

Changes in Children's Evaluations of Self

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Abstract

The effect of the nature of questions (behavior-based vs. trait-based and comparative vs. noncomparative) on measures of self-esteem for kindergartners and third graders was investigated. A total of 163 subjects answered questions from Harter's Pictorial Scale of Perceived Competence and Acceptance for Young Children and modifications of this measure. Importance scales were also administered to determine which domains the children thought were the most important in determining their self-esteem. MANOVAs revealed that all the children rated their cognitive and athletic competence higher in behavior questions and rated their global self-worth higher in trait questions. Kindergartners in the trait condition had significantly higher global self-worth than both the kindergartners and third graders in the behavior condition. Kindergartners thought that physical appearance was more important than third graders, while third graders had higher scores in the academic and behavior importance domains. Results indicate that both the kindergartners and third graders were willing to use trait labels, although the younger children were not as able to differentiate between different domains.

Recent theories of self-esteem suggest that the bases for and levels of self-esteem can vary considerably from individual to individual and even within one individual at different points of time. Children's self-esteem is considered to be especially likely to change over time. Before the age of 5 or 6, children view their abilities more positively than older children (Ruble, 1975); during the early years of school, average self-esteem scores often decline (Benenson & Dweck, 1986). Several cognitive and/or social changes that occur in the early school years may explain this shift.

Research has shown that by age 7 or 8 children are likely to have shifted from noncomparative to comparative self-evaluations (Livesley & Bromley, 1973). Before age 7, children evaluate their performance on their own behaviors, whereas after age 7 or 8, they use relative comparisons to evaluate their performance. Frey and Ruble (1985) found that kindergartners were concerned with the performance of their peers, but only in the way that it affected their friendship formation. Older children (first and second graders) displayed decreased attention to peers in nonacademic areas and increased attention to peers in academic areas. They also found that younger children were more likely to make comparisons to others in order to get answers, whereas the older children made comparisons in order to evaluate themselves. Arguments have been made that younger children can make social comparisons but may not choose to. Smith, Davidson, and France (1987) found that kindergartners could use social comparisons in setting performance standards for themselves. Overall, however,

research has supported the theory that younger children are less likely to use relative comparisons in evaluating their self-concepts.

Another cognitive shift that occurs around this age is from evaluating specific single behaviors to evaluating more global traits (Cicchetti & Schneider-Rosen, 1984). Harter (1990) theorizes that young children are not cognitively able to consider their traits and therefore use only their behaviors to evaluate themselves. Eder (1989) found that while all age groups in her study used behavior descriptions more often than trait descriptions, the 7 1/2-year-olds gave significantly more trait responses than the 3 1/2-year-olds. Rholes and Ruble (1984) suggest that even 7- and 8-year-olds may just be beginning to be able to evaluate their traits. Support of this position is found in the fact that younger children do not use observed consistencies in other peoples' past behavior to predict what their current actions will be, and may also not recognize the stability of their own actions. Both of these cognitive shifts, from absolute to comparative and from behavior-based to trait-based self-evaluations may help to explain the results of the research on self-esteem in young children.

Another issue in the development of self-esteem in children is what factors they consider in evaluating their self-esteem. Harter (1987) suggests that children below age 8 do not have a global sense of self-worth and that the domains they use may not be well differentiated. She theorizes that there are five domains that older children consider when evaluating their self-

esteem: physical appearance, social acceptance, scholastic competence, athletic competence, and behavioral conduct. Because these domains can be independent, although oftentimes related, it is necessary to determine which domains individual children think are the most important in determining their own sense of self-worth. In contrast she suggest that younger children utilize two domains in determining their self-worth: perceived competence and social acceptance (Harter, 1984). Harter further divides these domains into two competence categories (cognitive competence and physical competence) and acceptance categories (peer acceptance and maternal acceptance). Previous research (Harter, 1987) has indicated that physical appearance is the most important domain to children, followed by social acceptance and scholastic competence. Athletic competence and conduct are the least important domains in establishing the child's self-esteem. Harter (1985) uses these domains in her self-esteem measure for school age children, the Self-Perception Profile for Children. Harter and Pike's (1980) Pictorial Scale of Perceived Competence and Acceptance, which is intended for younger children, uses the domain of maternal acceptance along with social acceptance, scholastic competence, and athletic competence. Maternal acceptance is closely tied to global self-worth for young children. Because these scales consider each domain independently, they provide a more accurate measure of self-esteem than measures that only consider global self-worth. For example, if a child rates him- or herself low in one domain but does not think that the domain is important, he or she may still

have high self-esteem. Unfortunately, these scales are limited in that they do not allow for comparisons between younger and older children. The scale for younger children uses behavioral descriptions in a relatively noncomparative form, while the scale for older children uses broader, more trait-like descriptions in a more explicitly comparative form. Because direct comparisons can't be made, it is difficult to determine when cognitive shifts occur and what effect they have on self-esteem.

