



# It takes two to self-disclose: Incremental theorists facilitate others' self-disclosure more than do entity theorists

Liat Levontin<sup>1</sup> | Ora Nakash<sup>2</sup> | Shai Danziger<sup>3,4</sup>

<sup>1</sup>The Faculty of Industrial Engineering and Management, Technion – Israel Institute of Technology, Haifa, Israel

<sup>2</sup>The School of Psychology, Interdisciplinary Center Herzliya (IDC), Herzliya, Israel

<sup>3</sup>Coller School of Management, Tel-Aviv University, Tel Aviv, Israel

<sup>4</sup>University of Sydney Business School, Sydney University, Sydney, NSW, Australia

## Correspondence

Liat Levontin, The Faculty of Industrial Engineering and Management, Technion – Israel Institute of Technology, Haifa 32000, Israel.

Email: levontin@technion.ac.il

## Funding information

Israel science foundation, Grant/Award Number: 847/16 to Levontin; Israeli National Institute for Health Policy and Health Services Research, Grant/Award Number: 2006/6 to Nakash

## Abstract

**Objective:** We tested the prediction that incremental theorists are more likely to facilitate others' self-disclosure than are entity theorists.

**Method:** We conducted three studies: (a) a field study that examined client's self-disclosure ( $N = 122$ ;  $M_{\text{age}} = 41.9$ , 67.8% woman; Israelis) during an intake interview with a professional therapist ( $N = 38$ ;  $M_{\text{age}} = 46.2$ , 84.20% woman; Israelis), (b) a survey of adults ( $N = 120$ ;  $M_{\text{age}} = 37.14$ , 57.6% female) who reported self-perceptions and behaviors during conversations and their perceptions of others' self-disclosure. In both studies participants reported their implicit theories, and (c) an experiment ( $N = 250$ ;  $M_{\text{age}} = 28.27$ , 56.6% female) in which participants whose implicit theories were manipulated reported their opening behaviors during a conversation and their perceptions of others' self-disclosure.

**Results:** Ones' incremental theory of personality was positively related to another's self-disclosure, to one's opening and disclosure-encouraging behaviors, and was negatively related to one's perceptions of others' self-protection tendency. Furthermore, one's opening behaviors and perceptions of others' self-protection tendencies mediated the effect of one's incremental theory on others' self-disclosure.

**Conclusion:** Those who believe people can grow and change, can influence others to trust their personal information with them, even when the information is negative.

## KEYWORDS

implicit theories of personality, listening, opening behaviors, self-disclosure, self-protection

## 1 | INTRODUCTION

Try to recall the last time someone revealed to you some very personal information about himself or herself. What aspects of the conversation caused them to open up and self-disclose in this manner? Was there something special about where the conversation took place that allowed for self-disclosure and intimacy? For example, maybe it took place on a quiet beach? Was it because they are the type of person that reveals personal information readily to almost anyone? Alternatively, was it because of something you said or didn't say during the conversation that facilitated their self-disclosure? For

example, maybe you were listening attentively, responsive and not judgmental, giving them the impression that self-disclosure would be safe and beneficial? Thinking more broadly, was this conversation unique, or do others often self-disclose to you?

In this research, we explore the recipients' role in influencing others' self-disclosure. Converging research shows people differ in the extent to which they believe personality is malleable (as opposed to fixed), and that these implicit self-theories systematically influence how people interpret, judge, and behave toward others (Chiu, Hong, & Dweck, 1997; Dweck, 2013; Molden & Dweck, 2006; Rattan &

Dweck, 2010). We propose that incremental theorists, who believe personality is malleable, are more likely to facilitate others' self-disclosure than are entity theorists, who believe personality is fixed. We speculate this happens because incremental theorists are more likely than entity theorists to use opening, disclosure-encouraging behaviors in a conversation, such as asking questions about others' thoughts, feelings, actions, experiences, preferences, activities, or habits, and are less likely to interrupt.

### 1.1 | Self-disclosure

Self-disclosure is the process by which persons let themselves be known to others, and it includes any information exchange regarding the self (Derlega, Metts, Petronio, & Margulis, 1993). Self-disclosure is an essential factor in interpersonal relationships, and it is crucial to relationship development (Altman & Taylor, 1973; Cozby, 1973; Derlega et al., 1993). Individuals can derive substantial benefits from disclosing personal information. However, not all people feel comfortable disclosing information to others. Surprisingly, we know little about how the characteristics of the "other," the potential target of self-disclosure, influences self-disclosure. The current research begins to fill this gap by investigating how peoples' beliefs regarding the malleability of personality influence others' tendency to self-disclose to them.

### 1.2 | The benefits of self-disclosure

Intimate relationships are built through the reciprocity of self-disclosure. People who engage in intimate self-disclosures tend to be liked more than people who disclose less (Collins & Miller, 1994; McAllister & Bregman, 1983) and people prefer dating those who self-disclose than those who hide information, even when the former admit to having engaged in appalling behavior (John, Barasz, & Norton, 2016). Self-disclosure facilitates the development of caring and mutual understanding and plays an essential role in the development of intimacy between romantic couples (Derlega & Berg, 2013), while lack of self-disclosure is related to dissatisfaction with one's social network and feelings of loneliness (Stokes, 1987), and can even increase susceptibility to illness (Lumley, 2004; Pennebaker, 2012).

Research has demonstrated the benefits of self-disclosure in many social contexts beyond interactions between romantic partners. For example, disclosing information during a negotiation improved the accuracy of negotiators' judgments about the other party and led to more mutually beneficial, integrative negotiation agreements (Thompson, 1991). Of note, joint outcomes improved significantly even when only one member of a bargaining dyad provided personal information. Other research shows that group decision-making benefits from self-disclosure by enabling the use of members' unique

knowledge and qualities (Stasser, Stewart, & Wittenbaum, 1995). Finally, in the workplace, mentors' self-disclosure helps build core capabilities of the organization that includes norms, values, and employees' critical skills (Swap, Leonard, Shields, & Abrams, 2001).

Self-disclosure not only benefits the individual, but is also socially encouraged. For example, the disclosure of negative information is a familiar ritual rooted in most of the main religions and cultures (e.g., Christianity, Islam, Judaism, Buddhism), where it is thought to help individuals cleanse their soul (Kassin & Gudjonsson, 2004). Similarly, a central premise of most modern mental health treatments and social support groups is that disclosure of problems, traumas, and transgressions has positive effects on both psychological and physical markers (Pennebaker, 1997, 2012).

### 1.3 | The costs of self-disclosure

Despite its benefits, people may find self-disclosure challenging. Individuals may feel vulnerable when they expose personal information, particularly their attitudes and emotions (e.g., Derlega et al., 1993; Lehman, Ellard, & Wortman, 1986). Other risks include experiencing negative emotions, negative evaluation by the listener, social rejection and alienation, and causing discomfort to the listener, particularly when one reveals their flaws, weaknesses, or vulnerabilities (Kelly & McKillop, 1996; Omarzu, 2000; Pasupathi, McLean, & Weeks, 2009). Indeed, self-disclosure of negative information (e.g., wrongdoings, feelings of distress) may lead one to be liked less by others or to be judged as less competent (Forest & Wood, 2012). Thus, it is not surprising that some people do not self-disclose, even in situations that call for it. For example, in research studying a job interview context, participants were asked how they would answer the question "What is your weakness?" The majority of participants (77%) chose to humblebrag (i.e., make an apparently modest statement with the actual intention of drawing attention to something of which one is proud) rather than disclose an actual weakness (Sezer, Gino, & Norton, 2018). Also, despite the importance of self-disclosure for therapists' understanding of clients' problems and engagement in psychotherapy (Nakash, Nagar, & Kanat-Maymon, 2015a), many clients report that during the initial mental health conversation with a therapist, they do not self-disclose to their therapist important information, including the history of their chief complaints (Barry, Bradley, Britten, Stevenson, & Barber, 2000). Importantly, clients that do self-disclose tend to speak for more time, and as a result provide more diagnostic and personal information (Tai-Seale, McGuire, & Zhang, 2007). Furthermore, therapists often attribute to clients who voluntarily self-disclose, traits such as honesty and trustworthiness, as opposed to clients from whom they must solicit information. This effect is most pronounced when therapists perceive the information to be sensitive. Furthermore, therapists often use the amount

of information clients volunteer as a barometer of the quality of the rapport and success of the intake conversation (Nakash, Dargouth, Oddo, Gao, & Alegría, 2009).

