

decorating an office) to overt (explicitly discussing one's personal views). Deliberate self-disclosure can be used to express a therapist's views on a subject, or to reflect on the effect of what a client has said; deliberate self-disclosure strictly for the benefit of the therapist is considered unethical. Unavoidable self-disclosures includes aspects of a person that are apparent through observation (race, age, gender, overt religious paraphernalia, body modifications, personal dress and manner of presentation, etc). Accidental self-disclosures are those that are the result of interactions between therapists and clients when therapists do not maintain their professional demeanors; this can occur when they are surprised and caught off-guard or when therapists encounter clients outside professional settings. Client-driven self-disclosures result from a more open culture, combined with internet technology. Clients have come to view themselves as entitled to information on their therapist's background, and easy access to the Internet makes it easy to acquire such information. The appropriateness of self-disclosure varies based on the therapist, the client, and the particular situation. Some therapeutic techniques like feminist and humanist approaches lend themselves to self-disclosure to emphasize the egalitarian nature of counseling relationships, and others like cognitive-behavioral approaches use self-disclosure to provide feedback to a client's words or actions, and others like psychoanalysis aim to be opaque to clients in an effort to use, for example, projection and other therapeutic techniques (Henretty and Levitt 2010). As expected, the variety of therapeutic methods and self-disclosure challenges efforts to understand the effects of self-disclosure, but this area of research does highlight that self-disclosure is a key component of relationships and can serve to shape those relationships.

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Self-Discrepancies

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Overview

The tale of Dr. Jekyll and Mr. Hyde provides a vivid image of a self-discrepancy: a contradiction between two distinct inner “selves.” In reality, self-discrepancies are not confined to moral conflicts nor are they generally as extreme or as rare as the split personality of Dr. Jekyll/Mr. Hyde. Rather, inconsistencies between and among private thoughts, feelings, beliefs, desires, goals, and motivations are quite common across the life span (Markus and Nurius 1986). In adolescence, *self-discrepancies are both normative and necessary*; their exponential growth following late childhood results from and gives rise to important developmental processes including abstract thinking, goal setting, and goal attainment (Harter 2006; Gestsdottir and Lerner 2008). Despite the prevalence and functionality of self-discrepancies, they are associated with emotional

discomfort, especially for midadolescents. This is because adolescents are wrestling with the task of identity formation and are still developing the ability to make sense of, and to some extent make peace with, internal contradictions (Erikson 1968; Harter 1999). Although the literature on adult self-discrepancies far outstrips the work with younger populations, there has been some important and diverse work with adolescents.

This essay begins by discussing a number of perspectives on the self which have shaped modern research on self-discrepancies, particularly among adolescents. Following is a discussion of the dominant theoretical conceptualization of self-discrepancies and new research findings that challenge and expand this conceptualization. Finally, the clinical relevance of self-discrepancies will be considered along with future directions for treatment and research. In this essay, the terms self, self-view, and self-representation will be used interchangeably, as will the terms discrepancy, conflict, and contradiction.

How Do Self-discrepancies Come About?

The notion of dualities within the self dates far back in human history, but scientific curiosity about self-conflicts arose on the heels of modern psychological conceptions of the developing self. Thus, any discussion of adolescent self-discrepancies must begin with a discussion of the self in general, and the adolescent self in particular. Several major theorists have been influential in shaping current views of the self. These include William James (multiple selves, psychological significance of the ratio of one's actualities to potentialities: 1890/1950), Charles Horton Cooley (looking glass self – parents' views of children becomes embedded in children's self-views: 1902), Sigmund Freud (primacy of parent-child relationships, conflicting inner id, ego, superego: 1923/1961), Erik Erikson (identity formation across several domains during adolescence: 1968), and Urie Bronfenbrenner (self as active contributor to its own development: 1979). Taken together, these perspectives hold that *self-knowledge begins to evolve in infancy and becomes increasingly complex, multidimensional, and purposeful as individuals approach adulthood.*

