see Appendix L for full text of explanation). Each participant was then shown their own response regarding how they would assess the group member for the characteristic of interest, and they rated their own response on a scale from 1-*Observation* to 7-*Active "testing.*" Additionally, participants' written responses describing how they would assess the characteristic of interest were coded by a team of research assistants (more details below).

Next, each participant rated their belief about the observability of and their belief about the importance of the characteristic of interest, in the context of the imagined scenario. They were randomly assigned to answer questions about observability or importance beliefs first. To assess believed observability, participants responded to two items (1-*Extremely unlikely*, 7-*Extremely likely*), presented in randomized order: "Imagine you have [until the end of the week/six months] to simply observe the new group member at social events. [At the end of the week/After six months], how likely is it that you will be able to tell whether the new group member is [cowardly/smug/loud-mouthed]?" (M = 4.63, SD = 1.48), and "If you could only watch the new group member at social events.

week/for six months], how likely is it that you would be able to tell whether the new group member is [cowardly/smug/loud-mouthed] [by the end of the week/after six months]?" (M = 4.31, SD = 1.53). These items were highly correlated (r (570) = .75, p < .001) and were averaged to form a "believed observability" composite (M = 4.47, SD = 1.41).

To assess believed importance, participants responded to two items, presented in randomized order: "How important is it to know whether the new group member is [cowardly/smug/loud-mouthed]?" (1-*Not at all important,* 7-*Extremely important*) (M = 5.90, SD = 1.22), and "How much of a problem would it be for you if you were wrong about whether the new group member is [cowardly/smug/loud-mouthed]?" (1-*Not a problem at all,* 7-*Very much a problem*) (M = 5.16, SD = 1.47). These items were highly correlated (r (570) = .58, p < .001) and were averaged to form a "believed importance" composite (M = 5.53, SD = 1.20).

Participants then responded to another attention check item: "Please select 'Extremely positive' on the scale below," (1-*Extremely negative,* 7-*Extremely positive*). All participants who did not choose 7-*Extremely positive* for this item were excluded from analyses. For exploratory purposes, participants were next asked several questions not related to the present hypotheses, regarding how likely they were to do the assessment technique they described, and how manipulative or cynical they would find someone who used a similar technique. Finally, participants were asked whether they had ever been in an exclusive, high-end social group,⁸ completed several demographic items (e.g., age, sex, educational attainment, race), and were fully debriefed.

Independent Coding of Information-Seeking Strategies. As prefaced above, using the same coding procedure as Study 1, each participant's information-seeking strategy response was coded by five independent undergraduate research assistant coders. Nine research assistants were each randomly assigned to code a subset of participants' responses such that each response was coded five times. Four responses were coded six times. Seventeen responses were initially only coded four times; an additional independent research assistant then coded these responses. The study hypotheses and the participants' assigned conditions were masked for the research assistants.

Coders rated each response on a scale from 1-*Passive observation* to 7-*Active testing* or marked the response as unable to be rated. 439 participants' responses were rated by all 5 research assistant coders; these ratings had high inter-rater reliability (*Cronbach's* α = .90). All responses rated by at least one coder (*N* = 563) were averaged to form a composite rating for each participant's response (*M* = 3.33, *SD* = 1.69). Of those 563 responses, 538 were from participants who passed all attention checks. These 538 independently coded information-seeking strategy scores were significantly

⁸ Thirty-eight of the 572 participants in the analyzed sample indicated that they had been in an exclusive, high-end social group, and 47 were not sure if they had. When principal analyses were conducted with only the subsample of participants who had never been in a high-end social group (n = 487), conclusions remained unchanged (Appendix J, Tables J5 and J6). Participants who had been in a high-end social group were retained in the final analyzed sample.

positively correlated with the participants' self-rated information-seeking strategy scores (r (536) = .60, p < .001).

Study 2 Results

All analyses were conducted using SPSS version 27.

Information-Seeking Strategies Across Conditions

Participants' Self-Rated Information-Seeking Strategies. To assess whether participants' self-rated information-seeking strategies differed significantly across urgency and observability conditions, I conducted a 2 (urgency: low, high) by 3 (observability: low, medium, high) between-subjects ANOVA. Results closely matched those of Study 1. Providing support for Hypothesis 1-that characteristics believed to be less observable are more likely to be affordance tested (rather than passively observed) there was a significant main effect of observability condition on self-rated informationseeking strategy (F (2, 566) = 6.07, p = .002, partial- $\eta^2 = .02$). In support of Hypothesis 3—that participants who feel more urgency will by more likely to affordance test (rather than passively observe)-there was a significant main effect of urgency condition on selfrated information-seeking strategy (F (1, 566) = 14.95, p < .001, partial- $\eta^2 = .03$). Finally, contrary to Hypothesis 4, there was no significant interaction between observability and urgency conditions (F (2, 566) = 0.53, p = .59, partial- $\eta^2 = .002$). See Table 3 for marginal means and standard deviations of participants' self-rated information-seeking strategies by condition; see Figure 13.

Table 3

Study 2 Self-Rated Information-Seeking Strategy Marginal Means (and SD) and Sample

Size by Condition

	Observability Condition			
	Low	Medium	High	
	Cowardly	Smug	Loud-Mouthed	
Urgency Condition	Mean (SD) n	Mean (SD) n	Mean (SD) n	
Low Six Months	4.19 (2.10) 95	3.60 (1.91) 96	3.31 (2.02) 95	
High One Week	4.68 (2.00) 95	4.18 (1.98) 97	4.20 (2.13) 94	

Note. Means and standard deviations of participants' self-rated information-seeking strategies by observability and urgency condition. Information-seeking strategies were rated on a scale from 1-*Observation* to 7-*Active "testing."* The number of participants who passed attention checks in each condition is indicated by *n*.

Figure 13





Conditions



Independently Coded Information-Seeking Strategies. I then conducted the 2

(urgency: low, high) by 3 (observability: low, medium, high) between-subjects ANOVA to analyze the independently coded information-seeking strategies. There was again a significant main effect of observability condition on information-seeking strategy (F (2, 532) = 23.73, p < .001, *partial*- η^2 = .08). However, there was no significant main effect of urgency condition on information-seeking strategy (F (1, 532) = 2.35, p = .13, *partial*- η^2 = .004), nor a significant interaction between observability and urgency conditions (F(2, 532) = 0.04, p = .96, *partial*- η^2 < .001) (see Table 4 for marginal means and standard deviations of independently coded information-seeking strategies by condition; see

Figure 14).

Table 4

Study 2 Independently Coded Information-Seeking Strategy Marginal Means (and SD)

and Sample Size by Condition

	Observability Condition			
	Low	Medium	High	
	Cowardly	Smug	Loud-Mouthed	
Urgency Condition	Mean (SD) n	Mean (SD) n	Mean (SD) n	
Low Six Months	3.88 (2.07) 90	3.95 (1.17) 91	2.83 (1.48) 90	
High One Week	4.12 (1.86) 88	3.11 (1.33) 93	3.07 (1.54) 86	

Note. Means and standard deviations of independently coded information-seeking strategies by observability and urgency condition. Information-seeking strategies were rated on a scale from 1-*Observation* to 7-*Active "testing."* For each cell, *n* indicates the number of participants who passed attention checks and whose responses were able to be rated by coders.

Figure 14

Study 2 Average Independently Coded Information-Seeking Strategy by Urgency and



Observability Conditions



Felt Urgency and Believed Observability

Study 2 was designed to manipulate participants' sense of urgency and their beliefs about the observability of a characteristic of interest across conditions. To assess whether these manipulations were effective, I first ran a two-way between-subjects ANOVA to test whether participants' self-reported felt urgency composites differed across urgency conditions (as intended) or across observability conditions. As intended, participants' self-reported felt urgency in the low urgency (six months) condition (M = 4.48, SD = 1.43) was indeed significantly lower than felt urgency in the high urgency (one week) condition (M = 5.81, SD = 1.07) (F (1, 566) = 158.52, p < .001, partial- $\eta^2 =$ 0.22). As expected, felt urgency did not significantly differ across observability conditions (F (2, 566) = 0.17, p = .85, partial- $\eta^2 = 0.001$), and there was no significant interaction between the urgency and observability conditions (F (2, 566) = 2.01, p = .13, partial- $\eta^2 = 0.01$).

Next, a second two-way between-subjects ANOVA revealed that participants' composite beliefs about characteristics' observability did significantly differ across the three observability conditions ($F(2, 566) = 14.06, p < .001, partial-\eta^2 = 0.05$). Post hoc Tukey HSD comparisons indicated that, as intended, the believed observability of *loud-mouthed* (i.e., high observability condition, M = 4.88, SD = 1.43) was significantly greater than the believed observability of both *cowardly* (i.e., low observability condition, M = 4.15, SD = 1.34) (p < .001, 95% CI [0.40, 1.05]) and *smug* (i.e., medium observability condition, M = 4.38, SD = 1.40) (p = .001, 95% CI [0.17, 0.82]). However, the believed observability of *cowardly* (low) and *smug* (medium) did not significantly differ in the social group context (p = .23, 95% CI [-0. 55, 0.10]).

Additionally, there was an unintended significant difference in believed observability across urgency conditions ($F(1, 566) = 17.34, p < .001, partial-\eta^2 = 0.03$), such that believed observability was higher in the low urgency condition (M = 4.71, SD =1.36) compared to the high urgency condition (M = 4.23, SD = 1.42). There was also an unintended significant interactive effect of the urgency and observability conditions (F(2, 566) = 3.12, $p = .05, partial-\eta^2 = 0.01$) (see Table 5 for marginal means and standard deviations of believed observability by urgency and observability conditions). I return to consider the potential implications of this "leakage" of the urgency manipulation in the Discussion.

Table 5

Study 2 Believed Observability Marginal Means (and SD) by Observability and Urgency

Conditions

	Observability Condition						
	Low (Cowardly)		Med	Medium (Smug)		High	
			(Sm			(Loud-Mouthed)	
Urgency Condition	Mean	SD	Mean	SD	Mean	SD	
Low (Six Months)	4.24	1.43	4.58	1.18	5.30	1.24	
High (One Week)	4.07	1.25	4.18	1.49	4.45	1.49	

Note. Marginal means and standard deviations of participants' composite self-reported beliefs about the observability of each characteristic in the context of the different levels of urgency in the imagined scenarios. Believed observability was rated on a 7-point scale, with higher numbers indicating greater believed observability.

Participants' Self-Rated Information-Seeking Strategies. I next used OLS

linear regression to test Hypotheses 1, 3, and 4 using these more direct measures of participants' felt urgency, their beliefs about the observability of a characteristic, and their interaction ($R^2 = .07$). Each predictor was mean-centered and the interaction term was created from the centered predictors. As in Study 1, in support of Hypothesis 1, when accounting for other predictors in the model, believed observability significantly predicted self-rated information-seeking strategy, such that the less observable the characteristic was believed to be, the more likely the participant was to report affordance testing (vs. passively observing) (standardized $\beta = -0.23$, unstandardized b = -0.33, $SE_b = 0.06$, t (568) = -5.54, p < .001, 95% CI [-0.45, -0.21]). Additionally, unlike in Study 1, in support of Hypotheses 3, felt urgency significantly predicted self-rated information-

seeking strategy (standardized $\beta = 0.12$, unstandardized b = 0.17, $SE_b = 0.06$, t (568) = 2.85, p = .005, 95% CI [0.05, 0.29]). Contrary to Hypothesis 4, there was again no significant linear interaction between believed observability and felt urgency (standardized $\beta = -0.003$, unstandardized b = -0.002, $SE_b = 0.04$, t (568) = -0.06, p = .95, 95% CI [-0.08, 0.08]) (Figure 15).⁹

⁹ Characteristics were chosen to be of comparable pre-rated believed importance (when free of context). However, participants in Study 2 rated their believed importance of the characteristics in the social context, and a one-way between-subjects ANOVA revealed significant differences in believed importance across characteristics (F(2, 569) = 3.31, p= .04, η^2 = .01) (see Appendix K for means, standard deviations, and post hoc Tukey HSD comparisons). Therefore, I ran an OLS linear regression analysis predicting participants' self-rated information-seeking strategy from believed importance, believed observability, felt urgency, and all the two-way and three-way interactions between them (all predictors were centered and interaction terms created from centered predictors), and I repeated the analysis predicting independently coded information-seeking strategies. Results for both analyses showed no significant interactions and no significant prediction of information-seeking strategy by believed importance (with the exception of a significant interaction between felt urgency and believed importance predicting the independently coded scores (unstandardized b = -0.09, $SE_b = 0.03$, t (530) = -2.59, p =.01, 95% CI [-0.16, -0.02])). Further, believed observability remained a significant predictor in both analyses, and felt urgency remained a significant predictor of self-rated scores and remained a non-significant predictor of independently coded scores (see Appendix K for full details of regression analyses).
Figure 15

Study 2 Self-Rated Information-Seeking Strategy Predicted by Felt Situational Urgency



and Believed Observability

Note. Participants' felt situational urgency (centered) predicting participants' self-rated information-seeking strategy at the mean of believed observability and at one standard deviation above and below the mean. All variables were measured on 7-point scales. Higher scores indicate greater felt situational urgency and greater believed observability. Higher information-seeking scores indicate affordance testing, and lower scores indicate observation.

