### Self-Esteem Does Matter:

# Research on the Longitudinal Impact of Self-Esteem

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In the currently renewed debate about the effects of self-esteem (Seligman, 1998; Staub,1999; Baumeister 1999), Baumeister argues that the ability of high self-esteem "to produce beneficial outcomes is small to negligible" (p. 7). Self-esteem research, however, has been hampered by theoretical, definitional, and methodological problems (Davis-Kean & Sandler, 1995), resulting in little consistency in the conceptual and operational definitions of self-esteem or in distinctions made between self-esteem and other self-constructs (e.g., self-concept, identity, self-efficacy). Without a clear understanding of what self-esteem is and of which aspects of functioning and experience it should be impacting, it comes as no surprise that decades of research on self-esteem allows for continued debate about the utility of the concept in general and about the effects of self-esteem in particular.

In this paper, we address the following questions: (1) What is self-esteem? (2) What is the cross-sectional relation of self-esteem to other mental health indicators? and (3) How well does self-esteem, relative to other mental health indicators, predict change in mental health from childhood to adolescence? We propose that self-esteem is best conceptualized as the affective experience generated by the evaluative and emotional components of an individual's self-system and show that self-esteem plays an important functional role in the process of development that does not adequately emerge in cross-sectional studies.

#### Methods

### Sample

The sample (N=1482) is drawn from a large ongoing longitudinal study of an ethnically diverse county in the mid-Atlantic region of the United States designed to examine the influence of social contexts (i.e., family, peers, school, neighborhood) on adolescent development. The base sample drawn in 1990 and is composed of households (youth, primary caregiver, secondary caregiver, older sibling) that are 60% African-American; 31% White; and 9% other (Asian, Latino, Mixed). It includes approximately equal proportions of African-American and White males and females. The median family income in 1990-91 was between \$45,000 and \$49,000 per year. Nearly 39% of all families had a parent who had completed college or more. And 53% came from intact families, that is, those with both biological parents living together in the same household. Another 20% were separated or divorced; 15% had a step-parent in the household; 6% of the mothers had never been married; and 5% had a live-in partner. Thus the sample has the unique advantage of being representative of a normative distribution of both African-American and White populations and allows analysis of groups with comparable socioeconomic diversity.

#### Measures

The data were obtained with face-to-face interviews and self-administered questionnaires collected during the Fall of 1991 while the youth were in the seventh grade; again during the Summer of 1993 at the end of their eighth grade; and again in the Winter of 1996 when the youth were in the eleventh grade. A broad array of constructs was assessed including several mental health measures, including self-esteem, depression, anger, and resiliency and coping (see Table 1).

#### Results

Simple bivariate, cross-sectional correlations revealed predicted relations between self-esteem and a variety of family and peer variables; for example, higher levels of esteem correspond to higher levels of youth perceptions of positive affect from parents (r = .22), firm discipline (r = .17), and positive peer influences (r = .16), whereas lower levels of esteem correspond to youth perceptions of family violence (r = -.26), parental intrusiveness (r = -.25), and negative peer influences (r = -.19).

We conducted principle component factor analyses of the mental health indicators (i.e., self-esteem, depression, anger, coping strategies, and resilience) separately for 7<sup>th</sup> and 8<sup>th</sup> graders. The results of the factor analyses revealed a single factor at each measurement occasion. These principle components accounted for 41% and 43% of the total variance at 7<sup>th</sup> and 8<sup>th</sup> grade, respectively, and can be understood as overall factors representing global psychological adjustment. As expected, self-esteem did not appear to be a marker variable for psychological adjustment in either of these cross-sectional analyses (see Table 2 for the correlation matrices and Table 3 for the factor loadings); that is, when considered within the context of several indicators of mental health, self-esteem does not appear to be particularly important for understanding an individual's mental health status.