Because of the potential costs of self-disclosing to a significant other, people may prefer to disclose information to strangers whom they expect never to meet again (John, Acquisti, & Loewenstein, 2010). In a similar vein, people may be more willing to disclose information using computer-mediated communication, hiding behind a username, than face-to-face conversations (Bargh, McKenna, & Fitzsimons, 2002; Joinson, 2001). For example, to relieve their guilt about their wrongdoings people may choose to self-disclose to strangers on the web rather than to a close friend, a partner, or a priest (Levontin & Yom-Tov, 2017).

#### 1.4 | The target of self-disclosure

Although self-disclosure often involves revealing personal information to another person, somewhat surprisingly, there has been very little research on how the potential target influences self-disclosure. The limited existing research suggests the target matters. Specifically, research suggests people disclose more to openers, people who self-report being more responsive to others, good listeners, accepting, and sympathetic to other's problems (Miller, Berg, & Archer, 1983; Sprecher & Hendrick, 2004). Also, women are more responsive, better listeners and more likely to be "openers" than men (Miller et al., 1983). Finally, high self-monitoring (but not low self-monitoring) interviewers are more successful at eliciting self-disclosure in some contexts (Shaffer & Pegalis, 1998).

#### 1.5 | Implicit self-theories and self-disclosure

In the current research, we propose that an incremental self-theory, the belief that personality is relatively malleable, is positively associated with opening behaviors and consequently with others' self-disclosure. We base this prediction on research showing systematic differences in how entity and incremental theorists think about and act toward others.

Entity theorists believe human attributes are fixed, concrete, internal entities. By contrast, incremental theorists believe human attributes are relatively dynamic qualities that can change and develop. Entity theorists are more confident than incremental theorists that trait-relevant behaviors will be consistent across situations, and are more likely to rely on thin slices of behavior to evaluate global character (Chiu et al., 1997; Dweck, Hong, & Chiu, 1993). Entity theorists also more strongly believe that knowing a person's traits allows one to confidently make inferences about that person's behaviors in a new situation and vice versa—knowing how a person behaved in a particular situation allows one to confidently make inferences about this person's traits in the

relevant domain (Chiu et al., 1997). Finally, entity theorists efficiently integrate dispositional influences into their situational impressions, consistent with their focus on assessing people's unchanging psychological properties (Molden & Dweck, 2006). Based on these findings, we expect entity theorists to form impressions of the other early in a conversation, consistent with their reliance on thin slices of behavior (Butler, 2000). We thus expect entity theorists to be less likely to use opening behaviors that encourage self-disclosure and more likely to discourage others to self-disclose personal information in a conversation.

By contrast, incremental theorists efficiently integrate situational influences of behavior into their dispositional impressions, consistent with their focus on understanding the dynamic states and circumstances that influence people's psychological processes (Molden & Dweck, 2006). Incremental theorists are also more likely to behave toward others as if change and growth are possible, and to expend effort to achieve others' improvement. For example, to confront people who express explicit prejudice toward them, to constructively voice their dissatisfaction after a transgression, and to accept responsibility for an offense they committed (Kammrath & Dweck, 2006; Rattan & Dweck, 2010; Schumann & Dweck, 2014). In contrast to entity theorists, incremental theorists tend to form impressions of others based on all the information they receive (Butler, 2000). Thus, we expect incremental theorists to act as "openers" (Miller et al., 1983), encouraging others to self-disclose because they deem the information relevant to their decisions. During a conversation, incremental theorists convey their belief that people can change. Thus, others should feel safe disclosing to incremental theorists, even negative information, because disclosures will not be seen as an enduring reflection on their character, but rather as something that can be changed. Put differently; disclosing the same information to an incremental theorist who believes that people change over time may seem less "telling" or self-revealing.

We propose that one's incremental theory of personality is positively related to one's opening behaviors, negatively related to another's self-protection behaviors, and positively related to another's self-disclosure. Furthermore, we hypothesize that one's opening behaviors and another's self-protection behaviors mediate the relation between one's incremental theory of personality and another's self-disclosure.

We tested these hypotheses in three studies that varied in context and research design: a field study conducted in community mental health clinics, a survey of conversation behaviors, and a lab experiment. In Study 1, we investigated whether therapists' incremental theory of personality is associated with their clients' self-disclosure during a mental health intake in a naturalistic setting. In Study 2, we examined whether participants' incremental theory of personality is associated with one's opening behaviors and another's self-protection

behaviors. Finally, in Study 3, we manipulated implicit theories and measured participants' behavior during conversations.

## 2 | STUDY 1

The goal of Study 1 was to test the hypothesis that during an actual interaction—a clinical interview, the interviewer's implicit theory is positively related to the interviewee's self-disclosure, such that interviewees self-disclose more, to more incremental-oriented interviewers. We tested this hypothesis in a field study using intake interviews between clients and therapists as our data set. Specifically, we measured the relationship between therapists' self-reported incremental beliefs and the quality of a real-life clinical interaction with clients during the initial mental health intake. We measured clients' self-disclosure during the intake, a behavioral measure coded by blind independent raters directly from audio-recorded real intake sessions. The intake interview is often the first point of contact between clients and therapists, and as such, it forms the foundation for the mental health treatment (Nakash, Rosen, & Alegría, 2010; Nakash et al., 2009). The quality of therapist–client conversation is a major contributing factor to the quality of the intake, with research documenting its role in establishing rapport, improving information exchange, and facilitating clinical decisions (Nakash et al., 2015a; Ong, De Haes, Hoos, & Lammes, 1995). Importantly, research shows that information exchange during the intake influences therapists' decisions concerning the goals of the intake visit, client diagnosis, treatment recommendations, and whether clients felt understood (Hall, 2002; Nakash & Alegría, 2013). In this study, we test our hypothesis that clients of more incremental-oriented therapists self-disclose more than do clients of less incremental-oriented (more entity-oriented) therapists.

### 2.1 | Method

#### 2.1.1 | Sample and procedure

##### Setting

We conducted the study in four public mental health clinics that offer mental health services to an ethnically and socioeconomically diverse adult client population. All participating clinics used unstructured interview protocols to gather information during the intake. Because clinics allocate clients consecutively to therapists based on therapist availability, we assume random therapist–client pairing, or at the least, that pairings were not based on any particular characteristics of either therapist or client.

##### Sample

A convenience sample of therapists and clients participated in the study. We recruited therapists using introductory

informational meetings. Thirty-eight therapists agreed to participate ( $M_{\text{age}} = 46.2$ , 84.20% woman), and 5 declined. The therapists represented varied disciplinary backgrounds (6 psychiatrists, 14 psychologists, and 18 social workers) and levels of experience (65.8% were licensed therapists; mean years of clinical experience = 14.62).

We recruited client participants through direct person-to-person solicitation as they presented for an intake visit, which was their first contact with the service for a new episode of care. Client inclusion criteria were adults (18 years old and above) who did not require interpreter services. Exclusion criteria included people whom the therapists identified as psychotic or actively suicidal. One hundred and twenty-two clients ( $M_{\text{age}} = 41.9$ , 67.8% woman, mean years of education = 12.6) who sought outpatient mental health services participated in the study. Thirty-one clients declined to participate (21 clients were not able to stay for an additional time following their intake to complete the research protocol; 3 clients did not feel well enough to participate; 7 clients did not want to have the intake session recorded). A majority of clients (72%) had an annual household income that was below average (less than US\$15,000). Based on the Structured Diagnostic Interview (SCID), the most prevalent diagnosis in the sample was Major Depressive Disorder ( $N = 34$ ), followed by Generalized Anxiety Disorder ( $N = 26$ ). More than half of the sample was not diagnosed with any mood or anxiety disorder ( $N = 85$ , 54.1%).