Intertwined with the cognitive, pubertal, social/relational, and environmental/educational changes

that characterize the transition into adolescence, conceptions of self also undergo unique qualitative and quantitative changes (Wigfield et al. 1996; Harter 1999). Adolescents start to envision themselves in new ways and create multiple versions of the self, including numerous *self-guides*, which represent their desired end states. In addition to the self as it is (actual/true or current self), adolescents imagine themselves as they desire to be (ideal self), as they are duty-bound to be (ought self), as dreaded (undesired/feared self), as seen by a significant other (e.g., parental ideal for self), and as an infinite number of other past and future possible selves (Markus and Nurius 1986). Adolescents also begin to view themselves differently across relational contexts – as early as seventh grade, adolescents can describe differences between their attributes and behaviors when they are with parents, friends, and romantic partners (Harter and Monsour 1992).

Ideal and ought selves are the *self-guides* or *self-standards* that have received the most attention perhaps because parents are believed to be the primary contributors to their development. Children develop strong ideal and/or ought self-guides according to the focus of parenting messages. Messages regarding the importance of achieving positive outcomes lead to strong ideal selves, whereas messages regarding avoiding negative outcomes lead to strong ought selves (regulatory focus theory: Higgins 1997; Manian et al. 2006). Indeed, research in several countries including Germany, Israel, Jamaica, and the USA indicates that there is often a high degree of similarity between adolescents' values and ideals and their perceptions of their parents' wishes for them (see Cashmore and Goodnow 1985; Ferguson and Dubow 2007), particularly for girls (Moretti and Wiebe 1999). Societal values also play a role in the development of ideal and ought self-guides. For example, children across multiple societies tend to adopt ideals for physical appearance that represent culturally valued physical characteristics to the citation (e.g., Cramer and Anderson [Ferguson] 2003).

Increasing cognitive sophistication is the platform that allows for the rapid multiplication of selves during adolescence (cognitive developmental perspective: Harter et al. 1997). Due to the rise of formal operations (Piaget 1970), there is rapid growth in hypothetical and abstract thinking – adolescents are much better able to consider possibilities beyond their immediate experience. Early adolescents also demonstrate highly

compartmentalized thinking, which aids in the formation of numerous self-representations. Furthermore, having developed better perspective-taking ability (i.e., the ability to put themselves in another's shoes, which emerges in mid-/late childhood), early adolescents are more orientated toward social relationships and the standards of significant adults. This unique point in cognitive and social development results in greater differentiation of the self across different social contexts and relational roles (Harter 2006). As self-views rapidly multiply, so do contradictions between those self-views. Thus, *the prevalence of self-discrepancies during adolescence is a logical consequence of the exponential growth in self-representations*. Although the content of adolescents' selves differs based on what attributes are culturally prized, the proliferation of selves and corresponding increase in self-discrepancies during adolescence are considered to be universal phenomena (Harter 1999).

What Purpose Do Self-discrepancies Serve?

Self-discrepancies play a role in how adolescents go about evaluating and modifying their behaviors to achieve their goals (intentional self-regulation: Brandstädter 1999). *Their purpose is simple but essential: to spur growth toward self-development*. Whereas adolescents' desired and undesired selves specify the end states they want to approach and avoid, respectively, self-discrepancies between current self-states and those end states provide the *motivation* to do so. The motivational power of self-discrepancies lies in the fact that they create an unpleasant internal state that individuals instinctively desire to resolve by somehow bringing the dissonant selves back together (cognitive dissonance: Festinger 1957; self-discrepancy theory: Higgins 1987).