The main objective of this study was to manipulate measures of self-esteem to determine what affect the nature of the questions (comparative vs. noncomparative and behavior- vs. trait-based) has on children's ratings of self-esteem. Because of the cognitive shifts that are thought to occur around age 7 or 8, the younger children were expected to rate themselves higher on all the measures; however, it was also expected that they might be able to evaluate themselves comparatively or using trait labels if encouraged to do so. Older children were expected to be more consistent in their ratings across comparative conditions (they would presumably be comparing even when not explicitly asked to) and should also have lower scores than the younger children. If the third graders rated themselves highly on behaviors, it was not expected that these would predict global self-worth as well. Another focus was on the relationship between the individual domains of self-esteem and global self-worth. Domains which are highly correlated with the global self-worth questions might reflect a better picture of the child's self-esteem than those that are poorly correlated. Discounting

may also play a role in determining self-worth. If a child scores low in a domain, he or she may also rate that domain as not being important. In this way the child can still have high self-worth while knowing that he or she is not good in one area. Older children were predicted to be more likely to do this kind of discounting than the younger children.

Method

Subjects

The subjects were 82 kindergarten and 81 third grade students from three public elementary schools. Seventy-three of the children were male and 90 were female. Mean ages of the kindergartners and third graders were 5.7 and 8.7 years old respectively. Six of the kindergartners whose parents gave their written consent to participate did not finish the study. Three of these subjects did not complete the importance scale. All three were boys: one was in the comparative-trait condition and the other two were in the noncomparative-trait condition. In addition, one child told the experimenter that she wanted to stop, one child was noticeably anxious and the experimenter discontinued the questions, and one child displayed position bias. Each child that discontinued the study was made to believe that he or she had completed the interview and was given a prize like the other children. The data from four additional subjects also were not used in the final analyses because they were older than the rest of the sample (three ten-year-olds and one twelve-year-old).

Hollingshead's Two Factor Index of Social Position (1958)

was used to determine the socioeconomic status of the mothers and fathers of the children. Each parent's occupation and education were rated by independent observers. Any discrepancies in the scoring were decided by a consensus of the scorers. Occupation was rated on a scale of 1-7. Education was modified to a 5 point scale because of the lack of distinction between levels of school completed below high school on the demographic questionnaire. Socioeconomic status was generated using these two factors. Although the questionnaire asked for information on parents living in the home, it appeared that information was also given for fathers not in the home (e.g. marital status was given as divorced; father data were given for the biological father). Therefore SES was estimated using the mothers' data. The mean SES rating for the kindergartners' mothers was 3.79 and for the third graders' mothers was 3.89. This sample can be described as lower to lower middle class.

Design

This study consisted of a between subjects 2 (traits vs. behaviors) x 2 (noncomparative vs. comparative standards) x 2 (kindergarten vs. third grade) design. Each child was randomly assigned to one of four experimental groups.

Instruments

Demographic Questionnaire. A demographic questionnaire was completed by the parents of the children when they gave their written consent for their children to participate in the study. Information in the questionnaire included the child's birthday, the mother's marital status, the father's marital status, and the

parental education and occupation.

Pictorial Scale of Perceived Competence and Acceptance for Young Children (Harter, 1980). The Pictorial Scale is a noncomparative scale which relies on the children's perceptions of the behaviors they exhibit. This scale contains questions from four domains: cognitive competence, peer acceptance, physical competence, and maternal acceptance. The other three groups were each given modified versions of this scale in which the phrasing was different, but the pictures were the same. However, unlike Harter's original scale these versions contained a global self-worth domain instead of the maternal acceptance domain. One set of phrases required the children to evaluate themselves comparatively using their traits as a base for their perceptions. Phrases from the Self-Perception Profile for Children (a comparative-trait measure also developed by Harter, 1985) along with others formulated by the experimenter were used in this condition. The Self-Perception Profile contains five domains, only three of which were used in this study. Physical appearance and behavioral questions were not used, but the cognitive competence, physical competence and peer acceptance questions were utilized because they correspond well with the pictures in the pictorial scale. Global self-worth questions were used with the maternal acceptance pictures. Although in the trait condition the questions seemed to reflect global self-worth, the questions in the behavior condition reflected the more specific maternal acceptance. The two other groups also were given the Pictorial Scale, but one modification required the

subjects to make comparative judgements about their behaviors instead of traits, while the other required the subjects to make noncomparative judgements about their traits. Both comparative conditions emphasized the phrase "compared to other kids."