##### Procedure

To ensure a diverse therapist sample, we invited therapists to participate in no more than five different intake visits ( $M = 3.00$ ,  $SD = 1.60$ ). We provided clients with a complete description of the study and then obtained their written consent. The presenting problems clients described were diverse and included familial and other interpersonal problems as well as symptoms of mental disorders (e.g., depression, anxiety, eating disorders). The average intake visit duration was 51.3 min (range 14–99 min,  $SD = 18$  min, see Table 1). The appropriate Institutional Ethics Committees at each participating clinic approved all aspects of the study, and data collection complied with all human subject protocols. Participation in the study consisted of completing demographic and clinical measures (including a measure of implicit theories of personality) prior to intake, and audiotaping the mental health intake visit (for a full description of the study and measures, see Nakash, Nagar, & Kanat-Maymon, 2015b; Nakash, Nagar, & Levav, 2015; Nakash & Saguy, 2015).

#### 2.1.2 | Measures

We administered a *demographic questionnaire* to both clients and therapists. Clients provided information about their gender, age, education, employment status, and income.

**TABLE 1** Means, standard deviations, and level of self-disclosure during the mental health intake (Study 1)

	A. Intake duration (in minutes)	B. Number of items discussed during the intake visit	C. Number of items self-disclosed by the client during the intake visit	D. Self-disclosure ratio (= C/B)
Mean (SD)	51.28 (17.87)	47.39 (14.77)	26.20 (10.55)	0.56 (0.17)
Minimum	13.54	13.00	7.00	0.11
Maximum	99.24	84.00	57.00	1.00

Therapists provided information about their gender, age, discipline, and years in clinical practice. We embedded the *implicit theory of personality* measure (Chiu et al., 1997; Hong, Chiu, Dweck, Lin, & Wan, 1999) among other measures for both therapists and clients. The measure consisted of four items. Two that measure an entity theory (“The kind of person someone is, is something very basic about them and it can’t be changed very much,” “People can do things differently, but the important parts of who they are can’t really be changed”), and two that measure an incremental theory (“Everyone can change even their very basic traits,” “No matter who you are, you can always significantly change.”). Participants reported their agreement with each item on a 5-point scale anchored at 1 (*very strong disagreement*) and 5 (*very strong agreement*). We reverse scored the two entity items to create a four-item measure, with higher scores indicating an incremental theory of personality ( $\alpha$  therapists = 0.81,  $\alpha$  clients = 0.73).

### 2.1.3 | Analyses

We used the *Coder Information Checklist-Revised* (Alegría et al., 2008; Nakash et al., 2015b) to code each unit of information exchanged during the intake directly from the recorded sessions. The checklist was designed in a previous study by Alegría et al. (2008) and was expanded to include diagnostic information on personality disorders according to Diagnostic and Statistical Manual of Mental Disorders (DSM) IV as well as additional context-relevant socio-demographic information (e.g., mandatory military service). The checklist includes 220 items and more than 100 subitems that cover potential information that might be discussed during the intake session. Items covered symptoms related to major Axis I disorders as well as Axis II disorders. All items originated from the diagnostic criteria in the DSM-IV-TR (American Psychiatric Association, 2000). Also, the measure included items concerning personal history and sociocultural background, physical symptoms and disabilities, family history of mental health disorders, and mental health treatment history (Nakash et al., 2009; Rosen, Miller, Nakash, Halperin, & Alegría, 2012). Previous studies provide evidence for the construct validity of the information checklist (Alegría et al., 2008; Nakash et al., 2015b).

We first coded each item for whether the client and therapist discussed it during the intake (yes/no;  $M = 43.62$ ,

$SD = 13.3$ , information units discussed in each interview). Importantly, we coded diagnostic information independent of a disorder. As a result, we coded nonspecific symptoms such as sleep disturbances under all relevant disorders (i.e., depression, anxiety, and bipolar disorders). To capture the level of specificity at which information was discussed, the information-checklist measure included items describing symptoms at different levels of specificity. For example, the measure included two items to describe levels of specificity of discussion of substance use: “any general mention of substance use” (general screener); “Recurrent substance use (Specify which—Sedatives, Tranquilizers, Painkillers, Stimulants, Marijuana, Cocaine or Crack, Hallucinogens, Inhalants, Heroin, Pills, other)” (specific criteria).

We then coded each unit of information discussed for whether it was self-disclosed by the client or elicited by the therapist (if similar information was discussed at different times during the session, we coded the first time it was discussed during the session). For example, sleep disturbances could be discussed because it was self-disclosed by the client who complained about her sleep or because the therapist, who needed information about the client’s sleep for the diagnosis, elicited it.

Three independent raters, blind to study goals and hypotheses, coded the audiotapes of the intakes (all raters were licensed, clinical psychologists). Following training that took approximately 10 hr and included gaining familiarity with the coding measure and practicing the coding, all coders independently coded five randomly selected tapes. Coder agreement across the five tapes was high (inter-rater reliability,  $\kappa = 0.81$ ). To prevent coders’ drift, we assessed inter-rater reliability by having all raters also code two randomly selected tapes after coding 25% (30 tapes,  $\kappa = 0.77$ ), 50% (60 tapes,  $\kappa = 0.80$ ), 75% (90 tapes,  $\kappa = 0.70$ ), and 100% (120 tapes,  $\kappa = 0.76$ ) of the total tapes. The overall inter-rater agreement was high,  $\kappa = 0.78$ .

To study client self-disclosure during the intake visit, we created a self-disclosure variable by dividing the number of items the client self-disclosed by the overall items discussed during the intake conversation (Nakash et al., 2009). Higher values represent higher client self-disclosure (see Table 1). Because the data have a hierarchical structure (clients nested within therapists), we used hierarchical linear models (HLM; Raudenbush, Bryk, Cheong, Congdon, & Du Toit, 2011) software to test our hypotheses.

## 2.2 | Results and discussion

First, we compared therapists' and clients' incremental theories. Therapists' incremental theory ( $M = 2.86$ ,  $SD = 0.83$ ,  $Min = 1.25$  (2.8%),  $Max = 4.75$  (2.8%)) was significantly lower than that of clients ( $M = 3.25$ ,  $SD = 0.99$ ,  $Min = 1$  (1.6%),  $Max = 5$  (8.9%),  $t(158) = 2.14$ ,  $p = 0.034$ ). The results suggest that therapists do not hold an exceptionally high incremental theory of personality. Since this result may seem counterintuitive, we tested therapists' incremental theories as a function of their level of expertise (licensed vs. trainees). The correlation between therapists' level of expertise and their incremental theory of personality is positive ( $r = 0.28$ ,  $p = 0.105$ ), however, the difference between trainees' incremental theory ( $M = 2.54$ ,  $SD = 0.82$ ) and licensed therapists' incremental theory ( $M = 3.02$ ,  $SD = 0.81$ ,  $F(1, 34) = 2.78$ ,  $p = 0.105$ ) was not significant. One may expect more experienced therapists to have more hope their clients can change. Our results suggest this may not be the case.

Next, we used HLM to test our hypothesis that therapists' incremental theory, which is a level 2 factor, predicts client's self-disclosure ( $M = 56\%$ ,  $SD = 17\%$ ), which is a level 1 factor, controlling for clients' implicit theories of personality (a level 1 factor) and therapists' level of expertise (65% were experts, i.e., licensed therapists, and the remaining 35% were trainees), which is a level 2 factor. Thus, the generic level 1 equation is.

$$SD_{ij} = \beta_{0j} + \beta_{1j} * (X_{ij}) + r_{ij}$$

where  $\beta_{0j}$  refers to the intercept,  $\beta_{1j}$  represents the maximum likelihood estimate of the population slopes for the relationship between the client's implicit theories ( $X_{ij}$ ) and self-disclosure ( $SD_{ij}$ ), and  $r_{ij}$  represents error.

