Self-perception is considered a central issue in several psychological fields, especially in research on learning and personality. Self concept, or self perceptions, are viewed as intertwined with an individual's experiences and interpersonal relations in the environment. There seems to be a close relationship between self-perception and motivation shown in research on classroom interactions. A positive classroom climate stimulates the students' emotional responses to the group, their self concepts and motivations toward legitimate educational goals. The study was conducted to test the relationship between different aspects of self perception, as well as between self perception and motives in Norwegian children. The trends were compared to studies done with children in the United States. Results of the study indicated children high in Motive for Success had high self perceptions. However, children high in Motive to Avoid Failure had low self perceptions. The findings were confirmed, though modified, through a discriminant function analysis. Discriminant function results need further elaboration in future research before generalizations can be attempted. (Author/DWH)
THE RELATIONSHIP OF SELF-PERCEPTIONS AND ACHIEVEMENT MOTIVES IN NORWEGIAN CHILDREN

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ABSTRACT

The Relationship of Self-Perceptions and Achievement Motives in Norwegian Children.

Today self-perception is considered a central research issue in several psychological fields, particularly so in research on learning and personality. Recently, several researchers have discussed and examined problems of definition, measurement, and interpretation within self concept research. Theoreticians now see self concept or self-perceptions as strongly intertwined with the individual's experiences and interpersonal relations in the environment. However, there seems to be a close relationship between self-perception and motivation in research on classroom interactions. At school a positive classroom climate stimulates the students' emotional responses to the group, their self concepts, and their motivations toward educational, legitimate goals.

The relationship between different aspects of self-perception and between self-perceptions and motives in children have been studied before in the U.S., but whether the same trends would be found in Norwegian children (in the city of Trondheim), was a main purpose of the present study, besides actual try-outs of the instruments adapted to the project.

In this pilot study it was found that the highest correlations occurred between Self Concept and Reflected Self/Teacher and between the teachers' ratings of the Student as a Person and of the Student as a Student, when a Norwegian version of the Self-Perception Inventory (SPI) was used. Also used was the Achievement Motives Scale (AMS), which consisted of two parts, each measuring an important achievement motive: the Motive to achieve Success (Ms).
and the Motive to avoid Failure (Mf). According to expectations, a small and negative correlation was found between the scores of the two motives. The reliability of both instruments was found to be satisfactory to very satisfactory. In comparing the SPI to the AMS, satisfactory validity was determined between the Ms motive and the SPI student ratings of self and between the Mf motive and the SPI. These results were confirmed in a small-scale study carried out by the author in Urbana, Illinois in 1981.

Intercorrelations indicated that children high in Motive for Success had high self-perceptions and that children high in Motive to avoid Failure had low self-perceptions. These results were in part confirmed though, also somewhat modified by a discriminant analysis. The discriminant function results will need further elaboration in future research work.
The Relationship of Self-Perceptions and Achievement Motives in Norwegian Children

Background: Self-Perception and Motivation

In the recent years self-perception has become an increasingly important aspect in several psychological fields, but foremost in theory and research of learning and personality. However, it does not only reflect factors of an individual but of a social or interpersonal concern as well. Mead (1934) advocated that a person perceives the self through interactions with one or more other persons, interpreting their responses to his or her behavior. For this reason Silverberg (1952) claimed that there are two main sources in the development of self-esteem in a child: the internal source (own reactions to its behavior) and the external source (perception of others' responses to its behavior), and both are momentous to a healthy personality development. In this sense, self-perception is strongly influenced through the interpersonal interactions taking place.

Coopersmith (1967) attempted to delineate major conditions and experiences that seems to be associated with the development of a positive vs. a negative self-esteem. These he considered in the categories of successes, values, aspirations, and defenses (against threat and uncertainty). In his study Coopersmith emphasized the importance and the close relation between these categories both as to the quality of the parent-child relationship and concerning the development of self-esteem in the child. When the child enters school, important interactions take place, which will influence the students' performances and self-esteem development. Purkey (1970) claimed six factors seem momentous in creating a classroom atmosphere that is conducive to developing favorable self-perceptions.
in students: challenge, freedom, respect, warmth, control, and success. These factors seem to be highly compatible with ideas examined and discussed by several others.

As far as definitions are concerned, self-esteem, self-concept and self-perceptions have been and are seen more or less as synonyms. Coopersmith claimed self-esteem to be a personal judgement of worthiness that is expressed in the attitudes the individual holds toward himself (1967, p. 5). Later Shavelson, Hubner & Stanton (1976) defined self-concept (in broad terms) as a person's perception of himself, formed through his experiences in the environment and in interaction with environmental reinforcements and significant others. Further, these authors pointed to the self-concept construct as a network of associations or propositions that relate to:

a) observable properties, the within-construct portion (seven characteristic features),
b) other constructs, the between-construct portion.