Cross-sectional and longitudinal research indicate that adolescents play an active role in eliminating self-discrepancies in order to reverse the negative emotional state they bring about. For example, US adolescents in identity moratorium, who are actively exploring identity options, report significantly more self-discrepancies than adolescents with achieved, foreclosed, and diffused identity statuses who are not actively exploring identity options (Makros and McCabe 2001). This indicates that self-discrepancies are not simply a feature of having an uncommitted identity, but they

are associated with actively seeking a resolution, a task that requires motivation and effort. Research among undergraduate students is also consistent with this view. Among US undergraduate students, personal growth initiative (i.e., "active intentional involvement in changing and developing as a person") mediates relations between self-discrepancies and affect (Hardin et al. 2007, pp. 86). In other words, students' self-discrepancies lead to greater focus and effort toward self development, which in turn lead to improved affect. Longitudinal research also supports the notion that adolescents use self-discrepancies to achieve their self-development goals. A longitudinal investigation of changes in self-discrepancies among German adolescents indicated that adolescents seek to achieve their desired end states by intentionally heightening their goals in relevant domains, thus, intentionally enlarging their self-discrepancies (Pinquart et al. 2004). They then resolve these self-discrepancies by bringing their actual self to meet their ideal self over time (assimilation) rather than vice versa (accommodation).

These findings strongly support the action theoretical perspective on intentional self-development, which holds that the self is both a product and producer of self-development (Brandstädter 1999; Lerner 1982). That is, partly influenced by background and current environment, *each adolescent intentionally creates a variety of possible selves that give rise to self-discrepancies and, in turn, create the adolescent's own future*. This view greatly expands on the cognitive developmental perspective, which focuses on the self as a product rather than as a producer.

How Do Researchers Study Self-discrepancies?

Because of the nature of self-discrepancies as internal contradictions between two self-states, researchers have commonly studied them by asking participants to describe the relevant opposing selves. *The actual self is treated as the reference point and the degree of discrepancy from a comparison self is calculated*. Based on traditional self-discrepancy theories, researchers have been most interested in ways in which the actual self falls short of its self-standards (Brandstädter 1999; James 1890/1950; Harter 1999). *Idiographic measures* require adolescents to generate a list of attributes for each self-state and rate the degree to which

each attribute describes the different self-states (e.g., Selves Questionnaire: Higgins et al. 1985). On the other hand, *nomothetic measures* require adolescents to rate their self-states on pre-generated attributes (e.g., Self-Description Questionnaire, Self-Standards Questionnaire: Dubois 1993a, b). The former have been critiqued for being too complex to complete and score, and the latter have been critiqued for being too canned and impersonal. To solve this problem, a combined idiographic/nomothetic measure has been designed for use with adults, but has not yet been piloted with adolescents (Integrated Self-Discrepancy Index: Hardin and Lakin 2009). Another creative measurement approach combines a spatial element with an idiographic format (Harter and Monsour 1992).

There is now evidence that adolescent self-discrepancies also occur in the reverse direction wherein the actual self actually exceeds the self-standard (Ferguson et al. 2009). The possibility of a “reverse discrepancy” had been largely overlooked for decades until very recently, presumably because of the counter-intuitive logic involved, but perhaps also because of limitations in the commonly used self-discrepancy measures. In a study with Jamaican high school students, Ferguson and colleagues demonstrated the existence of self-discrepancies in both directions using a graphical pie instrument, which has been used in parenting research. The Identity Pie requires adolescents to share up a presliced circle/pie chart among prespecified areas of life according to how important each area is to the actual and ideal selves, respectively. Thus, the Identity Pie makes it possible for adolescents to indicate when an area of life such as family or religion is not actually as important to their identity as they would ideally like it to be (traditional self-discrepancy), or when an area of life is actually *more* important to their identity than they would ideally like it to be (reverse discrepancy).