Independently Coded Information-Seeking Strategies. I again used OLS linear

regression to predict independently coded information-seeking strategies from felt

urgency, believed observability, and their interaction (predictors were mean-centered, and

the interaction was created from centered predictors) ($R^2 = .06$). Again, supporting

Hypothesis 1, believed observability significantly predicted independently coded

information-seeking strategy (standardized $\beta = -0.23$, unstandardized b = -0.27, $SE_b =$

0.05, t (534) = -5.29, p < .001, 95% CI [-0.37, -0.17]). Contrary to Hypotheses 3 and 4,

neither felt urgency (standardized $\beta = 0.07$, unstandardized b = 0.08, $SE_b = 0.05$, t (534) = 1.60, p = .11, 95% CI [-0.02, 0.18]) nor the linear interaction term (standardized $\beta = 0.01$, unstandardized b = 0.01, $SE_b = 0.03$, t (534) = 0.23, p = .82, 95% CI [-0.06, 0.07]) significantly predicted independently coded information-seeking strategy (Figure 16).

Figure 16

Study 2 Independently Coded Information-Seeking Strategy Predicted by Felt Situational Urgency and Believed Observability



Note. Participants' felt situational urgency (centered) predicting independently coded information-seeking strategy at the mean of believed observability and at one standard deviation above and below the mean. All variables were measured on 7-point scales. Higher scores indicate greater felt situational urgency and greater believed observability. Higher information-seeking scores indicate affordance testing, and lower scores indicate observation.

Mediation Analyses

Participants' Self-Rated Information-Seeking Strategies. Finally, I used mediation analyses as more powerful tests of the effects of believed observability and felt urgency on self-rated information-seeking strategies. First, I assessed whether the relationship between urgency condition and self-rated information-seeking strategy was statistically mediated by felt urgency. Unexpectedly, there was no significant mediation of the relationship between urgency condition and self-rated information-seeking strategy (indirect effect unstandardized b = 0.17, $SE_b = .10$, 95% CI[-0.01, 0.36]), although the inclusion of felt urgency in the model did reduce the effect of urgency condition on information-seeking strategy from *unstandardized* b = 0.65 ($SE_b = .17$, p = .0001) to 0.48 ($SE_b = .07$, p = .01) (see Figure 17 for full mediation analysis).

Figure 17

Mediation of the Relationship Between Urgency Condition and Participants' Self-Rated

Information-Seeking Strategy by Felt Urgency in Study 2



Indirect effect: 0.17 (.10), 95% CI[-0.01, 0.36]

Note. There was no significant statistical mediation of the relationship between participants' randomly assigned urgency condition (low, high) and their self-rated information-seeking strategy by participants' self-reported felt urgency. All coefficients are unstandardized, with standard errors in parentheses. *p < .05, **** p < .0001

I assessed whether the relationship between observability condition and self-rated information-seeking strategy was statistically mediated by participants' self-reported believed observability. As in Study 1, sequential coding was used to compare each level of the observability condition to the level below it. There was significant statistical mediation of the effect of observability condition on self-rated information-seeking strategy by believed observability when comparing the high versus medium observability conditions (indirect effect unstandardized b = -0.17, $SE_b = .06$, 95% CI[-0.29, -0.07]), but not when comparing the medium versus low observability conditions (indirect effect unstandardized b = -0.08, $SE_b = .05$, 95% CI[-0.18, 0.01]) (see Figure 18 for full mediation analysis).

Figure 18

Mediation of the Relationship Between Observability Condition and Participants' Self-

Rated Information-Seeking Strategy by Believed Observability in Study 2



Med vs. low: -0.08 (.05), 95% CI[-0.18, 0.01] High vs. med: -0.17 (.06), 95% CI[-0.289 -0.07] www.employed.to.characterize.the.participants

Note. Sequential coding was employed to characterize the participants' randomly assigned observability condition (i.e., low vs. medium observability condition, medium vs. high observability condition). There was significant statistical mediation of the effect of observability condition on participants' self-rated information-seeking strategy by self-reported believed observability when comparing the high versus medium observability conditions, but not when comparing the medium versus low observability conditions. All coefficients are unstandardized, with standard errors in parentheses. *p < .05, **p < .01, ****p < .0001

As there was no significant interaction between observability condition and urgency condition on self-rated information-seeking strategy, nor between believed observability and felt urgency on self-rated information-seeking strategy, no moderated mediation models were tested.

Independently Coded Information-Seeking Strategies. Finally, I conducted mediation analyses to assess the effects of believed observability and felt urgency on independently coded information-seeking strategies. Again, there was no significant mediation of the relationship between assigned urgency condition and independently coded information-seeking strategy by participants' self-reported felt urgency (indirect effect unstandardized b = 0.15, $SE_b = .08$, 95% CI[-0.01, 0.32]), which is unsurprising given that situational urgency did not predict independently coded information-seeking strategy (see Figure 19 for full mediation analysis).

Figure 19

Mediation of the Relationship Between Urgency Condition and Independently Coded

Information-Seeking Strategy by Felt Urgency in Study 2



Indirect effect: 0.15 (.08), 95% CI[-0.01, 0.32]

Note. There was no significant statistical mediation of the relationship between participants' randomly assigned situational urgency condition (low, high) and the independently coded information-seeking strategy by participants' self-reported felt urgency. All coefficients are unstandardized, with standard errors in parentheses. $^{p} < .06$, **** p < .0001

I again conducted a mediation analysis assessing whether the relationship between observability condition and independently coded information-seeking strategy was mediated by believed observability, using sequential coding to compare the medium observability condition to low, and to compare the high observability condition to medium. Again there was significant statistical mediation of the effect of observability condition on independently coded information-seeking strategy by believed observability when comparing the high versus medium observability conditions (indirect effect unstandardized b = -0.11, $SE_b = .04$, 95% CI[-0.20, -0.04]), but not when comparing the medium versus low observability conditions (indirect effect unstandardized b = -0.06, $SE_b = .04, 95\%$ CI[-0.14, 0.001]) (see Figure 20 for full mediation analysis).

Figure 20

Mediation of the Relationship Between Observability Condition and Independently

Coded Information-Seeking Strategy by Believed Observability in Study 2



Note. Sequential coding was employed to characterize the participant's randomly assigned observability condition (i.e., low vs. medium observability condition, medium vs. high observability condition). There was significant statistical mediation of the effect of observability condition on independently coded information-seeking strategy by self-reported believed observability when comparing the high versus medium observability conditions, but not when comparing the medium versus low observability conditions. All coefficients are unstandardized, with standard errors in parentheses. $^{p} = .06, ** p < .01, **** p < .0001$

There was no significant interaction between observability condition and urgency condition on independently coded information-seeking strategy, nor between believed

observability and felt urgency on independently coded information-seeking strategy, so again no moderated mediation models were tested.

In sum, in Study 2, we again see a failure of the study design such that, when considered in the context of a social group setting, the believed observability of the characteristics in the assigned "low" versus "medium" observability conditions did not significantly differ in believed observability. Despite this flaw in the study design, in support of Hypothesis 1, there is again a consistent main effect of observability on information-seeking strategy, such that lower observability is associated with more affordance testing. For both participant self-rated and independently coded informationseeking strategies, we see a significant main effect of observability condition, and believed observability is a significant predictor of both. Further, when considering the medium versus high observability conditions (which significantly differed on believed observability, as intended), believed observability significantly statistically mediates the relationship between observability condition and information-seeking strategy (both selfrated and independently coded).

Again in Study 2, we see mixed support for Hypothesis 3, that greater felt urgency is associated with more affordance testing. When examining participants' self-rated information-seeking strategy, we see a significant main effect of urgency condition, as well as significant prediction by self-reported felt urgency. However, we do not see evidence that the effect of urgency condition on self-rated information-seeking strategy is mediated by felt urgency. Further, when examining independently coded informationseeking strategy, we do not see a significant main effect of urgency condition, nor significant prediction by felt urgency. Finally, contrary to Hypothesis 4, we do not see a significant linear interaction between urgency and observability in predicting information-seeking strategy in any analysis.

Discussion

Social information-seeking is an ongoing, pervasive practice. Often, we can gain useful information by passive observation, but sometimes we cannot. In these cases, I propose that we actively manipulate others' circumstance to reveal cues to hard-toobserve characteristics. Here, we begin to see evidence elucidating some of the factors that affect when we affordance test and when we passively observe: observability, importance, and urgency.

Summary of Support for Hypotheses

Hypothesis 1 predicts that lower believed observability of a characteristic is associated with a greater likelihood of affordance testing when seeking information about that characteristic in a target. Correlational evidence from the Preliminary Study, in which participants judged the observability of each characteristic without context, supports Hypothesis 1. Further, in Studies 1 and 2, causal evidence shows that randomly assigned observability conditions significantly predict both participants' self-rated information-seeking strategy and independently coded information-seeking strategy. Studies 1 and 2 also show that participants' self-reported observability beliefs significantly predict both participants' self-rated information-seeking strategy and independently coded information-seeking strategy. We see these results despite the fact that participants' observability beliefs for the characteristics assigned to the "low" and "medium" observability conditions did not significantly differ in either Study 1 or 2. Finally, in both studies, when considering the "medium" and "high" observability conditions (which did differ significantly in believed observability), the relationship between these conditions and information-seeking strategy (both self-rated and independently coded) was significantly mediated by believed observability. Altogether, we see highly consistent support for Hypothesis 1.

Hypothesis 2 predicts that greater believed importance of a characteristic is associated with a greater likelihood of affordance testing when seeking information about that characteristic in a target. Correlational evidence from the Preliminary Study, in which participants judged the importance of each characteristic without context, supports Hypothesis 2.

Hypothesis 3 predicts that greater felt urgency is associated with a greater likelihood of affordance testing when seeking information about a target. In Study 1, causal evidence shows that randomly assigned urgency conditions significantly predict both participants' self-rated information-seeking strategy and independently coded information-seeking strategy. However, participants' self-reported felt urgency does not significantly predict either participants' self-rated information-seeking strategy or independently coded information-seeking strategy. In Study 2, we see evidence that both assigned urgency conditions and self-reported felt urgency significantly predict self-rated information-seeking strategy. However, neither assigned urgency conditions nor selfreported felt urgency significantly predict independently coded information-seeking strategy in Study 2. Further, in neither study does felt urgency mediate the relationship between assigned urgency condition and information-seeking strategy. Therefore, we see mixed support for Hypothesis 3.

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Hypothesis 4 predicts that the believed observability of a characteristic will interact with the perceiver's felt urgency to predict the likelihood of affordance testing when seeking information about a target. In particular, Hypothesis 4 predicts that greater felt urgency should especially increase affordance testing for characteristics of medium observability. We do not see evidence in support of Hypothesis 4 in either Study 1 or 2.

Theoretical Implications

Effects of Believed Observability

In promising support of the proposed affordance testing framework (Pick & Neuberg, 2021), believed observability seems to be an important factor in determining a perceiver's likelihood of affordance testing when seeking information about a characteristic of interest. Indeed, that characteristics of high observability are more likely to be observed, and that characteristics of low observability are more likely to be affordance tested, is one of the foundational hypotheses of the framework. The evidence provided in this dissertation is therefore a promising first piece of direct evidence in support of the framework.

Effects of Felt Urgency

Evidence regarding the influence of urgency in determining one's informationseeking strategy is more mixed—although participants did report feeling significantly different levels of urgency across conditions in both studies, whether there was an effect of urgency on information-seeking strategy differed across analyses in both studies. Why might we be seeing these mixed effects? One possible explanation is that the urgency condition manipulation was not quite strong enough; although levels of felt urgency did significantly differ across conditions, the vignettes might not have been compelling enough to produce consistently different effects on reported information-seeking strategy.

A second possible explanation is that there is an effect of felt urgency on likelihood of affordance testing, but that the studies were underpowered to consistently detect such effects. Exploratory analyses pooling participants in Studies 1 and 2 do find that assigned urgency condition is a significant predictor of both self-rated informationseeking strategy and independently coded information-seeking strategy (Appendix J, Tables J8 and J9¹⁰). Thus, it is possible that each sample alone provided insufficient power to consistently detect significant effects.

A third possible explanation is that the effect of urgency is being masked by the effects of urgency condition on believed observability. Recall that, in both studies, assigned urgency condition significantly affected participants' beliefs about the observability of the characteristic of interest, such that in the high urgency condition, characteristics were believed to be less observable. Lower observability, in turn, was associated with greater likelihood of affordance testing. If one mechanism by which urgency operates is by changing participants' beliefs about the observability of a characteristic, in this study design it may be difficult to detect direct effects of urgency on

¹⁰ Exploratory 2 (urgency condition) by 3 (observability condition) by 2 (Study) betweensubjects ANOVAs were conducted for both self-rated and independently coded information-seeking strategies. In both analyses, a significant main effect of Study was found, such that Study 2 participants reported significantly higher levels of affordance testing than did Study 1 participants. There does not seem to be clear evidence that factors affecting participants' self-reported information-seeking strategies operated differently across studies, as Study rarely interacted with the other predictors (Appendix J, Tables J8 and J9).

likelihood of affordance testing. (Does this mean that the purported effect of observability was simply an effect of urgency? No. In both Studies 1 and 2, we also see an effect of observability condition on participants' affordance testing strategy, above and beyond any effect of urgency condition.) Future work is necessary to tease apart the possible relationship between urgency and observability, and to understand the mechanisms by which urgency (and other factors affecting affordance testing) might operate.