Next, to examine the longitudinal impact of self-esteem on mental health in general, we conducted a series of longitudinal, multivariate regression analyses. For each analysis, we regressed each  $8^{th}$  grade mental health indicator first on the equivalent  $7^{th}$  grade indicator and then, at the second step, on one of the other mental health indicators. These analyses were repeated using each mental health indicator as both a predictor and a criterion variable. For example, we regressed  $8^{th}$  grade depression scores on  $7^{th}$  grade depression scores, at step one, and on  $7^{th}$  grade self-esteem scores at step two. The results revealed significant effects of both  $7^{th}$  grade depression --  $\beta(990) = .38$ , p < .001 -- and  $7^{th}$  grade self-esteem --  $\beta(989) = .20$ , p < .001 -- on  $8^{th}$  grade depression. Similarly, we regressed  $8^{th}$  grade depression on  $7^{th}$  grade depression, at step one, and on  $7^{th}$  grade anger at step two. In this case, the results revealed significant effects of  $7^{th}$  grade depression --  $\beta(990) = .45$ , p < .001 -- but nonsignificant effects of  $7^{th}$  grade anger --  $\beta(989) = .03$ , p = .317 -- on  $8^{th}$  grade depression scores. The results from these 16 regression analyses are summarized in Figure 1. Overall, these results revealed that self-esteem predicts changes in psychological adjustment better than any of the other mental health indicators.

Similar regression analyses were conducted using  $7^{th}$  and  $11^{th}$  grade mental health indicators. In this case, in addition to self-esteem, only depression, anger, and resilience measures were available as mental health indicators. For example, we regressed  $11^{th}$  grade depression scores on  $7^{th}$  grade depression scores, at step one, and on  $7^{th}$  grade self-esteem scores at step two. The results revealed significant effects of both  $7^{th}$  grade depression --  $\beta(978) = .10$ , p < .01 -- and  $7^{th}$  grade self-esteem --  $\beta(977) = -.22$ , p < .001 -- on  $11^{th}$  grade depression. Similarly, we regressed  $11^{th}$  grade depression on  $7^{th}$  grade depression, at step one, and on  $7^{th}$  grade anger at step two. In this case, the results revealed significant effects of  $7^{th}$  grade depression --  $\beta(979) = .19$ , p < .001 -- but nonsignificant effects of  $7^{th}$  grade anger --  $\beta(978) = .05$ , p = .231 -- on  $11^{th}$  grade depression scores. Although the overall results of these  $7^{th}$  to  $11^{th}$  grade analyses are not as strong as those reported for the prediction of mental health changes between the  $7^{th}$  and  $8^{th}$  grades, the pattern of results remains the same (the results of these

analyses are summarized in Figure 2); that is, self-esteem appears to be the strongest and most reliable predictor of mental health changes between the 7<sup>th</sup> and 11<sup>th</sup> grade.

#### Discussion

The results of these analyses support our hypothesis that childhood self-esteem is a significant predictor of change in mental health into and throughout adolescence. The primary reason that self-esteem appears to be the strongest predictor of changes in mental health is that self-esteem is the most global indicator of mental health used in these analyses. It is important to note, however, that we are not claiming that self-esteem, per se, *causes* changes in mental health. Rather, given our position that self-esteem is an affective experience resulting from the global effects of the evaluative and emotional components of the self-system, it is these underlying, relatively enduring, components of the self-system that are most likely to have causative effects on psychological adjustment over time.

Questions about how best to conceptualize and measure self-esteem continue to challenge psychologists working in diverse areas. We feel that it is important to differentiate the *experience* of self-esteem from the underlying constructs of the mind that give rise to this experience. The underlying constructs that give rise to self-esteem are best understood as the evaluative components of self-concepts (i.e., beliefs about the self) and the emotional components of past experiences (i.e., schemas). Given that individuals have many beliefs about the self and many schemas that organize their wealth of past experiences, it is not practical in any given study to measure all of the constituent elements of the self-system that contribute to their overall experience of self-esteem. Nevertheless, as demonstrated in this study, it is possible to use standard self-report measures of self-esteem to produce general indicators of individuals' levels of self-esteem. These general measures of self-esteem are best interpreted as global indicators of an individuals' overall sense of self-worth that are based on the many underlying, positively and negatively valenced, constructs of the mind that give rise to this phenomenological experience of self-esteem.

It is also important to recognize, as demonstrated in this study, that whereas self-esteem might not appear to be particularly relevant to understanding mental health at any given point in time, self-esteem does provide important information, in addition to other measures of mental health, about the development of mental health. Given that self-esteem is a global indicator of mental health, and that the other mental health measures used in this study can be viewed as relatively domain-specific, we should expect that the global indicator will tap aspects of the underlying self-system not tapped by the more domain-specific indicators. It is precisely these aspects of the self-system – that are not tapped by the domain-specific indicators and that are tapped by the global self-esteem measure – that are most likely responsible for our ability to predict variations in changes in domain-specific aspects of mental health over time that are not predicted as a function of the domain-specific measures of mental health themselves. It is worth noting, in this regard, that the standardized beta coefficients that express the relations between the time 1 self-esteem measures and the time 2 mental health measures are sometimes larger than the standardized beta coefficients that expressive relations among the mental health measures themselves.