Having adolescents respond to domains (e.g., schoolwork) rather than attributes (e.g., intelligent, dumb) is a major strength of the Identity Pie because it maintains a self-descriptive rather than self-evaluative tone, thus, avoids biasing the adolescent toward viewing their ideal self as more positive than their actual self. An explicit self-evaluative focus may be one reason that other measures have not captured a reverse discrepancy despite having the capability

to do so (e.g., Self-Description Questionnaire, Self-Standards Questionnaire: Dubois 1993a, b; Self-Attribute Rating List: Makros and McCabe 2001). That is, an ideal attribute is by definition more desirable than an actual attribute (which is what most measures capture); however, the importance one ideally places on a life domain can be either higher *or* lower than the current importance ascribed to that domain (which is what the Identity Pie captures).

The Identity Pie is also unique in that it assesses the relative salience of domains within each self-state and helps the researcher understand the rank-ordered importance of each domain for the adolescent. However, being a finite whole, it limits the variance of domain scores (i.e., proportion of the pie assigned to each domain), and scores do not represent the absolute level of importance an adolescent places on each domain. For example, an adolescent who finds family very important to her identity may nevertheless assign only 30% of her Identity Pie to family because she finds schoolwork and dating slightly more important and has already assigned 35% to each of those domains. Like other graphical measures, the format of the Identity Pie makes it simple, engaging, quick, and more impervious to differing levels of adolescent verbal competence.

Are Self-discrepancies Problematic for Adolescents?

Although self-discrepancies evolve from normative developmental processes, a great deal of research across several countries indicates that they can also be a liability. Adolescent self-discrepancies are associated with momentary and/or chronic emotional distress and related adjustment problems (Ferguson et al. 2009; Hankin et al. 1997; Meleddu and Scalas 2003; Moretti and Wiebe 1999; Piquart et al. 2004; Renaud and McConnell 2007; Sanderson et al. 2008). However, the nature and extent of the problems associated with self-discrepancies depend on what particular selves are discrepant (actual/ideal discrepancies seem to be worse); how discrepant they are (larger discrepancies are worse); the domain of discrepancy (appearance and social/relational discrepancies are worse); and characteristics of the adolescent (high feminine gender orientation, and ruminative coping style are worse) (Ferguson et al. 2009; Higgins 1987; Klingenspor 2002; Moretti and Wiebe 1999; Papadakis et al. 2006).

Part of the reason that self-discrepancies become increasingly distressing as youth enter adolescence is that their self-descriptions and ideals are more likely to be based on stable traits or dispositions (e.g., physical attractiveness: I have a pretty face) rather than on shifting behaviors or situations (e.g., physical attractiveness: I am pretty when I wear my hair this way, but ugly when I wear it that way) (Papadakis et al. 2006). Discrepancies between one's traits and trait goals, both of which are perceived to be stable, are likely to have a greater emotional impact than discrepancies between one's transient behaviors. The distressing quality of self-discrepancies may actually be a necessary motivational ingredient for active self-improvement, and whereas this state of tension does not cause significant problems for most adolescents, there is a minority of adolescents with large and/or numerous self-conflicts who experience very high levels of distress and require clinical attention. This sub-group of adolescents will be specifically addressed in the next section.

Self-discrepancy theory (SDT; Higgins 1987) is the predominant theory used to understand the relations between self-discrepancies and emotional experience. It expands upon prior theories by making specific predictions regarding how and why particular emotions are linked to particular discrepancies. According to SDT, dejection-related feelings result specifically from actual/ideal discrepancies and anxiety results specifically from actual/ought discrepancies. Unlike research with adults, research with adolescents does not provide strong support for SDT's prediction of differential emotional consequences of specific discrepancies. Rather, several studies have found actual/ideal and actual/ought discrepancies to be highly intercorrelated, and actual/ought discrepancies to be weakly related or unrelated to anxiety (Meleddu and Scalas 2003). Furthermore, the correlation between these two self-discrepancies is significantly larger among children than among adults (Rubin et al. 1996). Taken together, these findings suggest that adolescents may not experience their ideal and ought self-standards to be as distinct as do adults.

