Dealing with Social Difficulty During Adolescence:
The Role of Implicit Theories of Personality

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Abstract

Social difficulty during adolescence contributes to internalizing problems (such as depression or stress) and also spurs cycles of aggression and retaliation. The present paper reviews how implicit theories of personality—beliefs about whether people can change their socially-relevant characteristics—can help explain why some adolescents respond to social difficulty in these ways while others do not. It is found that an entity theory of personality—the belief that people cannot change—elicits problematic self- and other-blame for social difficulty, and predicts more extreme affective, physiological, and behavioral responses, such as depression and aggression. Interventions that teach an incremental theory of personality—the belief that people have the potential to change—can reduce problematic reactions to social difficulty. Discussion centers on mechanisms for implicit theories effects and proposes directions for future research.

Keywords: implicit theories, coping, adolescence, mental representations, social cognitive development, psychological intervention.
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Why do some young people respond to social difficulties such as peer victimization and exclusion with despair or a thirst for revenge, while others find more productive ways of coping? Prior research has shown that adolescents suffer more when they blame their social difficulties on their flawed traits, and they want to lash out more when they conclude their peers are fundamentally “bad” people who deserve to suffer. These fixed-trait attributions are problematic in part because of what they portend. Illustrating this, a 9th-grade student once asked me (and I’m paraphrasing): “If my friends make fun of me or don’t ask me to sit with them at lunch, does that mean I’ll have no friends for life? That they’ll make fun of me forever?” This is a stressful thought, and one that might elicit extreme emotion or action.

Our research has identified the mindsets, or implicit theories of personality, that can underlie such thoughts. Because implicit theories can be altered through intervention (and perhaps socialization), then they represent one potential method for helping adolescents deal more effectively with social difficulty.

The present paper first reviews basic processes through which implicit theories shape responses to social difficulty, taking the process model of emotion regulation as an organizing framework. Next, it examines intervention studies that demonstrate causality and practical impact. Third, it discusses promising areas for future research.

Implicit Theories: High School Social Life Viewed from Two Perspectives

Implicit theories are beliefs about the malleability of human characteristics. An entity theory of personality is a theory that people’s socially-relevant traits (e.g. whether they are a

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1 For evidence that some adolescents develop internalizing and externalizing symptoms when they are victimized, see (1, 2).
mean or nice person, whether they are likable or not) are fixed and unchangeable. An *incremental theory* of personality is the theory that people have the potential to change their socially-relevant traits. The two implicit theories of personality—entity and incremental—can create different worldviews or “meaning systems” through which people interpret and respond to peer social conflicts like victimization and exclusion (7).

**Worldview.** First, the different implicit theories imply worldviews that shape goal striving. Those with more of an entity theory tend to endorse the goal of *demonstrating* social success or of *avoiding demonstrating* social ineptitude (i.e., a “performance” approach or avoidance goal; (9, 10). This is because, if traits are fixed, it is threatening to be “outed” as lacking in social status or competence. In an incremental theory, however, adolescents tend to endorse the goal of *learning how to develop* social competence or relationships (11). Often, this goal manifests in the motivation to put oneself in socially challenging situations where one can acquire more friendship skills or repair relationships with others (10, 12).

Next, the entity and incremental theories—and the social goals that emanate from them (13)— shape reactions to social difficulties like bullying, victimization, and exclusion. This can be illustrated through an analysis of how implicit theories affect each step in a process model of coping (5). Depending on people’s implicit theories of personality, people show different patterns of *attention, appraisal*, and *responses* in response to these socially-difficult situations, as outlined in Table 1 and Figure 1.

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2 For this review, I do not differentiate implicit theories about the malleability of one’s own versus others’ traits. In our experience, the two go hand in hand. When one feels that one’s own traits are fixed, it leads to the expectation that others will treat one the same way forever. When one feels that others’ traits are fixed, it can lead to the same conclusion. Although in general the closer an implicit theory is to the domain of the outcome, the more predictive it will be (8), in unpublished findings so far we have not yet found different associations for self-theories of personality versus other-theories. To reflect the state of the evidence so far, I discuss them both jointly.
Attention and information-seeking. A person in an incremental theory might ask: what was the person’s psychology? What were they thinking or feeling that made them act that way? In an entity theory, by contrast, a person might ask: what kind of person are they, and how do their traits or labels explain their behavior (14, 15)?