Interactive Effects of Believed Observability and Felt Urgency

In the present studies, there does not seem to be evidence for the hypothesized interaction between believed observability and felt urgency. It is possible that, although there is evidence that both believed observability and felt urgency are independent factors predicting information-seeking strategy, they may not have interactive effects. However, it is also possible that, if felt urgency has a particularly strong effect only in cases of *moderate* believed observability as hypothesized, the present studies may either a) not provide enough power to detect such a nuanced effect, or b) not provide a sufficient range of observability to show differential effects of urgency across low, moderate, and high believed observability characteristics. Both studies failed to include characteristics of interest that distinguished between "low" and "medium" levels of believed observability. This was likely because the characteristics were selected based on context-free ratings of how observable the characteristics were believed to be, whereas the present studies assessed the believed observability of characteristics in specific contexts.

Further, the so-called "low" and "high" observability characteristics in the present studies may not be sufficiently low and sufficiently high, respectively, in the full possible range of characteristic observability, to capture the hypothesized interaction. I predict that characteristics of the highest observability are unlikely to be affordance tested even under high urgency, and characteristics of the lowest observability are likely to be affordance tested even under low urgency, yet the characteristics chosen for the present studies might all fall under the more "moderate" observability section of this possible range. Thus, the studies may not have provided the range of observability beliefs necessary to allow evidence of an interactive effect with felt urgency to emerge.

Finally, it is possible that a true interactive effect between urgency and observability is being obscured in these studies by the main effect of the urgency condition on believed observability of characteristics in both studies, and by the interactive effect of urgency condition and observability condition on believed observability in Study 2. As discussed above, it is possible that one mechanism by which urgency affects likelihood of affordance testing is by shifting a perceiver's belief about how observable a characteristic is. If so, the observed interactive effects of urgency condition on believed observability in Study 2 may be consistent with the hypothesized interactive effect of felt urgency and believed observability on likelihood of affordance testing. Future work is necessary to tease apart whether this interactive effect of urgency and observability conditions might be obscuring, and/or part of the mechanism of, an interactive effect of believed observability and felt urgency on likelihood of affordance testing.

Limitations

In addition to the possible lack of power and lack of range of observability described above, there are several other potential limitations to the present studies that call for further exploration of the affordance testing framework.

Operationalization

First, only one characteristic was used to represent each "level" of observability in each study, so it is not possible to conclude with certainty that it was the believed observability and not some other dimension of the characteristics that was driving the demonstrated effects across "observability" conditions. This concern is diminished given that a) Study 1 and Study 2 employed distinct characteristics of interest yet demonstrated similar effects of observability condition, and b) participants' self-reported believed observability for the characteristics of interest also predicted their reported informationseeking strategy. It is still possible, however, that there is an unmeasured factor correlated with the believed observability of the characteristics in these studies that is in fact driving the observed effect on information-seeking strategy. For example, perhaps people have beliefs about the likelihood that others, in general, possess a given characteristic, and perhaps they are more likely to affordance test characteristics that they believe are uncommon in the population. If this dimension is correlated with observability, in general, or happens to be correlated with the characteristics chosen for this study, the purported effect of believed observability might instead be due in part or in full to beliefs about the prevalence of a characteristic. In future studies, this potential issue might be addressed by testing the hypothesized effect of believed observability by directly manipulating participants' beliefs about the observability of each characteristic, instead

of using different characteristics to operationalize different levels of believed observability.

Additionally, both contexts used in the study vignettes were designed to represent specific, real-world scenarios. However, relatively few participants had ever experienced the scenarios described in these vignettes. Only 6.6% of participants in Study 2 had ever been part of an exclusive, high-end social group (and an additional 8.2% were unsure if they had been), and a mere 1.3% (n = 7) participants in Study 1 had ever been a paramedic or EMT (2 additional participants were unsure). Therefore, the majority of participants in these studies may not have had a clear or accurate understanding of how people behave in these contexts. They thus might not have had a clear idea of how observable the characteristics of interest would be. Furthermore, this may have made it even more difficult for participants to imagine how they would plausibly affordance test another person in the described scenario, which, in turn, may have limited the range of the information-seeking strategy dependent variable on the high end (i.e., could have resulted in lower levels of reported affordance testing). Indeed, a Study 2 exploratory analysis¹¹ showed a marginally significant interaction between felt urgency and whether participants had been in an exclusive, high-end social group or not, when predicting self-

¹¹ In exploratory fashion, I ran a 2 (Experience in Context) by 2 (urgency condition) by 3 (observability condition) between-subjects ANOVA predicting self-rated informationseeking strategy. The Experience in Context variable compared participants who responded "Yes" (n = 38) to the question "Have you ever been in an exclusive, high-end social group?" with participants who responded "No" (n = 487) (excluding participants who responded "Not sure," n = 47). This ANOVA had highly unequal group sizes, but the homogeneity of variance assumption was not violated (Appendix J). Given that only 7 participants in Study 1 said they had ever been paramedics or EMTs, the subsample size was not sufficient to run parallel Study 1 analyses.

rated information-seeking strategy (Table J7). Specifically, under higher felt urgency, participants who had been in such a social group were more likely to report affordancetesting than were participants who had not been in such a social group (Figure J1). Therefore, in future studies, it will be important to assess the effects of felt urgency in contexts with which participants are highly familiar.

Finally, both information-seeking strategy dependent variables relied on selfreport written responses given by participants imagining how they would respond in a given scenario, and there are several possible reasons why participants may not have been willing or able to accurately report their likely information-seeking strategies. First, as described above, lack of experience in the imagined context may have affected participants' ability to predict feasible affordance testing strategies in those contexts. Second, it is possible that the participants were not able to accurately predict how they would behave if they were actually in the imagined scenarios. Affordance testing is not always a conscious process (Pick & Neuberg, 2021), and perceivers in real-life scenarios may often engage in affordance testing techniques that participants may not be able to call to mind while imagining a scenario. Third, there may be social desirability effects that prevent many participants from honestly describing tests they would perform in real life, if they view affordance testing as a manipulative practice. Exploratory analyses revealed that participants who see affordance testing as more manipulative are significantly less likely to have reported affordance testing to seek information about the target (Appendix J, Figures J2-J5). It could be that participants who reported affordance testing techniques were then less inclined to call their own behaviors manipulative, it could be that participants who view affordance testing as manipulative are less likely to

admit that they affordance test, or it could be that participants who view affordance testing as manipulative actually are less likely to affordance test: future study is necessary to tease apart the causes of this relationship.

To address these concerns, in subsequent research there may be value in doing studies that capitalize on measuring participants' real-world experiences. For example, in an experience sampling study, participants could be asked daily to report any experiences they had that day in which they had gathered information about another person, and asked to report how they had gone about gathering the information. Alternatively, a field study could be designed in which interactions between individuals could be observed and coded for types of information-seeking strategies employed. Further, following the observed interactions, the individuals could be asked what information they had gathered about the other person and how they had gathered the information. Aspects of these interactions could also potentially be manipulated. For example, if the study were conducted in a speed dating scenario, the length of time each pair of individuals has to talk could be manipulated to investigate effects of time pressure on likelihood of affordance testing. Benefits of such methods include not relying on participants role playing and imagining responses to scenarios, and instead collecting data on real behaviors and intentions of participants. Potential costs of the experience sampling method include a possible limit to participants' willingness and ability to accurately selfreport their own behaviors and intentions, as well as the study's potential to change participants' behavior over the course of the study if they become hyper-aware of their daily information-seeking behaviors. A potential cost of a field study method includes the inherent ambiguity in interpreting observed information-seeking behaviors of participants.

Generalizability

Participants in the present studies were all U.S.-based adults who participate in Prolific surveys. It is possible that we might see different results in other cultures (including other sub-populations of the U.S.), if those cultures differ on dimensions relevant to likelihood of affordance testing. For example, perhaps affordance testing is considered more or less manipulative in different cultures, and we would thus see differences in mean levels of affordance testing. Additionally, different views on whether affordance testing is a manipulative practice or indicative of an untrusting person might also interact with other factors hypothesized to affect affordance testing, such as power dynamics between targets and perceivers (see Pick & Neuberg, 2021, for additional hypothesized factors). For example, if it is viewed as highly manipulative, low-power perceivers might be particularly unlikely to affordance test, even though they are most likely to need to accurately assess the affordance-relevant characteristics of high-power targets who are readily able to influence their outcomes.

Finally, I expect to see individual differences in perceivers' tendencies to affordance test that were not captured in the present studies. To the extent that these individual differences are more or less frequent in certain parts of the population, we might see different results in a similar study. For example, I predict that perceivers who have a low tolerance for uncertainty are more disposed to engage in affordance testing when encountering new others, or those for whom they have yet to develop beliefs about which they are certain. This might particularly affect people who, for example, live in places characterized by high relational mobility, meaning that they are frequently encountering and forming relationships with new others. The effects of individual differences such as these warrant additional study.

Future Directions

In addition to future work that would address the potential limitations of the present studies, there are a number of other interesting, related questions and hypotheses of the affordance testing framework that remain unexplored. For example, given that the present studies were designed to minimize differences in characteristics' perceived importance across conditions, it remains to be tested whether the effect of a characteristic's believed importance interacts with other factors—including believed observability and felt urgency—to predict information-seeking strategy. When a characteristic is considered to be highly important, is the characteristic likely to be affordance tested even at low levels of urgency, or even when it is considered to be highly observable?

In a related vein, interesting future work might examine whether there are asymmetrical effects for positively-framed characteristics vs. negatively-framed characteristics, given people's greater inclination to avoid costs rather than seek rewards (as described above, e.g., Tversky & Kahneman, 1981). Are negatively-framed characteristics seen as "more important" to assess than positively-framed characteristics? Might this effect vary across contexts, such that some contexts make assessing positivelyframed characteristics more important than assessing negatively-framed characteristics? In addition to affecting the likelihood of affordance testing, might the framing of a characteristic affect the way in which a perceiver affordance tests for it?

Finally, are there demographics-based differences in the factors that affect one's information-seeking strategy? For example, how might participant sex interact with other important factors to predict one's information-seeking strategy? Exploratory analyses in both Studies 1 and 2 indicate that participant sex significantly or marginally significantly interacts with felt urgency, such that men and women were equally likely to report affordance testing in the high urgency condition, but that men were more likely than women to report affordance testing in the low urgency condition (Appendix J, Tables J10 and J11, Figures J6 and J7). Additionally, in both studies, there was a significant or marginally significant main effect of participant sex, such that men were more likely to report affordance testing than were women, in general. Why do men seem to be more likely to affordance test than are women? Why does urgency seem to have a different effect on affordance testing processes for men compared to women? Are there other important factors in the affordance testing process that operate differently for men and women? Future work is necessary to understand how information-seeking strategies may work differently based on different demographic variables such as perceiver sex.

Conclusion

We must constantly assess others' attributes and intentions to successfully navigate our social worlds. Our highly interdependent societies make it necessary to understand the potential costs and benefits others pose for us. Whereas a great deal of research has examined the process of observation in assessing others' characteristics, little has sought to uncover how we assess others when making inferences through observation becomes difficult. Here, we see promising initial progress in understanding several of the foundational factors—believed observability and felt urgency—that affect when perceivers are likely to "affordance test," rather than passively observe, to better understand their fellow social actors.

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APPENDIX A

PRELIMINARY STUDY METHODS AND RESULTS

Preliminary Study 1a

To assess Hypothesis 1, that the less observable a characteristic is believed to be, the more likely it is to be affordance tested (rather than passively observed), in Preliminary Study 1a I began by assessing how observable participants believed 23 characteristics to be.

Methods

Participants. 1318 undergraduate students (824 female) from Arizona State University completed Preliminary Study 1a for extra credit during the Fall 2020 semester. The survey materials were completed as part of an online survey that all Introductory Psychology students are invited to complete at the beginning of the semester. 455 participants were excluded from analyses after failing an attention check (more details below), leaving a total analyzed sample size of N = 863 (547 female), with a mean age of 18.90 years (SD = 1.75).

Procedure. Participants provided informed consent and then completed demographics questions. Participants completed the survey materials from the present study, as well as unrelated survey materials from other researchers. Participants completed the following item as an attention check: "I tend to be concerned with morality. I choose to only associate with people who have morals and values similar to my own. Please ignore this question and instead select the middle option below." Participants who did not select the middle option (455 participants) were excluded from analyses.

For the present study, each participant was asked to rate the observability of 23 characteristics, which were presented in randomized order (for full list of characteristics,

see Table A1). These characteristics were selected in an effort to include characteristics that varied on several dimensions, such as their expected believed observability and importance, and their hypothesized relevance to different social groups whose initiations have been reviewed as part of this framework (e.g., Greek-letter organizations, sports teams, gangs).

For each characteristic, participants read the following prompt: "Imagine that you are able to follow someone around for one week, observing everything they do, but you are unable to interact with them in any way. How likely is it that by the end of the week, you will be able to tell whether this person is [honest]?" and responded on a scale from 1 - *Extremely unlikely* to 7 – *Extremely likely* (for full prompt, see Appendix B).

Results

For each characteristic, I averaged participants' ratings of believed observability (for means and standard deviations see Table A1).