Self-discrepancies are more distressing for adolescents when they pertain to physical appearance, peer relationships, and romantic relationships. Adolescents become more oriented towards social and relational contexts starting in late childhood when social comparison skills emerge strongly. In addition, these are domains in

which adolescents have less control over the outcome: one's own biology/puberty and the actions/choices of other people play a very large role in achieving goals related to being physically attractive and securing a relationship, respectively.

During the adolescent years teenagers become increasingly preoccupied with their attributes, especially physical appearance, and become more self-conscious. Although both boys and girls place equally high importance on appearance, girls are especially vulnerable to large self-discrepancies in this area due to unrealistically high societal standards of female beauty (Meleddu and Scalas 2003). In Western societies in particular, the "thinner is better" ideal is in direct contrast to the physiological changes accompanying the onset of puberty for girls (e.g., widening hips, increased body fat). This no-win situation becomes reflected in lowered self-esteem, greater body dissatisfaction, and increased symptoms of depression, anxiety, and disordered eating (Harrison 2001; Sanderson et al. 2008).

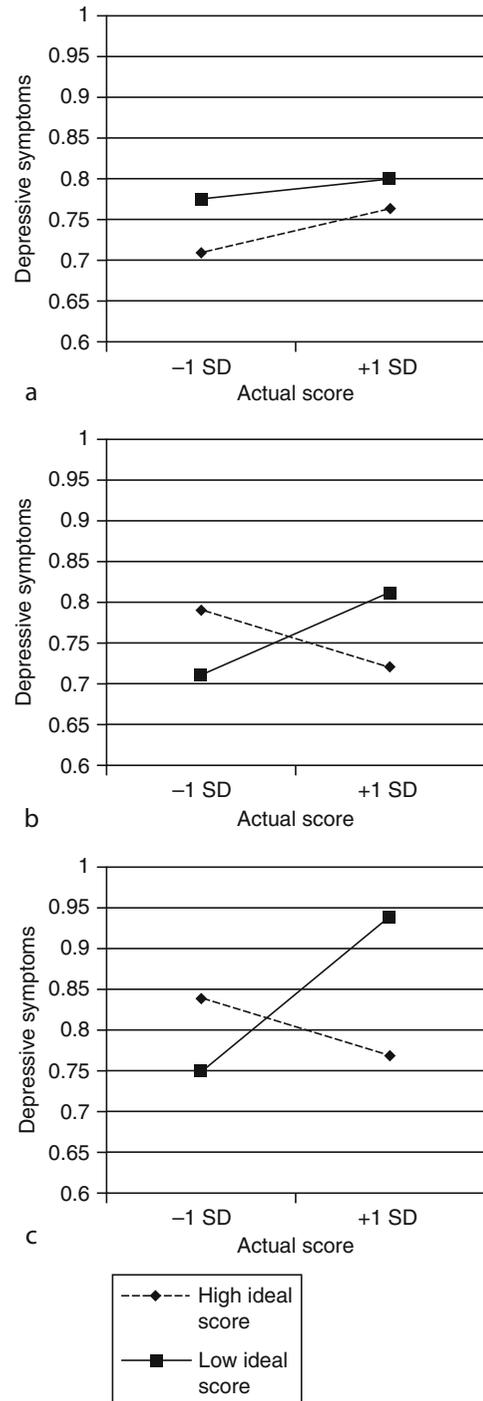
Moreover, among US adolescent girls with self-discrepancies, those who ruminate experience more discrepancy-related depressive symptoms (Papadakis et al. 2006). Papadakis and colleagues suggested that rumination interferes with adaptive coping by becoming like a quicksand which inhibits helpful behavioral action: "whereas under optimal conditions the momentary distress associated with perceptions of self-discrepancy motivates the individual to either increase their efforts in goal pursuit or to switch to a different goal, rumination intensifies distress at the same time as it makes disengagement more difficult" (Papadakis et al. 2006, p. 824). Work among undergraduate male and female students in the Netherlands supports these findings and suggests that rumination partially or fully mediates the association between self-discrepancies and depression (Roelofs et al. 2007).