For someone with more of an entity theory, who prioritizes the goal of demonstrating social competence or status, attention is allocated more toward peers’ status and social rank or underlying traits (16), as shown in Table 1, row 3. For instance, new research found that high school adolescents with more of an entity theory more readily sorted the social world in terms of who was popular or unpopular, rather than in terms of qualities like personal interests (17). Furthermore, when making judgments about a person who harmed others, participants with an entity theory expressed a desire to know more about a person’s traits, while an incremental theory predicted a desire to know more about the background situation in which the event occurred (15).

Appraisal. Next, implicit theories affect appraisals, at several levels of analysis, as shown in Table 1, row 4, and in Figure 1. That is, implicit theories shape attributions for cause and effect, and these can affect judgments of how demanding a stressor seems and whether one has the resources to deal with it.

Those with more of an entity theory are more likely to view an accidental conflict—such as a peer bumping into you in the hallway—as having been done on purpose in order to be mean (i.e., the hostile attributional bias; (18, 19). The same was true for a negative experience where hostile intent was unclear, such as ostracism during an online game with two peers (i.e., Cyberball; (19, 20). Next, an entity theory predicts trait-relevant attributions for both accidental and obviously-intended conflicts. High school students with more of an entity theory were more
likely to say that a peer who made fun of and embarrassed them was a “bad person” (4), and 5th grade students were more likely to wonder if an experience of social failure with peers meant that they are just “not likable” people (10). These kinds of fixed-trait attributions, in turn, create the perception that the bad things happening to one right now can never change, as shown in row 5 in Table 1.

New research has moved from intent and trait attributions to the kinds of appraisal processes commonly studied in the biopsychosocial model of challenge and threat (21, 22), as shown in row 6 in Table 1. Physiological responses to a stressor are shaped by whether individuals feel that they have the resources to cope with the demands facing them (i.e., the ratio of perceived resources to perceived demand; (21, 22). Individuals are said to experience threat when they appraise the demand as greater than the resources, and challenge when they appraise the resources as sufficient to meet the demand.

An entity theory predicts more of a threat appraisal to stressors—that is, it calls into question whether your fixed traits are up to the task of succeeding socially. In two studies (23), an incremental theory of personality created less of a threat appraisal and more of a challenge appraisal, both in response to a laboratory stressor (having to give a speech about what makes someone popular, to evaluative upperclassmen), and everyday events in high school (reported on a daily dairy).

**Responses.** Third, these different appraisals give rise to different responses depending on one’s implicit theory, again at multiple levels of analysis, as shown in Table 1, rows 7-10. Physiologically, threat-type appraisals lead to cardiovascular and hormonal responses that prepare the body for damage and defeat: constricted blood vessels (higher Total Peripheral Resistance), and secretion of cortisol (activation of the HPA-axis) (21, 22). An incremental
theory, which promotes more challenge-type appraisals, reduced the threat-type physiological responses during an experience of negative peer evaluation, both in the laboratory and in a field study (23); (also see (24), for a replication).

Adolescents furthermore report different emotions after peer victimization and exclusion, depending on their implicit theories. Those with more of an entity theory of personality are more likely to report *self-relevant emotions* such as shame, humiliation, and hatred (4). These emotions differ from more situation-focused emotions such as anger or sadness, because they stem from the judgment that a person’s core is flawed; in the case of shame, that one’s self is bad (25), and in the case of hatred, that another person’s core self is bad or evil (26). In one study, an incremental theory reduced shame and hatred after a scenario of serious bullying, but did not reduce anger or sadness (4). Thus, an incremental theory does not make one oblivious to the injustice of being targeted as a victim. Victims are still sad and angry. However, an incremental theory helps adolescents avoid destructive emotions like shame and hatred (26).

Finally, the different coping processes created by implicit theories of personality sometimes translate into different overall levels of internalizing or externalizing responses, as shown in Table 1 rows 7-10 and at the bottom of Figure 1. In a meta-analysis, an entity theory of personality predicted both depression and aggression in adolescence (27). In our studies, we gave adolescents hypothetical scenarios of bullying or victimization, or we put them in experimental situations in which they faced peer exclusion (i.e. Cyberball; (20)). In response to either kind of situation, adolescents with more of an entity theory displayed a greater desire to retaliate and get revenge—keeping the cycle of high school aggression going (4). Furthermore, those with an entity theory expected that getting revenge would make them feel better. Learning an
incremental theory, by contrast, reduced both the desire for aggression and the expectation that revenge would make one feel better (4).