A sample item on all four measures is a picture of a child who is the same sex as the subject sitting on a swing. All four scales asked the subject to identify whether he or she is "really like" or "sort of like" one of two pictures. In one picture, a child is sitting on a swing and in the other, the same child is swinging on the swing. The Pictorial Scale of Perceived Competence and Acceptance for Young Children uses the phrases, "This boy isn't very good at swinging by himself" vs. "This boy is pretty good at swinging by himself." The comparative-trait measure contains the phrases "Some kids don't do well at new outdoor games" and "other kids are good at new games right away." These phrases were extracted from the Self-Perception Profile for Children. The comparative-behavior measure contains the phrases "Some kids are not very good at swinging by themselves" and "other kids are pretty good at swinging by themselves." The noncomparative-trait measure contains the phrases "This boy does not do well at new outdoor games" and "This boy is good at new games right away."

Importance Scale. Harter's measure of importance was given in order to determine the importance to the child of each of the five domains that are used in the Self-Perception Profile. The experimenter read the scale to each child and the child pointed to which circle was the most like himself or herself (the origi-

nal measure contained boxes, but these were changed to smaller and larger circles in order to be consistent with the self-esteem measure). The discrepancies between what the children determined was important and how they felt about themselves in that domain was calculated in each of three domains: scholastic competence, social acceptance and athletic competence. The mean score on the importance scale was subtracted from the mean score on the self-esteem profile in each domain in which the child scored a 3.0 or higher on the importance scale. The total discrepancy score was calculated by finding the mean of the discrepancy scores in the domains which they reported as being important. This procedure is consistent with that suggested by Harter (1985).

Procedure

Parental permission forms were distributed through all kindergarten and third grade classrooms in three elementary schools. A random order of conditions was generated for each grade and sex. Those children who received permission were removed from the classroom individually and taken by the experimenter either to another classroom or to a workroom. Each child was asked if he or she wanted to go with the experimenter and answer the questions before leaving the subject's classroom. All children agreed at this point to participate. Children were also told that anytime they wanted to stop answering the questions, they could tell the experimenter and he or she would stop. Each child was administered the self-esteem measure for whichever condition had been randomly assigned. After the completion of

the self-esteem measure, the child was told that the experimenter had no more picture questions for them, but that there were a few more questions just like the previous ones, but without pictures. The child then completed the importance scale. At the conclusion of that test, the child was allowed to choose a small prize. The child was asked not to tell the other children what he or she had done, but also told that he or she could tell his or her parents and teacher. The child was then taken back to the classroom by the experimenter.

Results

Preliminary analyses showed no significant effects for sex or mother's SES. Subsequent analyses collapsed across sex and SES.

Data were analyzed by means of multivariate analyses of variance (MANOVA) of self-concept scales and importance scales. The behavior vs. trait effect was significant in the cognitive competence domain, $F(1,155)=8.03$, $p<.01$, the athletic competence domain, $F(1,155)=4.50$, $p<.04$, and the global self-worth domain, $F(1,155)=35.37$, $p<.01$. Post hoc analyses using Tukey's HSD test indicated that behavior scales produced higher self-esteem ratings in the cognitive domain (behavior, $M=20.87$; trait, $M=19.55$) and in the athletic competence domain (behavior, $M=20.55$; trait, $M=19.49$), while trait questions produced higher scores in the global self-worth domain (trait, $M=20.09$; behavior, $M=16.93$). Grade had a significant effect for global self-worth, $F(1,155)=9.86$, $p<.01$, with the kindergartners displaying significantly higher scores than the third graders (kindergarten,

M=19.22; third grade, M=17.58). An interaction effect was found for grade and behavior vs. trait questions in the global self-worth domain, $F(1,155)=4.41$, $p<.04$. As shown in Table 1,

Insert Table 1 about here

kindergartners in the trait condition had the highest scores and were significantly higher than both the kindergartners and third graders in the behavior condition. Both the kindergartners and the third graders in the trait condition had significantly higher scores than the third graders in the behavior condition, but did not differ from each other.