Table A1

	Mean	SD
Mentally strong	4.49	1.70
Cowardly	4.57	1.49
Brave	4.65	1.44
Untrustworthy	4.67	1.58
Fearful	4.74	1.46
Loyal	4.74	1.53
Trustworthy	4.76	1.58
Religiously faithful	4.76	1.62
Honest	4.82	1.59
Moral, or shares your values	4.85	1.55
Religious	5.05	1.54
Qualified at their job	5.07	1.42
Violent	5.10	1.52
Committed to the group	5.18	1.35
Nervous	5.29	1.35
Skilled at coursework	5.34	1.32
Determined	5.39	1.31
A leader	5.46	1.31
Respected	5.48	1.28
Mature	5.57	1.29
Kind	5.75	1.28
Lazy	5.83	1.29
Friendly	5.97	1.16

Believed Observability of 23 Characteristics

Note. Characteristics were rated on a 7-point scale with higher scores indicating higher believed observability. Participants viewed characteristics in randomized order. Characteristics are displayed here ordered from lowest believed observability (top) to highest believed observability (bottom).

Preliminary Study 1b

Next, to allow for a test of Hypothesis 1 (that less observable characteristics are

more likely to be affordance tested), in Preliminary Study 1b I measured how likely

participants were to affordance test versus passively observe each characteristic. To avoid

possible effects of participants' explicit consideration of the observability of each

characteristic on their likelihood of observing versus affordance testing, Preliminary Study 1b used a second set of participants.

Methods

Participants. 426 undergraduate students (306 female) from Arizona State University completed Preliminary Study 1b for extra credit. 52 participants were excluded from analyses after failing attention checks (see details below), leaving a total analyzed sample size of 374 (277 female). Given the new paradigm developed for this study, which relied on participants providing free response answers and coding their own data, I chose a large sample size with the aim of capturing an effect despite potential increased noise in the data. The mean age in the final sample was 19.3 years (*SD* = 2.8).

Procedure. During the Fall 2020 semester, Preliminary Study 1b data were collected online via a provided survey link, either with or without a research assistant available to answer questions and supervise via Zoom. 106 participants (98 who passed the attention checks) completed the survey while on Zoom with a research assistant, and 320 participants (276 who passed attention checks) completed the survey on their own.

Participants first provided informed consent, and then responded to a few demographic questions, including their preferred gender pronoun. Throughout the study, participants read about a target matching their preferred gender pronoun. Next, participants read a brief explanation of multiple social information-seeking strategies that fall on a continuum from passive observation to more active "testing" (for full explanation and survey items, see Appendix C). Then, for each of the 23 characteristics, presented in randomized order, participants were instructed: Imagine you met someone a few days ago and need to find out if the person is, for example, honest. Participants answered the following free response question about each characteristic: "What would you do, to find out if this person is [honest]?" At this point, participants answered the first attention check item: "Please select 'Extremely negative' on the scale below," and were provided a scale from 1-*Extremely negative* to 9-*Extremely positive*.

Next, participants read a more detailed explanation of affordance testing, referred to as "active 'testing." They were told that active testing is a normal part of the information gathering process, and they were provided with several examples of strategies a person might use to assess a romantic partner's faithfulness, ranging from observation to active testing. They were then given an example item, including a mock participant response to the question, "What would you do, to find out if this person is romantically faithful?" and were instructed to rate the mock response on a scale from 1-*Observation* to 8-*Active "testing.*" They were also given the option to review the affordance testing explanation again before continuing.

In randomized order, participants were provided their responses describing how they would assess each of the 23 characteristics. They rated their own responses on the scale from 1-*Observation* to 8-*Active "testing.*" Participants then answered questions regarding their likelihood of actually using each of their described strategies, and then rated how manipulative they would view someone who used strategies like those they had described. At this point, participants answered the second attention check item: "Please select 'Extremely positive' on the scale below," and were provided a scale from 1-*Extremely negative* to 9-*Extremely positive*. Participants who answered either attention check question incorrectly (52 participants) were excluded from analyses. After completing several measures for an unrelated study, participants then completed demographic questions.

Results

For each characteristic, I averaged participants' ratings of whether their information-seeking strategy was closer to observation or affordance testing (for means and standard deviations see Table A2).
Table A2

Participants' Information-Seeking Strategies Self-Rated as Observation versus Active

"Testing"

	Mean	SD
Trustworthy	5.48	2.45
Untrustworthy	5.31	2.46
Honest	5.10	2.56
Brave	4.70	2.52
Cowardly	4.55	2.49
Skilled at Coursework	4.50	2.48
Fearful	4.48	2.52
Moral/Shares Your Values	4.46	2.37
Loyal	4.41	2.49
Mentally strong	4.30	2.40
Committed to their Group	4.21	2.55
Determined	4.21	2.48
Lazy	4.06	2.55
Violent	4.01	2.54
Qualified for their Job	3.99	2.46
Leader	3.91	2.52
Mature	3.83	2.44
Religious	3.68	2.37
Kind	3.57	2.56
Friendly	3.57	2.46
Religiously Faithful	3.55	2.37
Nervous	3.29	2.43
Respected	2.76	2.12

Note. Participants read their own described strategy for assessing each characteristic, and then rated their response on a scale from 1-*Observation* to 8-*Active "testing."* Participants viewed characteristics in randomized order. Characteristics are ordered here from most likely to affordance test (top) to most likely to passively observe (bottom).

In support of Hypothesis 1, a characteristic's average believed observability was significantly negatively correlated with participants' averaged likelihood of affordance testing (versus observing) when assessing that characteristic (r (21) = -.59, p = .003). That is, as predicted, characteristics that are believed to be more observable are more likely to be assessed through observation, and characteristics that are believed to be less

observable are more likely to be assessed through affordance testing. For a visual representation of the association between believed observability and information-seeking strategy, see Figure 2.

Preliminary Study 1c

Next, to allow for a test of Hypothesis 2 (that more important characteristics are more likely to be affordance tested), in a third set of participants in Preliminary Study 1c, I measured how important each characteristic is believed to be.

Methods

Participants. 64 undergraduate students (50 female) from Arizona State University completed Preliminary Study 1c for extra credit during the Fall 2020 semester. Survey materials were included at the end of a larger, unrelated study; thus, the sample was a convenience sample with N determined by the focal study. The mean age in the sample was 19.23 years (SD = 1.59).

Procedure. After providing consent and completing materials for a separate, unrelated study, participants were asked to rate how important they perceived each characteristic to be, in randomized order, on a scale from 1-*Extremely unimportant* to 7-*Extremely important*. For each characteristic, participants were asked, "In general, how important is it for you to know how [honest] another person is?" (Appendix D). Finally, participants answered demographic questions.

Results

For each characteristic, I averaged participants' ratings of believed importance (for means and standard deviations, see Table A3).

Table A3

	Mean	SD
Trustworthy	6.35	1.22
Loyal	6.30	1.09
Honest	6.30	1.12
Untrustworthy	6.29	1.18
Violent	6.17	1.12
Kind	5.85	1.41
Moral, or shares your values	5.62	1.42
Friendly	5.58	1.48
Mature	5.45	1.43
Determined	5.08	1.43
Committed to their group	4.93	1.46
Mentally strong	4.70	1.49
Respected	4.47	1.65
Qualified for their job	4.43	1.69
Brave	4.43	1.38
Cowardly	4.22	1.80
A leader	4.22	1.52
Lazy	4.18	1.73
Skilled at coursework	4.17	1.49
Nervous	3.78	1.46
Fearful	3.72	1.52
Religiously faithful	3.08	1.92
Religious	2.75	1.62

Believed Importance of 23 Characteristics

Note. Characteristics were rated on a 7-point scale with higher scores indicating higher believed importance. Participants viewed characteristics in randomized order. Characteristics are ordered here from highest believed importance (top) to lowest believed importance (bottom).

In support of Hypothesis 2, a characteristic's average believed importance was significantly positively correlated with participants' likelihood of affordance testing (versus observing) when assessing that characteristic (r (21) = .46, p = .03). Therefore, as predicted, characteristics that are believed to be more important are more likely to be assessed through affordance testing, and characteristics that are less important are more

likely to be assessed through passive observation. For a visual representation of the association between believed importance and information-seeking strategy, see Figure 3. For a visual comparison of characteristics' mean ratings of believed (lack of) observability (i.e., reverse-coded observability scores such that higher scores indicate lower observability), believed importance, and likelihood of using affordance testing (vs. observation) as an information-seeking strategy, see Figure A1.

Figure A1



Mean Ratings of Characteristics' (Lack of) Observability, Importance, and Likelihood of Being Affordance Tested

Note. The figure shows mean ratings of each characteristic across participants (error bars indicate ± 1 standard error). A characteristic's believed (lack of) observability (blue) was measured on a 7-point scale, with higher scores here indicating lower observability. A characteristic's believed importance (yellow) was measured on a 7-point scale, with higher scores indicating higher importance. Participants rated their information-seeking strategy (green) for each characteristic on an 8-point scale, with higher scores indicating more affordance testing and lower scores indicating more passive observation. Characteristics are ordered here according to information-seeking strategy scores, with most likely to passively observation on the left, mostly likely to affordance test on the right.

APPENDIX B

PRELIMINARY STUDY 1A MATERIALS

Imagine that you are able to follow someone around for one week, observing everything they do, but you are unable to interact with them in any way. How likely is it that by the end of the week, you will be able to tell whether this person is **[characteristic]**?

Extremely						Extremely
unlikely						likely
1	2	3	4	5	6	7

[Repeated for all 23 characteristics in randomized order. Characteristics included: Brave Committed to the group Cowardly Determined Fearful Friendly Honest Kind Lazy A leader Loval Mature Moral, or shares your values Nervous Qualified at their job Religious Religiously faithful Respected Skilled at coursework Mentally strong Trustworthy Untrustworthy

Violent]

APPENDIX C

PRELIMINARY STUDY 1B MATERIALS

[Information-Seeking Introduction]

Sometimes you want to know something about somebody, but you can't find out that information by merely observing them in everyday life.

Perhaps it is a personality trait that only emerges in rare situations. Perhaps you have to assess many people quickly.

When trying to learn something about a new friend, people often ask a mutual acquaintance about that person. But what happens when asking isn't an option?

People use several strategies. For example, sometimes they just observe. Sometimes they "test" other people while interacting with them. We're interested in how people find out information about others.

On the following pages, you will be asked a series of questions about how people learn information about others. There are no right or wrong answers. We are simply interested in the strategies people use to find out information about others.

Imagine you met a new person in the past few days. Imagine that you need to find out if they are [**characteristic**]. You've known them for a few days, and haven't been able to tell yet if they are [**characteristic**]. You don't know anyone who already knows this person, so you can't ask anyone about them.

Within the next three days, you need to know whether they are [characteristic]. How would you find out? You can't simply ask them, and you can't ask anyone else about them.

What would you do, to find out if this person is [characteristic]?

[Repeated for all 23 characteristics in randomized order. Characteristics included: Brave Committed to the group Cowardly Determined Fearful Friendly Honest Kind Lazy A leader Loyal Mature Moral, or shares your values Nervous Qualified at their job Religious Religiously faithful Respected Skilled at coursework Mentally strong Trustworthy Untrustworthy Violent]

[Observation vs. "Testing" Explanation]

We know that sometimes people find out what other people are like by **observing** them. But, from past research, we also know that sometimes people cannot find something out just by observing. Sometimes, they need to do something more active--they need to do some form of "**test**" to find out what the other person is like. This active testing is very common in our everyday interactions with new people and with current friends and partners, even though people don't often think of themselves as "testing" other people.

The way you find out what another person is like, then, may fall somewhere on the continuum from just observing them, on one end, to doing a very active test, on the other end.

For example, imagine you had just started dating someone new. You want to find out if this new dating partner will be romantically faithful.

On one end, you may **simply observe** them to see if they seem like they will be faithful. However, it may be difficult to observe whether someone seems romantically faithful.

So, you may do something all the way on the other end of the continuum--on the **actively** "**testing**" end. For example, you may ask your friend to flirt with him or her to see how he or she will respond.

Or, you may do something that falls **in between** simple observation or actively testing. For example, you may arrange to go somewhere with your new dating partner where there is the opportunity for his/her "eyes to wander", and then you observe how they behave in this situation.

In the previous questions, we asked how you would find out if a person had different characteristics. In the following pages, you will be asked to rate each of your responses, to tell us where that response falls on the continuum from "observation" to "active testing" (or in between).

You will see the text from your responses, and you will be asked to rate it on a scale. On the next page, you will see the example from the previous slide. Given what you read, please use the scale to rate the example response.

THIS PAGE IS AN EXAMPLE:

How would you find out if your new dating partner is romantically faithful?

You said:

"I would take them to a popular bar and see if they're paying too much attention to all the hot people around us"

How would you rate this response?

							ACTIVE
OBSERVATION							"TESTING"
1	2	3	4	5	6	7	8

[Participants' Self-Rated Information-Seeking Strategies]

How would you find out if your new acquaintance is [characteristic]?

You said: "[participant's response inserted here]"

How would you rate this response?

							ACTIVE
OBSERVATION							"TESTING"
1	2	3	4	5	6	7	8

[Repeated for all 23 characteristics in randomized order]

ACTIVE

APPENDIX D

PRELIMINARY STUDY 1C MATERIALS

In general, how important is it for you to know how [characteristic] another person is?