**Changing Implicit Theories Through Psychological Intervention**

Implicit theories of personality appear to be somewhat stable individual differences when they are left untouched. Research is showing, however, that it is possible to redirect adolescents toward more of an incremental theory, sometimes through relatively short interventions. When this happens, adolescents can show better coping.

What do the interventions teach? Incremental theory of personality interventions teach that people have the potential to change their socially-relevant characteristics, no matter their age, under the right conditions, and with the right support. The interventions contain three messages.

First, incremental theory interventions teach that people don’t do things because of their labels (e.g. “bully” or “jerk”), but because of thoughts and feelings they have—thoughts and feelings that live in the brain. Second, the brain’s thoughts and feelings can change when the brain learns new ways of viewing and dealing with the social world. Third, the interventions teach that this potential for change means that people are not stuck being one way—that people who are mean, who bully, or who exclude you are not just “bad people” forever, but, with the right support, have the potential to see how what they are doing is harmful, and then change. This can provide a basis for hope.

In the interventions, these messages are wrapped in now-standard tactics for “wise interventions”—that is, for methods to produce internalization of novel world views (28). The intervention uses *scientific authority* (by summarizing real neuroscientific findings), it aligns the message with *descriptive social norms* (29); (by presenting statistical information and narrative
summaries of older students who endorse the view that people can change), and it implements saying-is-believing (30); (by inviting participants to write their own persuasive, comforting letter to a future, excluded student who might be bullied but who might not yet know that people can change). Hence the intervention is not passive—telling adolescents what to think—but is instead active—asking adolescents to draw on their personal wisdom and pass it on to others.

The first incremental theory of personality intervention was a six-session classroom workshop delivered in high school science classes at a low-income school (31). It was compared to two control groups: a six-session intervention that taught social-emotional coping skills (but no incremental theory), and a no-treatment control group. A month after the intervention, those who received the incremental theory classroom workshops showed less behavioral retaliation toward a peer who excluded them (via Cyberball). Three and a half months later, incremental theory participants were nominated by their teachers (who were blind to condition) as showing reduced conduct problems (31). The standard social-emotional coping skills intervention, by contrast, showed no benefits in social behavior compared to the no-treatment control (32). Critical for our theory, the long-term effects were greatest among those who had the most social difficulty. That is, students’ conduct problems were reduced the most in response to the treatment when they reported that they had been chronically victimized by peers (31).

Subsequent incremental theory interventions have been more compact, involving a 30 to 45-minute self-administered reading and writing exercise delivered either on paper or via the Internet. In a series of double-blind randomized field experiments in high schools, adolescents who received the incremental theory intervention have coped with the social difficulties of the transition to high school more productively. Adolescents receiving the incremental theory of personality intervention reported less overall stress and earned higher grades over the socially-
difficult freshman year of high school (23, 33). In another study, entering 9th graders given the incremental theory intervention showed 40% fewer depressive symptoms 8-9 months post-treatment, an effect that was especially prominent for those who started the year with an entity theory of personality (34, 35). This effect on internalizing symptoms did not generalize to one sample of entering college students at a 1-month follow-up (34), while the effect on physiological reactivity that is antecedent to internalizing symptoms generalized to clinically-referred adolescents (24). These initial results are encouraging enough to continue replications, but the intervention is not ready for full-scale implementation.

**Future Directions**

There are several exciting areas for future research. In general, these will build out the unknown areas in the process model in Figure 1.

First, can incremental theories of personality reduce actual bullying itself—and not only responses to victimization and exclusion? Perhaps those with an entity theory—believing that any instance of social failure would put them in the “loser” category forever—maintain a keen vigilance to threats to status, and then strategically and preemptively attack others’ status to preserve their own. If true, then an incremental theory intervention might dampen adolescents’ urges to harm others’ reputations by bullying them.