For each  $\beta_j$  in the client-level equation, a corresponding component in the therapist-level model was created. The corresponding level 2 equations were

$$\beta_{0j} = \gamma_{00} + \gamma_{01} * (V_j) + \gamma_{02} * (W_j) + u_{0j} \text{ and}$$

$$\beta_{1j} = \gamma_{10}$$

The therapist-level intercept  $\gamma_{00}$  represents the average score on self-disclosure,  $\gamma_{01}$  represents the therapist expertise ( $V_j$ ) slope at the therapist level,  $\gamma_{02}$  represents the therapist's implicit theories ( $W_j$ ) slope at the therapist level, and  $u_{0j}$  represents error.  $\gamma_{10}$  represents the average client implicit theories ( $X_{ij}$ ) slopes at the client level.

As predicted, therapists' incremental theory was positively related to clients' self-disclosure during the intake ( $\gamma_{02} = 0.05$ ,  $SE = 0.02$ ,  $t = 2.16$ ,  $p = 0.039$ ). Clients' implicit theories of personality were not related to clients' self-disclosure ( $\gamma_{10} = 0.00$ ,  $SE = 0.01$ ,  $t = 0.71$ ,  $p = 0.483$ ), and therapists'

level of expertise was not related to clients' self-disclosure ( $\gamma_{01} = 0.04$ ,  $SE = 0.04$ ,  $t = 0.91$ ,  $p = 0.368$ ). Calculating effect size indicated that across participants, therapists' incremental theory explained 45.1% of the between-therapist variance in clients' self-disclosure.

We repeated the analysis adding to the former set of equations the interaction between clients and therapists' incremental theories. As a result, the second level 2 equation is:

$$\beta_{1j} = \gamma_{10} + \gamma_{11} * (W_j) + u_{1j}$$

As in the first analysis, therapists' incremental theory was positively related to clients' self-disclosure during the intake ( $\gamma_{02} = 0.07$ ,  $SE = 0.02$ ,  $t = 3.73$ ,  $p < 0.001$ ), clients' implicit theories of personality were not related to clients' self-disclosure ( $\gamma_{10} = 0.04$ ,  $SE = 0.02$ ,  $t = 1.74$ ,  $p = 0.092$ ), and the relations between therapists' level of expertise and clients' self-disclosure was now marginally significant ( $\gamma_{01} = 0.06$ ,  $SE = 0.03$ ,  $t = 1.98$ ,  $p = 0.056$ ). Importantly, the interaction between therapists' incremental theory and client's incremental theory was not related to clients' self-disclosure ( $\gamma_{11} = 0.02$ ,  $SE = 0.03$ ,  $t = 0.59$ ,  $p = 0.561$ ).

To better understand what kind of information was discussed, we created two factors by conceptually grouping items discussed during the intake session according to the Coder Information Checklist-Revised (Alegría et al., 2008) as follows: (a) symptoms of DSM-IV Axis I disorders (including major depressive disorder, bipolar disorder, psychotic disorders, alcohol and substance abuse/dependence, adjustment disorder, eating disorders, and anxiety disorders), (b) personal and familial history and sociocultural background (including history of personal loss, financial and occupational status, the quality of relationships with family members and friends, developmental history, history of abuse/neglect, and immigration; for more information see Nakash et al., 2015a). As expected, therapists' incremental theory of personality is positively correlated with both factors, while clients' incremental theory of personality is not (see Table 2).

This study revealed two significant and novel findings. First, therapists' incremental theory was lower than that of clients. Thus, the effect of therapists' incremental beliefs on clients' self-disclosure was not the result of therapists holding stronger incremental beliefs. More importantly, our findings reveal a relation between therapists' incremental theory and the quality of the clinical interaction. Clients self-disclosed more when interviewed by a therapist with a stronger incremental theory of personality. Clients' implicit theories did not affect their self-disclosure, nor did the interaction between clients' and therapists' implicit theories. That is, during conversations, such as a full-length clinical interview, the incremental beliefs of the interviewer influence self-disclosure above the incremental beliefs of the interviewee and above the expertise level of the interviewer.

**TABLE 2** Means, standard deviations, range, reliabilities, and correlations among Study 1 variables

	Mean	SD	Min	Max	1	2	3	4
1. Incremental theory of personality—Clients	3.25	0.99	1.00	5.00	0.73			
2. Incremental theory of personality—Therapists	2.86	0.83	1.25	4.75	0.04	0.81		
3. Therapist's expertise level (0 = trainee, 1 = expert)	1.66	0.48	0	1	0.21*	0.28		
4. Number of items of DSM-IV Axis I disorders symptoms discussed	14.27	6.37	1.00	31.00	-0.01	0.31**	0.02	
5. Number of personal, familial, and sociocultural items discussed	21.59	7.57	2.00	43.00	0.09	0.27**	0.13	0.54**

Note. Numbers in the diagonals indicate reliability scores.

\*Correlation is significant at the 0.05 level (2-tailed); \*\*Correlation is significant at the 0.01 level (2-tailed).

One might expect clients' own incremental theories to predict self-disclosure by facilitating opening up about uncomfortable topics because incremental theorists probably do not feel that these topics reflect poorly on them as a person, per se, but are merely commenting on transient affects, motivations, and circumstances. This may be true, however, as the results of this study suggest, the effect of the therapist's implicit theory on self-disclosure is stronger than those of client's implicit theories. It seems that incremental therapists are more interested in different types of information that are relevant to a clinical interview, including medical/diagnostic and personal/social information (see Table 2). We suggest the therapist's implicit theories lead to more opening behaviors during conversations and decreases the clients' self-protection goals. As such, the therapist's implicit theories influence clients' self-disclosure above their own implicit theories. We test this suggestion in the next study.

One limitation of this study is that therapists' opening behavior could not be coded. We showed the relation between therapists' incremental theory and clients' self-disclosure; however, we cannot support the suggested mechanism. Future research should code therapists or interviewers actions during the interview using video rather than audio recording. The goal of Study 2 was to give some support for the suggested mechanism.

A second limitation of this study is that the data do not allow distinguishing the impact of implicit theories of personality on self-disclosure from the impact of other constructs such as warmth, personality factors, and interpersonal issues. Future studies should measure interviewers' implicit theories and other factors influencing self-disclosure to understand how one's implicit theories of personality contribute to another's self-disclosure.

### 3 | STUDY 2

The goal of Study 2 was to provide support for our mechanism hypotheses and to explain why one's incremental theory of

personality is positively related to *another's* self-disclosure during a conversation. To this end, we measured participants' implicit theories of personality, asked them to think about their conversations with others, and measured their perceptions of others' self-disclosure during such conversations. We also measured participants' reports of their perceptions and behaviors during such conversations. We expected one's incremental theory of personality to be positively related to one's opening behaviors and others self-protection goals.

#### 3.1 | Method

One hundred and twenty Amazon Mturkers ( $M_{age} = 37.14$ , 57.6% female) participated in return for a small fee. Two participants who failed to correctly answer an attention filter question were not included in the analyses. Participants completed measures assessing their implicit theories of personality, their opening behaviors during conversations and their perceptions of others' self-disclosure and self-protection goals. We presented the measures in random order to avoid an order effect. Participants reported their agreement with each item of each measure on a 7-point scale (1 = *very strong disagreement*, 7 = *very strong agreement*).

To measure *implicit theory of personality*, we used three items that measure an entity theory of personality (Chiu et al., 1997; Hong et al., 1999), for example, "The kind of person someone is, is something very basic about them and it can't be changed very much" ( $\alpha = 0.95$ ,  $M = 4.03$ ,  $SD = 1.68$ ). We then reverse coded the items, to report the effects in terms of incremental theory.