Extremely unimportant						Extremely important
1	2	3	4	5	6	7
[Repeated for al	1 23 charac	eteristics in r	andomized or	rder. Charac	teristics inc	luded:
Brave						
Committed to th	e group					
Cowardly	0 1					
Determined						
Fearful						
Friendly						
Honest						

Kind Lazy A leader Loyal Mature

Nervous

Religious

Respected

Violent]

Moral, or shares your values

Qualified at their job

Religiously faithful

Skilled at coursework Mentally strong Trustworthy Untrustworthy

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APPENDIX E

CHARACTERISTIC SELECTION MATERIALS

[Informed Consent]

[Participants first provided informed consent.]

[Participants were randomly assigned to answer questions related to general observability first and general importance second, or vice versa.]

[General Observability]

In this set of questions, you will be asked to think about how easy it is to observe whether someone has a particular characteristic or trait.

Imagine that you are able to follow someone around for one week, observing everything they do, but you are unable to interact with them in any way.

How likely is it that by the end of the week, you will be able to tell whether this person is **[characteristic]**?

Extremely						Extremely
unlikely						likely
1	2	3	4	5	6	7

[Repeated for 27 characteristics in randomized order. Characteristics included: Aimless Bossy Careless Clumsy Cowardly Greedy Grouchy Humorless Insecure Irresponsible Lazy Loud-mouthed Mentally weak Messy Narrow-minded Nervous Pessimistic Self-centered

Selfish Shallow Smug Spiteful Stubborn Tense Thoughtless Unforgiving Vulgar]

[General Importance]

In this set of questions, you will be asked to think about how important it is whether someone does or doesn't have a particular characteristic or trait.

In general, how Extremely unimportant	⁷ important	is it for y	ou to know	how [cha	racteristi	c] another person is Extremely important	s?
1	2	3	4	5	6	7	
[Repeated for 2 Aimless Bossy Careless Clumsy Cowardly Grouchy Humorless Insecure Irresponsible Lazy Loud-mouthed Mentally weak Messy Narrow-mindeo Nervous Pessimistic Self-centered Selfish	27 character	istics in r	andomized	l order. Ch	aracteristic	es included:	

Shallow Smug Spiteful Stubborn Tense Thoughtless Unforgiving Vulgar]

[Attention Check]

Please select "Strongly disagree" on the scale below. Thank you for paying attention.Strongly
disagreeStrongly
agree1234567

[Participants were next randomly assigned to either answer questions about Observability (Paramedic) first and Importance (Paramedic) second, or vice versa.]

[Observability (Paramedic)]

Imagine that you are able to follow **your coworker**, **another paramedic**, around for one week, <u>observing</u> everything they do, but you are unable to interact with them in any way.

How likely is it that by the end of the week, you will be able to tell whether this paramedic is **cowardly**?

Extremely						Extremely
unlikely						likely
1	2	3	4	5	6	7

[Repeated for the following characteristics in randomized order: Cowardly Nervous Lazy]

[Importance (Paramedic)]

For the next brief set of questions, please imagine that you are a paramedic. Think about the characteristics your coworker, another paramedic, might have.

In general, how <u>important</u> is it for you to know how [characteristic] another <u>paramedic</u> who you work with is?

Extremely						Extremely
unimportant						important
1	2	3	4	5	6	7

[Repeated for the following characteristics in randomized order: Cowardly Nervous Lazy]

[Meaning of Importance]

In your own words, what does it mean to say that a particular characteristic or trait is **important**? What makes a characteristic more versus less important?

[Demographics]

• Age

• Gender

[Debriefing]

[Participants were fully debriefed and had the opportunity to leave comments.]

APPENDIX F

CHARACTERISTIC SELECTION EXTENDED RESULTS

Participants

Data were collected from 176 undergraduate participants (37 male, 103 female, 36 other/unspecified) at Arizona State University. Participants were all 18 years or older, with a mean age of 21.29 years (SD = 3.77).

Fifty-five participants who did not pass the attention check item were excluded from analyses, leaving a total analyzed *N* of 121 (33 male, 86 female, 1 other). In the analyzed sample, participants had a mean age of 21.45 years (SD = 4.00). 104 participants identified as native English speakers. The 16 participants who did not identify as native English speakers had all spoken English for 5 or 6 years (M = 5.94years, SD = 0.25).

Characteristic Descriptives

Table F1

	Believed Observability		Believed Importance		
	Mean	SD	Mean	SD	
Unforgiving	3.71	1.70	5.51	1.32	
Mentally Weak*	4.03	1.80	4.52	1.76	
Aimless	4.05	1.70	4.34	1.73	
Cowardly^	4.20	1.62	4.21	1.64	
Spiteful	4.21	1.62	5.55	1.35	
Narrow-Minded	4.29	1.59	5.63	1.56	
Thoughtless	4.38	1.78	5.24	1.49	
Shallow	4.42	1.66	5.28	1.58	
Greedy	4.64	1.54	5.64	1.38	
Smug^	4.67	1.55	4.42	1.57	
Insecure	4.76	1.64	4.34	1.58	
Stubborn	4.81	1.67	4.69	1.45	
Selfish	4.93	1.56	5.75	1.36	
Pessimistic	4.96	1.75	4.89	1.64	
Careless	5.02	1.61	5.35	1.44	
Self-Centered	5.14	1.51	5.65	1.36	
Humorless	5.15	1.82	4.87	1.67	
Tense*	5.17	1.57	4.06	1.55	
Irresponsible	5.21	1.54	5.84	1.21	
Nervous	5.43	1.45	3.78	1.59	
Grouchy	5.45	1.53	5.16	1.47	
Clumsy	5.53	1.46	2.63	1.70	
Vulgar	5.55	1.54	4.17	1.86	
Bossy	5.64	1.40	4.99	1.47	
Lazy	5.74	1.43	4.57	1.70	
Messy*	5.96	1.42	4.26	1.80	
Loud-Mouthed^	6.09	1.24	4.40	1.68	

Note. Means and standard deviations for the believed observability and believed importance of each characteristic considered for selection. Characteristics are listed from lowest believed observability to highest believed observability for ease of viewing.

*Characteristics selected for Study 1.

^Characteristics selected for Study 2.

Figure F1



Characteristics' Average Believed Observability and Believed Importance

Note. Mean ratings for the believed observability and believed importance of each characteristic considered for selection for Studies 1 and 2. Characteristics are listed in order from lowest believed observability (left) to highest believed observability (right) for ease of viewing. Error bars indicate ± 1 standard error.

*Characteristics selected for Study 1.

^Characteristics selected for Study 2.

APPENDIX G

EXCLUSION OF PARTICIPANTS

Subsample Sizes Across Cells after Excluding Participants

Participants who failed any of the four attention checks were excluded from analyses (n = 41 in Study 1, n = 29 in Study 2). A number of additional responses from those participants who passed attention checks were unable to be rated by independent coders (see main text for further discussion) (n = 44 in Study 1, n = 34 in Study 2). See Tables G1 and G2 for subsample sizes by experimental condition.

Table G1

Condition			<i>n</i> Passing	<i>n</i> Rated by
		<i>n</i> Assigned to	Attention	Independent
Urgency	Observability	Condition	Checks	Coders
Low	Low	99	94	87
Low	Medium	96	91	85
Low	High	101	95	84
High	Low	103	95	88
High	Medium	100	91	86
High	High	101	93	85
	Total	600	559	515

Study 1 Subsample Sizes by Condition, Before and After Excluding Participants

Note. The "n Rated by Independent Coders" column includes only those participants who also passed attention checks.

Table G2

Condition			<i>n</i> Passing	<i>n</i> Rated by
		n Assigned to	Attention	Independent
Urgency	Observability	Condition	Checks	Coders
Low	Low	103	95	90
Low	Medium	98	96	91
Low	High	100	95	90
High	Low	100	95	88
High	Medium	100	97	93
High	High	100	94	86
	Total	601	572	538

Study 2 Subsample Sizes by Condition, Before and After Excluding Participants

Note. The "n Rated by Independent Coders" column includes only those participants who also passed attention checks.

Tests for Nonrandom Loss of Participants Across Conditions

Although participants were randomly assigned to the manipulation condition, the exclusion of participants may threaten this random assignment if there is non-random loss of participants across conditions. To investigate any possible effects of the exclusion of participants due to failed attention checks, following Jurs and Glass (1971), I ran a 2 (Participant Exclusion vs. Inclusion) by 6 (Condition Cell) between-subjects MANOVA, predicting the following dependent variables: Felt Urgency, Believed Observability, Believed Importance, and Believed Manipulativeness (i.e., the exploratory measures assessing beliefs about whether affordance testing is manipulative, sneaky, etc.). These analyses attempt to provide a better understanding of whether the experiment is compromised by internal or external invalidity due to potentially non-random participant exclusion.

Note, however, that participants were excluded from analyses due to lack of attention to the study measures. Therefore, significant differences in this analysis may be due to "true" differences across groups in the construct being measured (e.g., believed observability, felt urgency), or significant differences may indicate that the excluded participants are indeed not paying attention to the questions being asked and therefore their "arbitrary" responses may appear systematically different from participants who are paying attention to questions.

Because relatively few participants were excluded due to failed attention checks $(n_{excluded} = 70 \text{ versus } n_{included} = 1131)$, to increase statistical power to detect any possible main effect or interactive effect of Participant Exclusion, I conducted the analysis pooling participants across Studies 1 and 2. In light of unequal sample sizes, I ran Levene's test for equality of variance, and found that the test was statistically significant for Felt Urgency (Levene statistic (11, 1189) = 8.13, p < .001). Therefore, we must interpret results regarding Felt Urgency with caution. Levene's tests for the other dependent variables were not statistically significant (all ps > .09).

Results of the focal tests (i.e., tests for a main effect of Participant Exclusion or an interaction between Participant Exclusion and Condition Cell) indicate a significant interaction between Participant Exclusion and Condition Cell to predict Felt Urgency (Table G3). Again, we must interpret this result with caution due to the violation of the assumption of homogeneity of variance, but such a significant result indicates a potential threat to internal invalidity (Jurs & Glass, 1971). Specifically, participants' feelings of

urgency may not vary across conditions in the same ways for excluded participants as they do for included participants.

Table G3

MANOVA Assessing Effects of Participant Exclusion and Condition Cell on Felt Urgency, Believed Observability, Believed

Importance, and Believed Manipulativeness

		Type III Sum	10	Mean	-		
Independent Variable	Dependent Variable	of Squares	df	Square	F	р	Partial- η^2
Participant Exclusion	Felt Urgency	4.33	1	4.33	2.81	.09	0.002
	Believed Observability	0.29	1	0.29	0.16	.69	0.00
	Believed Importance	4.12	1	4.12	3.13	.08	0.003
	Believed Manipulativeness	0.13	1	0.13	0.08	.78	0.00
Condition Cell	Felt Urgency	17.04	5	3.41	2.21	.05	0.01
	Believed Observability	32.05	5	6.41	3.59	.003	0.01
	Believed Importance	3.17	5	0.63	0.48	.79	0.002
	Believed Manipulativeness	7.07	5	1.41	0.89	.49	0.004
Participant Exclusion X	Felt Urgency	55.61	5	11.12	7.20	<.001	0.03
Condition Cell	Believed Observability	3.66	5	0.73	0.41	.84	0.002
	Believed Importance	1.28	5	0.26	0.19	.97	0.001
	Believed Manipulativeness	3.58	5	0.72	0.45	.81	0.002
Error	Felt Urgency	1837.38	1189	1.55			
	Believed Observability	2125.68	1189	1.79			
	Believed Importance	1566.76	1189	1.32			
	Believed Manipulativeness	1886.75	1189	1.59			

Note. A 2 (Participant Exclusion vs. Inclusion) by 6 (Condition Cell) MANOVA aiming to assess whether there was nonrandom loss of participants across conditions. Levene's test for equality of variance indicated that homogeneity of variance assumption was violated for Felt Urgency, and thus results must be interpreted with caution.

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Finally, I conducted another 2 (Participant Exclusion vs. Inclusion) by 6 (Condition Cell) between-subjects MANOVA, this time predicting our principal dependent variables (both self-rated and independently coded information-seeking strategy) to see whether the pattern of results differed for excluded versus included participants. I again pooled participants across Studies 1 and 2. Levene's test for equality of variance was statistically significant for both self-rated information-seeking strategy (Levene statistic (11, 1099) = 2.08, p = .02) and independently coded informationseeking strategy (Levene statistic (11, 1099) = 9.11, p = < .001). Therefore, we must interpret results with caution. Results of focal tests indicated that neither Participant Exclusion nor the interaction between Participant Exclusion and Condition Cell significantly predicted either dependent variable (Table G4). Therefore, we do not seem to see a different pattern of results due to Participant Exclusion for our principal dependent variables.