In their study using the Identity Pie, Ferguson and colleagues found that Jamaican adolescents with larger actual/ideal self-discrepancies in the friendship and dating domains had lower self-esteem, more depressive symptoms, and lower school grades (Ferguson et al. 2009). This was true for adolescents with discrepancies in the traditional direction *and* in the reverse direction. That is, it was just as problematic for adolescents when their actual self fell short of their ideal in the dating

domain as it was when their actual self exceeded their ideal self-ratings in that domain (see Fig. 1).

Age also makes a difference in the level of discrepancy-related distress adolescents experience and these age-related differences are associated with cognitive developmental changes across adolescence (Harter & Monsour 1992; Harter et al. 1997). Although self-representations begin to multiply in early adolescence, adolescents maintain fairly compartmentalized self views at that developmental stage. Because they have little interest in integrating their perceived attributes into a coherent self-portrait, early adolescents are less cognizant of the contradictions between those attributes and they experience little discrepancy-related distress. In midadolescence, however, youth become more self-aware, make finer distinctions between self-representations, and begin to compare and contrast self-attributes. As a result, *self-discrepancies become very noticeable to midadolescents, who report significantly more opposing self-attributes and more conflict between attributes*. Unfortunately, midadolescents still lack sufficient cognitive sophistication to successfully integrate these contrasting attributes. Consequently, they struggle to pull together the diverse conceptions of themselves into a coherent self-portrait and experience significant discomfort. In Ferguson et al. 2009 study, midadolescents with high ideal scores but low actual scores and those with high actual scores but low ideal scores (larger actual/ideal discrepancy in both cases) reported more depressive symptoms than midadolescents without self-discrepancies (pictured in Fig. 1, graphs b and c). However, self-discrepant early adolescents (pictured in Fig. 1, graph a) did not report more distress than non-discrepant early adolescents. Near the end of adolescence significant advances in cognitive integration skills make adolescents better equipped to handle self-discrepancies by weaving together opposing self-attributes into higher order traits (e.g., the trait label “moody” integrates a view of self as happy in one setting, depressed in another, and anxious in a third), and also by coming to accept that no-one is perfectly congruent (for detailed discussion, see Harter 2006).

The impact of self-discrepancies on self-esteem can be moderated by cultural values. In a study of actual/ideal discrepancies regarding skin color among children in Jamaica, self-esteem was significantly higher among fifth/sixth graders whose actual skin color matched



Self-Discrepancies. Fig. 1 Interaction between actual and ideal Identity Pie friendship scores in relation to depressive symptoms for early and midadolescents. (a) 12.47 mean years (SD = .69 years, $n = 51$); (b) 14.30 mean years (SD = .48 years, $n = 106$); (c) 16.33 mean years (SD = .66 years, $n = 55$) (Reprinted with permission from Ferguson et al. 2009)

their ideal skin color *only if* their ideal was aligned with the cultural ideal (Ferguson [Anderson] and Cramer 2007). That is, the self-esteem of non-discrepant children whose ideal skin color differed from the cultural ideal was as low as the self-esteem of children with discrepancies between their actual and ideal skin color.

What Can Be Done About Self-discrepancies?

It is important to remember that self-discrepancies in adolescence are, for the most part, adaptive in that they promote self-growth. Therefore, the eradication of self-discrepancies would ultimately not be beneficial. Furthermore, most adolescents do not experience intense or chronic levels of distress related to their self-discrepancies; rather, significant problems arise for a small subset of adolescents when self-discrepancies are too plentiful and/or too large. Thus, *strategies to identify these high-risk adolescents may be the most useful approach*. Quick, easy, and portable self-discrepancy measures, such as the Identity Pie, may have utility as screening tools to identify adolescents at risk for emotional difficulties due to large self-discrepancies. In fact, because self-discrepancy measures do not assess mental health problems (e.g., depression), their use may be more readily accepted in nonclinical setting (e.g., schools, community centers). Referrals for treatments can be provided as needed for youth evidencing very large or numerous self-discrepancies and those voicing significant distress related to self-discrepancies.