Finally, in other analyses (not reported in this paper), we found that a relatively small number of adolescents (n = 17; approximately one percent of the sample) who reported *both* the most extreme levels of self-esteem (greater than or equal to 4 on a 5-point scale) and the most

extreme levels of problem behavior (greater than or equal to 1.5 standard deviations above the mean on a standardized, 20-item scale) were more likely to show higher levels of psychopathology than any of the other four groups (created by crossing median splits of self-esteem and problem behavior scores). The measures of psychopathology included parent's reports of youth attention problems and anti-social behavior. These results support Baumeister's (1999) position on the possible "narcissistic" character of individuals with high self-esteem. However, it is important to keep in mind that these were preliminary analyses conducted on a very small sample and that there was a larger group of high self-esteem, high problem behavior youths (n = 282) who did not appear to display such psychopathological symptoms. Consequently, the precise role that the underlying constructs of the mind (which are responsible for experiences of self-esteem) play, as components within the overall configuration of mental health indicators that exist within a given person's self-system, needs further investigation.

### References

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Table 1
Descriptive Statistics for Mental Health Variables

7t	h	G	ra	d	e

N	Mean	Std. Dev
1472	3.67	0.79
1380	2.09	0.94
1380	2.86	1.05
1471	3.6	0.8
1401	3.87	0.77
	1472 1380 1380 1471	1472 3.67 1380 2.09 1380 2.86 1471 3.6

## 8th Grade

	Mean	Std. Dev
1057	3.88	0.9
1163	1.89	0.9
1149	2.71	1.04
1057	3.83	0.64
1163	3.86	0.76
	1163 1149 1057	11631.8911492.7110573.83

Table 2
Intercorrelations Between Grade Mental Health Indicators
for 7th and 8th Graders

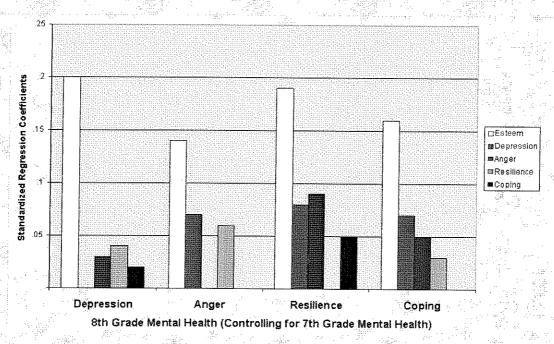
	1	2	3	4	5
				raders 1364)	
1. Esteem		.42	.32	.36	.14
2. Depression			.54	.18	.28
3. Anger			~-	.16	.27
4. Resilience				Book lamb	.13
5. Coping					
		,, <u>, , , , , , , , , , , , , , , , , ,</u>	8th Gi (n =	raders 867)	
1. Esteem	<del>~~</del>	.38	.28	.36	.19
2. Depression			.52	.19	.35
3. Anger				.22	.31
4. Resilience				the law	.11
5. Coping					

Table 3
Factor Loadings

	7th Grade
Depression	785
Anger	744
Self-Esteem	.691
Coping	.524
Resilience	.485

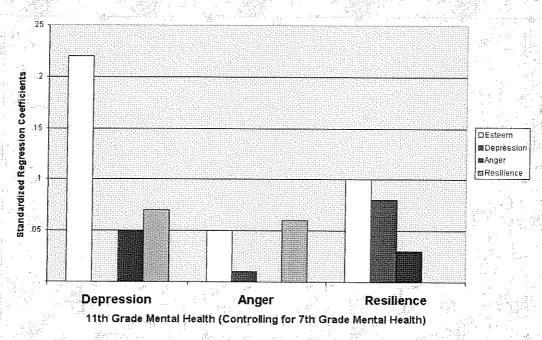
	8th Grade
Depression	809
Anger	767
Self-Esteem	.753
Resilience	.556
Coping	.352

Figure 1: Self-Esteem is the Best Predictor of Change in Mental Health (from 7th to 8th Grade)



Note: all effects in this figure are expressed as absolute values for ease of presentation.

Figure 2: Self-Esteem is the Best Predictor of Change in Mental Health (from 7th to 11th Grade)



Note: all effects in this figure are expressed as absolute values for ease of presentation.



"My family's great. The problem is that I come from a dysfunctional planet."

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