Table G4

MANOVA Assessing Effects of Participant Exclusion and Condition Cell on Self-Rated and Independently Coded Information-

Seeking Strategies

-	Independent Variable	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	р	Partial- η^2
-	Participant Exclusion	Self-Rated Information-Seeking Strategy Independently Coded Information-	6.10	1	6.10	1.43	.23	0.001
		Seeking Strategy	0.74	1	0.74	0.22	.64	0.00
	Condition Cell	Self-Rated Information-Seeking Strategy Independently Coded Information-	92.00	5	18.40	4.32	< .001	0.02
<u> </u>		Seeking Strategy	87.72	5	17.54	5.15	< .001	0.02
27	Participant Exclusion X Condition Cell	Self-Rated Information-Seeking Strategy Independently Coded Information-	36.28	5	7.26	1.70	.13	0.01
		Seeking Strategy	15.75	5	3.15	0.92	.46	0.004
	Error	Self-Rated Information-Seeking Strategy Independently Coded Information-	4682.81	1099	4.26			
_		Seeking Strategy	3745.08	1099	3.41			

Note. A 2 (Participant Exclusion vs. Inclusion) by 6 (Condition Cell) MANOVA aiming to assess whether there was nonrandom loss of participants across conditions. Levene's test for equality of variance indicated that homogeneity of variance assumption was violated for both self-rated and independently coded information-seeking strategies, and thus results must be interpreted with caution.

APPENDIX H

IRB EXEMPTION LETTER



EXEMPTION GRANTED

Steven Neuberg Psychology 480/965-7845 STEVEN.NEUBERG@asu.edu

Dear Steven Neuberg:

On 2/2/2018 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Affordance Testing 2
Investigator:	Steven Neuberg
IRB ID:	STUDY00007672
Funding:	Name: Arizona State University (ASU), Funding
	Source ID: Neuberg Foundation account: MG(1007
Grant Title:	
Grant ID:	
Documents Reviewed:	Consent_MTurk.pdf, Category: Consent Form;
	• Survey Materials2.pdf, Category: Measures (Survey
	questions/Interview questions /interview guides/focus
	group questions);
	• Consent_Undergrad2.pdf, Category: Consent Form;
	Protocol2.docx, Category: IRB Protocol;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 2/2/2018.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Cari Pick Cari Pick

APPENDIX I

STUDY 1 MATERIALS

[Informed Consent]

[Participants first provided informed consent.]

[Participants were randomly assigned to read one vignette from the 2 situational urgency (high (one week), low (two months)) x 3 characteristic observability (low (mentally weak), medium (tense), high (messy)) between-subjects design.]

[Vignette]

Imagine you are working as a **paramedic**. You are the shift leader, and you have been working with the same shift team for several years.

The members of the team all rely on each other to work hard and prep the rig and your equipment so that it's fully ready for every call. When you're out on a call, you need to rely on everyone in your team to not "crack" under the pressure of the call, to not be nervous or rigid when they need to think quickly, and to not be sloppy and disorganized with their equipment and tools so they can deal with any emergency you might be called to.

Recently, one of your paramedics had to move to another city. A new paramedic was just hired in their place. This new paramedic is beginning their probationary period on the team, and will be on probation **[until the end of the week/for six months]**. During the probationary period, the new paramedic mostly shadows the other paramedics on the team. At the end of this probationary period, you need to determine whether they can be relied on to be mentally strong, flexible, and organized, or else they cannot remain on your team.

By the **end of [the week/six months]**, you need to determine if your new paramedic is **[mentally weak/tense/messy]**. You need to know if your team can count on the new paramedic... yet you barely know this person!

[Reading Comprehension]

Please answer the following questions based on the scenario you just read.

How long will the new paramedic's probationary period last?

- Until the end of the week
- Six months
- Two years

Of the following, which characteristic do you need to assess before the end of the probationary period?

- How mentally weak the paramedic is
- How **tense** the paramedic is
- How **messy** the paramedic is

[Responses presented in randomized order.]

[Felt Urgency]

[Participants responded to the two Felt Urgency questions in randomized order.]

How **urgently** do you feel that you need to find out whether the new paramedic is [mentally weak/tense/messy]?

Not at all urgently						Extremely urgently
1	2	3	4	5	6	7
How much tin	ne pressure	e do you feel	to find out q	uickly wheth	er the new j	paramedic is
[mentally weal	k/tense/mes	ssy]?				
Not time						A great deal

Not time						A great deal
pressure at						of time
all						pressure
1	2	3	4	5	6	7

[Information-Seeking Strategy]

What will you do to find out if they are [mentally weak/tense/messy], given that you have [until the end of the week/six months]?

[Attention Check]

Please select	"Extremely	negative"	on the scale	below. Than	k you for pa	ying attention.
Extremely						Extremely
negative						positive
1	2	3	4	5	6	7

[Observation vs. "Testing" Explanation]

We know that sometimes people find out what other people are like by **observing** them. But, from past research, we also know that sometimes people cannot find something out just by observing. Sometimes, they need to do something more active--they need to do some form of "**test**" to find out what the other person is like. This active testing is very common in our everyday interactions with new people and with current friends and partners, even though people don't often think of themselves as "testing" other people.

The way you find out what another person is like, then, may fall somewhere on the continuum from just observing them, on one end, to doing a very active test, on the other end.

For example, imagine you had just started dating someone new. You want to find out if this new dating partner will be romantically faithful.

On one end, you may **simply observe** them to see if they seem like they will be faithful. However, it may be difficult to observe whether someone seems romantically faithful.

So, you may do something all the way on the other end of the continuum--on the **actively** "**testing**" end. For example, you may ask your friend to flirt with him or her to see how he or she will respond.

Or, you may do something that falls **in between** simple observation or actively testing. For example, you may arrange to go somewhere with your new dating partner where there is the opportunity for his/her "eyes to wander", and then you observe how they behave in this situation.

[Participants' Self-Rated Information-Seeking Strategies]

Earlier, we asked how you would find out if a person had a specific characteristic. On the next page, you will be asked to rate your response, to tell us where that response falls on the continuum from "observation" to "active testing" (or in between).

You were asked: How you would find out if the new paramedic is [mentally weak/tense/messy]?

You said: "[participant's response inserted here]"

How would you rate this response?

						ACTIVE
OBSERVATION						"TESTING"
1	2	3	4	5	6	7

[Participants were randomly assigned to answer questions about Believed Observability first and Believed Importance second, or vice versa.]

[Believed Observability]

[Participants responded to the two Believed Observability questions in randomized order.]

Imagine you have [until the end of the week/six months] to <u>simply observe</u> the new paramedic during their shifts.

[At the end of the week/after six months], how likely is it that you will be able to tell whether the new paramedic is [mentally weak/tense/messy]?

Extremely						Extremely
unlikely						likely
1	2	3	4	5	6	7

If you could **<u>only watch</u>** the new paramedic at work—without interacting with them in any way—[until the end of the week/for six months], how likely is it that you would be

able to tell wheth	her the parar	nedic is [mei	ntally weak/te	ense/messy]	[by the en	d of the
Extremely unlikely 1	2	3	4	5	6	Extremely likely 7
		[Believ	ed Importanc	e]		
[Participants resp	ponded to th	e two Believ	ed Importance	e questions i	n random	ized order.]
How important i Not at all	s it to know	whether the	new paramec	lic is [mental	ly weak/te	ense/messy]? Extremely
1	2	3	4	5	6	7
How much of a p paramedic cowo Not a problem at all 1	problem woo rker is [men 2	uld it be for y tally weak/te 3	you if you we ense/messy]? 4	ere wrong abo	out whethe	er your new Very much a problem 7
		[Atte	ntion Check]			
Please select "Ex Extremely negative	stremely pos	sitive" on the	scale below.	Thank you f	for paying	attention. Extremely
1	2	3	4	5	6	7
	[Expl	oratory: Like	elihood of Us	ing Strategy]		
You were asked: weak/tense/mes	: How you w sy] ?	ould find ou	t if the new p	paramedic is	[mentally	

You said: "[participant's response inserted here]"

If you were in the described scenario and did have to find out if they were [mentally							
weak/tense/me	ssy], <u>how l</u>	ikely would	you be to act	<u>ually do wha</u>	<u>t you wrote</u> ?		
Extremely						Extremely	
unlikely						likely	
1	2	3	4	5	6	7	

[Exploratory: Views of Tester]

[Views of Tester items were presented in randomized order.]

Now imagine that **someone else** is using these sorts of active "testing" techniques to try to find out if *you* have a certain characteristic.

How much do y Not at all	erson?	Very much				
1	2	3	4	5	6	7
How manipula Not at all manipulative 1	tive do you	think this p	erson is? 4	5	6	Extremely manipulative 7
How trustwort Extremely untrustworthy 1	hy do you t 2	think this pe	rson is? 4	5	6	Extremely trustworthy 7
How likable is Extremely unlikable 1	this person ⁶ 2	? 3	4	5	6	Extremely likable 7
How sneaky is Not at all sneaky 1	this person	? 3	4	5	6	Extremely sneaky 7

[Demographics]

- Have you ever served as a paramedic or emergency medical technician (EMT)? Yes/No
- Gender
- Sexual orientation
- Age
- Number of years speaking English
- Relationship status
- Politically liberal/conservative
- Race
- Education level attained

[Debriefing]

[Participants were fully debriefed and had the opportunity to leave comments.]

APPENDIX J

EXPLORATORY ANALYSES

Experience in the Vignette Contexts

Study 1 : Paramedic Context

Participants were asked, "Have you ever served as a paramedic or emergency medical technician (EMT)?" Seven participants responded "yes," 550 responded "no," and two responded "not sure." Here, two principal analyses were conducted again, using only the subsample of participants who responded "no" to ever having served as a paramedic or EMT. The conclusions of these analyses were consistent with the conclusions drawn when using the entire sample. In a 2 (urgency condition) x 3 (observability condition) between-subjects ANOVA predicting self-rated information-seeking strategy, there were significant main effects of urgency and observability conditions, but no significant interaction (Table J2). In an OLS linear regression, believed observability was a significant predictor of self-rated information-seeking strategy, but felt urgency and the interaction were not (predictors were centered and centered variables were used to create interaction term) (Table J3).

Table J1

Study 1 Subsample Size by Cell, Excluding Paramedics

	Observability					
Urgency	Low	Medium	High			
Low	93	89	94			
High	93	91	90			

Note. Number of participants per condition when only including those who responded "No" to the question "Have you ever served as a paramedic or emergency medical technician (EMT)?"

Table J2

Study 1 ANOVA Predicting Self-Rated Information-Seeking Strategy, Excluding

Paramedics

	Type III Sum of Squares	df	Mean Square	F	р	Partial- η^2
Urgency	18.60	1	18.60	4.33	.04	0.01
Observability	73.87	2	36.94	8.61	<.001	0.03
Urgency X Observability	5.01	2	2.50	0.58	.56	0.00
Error	2334.72	544	4.29			

Note. 2 (urgency condition) x 3 (observability condition) between-subjects ANOVA predicting self-rated information-seeking strategy, including only participants who responded "No" to the question "Have you ever served as a paramedic or emergency medical technician (EMT)?"

Table J3

Study 1 Regression Predicting Self-Rated Information-Seeking Strategy, Excluding

Paramedics

	Unstan	dardized	_		95% CI		
	b	SE	t	р	LL	UL	
Felt Urgency	0.04	0.07	0.52	.60	-0.11	0.18	
Believed Observability	-0.31	0.07	-4.53	<.001	-0.44	-0.17	
Felt Urgency X							
Believed Observability	0.03	0.05	0.65	.52	-0.07	0.13	

Note. OLS linear regression predicting self-rated information-seeking strategy from selfreported felt urgency, believed observability, and their interaction (df = 546). Each predictor was mean-centered and the interaction term was created from centered predictors. Analysis includes only participants who responded "No" to the question "Have you ever served as a paramedic or emergency medical technician (EMT)?" Regression coefficients are unstandardized. Lower limits (LL) and upper limits (UL) for 95% confidence intervals (CI) for the unstandardized regression coefficients are shown.

Study 2: Social Club Context

Participants were asked, "Have you ever been in an exclusive, high-end social group?" Thirty-eight participants responded "yes," 487 responded "no," and 47 responded "not sure." Here, two principal analyses were conducted again, using only the subsample of participants who responded "no" to ever having been in an exclusive, high-end social group. The conclusions of these analyses were consistent with the conclusions drawn when using the entire sample. In a 2 (urgency condition) x 3 (observability condition) between-subjects ANOVA predicting self-rated information-seeking strategy, there were significant main effects of urgency and observability conditions, but no significant interaction (Table J5). In an OLS linear regression, felt urgency and believed observability were significant predictors of self-rated information-seeking strategy, but the interaction was not (predictors were centered and centered variables were used to create interaction term) (Table J6).

Table J4

Study 2	Subsampl	e Size by	Cell, E	Excluding	High-End	Social	Group	Memb	ers
~	1	~			0				

	Observability						
Urgency	Low	Medium	High				
Low	80	82	84				
High	82	77	82				

Note. Number of participants per condition when only including those who responded "No" to the question "Have you ever been in an exclusive, high-end social group?"

Table J5

Study 2 ANOVA Predicting Self-Rated Information-Seeking Strategy, Excluding High-

	Type III Sum of Squares	df	Mean Square	F	р	Partial- η^2
Urgency	24.65	1	24.65	5.74	.02	0.01
Observability	47.96	2	23.98	5.58	.004	0.02
Urgency X Observability	6.05	2	3.03	0.70	.49	0.00
Error	2065.72	481	4.29			

End Social Group Members

Note. 2 (urgency condition) x 3 (observability condition) between-subjects ANOVA predicting self-rated information-seeking strategy, including only participants who responded "No" to the question "Have you ever been in an exclusive, high-end social group?"