Several main effects and an interaction effect were also found for the importance scale. Grade had a significant effect for academic importance, $F(1,155)=21.73$, $p<.01$, physical appearance importance, $F(1,155)=22.13$, $p<.01$, and behavior importance, $F(1,155)=28.13$, $p<.01$. Means for all domains are

Insert Table 2 about here

shown in Table 2. Kindergartners displayed significantly higher scores in the physical appearance importance domain, while the third graders had higher scores in the academic and behavior importance domains. An interaction effect was significant for comparative vs. noncomparative questions and behavior vs. trait questions for academic importance, $F(1,155)=9.52$, $p<.01$. The children in the comparative-behavior conditions had significantly

higher scores than those in both the comparative-trait condition and the noncomparative-behavior condition.

Pearson correlations were conducted between the means of all four of the self-esteem domains. For kindergartners in the trait condition (see Table 3), correlations were significant between

Insert Table 3 about here

the scores of all the domains: peer acceptance-cognitive competence ($r=.66, p<.01$), peer acceptance-athletic competence ($r=.68, p<.01$), peer acceptance-global self-worth ($r=.38, p<.02$), cognitive competence-athletic competence ($r=.75, p<.01$), cognitive competence-global self-worth ($r=.54, p<.01$), and athletic competence-global self-worth ($r=.45, p<.01$).

Kindergartners in the behavior condition (see Table 4)

Insert Table 4 about here

differentiated between the different domains more than in the trait condition and had significant correlations for cognitive competence-athletic competence ($r=.73, p<.01$) and peer acceptance-global self-worth ($r=.67, p<.01$). Third graders in the trait condition (see Table 5) had significant correlations

Insert Table 5 about here

for cognitive competence-peer acceptance ($r=.49, p<.01$),

cognitive competence-athletic competence ($r=.75, p<.01$), cognitive competence-global self-worth ($r=.46, p<.01$), and peer acceptance-global self-worth ($r=.34, p<.04$). Third graders in the behavior condition (see Table 6) had significant correlations for cognitive competence-athletic competence ($r=.46, p<.01$),

Insert Table 6 about here

cognitive competence-global self-worth ($r=.31, p<.04$), peer acceptance-athletic competence ($r=.37, p<.01$), peer acceptance-global self-worth ($r=.46, p<.01$), and athletic competence-global self-worth ($r=.30, p<.05$).

Pearson correlations were also conducted between the mean of the general self-worth scores and the discrepancy scores (see Table 7). Because the effect of the comparative vs. noncomparative questions was not significant in the MANOVA, the groups were collapsed across that dimension. In the trait condition for third graders, the correlation was significant ($r=.42, p<.01$).

Discussion

The main focus of this study was how the nature of questions on measures of self-esteem affects their outcomes. Previous research indicates that younger children are not cognitively able or willing to use comparative judgements and to evaluate their traits. In the present study, however, whether the questions were comparative or noncomparative had no effect on the results. It is possible that even when asked comparative questions, all

the children considered only their own behaviors or traits while ignoring the "compared to others" part of the question; alternatively, even kindergarten children may already be comparing themselves to their peers.

Whether the questions were behavioral or trait did have an effect in several domains. Both age groups had lower scores on trait questions in the cognitive competence and athletic competence domains. When asked specific behavioral questions, however, the scores were significantly higher. These findings imply that the decline in self-evaluations often seen in the early school years may be due to the change in the way we ask children to evaluate themselves.

The interaction between grade and trait vs. behavior questions in the global self-worth domain is possibly explained by the nature of the different questions for each condition. In the behavior condition, the self-worth questions actually concerned maternal acceptance. The trait questions, on the other hand, were primarily concerned with self-worth. The lower self-worth scores for both the kindergartners and the third graders in the behavior questions point to the possibility that they may be able to distinguish between maternal acceptance and global self-worth.