Second, and relatedly, we know very little about the *behavioral* and *environmental* mediators of incremental theory of personality treatments. Do treated youth start making more friends, and do these stronger peer relationships sustain the treatment effects, as suggested in Figure 1 (also cf. 36)? Or are the relevant mediators solely internal to a young person’s psychology? Multi-school replications of implicit theories interventions that assessed personal and situational moderators could address these and other possibilities outlined in Figure 1.
Third, how can adults socialize young people into an incremental theory of personality? In the intelligence domain, telling children that they were “smart at that” communicated an entity theory of intelligence (37). Comfort such as “it’s okay, not everybody can be good at math,” encouraged hopelessness (38). Perhaps in the personality domain, parents may, in a moment of crisis, use phrases that invite fixed explanations for differences among people (39, 40), such as “don’t worry, they’re just bullies,” or “you’re a good person, they’re not.” This language may not provide relief if it promotes fixed-trait thinking. Indeed, one study (41) found that a common message for LGBTQ youth who were bullied—the “it gets better” social media campaign—was that life gets better because you can escape your hometown and move to San Francisco or New York, which are cities with more tolerant views of the LGBTQ community. This message increased despair for LGBTQ youth by implying that bullies can never change. It was only when youth were told that “it gets better” because society’s views can change over time, and your peer tormenters might become enlightened one day, that LGBTQ youth felt comforted (41).

Conclusion
Implicit theories research, applied to the social lives of adolescents, has been fruitful in uncovering explanations for differences in how adolescents deal with peer victimization and exclusion and for informing initially-promising interventions. The next phase of research will investigate additional mechanisms, antecedents, and effects at scale across social contexts. Our measures will also hopefully be improved. After this research, incremental theory of personality interventions may eventually emerge as a useful tactic for ameliorating a portion of the internalizing and externalizing consequences of adolescent social difficulty.
References


Implicit Theories of Personality


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Table 1. The Experience of Being Subjected to High School Social Conflict from Two Worldviews: Entity and Incremental Theories of Personality.

<table>
<thead>
<tr>
<th>Worldview</th>
<th>Entity Theory of Personality</th>
<th>Incremental Theory of Personality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beliefs</td>
<td>People can’t change.</td>
<td>People can change.</td>
</tr>
<tr>
<td>Goals</td>
<td>Demonstrate social competence (or avoid social catastrophe).</td>
<td>Develop social relationships.</td>
</tr>
<tr>
<td>Attention</td>
<td>Status and social rank; Trait-revealing information.</td>
<td>Personal interests and values; Psychological and situational information.</td>
</tr>
<tr>
<td>Appraisal</td>
<td>Perpetrator was “mean on purpose” due to fixed traits of the self (“I’m not likable”) and of the perpetrator (“he’s a bad person”).</td>
<td>The perpetrator had psychological reasons, or extenuating circumstances, for his or her behavior.</td>
</tr>
<tr>
<td>Predictions</td>
<td>Negative events will always stay this way.</td>
<td>Negative events can improve.</td>
</tr>
<tr>
<td>Resource appraisal</td>
<td><strong>Threat:</strong> No amount of resources can help me overcome a difficult situation.</td>
<td><strong>Challenge:</strong> I have or can acquire the resources to overcome a difficult situation.</td>
</tr>
<tr>
<td>Response</td>
<td>Physiology</td>
<td><strong>Threat:</strong> Constriction of blood vessels, less efficient heart, greater cortisol.</td>
</tr>
<tr>
<td>Emotion</td>
<td>Shame, humiliation, hatred.</td>
<td>Sadness, anger.</td>
</tr>
<tr>
<td>Internalizing</td>
<td>Depression, stress, and hopelessness.</td>
<td>Active problem solving and optimism.</td>
</tr>
<tr>
<td>Externalizing</td>
<td>Aggression and desire for revenge.</td>
<td>Confrontation (with intent to change), reconciliation, or moving on.</td>
</tr>
</tbody>
</table>
Figure 1. A hypothesized recursive process model illustrating how an entity theory of personality (“belief that people cannot change”) could relate to poorer coping outcomes in response to peer social conflict during the transition to high school. Model based on Gross (2015).

A. High School Transition Linear Model

Situation (S): Social exclusion, insults, rumors, or reputational aggression
Attention (At): Anticipating and noticing status threats (demands > resources)
Appraisal (Ap): Attributing to fixed traits (demands > resources)
Response (R): Aggression or helplessness

B. High School Transition Developmental Process Model

(S) Popular peers laugh at what you wear
(At) Notice that they are laughing at you
(Ap) Wonder if they think you are a "loser"
(R) Feel ashamed, hate them

Wariness in taking risks to make friends

Uncertain hierarchy in high school + adolescent drive for status

Belief that people cannot change

Acquaintances do not invite you to a party
Notice that you were "left out"
Worry that you are "not likable"
Feel anxious and "stressed out"

Reduced social motivation

Belief that people cannot change

People make fun of you for being a "loner"
Notice the insults
They are "bad people" who will always make fun of you
Despair or desire for revenge