Table J6

Study 2 Regression Predicting Self-Rated Information-Seeking Strategy, Excluding High-

End Social Group Members

	Unstan	dardized			95% CI		
	b	SE	t	р	LL	UL	
Felt Urgency	0.18	0.06	2.81	.005	0.05	0.30	
Believed Observability	-0.37	0.07	-5.58	<.001	-0.50	-0.24	
Felt Urgency X							
Believed Observability	0.00	0.04	0.09	.93	-0.08	0.09	

Note. OLS linear regression predicting self-rated information-seeking strategy from self-reported felt urgency, believed observability, and their interaction (df = 483). Each predictor was mean-centered and the interaction term was created from centered predictors. Analysis includes only participants who responded "No" to the question "Have you ever been in an exclusive, high-end social group?" Regression coefficients are unstandardized. Lower limits (LL) and upper limits (UL) for 95% confidence intervals (CI) for the unstandardized regression coefficients are shown.

Next, I explored whether believed observability or felt urgency might have had a different effect on information-seeking strategy for participants who had been in an exclusive, high-end social group compared to participants who had not. I ran a 2 (Experience in Context) by 2 (urgency condition) by 3 (observability condition) between-subjects ANOVA predicting self-rated information-seeking strategy. The Experience in Context variable compared participants who responded "Yes" (n = 38) to the question "Have you ever been in an exclusive, high-end social group?" with participants who responded "No" (n = 487) (excluding participants who responded "Not sure," n = 47). In light of unequal sample sizes, I ran Levene's test for equality of variance, and found that the test was not statistically significant (Levene statistic (11, 513) = 1.34, p = .20), indicating that the homogeneity of variances assumption was not violated.

The analysis showed that there was a marginally significant interaction between felt urgency and whether participants had been in an exclusive, high-end social group or not (Table J7). Specifically, under higher felt urgency, participants who had been in such a social group were more likely to report affordance-testing than were participants who had not been in such a social group (Figure J1). There was also a significant main effect of urgency, but surprisingly, there was no significant main effect of observability, which might be due to the different pattern of information-seeking strategies across observability conditions reported by participants in the low felt urgency condition who had been in an exclusive social group.

Table J7

ANOVA Predicting Self-Rated Information-Seeking Strategy from Experience in Context

	Type III Sum of Squares	df	Mean Square	F	р	Partial- η^2
Experience	2.18	1	2.18	0.52	.47	0.001
Urgency	37.13	1	37.13	8.83	.003	0.02
Observability	5.35	2	2.67	0.64	.53	0.002
Experience X Urgency	13.36	1	13.36	3.18	.08	0.01
Experience X Observability	1.44	2	0.72	0.17	.84	0.001
Urgency X Observability	1.00	2	0.50	0.12	.89	0.00
Experience X Urgency X						
Observability	3.20	2	1.60	0.38	.68	0.001
Error	2157.21	513	4.21			

and Conditions in Study 2

Note. A 2 (Experience) by 2 (urgency condition) by 3 (observability condition) betweensubjects ANOVA predicting self-rated information-seeking strategy. The Experience variable compared participants who responded "Yes" (n = 38) to the question "Have you ever been in an exclusive, high-end social group?" with participants who responded "No" (n = 487) (excluding participants who responded "Not sure," n = 47).



by Conditions



Note. Average levels of self-rated information-seeking strategy for participants who have been in an exclusive, high-end social group ("Experience") versus participants who have not ("None") by Urgency and Observability conditions.

"Study" as a Factor: Pooling Participants across Studies

Because participants were randomly assigned to participate in Study 1 or Study 2, I was able to conduct exploratory analyses pooling participants from both studies to investigate whether the factors affecting information-seeking strategy had different effects across studies. I conducted a 2 (urgency condition) by 3 (observability condition) by 2 (Study) between-subjects ANOVA for self-rated information-seeking strategy (Table J8) and again for independently coded information-seeking strategy (Table J9). Analyses showed a significant main effect of Study for both self-rated and independently coded information-seeking strategy, such that participants in Study 2 were significantly more likely to report affordance testing than participants in Study 1 (selfrated information-seeking strategy: $M_{Study1} = 3.42$, $SD_{Study1} = 2.11$; $M_{Study2} = 4.03$, SD_{Study2} = 2.06; independently coded information-seeking strategy: $M_{Study1} = 2.88$, $SD_{Study1} = 2.04$; $M_{Study2} = 3.32$, $SD_{Study2} = 1.67$). These differences across studies may be attributed to several possible causes, including the different imagined contexts of the vignettes (a work setting versus a social club setting) or the different characteristics of interest.

There were no significant two-way or three-way interactions between Study and the condition variables for either dependent variable, with the exception of a significant interaction between Study and observability condition, only on independently coded information-seeking strategy ($F(2, 1041) = 4.99, p = .01, partial - \eta^2 = 0.01$). Specifically, for the independently coded information-seeking strategy, relative to levels of affordance testing in the "low" and "high" observability conditions, Study 1 participants in the "medium" observability condition were more likely to report affordance-testing than were Study 2 participants in the "medium" observability condition. This interaction is difficult to interpret, given that participants' observability beliefs did not significantly differ between the "low" and "medium" observability conditions in either study.

Table J8

	Type III					
	Sum of		Mean			
	Squares	df	Square	F	р	Partial- η^2
Urgency	77.06	1	77.06	18.38	<.001	0.02
Observability	110.31	2	55.16	13.15	<.001	0.02
Study	104.74	1	104.74	24.98	<.001	0.02
Urgency X Observability	4.27	2	2.13	0.51	.61	0.001
Urgency X Study	4.93	1	4.93	1.18	.28	0.001
Observability X Study	11.80	2	5.90	1.41	.25	0.003
Urgency X Observability						
X Study	5.78	2	2.89	0.69	.50	0.001
Error	4692.00	1119	4.19			

ANOVA Predicting Self-Rated Information-Seeking Strategy from Conditions and Study

Note. A 2 (urgency condition) by 3 (observability condition) by 2 (study) betweensubjects ANOVA for self-rated information-seeking strategy, pooling across participants in both studies.

Table J9

ANOVA Predicting Independently Coded Information-Seeking Strategy from Conditions

and Study

	Type III Sum of		Mean			
	Squares	df	Square	F	р	Partial- η^2
Urgency	24.13	1	24.13	7.31	.001	0.01
Observability	122.23	2	61.12	18.51	<.001	0.03
Study	53.42	1	53.42	16.18	<.001	0.02
Urgency X Observability	3.25	2	1.62	0.49	.61	0.001
Urgency X Study	2.18	1	2.18	0.66	.42	0.001
Observability X Study	32.94	2	16.47	4.99	.01	0.01
Urgency X Observability						
X Study	5.23	2	2.61	0.79	.45	0.002
Error	3437.44	1041	3.30			

Note. A 2 (urgency condition) by 3 (observability condition) by 2 (study) betweensubjects ANOVA for independently coded information-seeking strategy, pooling across participants in both studies.

Manipulative

Exploratory items assessed participants' beliefs about how manipulative they view affordance testing and its practitioners to be. Four questions asked how manipulative, trustworthy (reverse-coded), likable (reverse-coded), and sneaky they viewed a person to be if that person used active "testing" techniques to try to find out if the participant had a certain characteristic, and a fifth question asked how much they would want to maintain a relationship with that person (see Appendix I or Appendix L for exact wording of items). All items were presented in randomized order, were measured on 7-point Likert-type scales, and were scored or reverse-coded such that higher scores indicated a greater belief that affordance testing is manipulative. All five items were highly correlated and were thus averaged to form a composite "believed manipulativeness" score (Cronbach's $\alpha = .87$, pooling across both studies; Cronbach's α = .88 in Study 1; Cronbach's α = .86 in Study 2). Average levels of believed manipulativeness were significantly lower in Study 1 (M = 3.79, SD = 1.29) compared to Study 2 (M = 4.33, SD = 1.18) (t (1129) = -7.31, p < .001, 95% CI [-0.68, -0.39], Cohen's d = -0.43).

Study 1: Paramedic Context

In Study 1, participants' reported "believed manipulativeness" was significantly negatively correlated with their self-rated information-seeking strategy, such that the more a participant indicated that a person who is affordance testing is manipulative, the less likely they were to have reported affordance testing as their own self-rated information-seeking strategy (r (557) = -.22, p < .001) (Figure J2). The same pattern of results was seen for believed manipulativeness and independently coded information-seeking strategy (r (513) = -.14, p = .002) (Figure J3).

Figure J2

Study 1 Relationship Between Believed Manipulativeness and Self-Rated Information-



Seeking Strategy

Note. The relationship between believed manipulativeness and participants' self-rated information seeking strategy. Believed manipulativeness was measured on a 7-point Likert-type scale, with higher scores indicating greater belief that affordance testing is manipulative.

Study 1 Relationship Between Believed Manipulativeness and Independently Coded



Information-Seeking Strategy

Note. The relationship between believed manipulativeness and independently coded information seeking strategy. Believed manipulativeness was measured on a 7-point Likert-type scale, with higher scores indicating greater belief that affordance testing is manipulative.

Study 2: Social Club Context

In Study 2, participants' reported "believed manipulativeness" was significantly negatively correlated with their self-rated information-seeking strategy, such that the more a participant indicated that a person who is affordance testing is manipulative, the less likely they were to have reported affordance testing as their own self-rated information-seeking strategy (r(570) = -.13, p = .003) (Figure J4). The same pattern of results was seen for believed manipulativeness and independently coded information-seeking strategy, but it was marginally significant (r(536) = -.08, p = .06) (Figure J5).

Study 2 Relationship Between Believed Manipulativeness and Self-Rated Information-





Note. The relationship between believed manipulativeness and participants' self-rated information seeking strategy. Believed manipulativeness was measured on a 7-point Likert-type scale, with higher scores indicating greater belief that affordance testing is manipulative.

Study 2 Relationship Between Believed Manipulativeness and Independently Coded



Information-Seeking Strategy

Note. The relationship between believed manipulativeness and participants' self-rated information seeking strategy. Believed manipulativeness was measured on a 7-point Likert-type scale, with higher scores indicating greater belief that affordance testing is manipulative.

Effects of Participant Sex

Study 1: Paramedic Context

In Study 1, I explored whether participant sex might affect how believed observability or felt urgency affect information-seeking strategy. I ran a 2 (participant sex) by 2 (urgency condition) by 3 (observability condition) between-subjects ANOVA predicting self-rated information-seeking strategy (Table J10). Results indicated that there was a marginally significant interaction between participant sex and felt urgency, such that male and female participants were equally likely to report affordance testing in the high urgency condition, but that male participants were more likely than female

participants to report affordance testing in the low urgency condition (Figure J6).

Additionally, there was a significant main effect of participant sex, such that males were

more likely to report affordance testing than were females, in general ($M_{male} = 3.59$,

 $SD_{male} = 0.13; M_{female} = 3.24, SD_{female} = 0.12).$

Table J10

Study 1 ANOVA Predicting Self-Rated Information-Seeking Strategy from Sex and from

Conditions

	Type III Sum of		Mean			
	Squares	df	Square	F	р	Partial- η^2
Urgency	22.74	1	22.74	5.35	.02	0.01
Observability	73.01	2	36.50	8.59	<.001	0.03
Sex	19.22	1	19.22	4.52	.03	0.01
Urgency X Observability	6.04	2	3.02	0.71	.49	0.003
Urgency X Sex	13.60	1	13.60	3.20	.07	0.01
Observability X Sex	2.01	2	1.00	0.24	.79	0.001
Urgency X Observability						
X Sex	9.29	2	4.65	1.09	.37	0.004
Error	2300.02	541	4.25			

Note. A 2 (urgency condition) by 3 (observability condition) by 2 (participant sex) between-subjects ANOVA for self-rated information-seeking strategy.

Study 1 Average Self-Rated Information-Seeking Strategy by Participant Sex and by

Conditions



Note. Average levels of self-rated information-seeking strategy for male participants versus female participants by Urgency and Observability conditions.

Study 2: Social Club Context

In Study 2, I again ran a 2 (participant sex) by 2 (urgency condition) by 3 (observability condition) between-subjects ANOVA predicting self-rated informationseeking strategy (Table J11). Results indicated that there was a significant interaction between participant sex and felt urgency, such that again male and female participants were equally likely to report affordance testing in the high urgency condition, but that male participants were more likely than female participants to report affordance testing in the low urgency condition (Figure J7). Additionally, there was a marginally significant main effect of participant sex, such that males were again more likely to report

affordance testing than were females, in general ($M_{male} = 4.18$, $SD_{male} = 0.13$; $M_{female} =$

 $3.48, SD_{female} = 0.11$).

Table J11

Study 2 ANOVA Predicting Self-Rated Information-Seeking Strategy from Sex and from

Conditions

	Type III Sum of		Mean			
	Squares	df	Square	F	р	Partial- η^2
Urgency	55.79	1	55.79	13.69	<.001	0.02
Observability	43.92	2	21.96	5.39	.005	0.02
Sex	12.19	1	12.19	2.99	.08	0.01
Urgency X Observability	3.89	2	1.95	0.48	.62	0.002
Urgency X Sex	16.14	1	16.14	3.96	.05	0.01
Observability X Sex	2.39	2	1.19	0.29	.75	0.001
Urgency X Observability						
X Sex	6.84	2	3.42	0.84	.43	0.003
Error	2241.52	550	4.08			

Note. A 2 (urgency condition) by 3 (observability condition) by 2 (participant sex) between-subjects ANOVA for self-rated information-seeking strategy.