Longitudinal research has demonstrated that changing one's actual self to meet one's ideal self (i.e., assimilation) predicts significantly higher self-esteem for adolescents (Pinquart et al. 2004). Consistent with this, Harrison (2001) recommended that adolescents with weight-related discrepancies select media (magazines, television programs) which promote fitness or diet strategies that will ultimately help the adolescent decrease his/her discrepancy by bringing his/her actual self in accord with his/her ideal.

Adolescents seeking clinical treatment for depression are especially likely to be experiencing large self-discrepancies. Self-system therapy (SST: Vieth et al. 2003) treats depression as a disruption/dysfunction of self-regulation, which includes but is not limited to a focus on self-discrepancies. In a randomized clinical trial, SST has been shown to be equally efficacious to Cognitive Behavioral Therapy (CBT) in treating depression

among adults, and superior to CBT for a subset of individuals (Strauman et al. 2006). Given that SDT appears to explain depressive symptoms in adolescents as well as it does in adults, SST may offer a promising avenue for clinical intervention with adolescents. Research is needed on the applicability and efficacy of this clinical treatment with adolescents.

Where to from Here? Gaps in the Literature and Future Directions

As with many other areas of study, the bulk of knowledge about self-discrepancies comes from the adult literature, specifically, US undergraduate students. Although undergraduates are just beyond adolescence themselves, there are some unique aspects of adolescent development that suggest caution in generalizing research findings from emerging adults to adolescents. For example, as has been discussed, due to a unique combination of newfound cognitive capabilities and limitations, midadolescents experience significantly more discrepancy-related distress compared to late adolescents. This important developmental vulnerability during midadolescence would be masked by leaning solely on adult research.

Within the modest literature, research interest in adolescent self-discrepancies is not equally spread across types of discrepancies (disproportionate focus on actual/ideal and actual/ought), domains (disproportionate focus on body-related self-discrepancies), age groups (disproportionate focus on late adolescents and older), or socioeconomic groups (disproportionate focus on socioeconomically and educationally advantaged youth). Future research is needed to address these gaps. In addition, there are interesting lines of adult self-discrepancy research that have not even begun to be investigated among adolescents. For example, research with US undergraduates reveals that priming self-discrepancies suppresses the body's immune functioning whereas priming self-congruency for highly self-discrepant individuals boosts immune functioning (see Strauman et al. 2004). Another line of research with US undergraduates demonstrates that actual/undesired self-discrepancies are associated with depressive symptoms (Hardin and Leong 2005). These are two fascinating avenues for future exploration among adolescents.

The traditional unidirectional view of self-discrepancies in which the actual self is permanently

cast as the underdog to lofty self-standards misses half the story. Thus, the bidirectional view is a new frontier to be explored further. In any given area of life, an adolescent may perceive himself/herself to have fallen short of or to have exceeded a particular self-standard, and discrepancies in both directions can be equally problematic. Self-discrepancy researchers should take this into account by using measures that capture discrepancies in both directions (e.g., Identity Pie) or adapting measurement techniques capable of the same (e.g., Selves Questionnaire) (see Ferguson et al. 2009).

Much of the self-discrepancy literature is problem focused. However, there is evidence that awareness of self-discrepancies can be heightened in order to promote positive behavior change among adolescents. For example, college students are more likely to purchase condoms after they have been made more aware of the discrepancies between their beliefs and behaviors regarding safe sex (Stone et al. 1994). This intervention approach could be explored to promote other positive physical and emotional health behaviors such as healthy eating or not smoking. Other interesting work among undergraduate students suggests that low self-esteem individuals can move their actual selves closer to their ideal selves just by thinking about a favorite celebrity (Derrick et al. 2008). The potential benefits of these “faux” relationships for low self-esteem adolescents could also be explored, especially given their heightened engagement with celebrity culture.