We measured opening behaviors using the Communication Effectiveness Scale (CES)-Observer Version (Blechman, Lowell, & Garrett, 1999). We asked participants to report how accurately each description of behavior characterizes them when they interact with others during group meetings, conversations, or chats. We used the following seven items: "Listen when others are talking," "Look others in the eye"; "Ask questions about others' thoughts, feelings, actions, or experiences," "Ask questions about others' preferences,

activities, or habits,” “Ask follow-up questions,” “Show affect appropriate to others’ statements and questions,” and “Encourage others with nonverbal gestures or brief comments” ( $\alpha = 0.91$ ,  $M = 5.20$ ,  $SD = 1.09$ ).

To measure *perceptions of others self-disclosure*, we used two items from the interaction goals in negotiation measure (Liu & Wang, 2010). We modified these items to measure participants’ perceptions of others tendency to self-disclose information during a conversation: “When I have a conversation with others they share information” and “When I have a conversation with others they are open and honest about their needs” ( $\alpha = 0.78$ ,  $M = 4.97$ ,  $SD = 1.08$ ).

To measure *perceptions of others self-protection tendencies*, we used three items from the interaction goals in negotiation measure (Liu & Wang, 2010). We modified these three items to measure participants’ perception of others self-protection tendency during a conversation. Items were: “When I have a conversation with others they make sure I will not know their weaknesses,” “When I have a conversation with others they withhold information that will put them at a disadvantage,” and “When I have a conversation with others they conceal the truth about their problems” ( $\alpha = 0.78$ ,  $M = 3.63$ ,  $SD = 1.11$ ).

### 3.2 | Results and discussion

Table 3 presents the means, standard deviations, range, reliabilities, and correlations among Study 2 variables. To test our hypotheses that one’s opening behaviors and others self-protection behaviors mediate the relations between one’s incremental theory of personality and others’ self-disclosure, we used PROCESS Model 4 (Hayes, 2013), with ones’ incremental theory of personality as the IV (X), perception of others’ self-disclosure tendencies as the DV (Y), and one’s opening behaviors (M1), and perceptions of others self-protection (M2), as the mediators.

As predicted, an incremental theory of personality was positively related to opening, disclosure-encouraging behaviors ( $B = 0.14$ ,  $SE = 0.06$ ,  $t = 2.35$ ,  $p = 0.021$ , 95% CI [0.02, 0.25]), and negatively related to perceived

self-protection tendency of others ( $B = -0.17$ ,  $SE = 0.06$ ,  $t = -2.89$ ,  $p = 0.005$ , 95% CI [-0.29, -0.05]). The total effect of ones’ incremental theory of personality on others self-disclosure tendencies was not significant ( $B = 0.09$ ,  $SE = 0.06$ ,  $t = 1.51$ ,  $p = 0.113$ , 95% CI [-0.03, 0.21]). However, as expected the total indirect effect was significant ( $B = 0.12$ ,  $SE_{boot} = 0.04$ , 95% CI [0.04, 0.21]): the indirect effects of both opening behaviors ( $B = 0.06$ ,  $SE_{boot} = 0.03$ , 95% CI [0.01, 0.14]), and others self-protection tendencies ( $B = 0.06$ ,  $SE_{boot} = 0.03$ , 95% CI [0.01, 0.13]) were significant. Model  $R^2 = 0.35$ ,  $F(3,114) = 20.36$ ,  $p < 0.001$  (see Figure 1).

The effect of one’s incremental theory of personality on the perception of others self-disclosure was fully mediated by the behavioral tendencies of those with an incremental theory and their perceptions of others self-protection tendencies. Participants’ incremental theory of personality was positively related to their effectiveness in facilitating others self-disclosure. Incremental theorists tend to use opening, disclosure-encouraging, behaviors, such as asking questions about others’ thoughts, feelings, actions, experiences, preferences, activities, or habits. Also, an incremental theory had a direct effect on the perception of others self-protection tendencies, such that those with an incremental theory reported that during a conversation with others, they tend less to perceive others as self-protecting, as withholding information that will put them at a disadvantage and as concealing the truth about their problems.

Although Studies 1 and 2 show the predicted relations, they do not demonstrate causality. To overcome this limitation, in Study 3, we manipulated implicit theories and then measured participants’ opening behaviors and their perceptions of others’ self-disclosure during conversations.

## 4 | STUDY 3

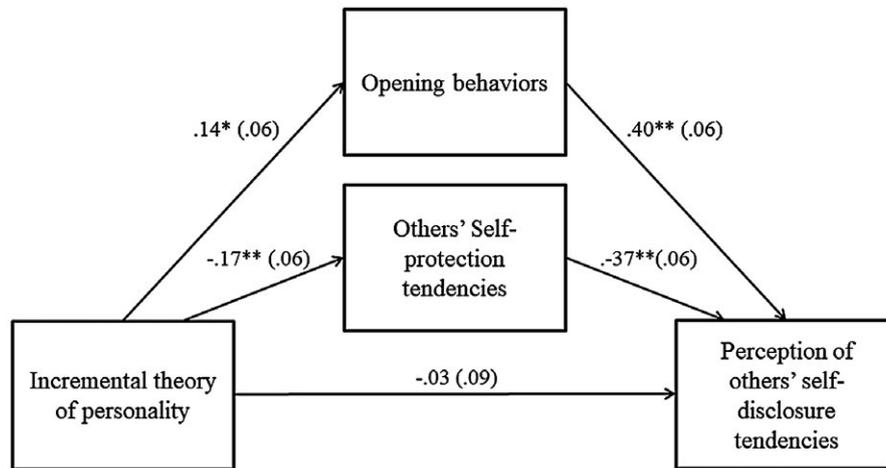
The goal of Study 3 was to provide causal support for our hypothesis that one’s incremental theory of personality

**TABLE 3** Means, standard deviations, range, reliabilities, and correlations among Study 2 variables

	Mean	SD	Min	Max	1	2	3	4
1. Incremental theory of personality	4.03	1.68	1 (5.8%)	7 (9.2%)	0.95			
2. Opening behaviors	5.20	1.09	1 (0.8%)	7 (5.0%)	0.21*	0.91		
3. Perceptions of others self-disclosure	4.97	1.08	1 (0.8%)	7 (2.5%)	0.14	0.47**	0.78	
4. Perceptions of others self-protection	3.63	1.11	1 (1.7%)	6.7 (0.8%)	-0.26**	-0.20*	-0.44**	0.78

Note. Numbers in the diagonals indicate reliability scores.

\*Correlation is significant at the 0.05 level (2-tailed); \*\*Correlation is significant at the 0.01 level (2-tailed).



**FIGURE 1** The direct and indirect relations between one's incremental theory of personality and other's self-disclosure tendencies, Study 2

predicts one's opening behaviors, the behaviors that allow for *another's* self-disclosure during a conversation. To this end, we manipulated participants' implicit theories of personality, and then asked them to imagine starting a conversation with others, and measured their behaviors during such conversations.

#### 4.1 | Method

Two hundred and fifty-one Amazon Mturkers ( $M_{\text{age}} = 28.27$ , 56.6% female) participated in return for a small fee. Participants were randomly assigned to one of two conditions, incremental or entity. They read a short paragraph (the well-established implicit theories manipulation; Chiu et al., 1997) that presented research suggesting personality is either fixed, stable over time, and appears to be attributable to a person's genetics (entity condition), or malleable, flexible, and appears to be attributable to a person's environment (incremental condition).

Participants were then asked to imagine they just met a new person whom they are about to work with, and they start talking. Shortly after, two more people join the conversation and the four of them continue chatting. Then, participants were asked to think about themselves during this conversation and completed measures assessing their opening behaviors, and their perceptions of the others' self-disclosure. Participants reported their agreement with each item of each measure on a 7-point scale (1 = *very strong disagreement*, 7 = *very strong agreement*). We measured opening behaviors using three items from the CES—Observer Version (Blechman et al., 1999): “Listen when others are talking,” “Ask questions about others' thoughts, feelings, actions, or experiences,” “Ask follow-up questions.” To this scale we added three items: “I tend to encourage the others to talk,” “When others speak I usually assume I can learn something so I tend to listen patiently,” “I encourage the others to tell me

about themselves to get to know them” ( $\alpha = 0.79$ ,  $M = 5.28$ ,  $SD = 0.90$ , Min = 2 (0.4%), Max = 7 (0.8%)). To measure *perceptions of others self-disclosure* we used the item “I share information” ( $M = 4.66$ ,  $SD = 1.26$ , Min = 1 (1.6%), Max = 7 (7.2%)).