Conditions



Note. Average levels of self-rated information-seeking strategy for male participants versus female participants by Urgency and Observability conditions.

APPENDIX K

BELIEVED IMPORTANCE

Study 1

A one-way between-subjects ANOVA revealed significant differences in believed importance across characteristics ($F(2, 556) = 16.47, p < .001, \eta^2 = .06$). Post hoc Tukey HSD comparisons revealed that *mentally weak* (M = 6.37, SD = 0.75) was believed to be significantly more important than *tense* (M = 6.12, SD = 0.86) (p = .04, 95% CI [0.01, 0.49]), and *tense* was believed to be significantly more important than *messy* (M = 5.80,SD = 1.24) (p = .004, 95% CI [0.09, 0.56]).

An OLS linear regression analysis was conducted, predicting self-rated information-seeking strategy from believed importance, believed observability, felt urgency, and all the two-way and three-way interactions between them (all predictors were centered and interaction terms created from centered predictors). The analysis was then repeated, predicting independently coded information-seeking strategy. See Table K1 for results.

Table K1

Study 1 Regressions of Felt Urgency, Believed Importance, Believed Observability, and all Two- and Three-Way Interactions on

Information-Seeking Strategy

						Info	rmation-	Seeking Strategy						
			Participants' Self-Rating						Independent Coding					
		Unstand	lardized			95% CI		Unstand	Unstandardized			95% CI		
		b	SE	t	р	LL	UL	b	SE	t	р	LL	UL	
	Felt Urgency	0.05	0.07	0.63	.53	-0.10	0.19	0.03	0.07	0.45	.65	-0.11	0.18	
	Believed Observability	-0.30	0.07	-4.58	< .001	-0.43	-0.17	-0.33	0.07	-4.91	< .001	-0.46	-0.20	
159	Believed Importance	0.02	0.09	0.27	.79	-0.16	0.21	-0.01	0.10	-0.08	.94	-0.20	0.18	
	Urgency X Observability	0.03	0.05	0.68	.50	-0.06	0.13	0.05	0.05	1.00	.32	-0.05	0.15	
	Urgency X Importance	-0.03	0.07	-0.45	.65	-0.18	0.11	0.00	0.08	-0.002	>.99	-0.15	0.15	
	Importance X Observability	0.03	0.06	0.47	.64	-0.09	0.14	0.06	0.06	0.96	.34	-0.06	0.19	
	Urgency X Observability X Importance	-0.04	0.04	-0.84	.40	-0.12	0.05	-0.03	0.05	-0.63	.53	-0.12	0.06	

Note. An OLS linear regression analysis was conducted for self-rated information-seeking strategy and again for independently coded information-seeking strategy (df = 551). Each predictor was mean-centered, and interaction terms were created from centered variables. Regression coefficients are unstandardized. Lower limits (LL) and upper limits (UL) for 95% confidence intervals (CI) for the unstandardized regression coefficients are shown.

Study 2

A one-way between-subjects ANOVA revealed significant differences in believed importance across characteristics ($F(2, 569) = 3.31, p = .04, \eta^2 = .01$). Post hoc Tukey HSD comparisons revealed that, as intended, the believed importance of *loud-mouthed* (M = 5.54, SD = 1.18) was not significantly different from the believed importance of *cowardly* (M = 5.36, SD = 1.29) (p = .31, 95% CI [-0.11, 0.47]) or *smug* (M = 5.68, SD =1.10) (p = .52, 95% CI [-0.42, 0.15]). However, *smug* was believed to be significantly more important than *cowardly* (p = .03, 95% CI [0.03, 0.60]).

An OLS linear regression analysis was conducted, predicting self-rated information-seeking strategy from believed importance, believed observability, felt urgency, and all the two-way and three-way interactions between them (all predictors were centered and interaction terms created from centered predictors). The analysis was then repeated, predicting independently coded information-seeking strategy. See Table K2 for results.

Table K2

Study 2 Regressions of Felt Urgency, Believed Importance, Believed Observability, and all Two- and Three-Way Interactions on

Information-Seeking Strategy

					eeking Strategy								
			Participants' Self-Rating						Independent Coding				
		Unstand	lardized			95%	6 CI	Unstan	dardized		-	95% CI	
		b	SE	t	р	LL	UL	b	SE	t	р	LL	UL
	Felt Urgency	0.16	0.06	2.54	.01	0.04	0.29	0.07	0.05	1.30	.20	-0.04	0.17
	Believed Observability	-0.32	0.06	-5.15	< .001	-0.44	-0.20	-0.27	0.05	-5.23	<.001	-0.38	-0.17
161	Believed Importance	-0.001	0.08	-0.01	.99	-0.15	0.15	-0.06	0.07	-0.84	.40	-0.18	0.07
	Urgency X Observability	0.002	0.04	0.06	.96	-0.08	0.09	0.02	0.04	0.62	.54	-0.05	0.09
	Urgency X Importance	-0.06	0.04	-1.42	.16	-0.14	0.02	-0.09	0.03	-2.59	.01	-0.15	-0.02
	Importance X Observability	-0.02	0.05	-0.39	.70	-0.12	0.08	0.01	0.04	0.22	.82	-0.08	0.10
	Urgency X Observability X Importance	-0.02	0.02	-1.02	.31	-0.07	0.02	0.01	0.02	0.29	.77	-0.03	0.05

Note. An OLS linear regression analysis was conducted for self-rated information-seeking strategy and again for independently coded information-seeking strategy (df = 564). Each predictor was mean-centered, and interaction terms were created from centered variables. Regression coefficients are unstandardized. Lower limits (LL) and upper limits (UL) for 95% confidence intervals (CI) for the unstandardized regression coefficients are shown.

APPENDIX L

STUDY 2 MATERIALS

[Informed Consent]

[Participants first provided informed consent.]

[Participants were randomly assigned to read one vignette from the 2 situational urgency (high (one week), low (two months)) x 3 characteristic observability (low (cowardly), medium (smug), high (loud-mouthed)) between-subjects design.]

[Vignette]

Imagine you are part of an **exclusive, high-end social club**. The group members are all good friends and hang out informally quite often. You also have several large social events throughout the year, and once a year you do a large fundraiser to raise money for those events.

You're in charge of the organizing committee for the fundraiser this year. All the group members attend the fundraising event, and spend the evening networking with invited guests who you all hope will donate money to the group. All the group's members must show a good face of the group at this public event, by being confident but not too rowdy or boisterous in conversation, by not being self-centered or arrogant, and by not being afraid to approach strangers who are potential donors to the group.

Recently, a new potential member was allowed to join the social group in a probationary period. The probationary period will last until the fundraising event, which is [at the end of the week/in six months]. At the end of this probationary period, you need to determine whether you will get along with the new potential group member, and importantly, you also need to know whether they will be sophisticated, modest, and socially fearless enough to represent the group well at the fundraising event, or else they cannot remain in the group.

By the **end of [the week/six months]**, you need to determine if the new potential group member is **[cowardly/smug/loud-mouthed]**. You need to know if they will be a good representative of the group...yet you barely know this person!

[Reading Comprehension]

Please answer the following questions based on the scenario you just read.

How long will the new group member's probationary period last?

- Until the end of the week
- Six months
- Two years

Of the following, which characteristic do you need to assess before the end of the probationary period?

- How **cowardly** the new group member is
- How **smug** the new group member is
- How loud-mouthed the new group member is

[Responses presented in randomized order.]

[Felt Urgency]

[Participants responded to the two Felt Urgency questions in randomized order.]

How **urgently** do you feel that you need to find out whether the new group member is [cowardly/smug/loud-mouthed]?

Not at all urgently	2	2	4	c.		Extremely urgently
1	Z	3	4	5	6	/

How much **time pressure** do you feel to find out quickly whether the new group member is [cowardly/smug/loud-mouthed]?

Not time						A great deal
pressure at						of time
all						pressure
1	2	3	4	5	6	7

[Information-Seeking Strategy]

What will you do to find out if they are **[cowardly/smug/loud-mouthed]**, given that you have **[until the end of the week/six months]**?

[Attention Check]

Please select	"Extremely	negative"	on the scale	below. Than	k you for pa	ying attention.
Extremely						Extremely
negative						positive
1	2	3	4	5	6	7

[Observation vs. "Testing" Explanation]

We know that sometimes people find out what other people are like by **observing** them. But, from past research, we also know that sometimes people cannot find something out just by observing. Sometimes, they need to do something more active--they need to do some form of "**test**" to find out what the other person is like. This active testing is very common in our everyday interactions with new people and with current friends and partners, even though people don't often think of themselves as "testing" other people.

The way you find out what another person is like, then, may fall somewhere on the continuum from just observing them, on one end, to doing a very active test, on the other end.

For example, imagine you had just started dating someone new. You want to find out if this new dating partner will be romantically faithful.

On one end, you may **simply observe** them to see if they seem like they will be faithful. However, it may be difficult to observe whether someone seems romantically faithful.

So, you may do something all the way on the other end of the continuum--on the **actively** "**testing**" end. For example, you may ask your friend to flirt with him or her to see how he or she will respond.

Or, you may do something that falls **in between** simple observation or actively testing. For example, you may arrange to go somewhere with your new dating partner where there is the opportunity for his/her "eyes to wander", and then you observe how they behave in this situation.

[Participants' Self-Rated Information-Seeking Strategies]

Earlier, we asked how you would find out if a person had a specific characteristic. On the next page, you will be asked to rate your response, to tell us where that response falls on the continuum from "observation" to "active testing" (or in between).

You were asked: How you would find out if the new group member is **[cowardly/smug/loud-mouthed]**?

You said: "[participant's response inserted here]"

How would you rate this response?

2	1					ACTIVE
OBSERVATION						"TESTING"
1	2	3	4	5	6	7

[Participants were randomly assigned to answer questions about Believed Observability first and Believed Importance second, or vice versa.]

[Believed Observability]

[Participants responded to the two Believed Observability questions in randomized order.]

Imagine you have [until the end of the week/six months] to <u>simply observe</u> the new group member at social events.

[At the end of the week/after six months], how likely is it that you will be able to tell whether the new group member is [cowardly/smug/loud-mouthed]?

Extremely						Extremely
unnikery						пксту
1	2	3	4	5	6	7

If you could <u>only watch</u> the new group member at social events—without interacting with them in any way—[until the end of the week/for six months], how likely is it that

you would be a [by the end of t	ble to tell v be week/af	whether the greater six month	group membe	r is [coward]	y/smug/lou	id-mouthed]
Extremely unlikely		2	10].	5	6	Extremely likely
1	2	3	4	5	0	1
		[Beli	eved Importa	ance]		
[Participants re	sponded to	the two Bel	ieved Import	ance question	ns in randor	mized order.]
How important	is it to kno	ow whether t	he new group	member is	cowardly/s	mug/loud-
Not at all important						Extremely important
1	2	3	4	5	6	7
How much of a	ı problem v	vould it be fo	or you if you	were wrong	about whetl	her the new
group member Not a problem at	is [coward	ly/smug/loud	l-mouthed]?			Very much a
an 1	2	3	4	5	6	7
		[A	ttention Cheo	ck]		
Please select "E Extremely	Extremely p	positive" on 1	the scale belo	ow. Thank yo	ou for payin	g attention. Extremely
negative 1	2	3	4	5	6	positive 7
	[Ex	xploratory: L	ikelihood of	Using Strate	gy]	
Vou wore oste	d. Uow vo	would find	out if the nor	u arolin mor	abor is	

You were asked: How you would find out if the new group member is **[cowardly/smug/loud-mouthed]**?

You said: "[participant's response inserted here]"

If you were in	the describe	ed scenario a	nd did have	to find out if	they were	
[cowardly/sm	ug/loud-moi	uthed], <u>how l</u>	ikely would	you be to act	ually do wl	nat you wrote?
Extremely						Extremely
unlikely						likely
1	2	3	4	5	6	7

[Exploratory: Views of Tester]

[Views of Tester items were presented in randomized order.]

Now imagine that **someone else** is using these sorts of active "testing" techniques to try to find out if *you* have a certain characteristic.

How much do yo	ou want to	maintain a	relationship) with this p	erson?	
Not at all						Very much
1	2	3	4	5	6	7
How manipulat	ive do you	think this p	erson is?			
Not at all						Extremely
1	2	3	4	5	6	7
How trustworth	iy do you t	hink this pe	erson is?			
Extremely						Extremely
1	2	3	4	5	6	7
How likable is t	his person?	?				
Extremely unlikable						Extremely likable
1	2	3	4	5	6	7
How sneaky is t	his nerson	7				
Not at all sneaky	ins person					Extremely sneaky
1	2	3	4	5	6	7

[Demographics]

- Have you ever served as a group member or emergency medical technician (EMT)? Yes/No
- Gender
- Sexual orientation
- Age
- Number of years speaking English
- Relationship status
- Politically liberal/conservative
- Race
- Education level attained

[Debriefing]

[Participants were fully debriefed and had the opportunity to leave comments.]