Conclusion

The current understanding of adolescent self-discrepancies is based on the past 3 decades of scientific research. This body of knowledge demonstrates that adolescents start to envision themselves in new ways, creating multiple versions of the self and experiencing resulting self-discrepancies. These self-discrepancies are largely normative, intentional, and adaptive; they serve both as markers of the gulf between an adolescents' present state and his/her goal state, and as fuel to cross that very gulf. For adolescents, who they are (cognitive capabilities, personal goals, family background, and cultural values) shapes their self-discrepancies, and their self-discrepancies shape who they become.

Research on adolescent self-discrepancies has until recently been somewhat myopic in its focus on only

one direction of discrepancy – when the self-standard exceeds the actual self. New research indicates that adolescents also experience discrepancies in the opposite direction – when the actual self exceeds the self-standard. Discrepancies in both directions can be problematic. Internal distress decreases as adolescents bring their actual state in agreement with their self-standard. Adolescents with larger or more numerous self-discrepancies may benefit from clinical help targeting their self-discrepancies and self-regulation strategies.

More self-discrepancy research among adolescents is needed in the published empirical literature and there are many new avenues to apply and expand one's current knowledge. Certainly among those avenues are additional investigations of reverse self-discrepancies, validation of self-system therapy for use with adolescents, and exploration of discrepancy-related immune reactivity among adolescents.

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accredited with identifying, developing, and providing the empirical support for the construct of self-efficacy. Bandura described self-efficacy as “self-reflectiveness about one’s capabilities, quality of functioning, and their meaning and purpose of one’s life pursuits” (Bandura 2001, p. 1). In other words, self-efficacy is the individual’s belief in their abilities and capacities that enables him or her to adapt and adjust in a given environment. Moreover,

- ▶ [P]eople’s beliefs in their efficacy influence the choices they make, their aspirations, how much effort they mobilize in a given endeavour, how long they persevere in the face of difficulties and setbacks, whether their thought patterns are self-hindering or self-aiding, the amount of stress they experience in coping with taxing environmental demands and their vulnerability to depression. (Bandura 1991, p. 257)

Since social cognitive theory underpins self-efficacy, the construct is both impacted by the environment and is underscored by self-determination. That is, the decisions made by the individual play an important part. The central and pervasive mechanism of personal agency is the individual’s belief in their capacity to exercise control over events that affect their life. The causal structure of social cognitive theory is heavily influenced by perceived self-efficacy; efficacy belief will not only affect how the individual will personally adapt in a given environment but these self-beliefs will have further implications on other factors in the given situation.

Bandura acknowledges that the individual’s environment is inconsistent and unpredictable and even though they may have knowledge on what to do in a given situation, it is also a matter of determining *how* they will use the knowledge. The individual’s efficacy requires self-reflection and regulation of their abilities, cognitive social skills, behavior, and organization (Bandura 2001). The individual’s ability to reflect and assess their behaviors and abilities will affect the choices, aspirations, motivations, and coping mechanisms.

Measurement of Adolescent Self-efficacy

Even though self-efficacy is a widely recognized and researched concept, its measurement is somewhat inconsistent. In many of the studies referenced in this section, the researchers have developed different tools

Self-efficacy

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Self-efficacy, like much of the seminal research in psychology, has been developed from an adult-centric perspective and the evidence-based theories then extended to the field of adolescence. Hence, research relating to self-efficacy is considerably more modest in the adolescent than in the adult domain. Nevertheless, the concept has been useful in a general sense and particularly helpful in identifying elements of the construct, such as academic, social, and filial self-efficacy, which are pertinent to the world of the adolescent. This essay briefly reviews that literature as it particularly focuses on the general nature of self-efficacy, its measurement, its various forms, and some of its links and programs that can enhance it.

Bandura and the Construct of Self-efficacy

Albert Bandura, best known for his significant contribution in the field of social cognitive theory, is