#### 4.2 | Results and discussion

We used analysis of variance (ANOVA) to test the hypothesis that incremental theory (more than entity theory) of personality predicts one's opening behaviors during a conversation. As expected, following an incremental theory manipulation participants reported engaging in opening behaviors during a conversation ( $M = 5.40$ ,  $SD = 0.84$ ), more than following an entity theory manipulation ( $M = 5.15$ ,  $SD = 0.93$ ,  $F(1, 249) = 4.94$ ,  $p = 0.027$ ,  $\eta^2 = 0.02$ ).

Next, we used PROCESS Model 4 (Hayes, 2013) to test the indirect effect of implicit theories on others' self-disclosure through their opening behaviors. As in Study 2, the direct effect of implicit theories on others' self-disclosure tendencies was not significant ( $B = -0.12$ ,  $SE = 0.16$ ,  $t = -0.78$ ,  $p = 0.437$ , 95% CI [-0.43, 0.19]). However, as expected the indirect effect of implicit theories on self-disclosure through opening behaviors ( $B = 0.07$ ,  $SE_{\text{boot}} = 0.04$ , 95% CI [0.02, 0.17]) was significant. Model  $R^2 = 0.04$ ,  $F(2, 248) = 5.50$ ,  $p = 0.005$ .

Participants' incremental theory of personality predicted their effectiveness in facilitating others' self-disclosure. Following an incremental theory manipulation participants reported using more opening, disclosure-encouraging, behaviors, such as asking questions, encouraging others to talk and listening, than following an entity theory manipulation. The implicit theories manipulation did not have a direct effect on the perception of others self-disclosure; this effect was fully mediated by the behavioral tendencies of those primed with an incremental theory.

## 5 | GENERAL DISCUSSION

In three studies, we show that one's implicit theory of personality is related to another's self-disclosure, such that an incremental theory of personality is related directly and indirectly to more self-disclosure. In Study 1 clients were more likely to self-disclose during the intake interview with a therapist who holds a stronger incremental theory of personality, controlling for the therapist's level of expertise. In Study 2, one's incremental theory of personality was positively related to opening, disclosure-encouraging behaviors, and negatively related to the perceived self-protection tendency of others. Furthermore, one's opening behaviors and others' self-protection tendencies mediated the effect of one's incremental theory on others' self-disclosure. Finally, in Study 3 we showed a causal effect of implicit theories on opening behaviors such that following an incremental theory manipulation participants reported engaging in opening behaviors more than following an entity theory manipulation. Furthermore, the indirect effect of implicit theory on self-disclosure through opening behaviors was significant.

## 6 | THEORETICAL IMPLICATIONS

Our findings contribute to the literatures on self-disclosure and implicit theories. We consider each of these in turn. The current research shows that the target's incremental beliefs encourage self-disclosure. Across several settings and study designs, we show that those who interact with targets who hold an incremental theory are more likely to self-disclose. Past research shows people tend to be more openly expressive and self-revealing when interacting with a self-disclosure partner they believe is caring, responsiveness, and trustworthy (Forest & Wood, 2012; Gaucher et al., 2012; McCarthy, Wood, & Holmes, 2017). We reveal a potential mechanism for trust creation. People seem to share their most sensitive information with others that believe they can change. The current research reveals the mechanism that encourages self-disclosure—opening behaviors. Opening behaviors include question asking and listening. Recent research shows that people who ask more questions, particularly follow-up questions, are better liked by their conversation partners (Huang, Yeomans, Brooks, Minson, & Gino, 2017). We identify incremental theorists as those who tend to use opening behaviors, including question asking, and we find that those using opening behaviors are not only better liked but are also more likely to be self-disclosure recipients.

Our findings also contribute to the implicit theories' literature. Research shows that incremental theorists use information about others differently than do entity theorists. Incremental theorists tend to integrate situational influences of behavior into their dispositional impressions, consistent

with their focus on understanding the dynamic states and circumstances that influence people's psychological processes (Molden & Dweck, 2006), whereas entity theorists tend to make more rapid, global trait judgments and to afford traits greater weight in explaining behavior (Gervy, Chiu, Hong, & Dweck, 1999). For example, trait-relevant information was found to have little effect on incremental theorists' verdicts but a marked effect on entity theorists' verdicts (Gervy, Chiu, Hong, & Dweck, 1999). The current research further shows that one's incremental beliefs influence others' behavior. We demonstrate differences between incremental and entity theorists in their effect on others' self-disclosure. Our results show incremental theorists' flexible mode of information gathering allows them to be more open and inviting and encourages others to self-disclose. This behavioral pattern has advantages. Those who engage in intimate disclosures tend to be liked more than those who disclose at lower levels (Collins & Miller, 1994). This tendency could reflect a positive spiral relationship creation process whereby people disclose more to incremental theorists whom they initially like due to their question asking tendency (Huang et al., 2017), and then like them even more for having disclosed to them (Collins & Miller, 1994; McAllister & Bregman, 1983). Future research may use a longitudinal study approach to examine this potential spiral relationship.

Our findings also contribute to research showing that incremental theorists are more likely to behave toward others as if change and growth are possible and to expend effort to achieve others' improvement. Past research has focused on the advantage of incremental beliefs in confronting prejudice and transgression, and on reconciling with victims or out-groups in conflict by accepting responsibility (e.g., Kammrath & Dweck, 2006; Levontin, Halperin, & Dweck, 2013; Rattan & Dweck, 2010; Schumann & Dweck, 2014). The current research is the first to look at the influence of an incremental theory on conversation patterns, and more specifically on the tendency for opening behaviors that encourage others' self-disclosure in different contexts, including social conversations and clinical interactions. We show that those who hold an incremental theory of personality encourage others' self-disclosure. As such, on average, interviewers such as therapists who interview their clients, or job interviewers, can attain more information voluntarily from their conversation partner, information that can improve decision quality, if they hold incremental rather than entity beliefs. Future research could test the influence of an incremental theory of personality on interviewers' success in other contexts, such as job interviews. We would expect interviewees to willingly self-disclose more to an interviewer holding an incremental theory of personality. As such, the interviewer will have more information to use when making decisions. A longitudinal field study that will test the effect of interviewees' self-theories on work performance, work satisfaction, and well-being of the

employees chosen to join the organization following the interview, could contribute to a fuller understanding of the effect.

## 7 | STRENGTHS, LIMITATIONS, AND FUTURE RESEARCH AVENUES

Our research has several strengths. We conducted our studies in several contexts, and we used a multimethod approach that included a field study in which we found that therapists' self-reported incremental theory of personality predicts a behavioral index of self-disclosure (measured by independent observers). We not only examined how incremental and entity beliefs predict others' self-disclosure, but we also investigated the psychological process underlying this association: one's opening behaviors and others' self-protection tendencies.

Our research also has limitations. One limitation is that Studies 2 and 3 used self-report measures. Future studies should use behavioral indexes to measure self-disclosure during a conversation between two or more partners to confirm that the implicit theory of personality influence not only self-report about opening behaviors but also actual opening behaviors. Another limitation is that we demonstrated causality only in the lab but not in the field. Future studies could implement a similar experimental design in the field. For example, an intervention for therapists or work interviewers to increase their incremental beliefs can be developed based on successful interventions for students (Dweck, 2008; Paunesku et al., 2015). Following such an intervention for interviewers, we would expect others to self-disclose more to them. Finally, although we researched clinical interviews (Study 1) and conversations in general (Studies 2 and 3), we do not know whether these findings generalize to long-term social interactions, such as a series of conversations among friends or romantic partners, or during long-term therapy sessions. During such interactions, implicit theories of personality may no longer influence the *amount* of self-disclosure, but rather its *depth*. As the parties come to know each other better, there is less information left to self-disclose. Therefore, implicit theories of personality may have little influence on the *amount* of self-disclosure, the number of new pieces of information revealed. However, we expect implicit theories of personality to influence the *depth* of self-disclosure in long-term social interactions, reflected in the richness and detail of information. Future longitudinal research could test this speculation.