The correlational data present a somewhat confusing picture. The kindergartners in the behavior condition had significant correlations between the two competence domains and between the two acceptance domains. These findings support the two factor analysis that Harter (1984) found when evaluating the Pictorial

Scale of Perceived Competence and Acceptance. No other correlations were significant for this group. Both the kindergartners and the third graders in the trait condition had many domains correlated. They seemed to have trouble differentiating between the different domains when using trait labels. The third graders' correlations were not as high as the kindergartners and there were not as many domains correlated, suggesting somewhat more differentiation in the use of trait labels. Possibly, there may have been third graders who were in a transition phase from using behaviors to using trait labels. Even some of the third graders might not have been able or willing to use trait labels to describe themselves. The third graders in the behavior condition; however, had significant correlations for almost all the domains. All the other domains were correlated with maternal acceptance. It may be that the third graders understand that cognitive competence, peer acceptance and athletic competence can lead to maternal acceptance. Likewise, peer acceptance was significantly correlated with athletic competence. Elementary school children are very likely to realize that peer acceptance is often contingent on athletic competence. The fact that athletic competence and cognitive competence are very highly correlated does not seem to make sense with the rest of the findings. More research on these areas should be conducted in order to figure out why the third graders have such high correlations for these two domains.

Age differences were also found for the importance scales.

Kindergartners rated physical appearance much higher than third graders, while the third graders said that academics and behavior were more important. Discrepancy scores and correlations with global self-worth also showed differences between the two age groups. The third graders discounted those areas in which they gave themselves lower competency scores. The kindergartners did not exhibit discounting. A possible problem with this study is that there were no questions in the self-esteem measure about a domain that children say is most important to their self-concept, behavior. Further research should look into the behavior domain to see if children rate themselves highly on a measure of self-esteem which includes questions about how the child behaves.

Overall, all the children seemed to be willing to use traits to evaluate their self-esteem, but in different ways. The kindergartners had trouble differentiating between the different domains. This suggests that although they may be willing to use trait labels, the younger children think that they are either good at everything or bad at everything. Kindergartners also had relatively high scores on all the domains in the importance scales. They considered all the domains to be important and did not discount. The high correlations of the domains of the self-esteem measure also points to this lack of differentiation. The third graders, on the other hand, had more varied scores in the different domains and were more likely to discount for domains that they did not feel they were good in. The performance of the third graders may reflect greater individual differences in the evaluation of self; further research on this point is necessary.

Overall, these results suggest that kindergartners have difficulty using trait labels in a differential way. Although third graders are better at using trait labels, they seem to be in a transition and are still not as advanced as earlier research would have predicted.

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Table 1

Global Self-Worth Means for Grade and Behavior vs. Trait Interactions

Kindergarten, Behavior Condition	18.26 (n=43)
Kindergarten, Trait Condition	20.28 (n=39)
Third Grade, Behavior Condition	15.64 (n=44)
Third Grade, Trait Condition	19.89 (n=37)

Table 2
Importance Scale Means by Domain

	Academic	Peer	Athletic	Appearance	Behavior
Kindergarten	6.66	5.99	5.85	6.27	6.61
Third Grade	7.52	5.52	6.19	4.89	7.64

Table 3

Correlation Matrix of Competence Scale Means: Trait Condition,
Kindergartners

	Cognitive Competence	Peer Acceptance	Athletic Competence	Global Self-Worth
Cognitive Competence		.66***	.75***	.54***
Peer Acceptance			.68***	.38*
Athletic Competence				.45**

Note. n=39.

*p<.05. **p<.01. ***p<.001.

Table 4

Correlation Matrix of Competence Scale Means: Behavior Condition, Kindergartners

	Cognitive Competence	Peer Acceptance	Athletic Competence	Global Self-Worth
Cognitive Competence		.28	.73***	.29
Peer Acceptance			.20	.67***
Athletic Competence				.24

Note. n=43.

*p<.05. **p<.01. ***p<.001.

Table 5

Correlation Matrix of Competence Scale Means: Trait Condition,
Third Graders

	Cognitive Competence	Peer Acceptance	Athletic Competence	Global Self-Worth
Cognitive Competence		.49**	.75***	.46**
Peer Acceptance			.24	.34*
Athletic Competence				.29

Note. n=37.

*p<.05. **p<.01. ***p<.001.

Table 6

Correlation Matrix of Competence Scale Means: Behavior Condition,
Third Graders

	Cognitive Competence	Peer Acceptance	Athletic Competence	Global Self-Worth
Cognitive Competence		.15	.47***	.31*
Peer Acceptance			.37*	.46**
Athletic Competence				.30*

Note. n=44.

*p<.05. **p<.01. ***p<.001.

Table 7

Correlation Matrix between Global Self-Worth Means and
Discrepancy Scores by Condition and Grade

Kindergarten, Behavior Condition	-.07 (n=38)
Kindergarten, Trait Condition	.08 (n=32)
Third Grade, Behavior Condition	.22 (n=43)
Third Grade, Trait Condition	.42 (n=35)*

*p<.01