## 8 | CONCLUSION

People have a strong desire to communicate with others and to be socially accepted. Research suggests self-disclosure strengthens social ties, yet it can carry risk by potentially making the

disclosing person vulnerable. Thus, the very behavior that increases relationship intimacy might also leave one vulnerable to the social pain of negative evaluation and rejection (Derlega et al., 1993; Forest & Wood, 2012). Our research suggests that incremental theorists, those who believe people can grow, improve, and change for the better, can influence others to trust their personal information with them, even if negative.

## ACKNOWLEDGEMENT

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Preparation of this manuscript was supported by the Israeli National Institute for Health Policy and Health Services Research (2006/6); and Israel science foundation (grant number 847/16).

## CONFLICT OF INTERESTS

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## ORCID

Liat Levontin  <https://orcid.org/0000-0001-9692-4555>

## REFERENCES

- Alegria, M., Nakash, O., Lapatin, S., Oddo, V., Gao, S., Lin, J., & Normand, S. L. (2008). How missing information in diagnosis can lead to disparities in the clinical encounter. *Journal of Public Health Management and Practice: JPHMP*, 14, S26–S35.
- Altman, I., & Taylor, D. A. (1973). *Social penetration: The development of interpersonal relationships*. New York, NY: Holt, Rinehart & Winston.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (revised 4th ed.). Washington, DC: Author.
- Bargh, J. A., McKenna, K. Y., & Fitzsimons, G. M. (2002). Can you see the real me? Activation and expression of the "true self" on the Internet. *Journal of Social Issues*, 58, 33–48. <https://doi.org/10.1111/1540-4560.00247>
- Barry, C. A., Bradley, C. P., Britten, N., Stevenson, F. A., & Barber, N. (2000). Patients' unvoiced agendas in general practice consultations: Qualitative study. *BMJ*, 320, 1246–1250. <https://doi.org/10.1136/bmj.320.7244.1246>
- Blechman, E. A., Lowell, E. S., & Garrett, J. (1999). Prosocial coping and substance use during pregnancy. *Addictive Behaviors*, 24, 99–109. [https://doi.org/10.1016/S0306-4603\(98\)00062-8](https://doi.org/10.1016/S0306-4603(98)00062-8)
- Butler, R. (2000). Making judgments about ability: The role of implicit theories of ability in moderating inferences from temporal and social comparison information. *Journal of Personality and Social Psychology*, 78, 965–978. <https://doi.org/10.1037/0022-3514.78.5.965>

- Chiu, C., Hong, Y., & Dweck, C. S. (1997). Lay dispositionism and implicit theories of personality. *Journal of Personality and Social Psychology*, *73*, 19–30. <https://doi.org/10.1037/0022-3514.73.1.19>
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. *Psychological Bulletin*, *116*, 457–475. <https://doi.org/10.1037/0033-2909.116.3.457>
- Cozby, P. C. (1973). Self-disclosure: A literature review. *Psychological Bulletin*, *79*, 73–91. <https://doi.org/10.1037/h0033950>
- Derlaga, V. J., & Berg, J. H. (Eds.). (2013). *Self-disclosure: Theory, research, and therapy*. New York, NY: Springer Science & Business Media.
- Derlega, V. J., Metts, S., Petronio, S., & Margulis, S. T. (1993). *Self-disclosure*. Newbury Park, CA: Sage.
- Dweck, C. S. (2008). Can personality be changed? The role of beliefs in personality and change. *Current Directions in Psychological Science*, *17*, 391–394. <https://doi.org/10.1111/j.1467-8721.2008.00612.x>
- Dweck, C. S. (2013). *Self-theories: Their role in motivation, personality, and development*. New York, NY: Psychology Press.
- Dweck, C. S., Hong, Y., & Chiu, C. (1993). Implicit theories individual differences in the likelihood and meaning of dispositional inference. *Personality and Social Psychology Bulletin*, *19*, 644–656. <https://doi.org/10.1177/0146167293195015>
- Forest, A. L., & Wood, J. V. (2012). When social networking is not working: Individuals with low self-esteem recognize but do not reap the benefits of self-disclosure on Facebook. *Psychological Science*, *23*, 295–302. <https://doi.org/10.1177/0956797611429709>
- Gaucher, D., Wood, J. V., Stinson, D. A., Forest, A. L., Holmes, J. G., & Logel, C. (2012). Perceived regard explains self-esteem differences in expressivity. *Personality and Social Psychology Bulletin*, *38*, 1144–1156. <https://doi.org/10.1177/0146167212445790>
- Gervey, B. M., Chiu, C. Y., Hong, Y. Y., & Dweck, C. S. (1999). Differential use of person information in decisions about guilt versus innocence: The role of implicit theories. *Personality and Social Psychology Bulletin*, *25*, 17–27. <https://doi.org/10.1177/0146167299025001002>
- Hall, K. H. (2002). Reviewing intuitive decision-making and uncertainty: The implications for medical education. *Medical Education*, *36*, 216–224. <https://doi.org/10.1046/j.1365-2923.2002.01140.x>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Hong, Y. Y., Chiu, C. Y., Dweck, C. S., Lin, D. M. S., & Wan, W. (1999). Implicit theories, attributions, and coping: A meaning system approach. *Journal of Personality and Social Psychology*, *77*, 588–599. <https://doi.org/10.1037/0022-3514.77.3.588>
- Huang, K., Yeomans, M., Brooks, A. W., Minson, J., & Gino, F. (2017). It doesn't hurt to ask: Question-asking increases liking. *Journal of Personality and Social Psychology*, *113*, 430–452. <https://doi.org/10.1037/pspi0000097>
- John, L. K., Acquisti, A., & Loewenstein, G. (2010). Strangers on a plane: Context-dependent willingness to divulge sensitive information. *Journal of Consumer Research*, *37*, 858–873. <https://doi.org/10.1086/656423>
- John, L. K., Barasz, K., & Norton, M. I. (2016). Hiding personal information reveals the worst. *Proceedings of the National Academy of Sciences*, *113*, 954–959. <https://doi.org/10.1073/pnas.1516868113>
- Joinson, A. N. (2001). Self-disclosure in computer-mediated communication: The role of self-awareness and visual anonymity. *European Journal of Social Psychology*, *31*, 177–192. <https://doi.org/10.1002/ejsp.36>
- Kammrath, L. K., & Dweck, C. (2006). Voicing conflict: Preferred conflict strategies among incremental and entity theorists. *Personality and Social Psychology Bulletin*, *32*, 1497–1508. <https://doi.org/10.1177/0146167206291476>
- Kassin, S. M., & Gudjonsson, G. H. (2004). The psychology of confessions a review of the literature and issues. *Psychological Science in the Public Interest*, *5*, 33–67. <https://doi.org/10.1111/j.1529-1006.2004.00016.x>
- Kelly, A. E., & McKillop, K. J. (1996). Consequences of revealing personal secrets. *Psychological Bulletin*, *120*, 450–465. <https://doi.org/10.1037/0033-2909.120.3.450>
- Lehman, D. R., Ellard, J. H., & Wortman, C. B. (1986). Social support for the bereaved: Recipients' and providers' perspectives on what is helpful. *Journal of Consulting and Clinical Psychology*, *54*, 438–446. <https://doi.org/10.1037/0022-006X.54.4.438>
- Levontin, L., Halperin, E., & Dweck, C. S. (2013). Implicit theories block negative attributions about a longstanding adversary: The case of Israelis and Arabs. *Journal of Experimental Social Psychology*, *49*, 670–675. <https://doi.org/10.1016/j.jesp.2013.02.002>
- Levontin, L., & Yom-Tov, E. (2017). Negative self-disclosure on the web: The role of guilt relief. *Frontiers in Psychology*, *8*, 1068. <https://doi.org/10.3389/fpsyg.2017.01068>
- Liu, M., & Wang, C. (2010). Explaining the influence of anger and compassion on negotiators' interaction goals: An assessment of trust and distrust as two distinct mediators. *Communication Research*, *37*, 443–472. <https://doi.org/10.1177/0093650210362681>
- Lumley, M. A. (2004). Alexithymia, emotional disclosure, and health: A program of research. *Journal of Personality*, *72*, 1271–1300. <https://doi.org/10.1111/j.1467-6494.2004.00297.x>
- McAllister, H. A., & Bregman, N. J. (1983). Self-disclosure and liking: An integration theory approach. *Journal of Personality*, *51*, 202–212. <https://doi.org/10.1111/j.1467-6494.1983.tb00863.x>
- McCarthy, M. H., Wood, J. V., & Holmes, J. G. (2017). Dispositional pathways to trust: Self-esteem and agreeableness interact to predict trust and negative emotional disclosure. *Journal of Personality and Social Psychology*, *113*, 95–116. <https://doi.org/10.1037/pspi0000093>
- Miller, L. C., Berg, J. H., & Archer, R. L. (1983). Openers: Individuals who elicit intimate self-disclosure. *Journal of Personality and Social Psychology*, *44*, 1234–1244. <https://doi.org/10.1037/0022-3514.44.6.1234>
- Molden, D. C., & Dweck, C. S. (2006). Finding “meaning” in psychology: A lay theories approach to self-regulation, social perception, and social development. *American Psychologist*, *61*, 192–203. <https://doi.org/10.1037/0003-066X.61.3.192>
- Nakash, O., & Alegría, M. (2013). Examination of the role of implicit clinical judgments during the mental health intake. *Qualitative Health Research*, *23*, 645–654. <https://doi.org/10.1177/1049732312471732>
- Nakash, O., Dargouth, S., Oddo, V., Gao, S., & Alegría, M. (2009). Patient initiation of information: Exploring its role during the mental health intake visit. *Patient Educational Counseling*, *75*, 220–226. <https://doi.org/10.1016/j.pec.2008.10.010>
- Nakash, O., Nagar, M., & Kanat-Maymon, Y. (2015a). “What should we talk about”? The association between the information exchanged during the mental health intake and the quality of the working alliance. *Journal of Counseling Psychology*, *62*, 514–520.

- Nakash, O., Nagar, M., & Kanat-Maymon, Y. (2015b). The clinical use of DSM categorical diagnostic system during the mental health intake. *The Journal of Clinical Psychiatry*, *76*, e862–e869.
- Nakash, O., Nagar, M., & Levav, I. (2015). Predictors of mental health care stigma and its association with the therapeutic alliance during the initial intake session. *Psychotherapy Research*, *25*, 214–221. <https://doi.org/10.1080/10503307.2014.885147>
- Nakash, O., Rosen, D., & Alegría, M. (2010). The culturally sensitive evaluation. In P. Ruis & A. Primm (Eds.), *Disparities in psychiatric care: Clinical and cross-cultural perspectives* (pp. 225–235). Philadelphia, PA: Lippincott, Williams & Wilkins.
- Nakash, O., & Saguy, T. (2015). Social identities of clients and therapists during the mental health intake predict diagnostic accuracy. *Social Psychological and Personality Science*, *6*, 710–717. <https://doi.org/10.1177/1948550615576003>
- Omarzu, J. (2000). A disclosure decision model: Determining how and when individuals will self-disclose. *Personality and Social Psychology Review*, *4*, 174–185. [https://doi.org/10.1207/S15327957PSPR0402\\_05](https://doi.org/10.1207/S15327957PSPR0402_05)
- Ong, L. M., De Haes, J. C., Hoos, A. M., & Lammes, F. B. (1995). Doctor-patient communication: A review of the literature. *Social Science & Medicine*, *40*, 903–918. [https://doi.org/10.1016/0277-9536\(94\)00155-M](https://doi.org/10.1016/0277-9536(94)00155-M)
- Pasupathi, M., McLean, K. C., & Weeks, T. (2009). To tell or not to tell: Disclosure and the narrative self. *Journal of Personality*, *77*, 89–124. <https://doi.org/10.1111/j.1467-6494.2008.00539.x>
- Paunesku, D., Walton, G. M., Romero, C., Smith, E. N., Yeager, D. S., & Dweck, C. S. (2015). Mind-set interventions are a scalable treatment for academic underachievement. *Psychological Science*, *26*, 784–793. <https://doi.org/10.1177/0956797615571017>
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science*, *8*, 162–166. <https://doi.org/10.1111/j.1467-9280.1997.tb00403.x>
- Pennebaker, J. W. (2012). *Opening up: The healing power of expressing emotions*. New York, NY: Guilford Press.
- Rattan, A., & Dweck, C. S. (2010). Who confronts prejudice? The role of implicit theories in the motivation to confront prejudice. *Psychological Science*, *21*, 952–959. <https://doi.org/10.1177/0956797610374740>
- Raudenbush, S. W., Bryk, A. S., Cheong, Y. F., Congdon, R. T., & Toit, D. U. (2011). *HLM 7: Hierarchical linear and nonlinear modeling*. Lincolnwood, IL: Scientific Software International.
- Rosen, D. C., Miller, A. B., Nakash, O., Halperin, L., & Alegría, M. (2012). Interpersonal complementarity in the mental health intake: A mixed-methods study. *Journal of Counseling Psychology*, *59*, 185–196. <https://doi.org/10.1037/a0027045>
- Schumann, K., & Dweck, C. S. (2014). Who accepts responsibility for their transgressions? *Personality and Social Psychology Bulletin*, *40*, 1598–1610.
- Sezer, O., Gino, F., & Norton, M. I. (2018). Humblebragging: A distinct—and ineffective—self-presentation strategy. *Journal of Personality and Social Psychology*, *114*, 52–74. <https://doi.org/10.1037/pspi0000108>
- Shaffer, D. R., & Pegalis, L. J. (1998). Gender and situational context moderate the relationship between self-monitoring and induction of self-disclosure. *Journal of Personality*, *66*, 215–234. <https://doi.org/10.1111/1467-6494.00010>
- Sprecher, S., & Hendrick, S. S. (2004). Self-disclosure in intimate relationships: Associations with individual and relationship characteristics over time. *Journal of Social and Clinical Psychology*, *23*, 857–877. <https://doi.org/10.1521/jscp.23.6.857.54803>
- Stasser, G., Stewart, D. D., & Wittenbaum, G. M. (1995). Expert roles and information exchange during discussion: The importance of knowing who knows what. *Journal of Experimental Social Psychology*, *31*, 244–265. <https://doi.org/10.1006/jesp.1995.1012>
- Stokes, J. P. (1987). The relation of loneliness and self-disclosure. In V. J. Derlega & J. H. Berg (Eds.), *Self-disclosure. Perspectives in social psychology* (pp. 175–201). Boston, MA: Springer.
- Swap, W., Leonard, D., Shields, M., & Abrams, L. (2001). Using mentoring and storytelling to transfer knowledge in the workplace. *Journal of Management Information Systems*, *18*, 95–114. <https://doi.org/10.1080/07421222.2001.11045668>
- Tai-Seale, M., McGuire, T. G., & Zhang, W. (2007). Time allocation in primary care office visits. *Health Services Research*, *42*, 1871–1894. <https://doi.org/10.1111/j.1475-6773.2006.00689.x>
- Thompson, L. L. (1991). Information exchange in negotiation. *Journal of Experimental Social Psychology*, *27*, 161–179. [https://doi.org/10.1016/0022-1031\(91\)90020-7](https://doi.org/10.1016/0022-1031(91)90020-7)

**How to cite this article:** Levontin L, Nakash O, Danziger S. It takes two to self-disclose: Incremental theorists facilitate others' self-disclosure more than do entity theorists. *Journal of Personality*. 2019;00:1–13. <https://doi.org/10.1111/jopy.12473>