They call this interrelationship a nomological network. Soares & Soares (1975) in an attempt at an operational definition stated that self-concept is the system of perceptions which the individual formulates of himself in awareness of his distinctive existence. Though, they are adding a long list of etiological sources of importance for the self concept development. More recently, researchers have attempted at determining whether the self-concept is a general factor, connotes a hierarchical structure, or whether it is best described in a taxonomic or multidimensional system. These are within-network studies investigating the relationship among "parts" or facets of the construct of self-concept, as opposed to the between-network studies examining the relationship between aspects of self-concept and other relevant variables.
(cf. Marx & Winne, 1978). To clarify the within portion of the nomological network of self-concept, researchers in the field (e.g. Purkey, 1970; Wylie, 1974) have urged for so-called multitrait-multimethod studies, proposed as a complete and satisfying validity testing approach by Campbell & Fiske (1959). Several researchers have posited that self-concept research has addressed itself to substantive problems before problems of definition, measurement, and interpretation have been resolved. Shavelson et al. (1976) claimed that advances in construct validation methodology are needed, until then the generalizability of self-concept findings will be severely limited. In the last years some studies of a multitrait-multimethod nature have been published, though they have not seemed able to distinguish among different facets of a self-concept. One study (Winne, Marx & Taylor, 1977) discovered convergence of physical, social, and academic self concept rather than discriminant validity. Attempts to present a hierarchical structure of self have not thus far been convincing (Shavelson, Hubner, & Stanton, 1976; Marx & Winne, 1978). Soares & Soares (1980a) have claimed that one possible reason for this may be that the theoretical constructs themselves are not discriminating. From their own multitrait-multimethod studies they concluded that self-perceptions would seem to be varied and multiple, providing congruent and differentiating dynamics both horizontally or interpersonally and vertically or intrapersonally. Their research results indicated general differentiation on the nine scales of the Affective Perception Inventory (API), suggesting situation-dependent and divergent self-pictures in Self Concept, Student Self, School Perceptions and six different school subjects. Interpersonal congruence was found most often between self-perceptions and peer-perceptions, but also between self-perceptions and teacher-perceptions. Less agreement was found between peers and teachers. Furthermore, indication of discriminant validity was found in several of the cases. Results of discriminant analysis yielded distinct separation
of group centroids (grades and gender) on all the factors. In the analyses they obtained three significant functions, which they labeled "the academic self", "the school self" and "the humanistic self" (Soares & Soares, 1980b).

As to the problem of generalizability of self-concept findings, let me add some critical remarks. I do share Shavelson and other researchers' position regarding the need for advances in construct validation within self-concept measurement. But is the achievement of equivalence among the various self-concept measurement instruments always a desirable or necessary aim to researchers in the field? The self-concept construct is multifaceted and accordingly a self-concept measurement instrument have to emphasize some of the facets, whereas other such instruments might tap another selection of facets. With self-concept measures different in terms of the selection of facets it is too rigid to expect equivalence. The different perspectives of research where self-concept measurement is relevant seem to be so varied in nature and scope as to call for use of quite different self-concept measures. Furthermore, there might sometimes be of interest to use more qualitative methods in the measurement of self-concept, for which rigorous criteria may be somewhat improper. Though, because of the clear limitations of self-concept measurement so far, cautiousness is absolutely necessary in the generalizations of self-concept findings. There is also an important fact to remember when using the four criteria of construct validity suggested by the multitrait - multimethod approach (Campbell & Fiske, 1959). The criteria are far too stringent to maintain when there is considerable im - trments in the reliability of the measures, a fact that become quite clear as to the fourth of the criteria of this approach: obtaining same pattern of trait interrelations in correlations with same or different methods (Magnusson 1969, p. 56). In this author's opinion we need both within-network and between-network studies of self-concept or self-perceptions, because it will probably take several
decades before the limitations of the within-network studies, discussed by Shavelson et al., are eliminated.

Students' self-perceptions concern the affective aspects of the learning process and are important both in motivation for academic achievement and as desirable and legitimate educational goals in themselves (Mønsterplanen, 1974).

It has been claimed that in school feelings, attitudes, values, and self-concepts usually have been conceived of as the servants of cognition and accordingly are paid little interest. However, as Kash & Borich (1978) pointed out, in the last decade the affective domain has been accorded more concern in school efforts than ever before. This is a fact reflected among both educational researchers (f.i. Covington & Beery, 1976; Hidgins, 1979; Corno, Mitman, & Hedges, 1981) and the curriculum developers of the school (f.i. Stenhouse, 1976; Hamachek, 1977; Eisner, 1978). As the school activities take place in a psychodynamic context, much of the research in school settings will actually be research on classroom group processes.

Schmuck & Schmuck (1979) explored how the processes of group interaction combine to facilitate or restrain cognitive as well as affective learning in the classroom. They characterized a positive classroom climate as one where students expect one another to do their best, support each other, share high amounts of potential influence. It is furthermore a climate where high levels of attraction exist, norms are supporting academic work and maximizing individual differences, where communication is open and the process of working together as a group is considered to be of great importance. In this way, a positive classroom climate stimulates the students' emotional responses to the group, their self concepts and not of less importance their motivation toward the educational goals. The study
of Solomon & Kendall (1979), actually an ATI-study, is but
one example of research studies on classroom climate in
recent years.

Researchers in educational and social psychology have long
been interested in explanations of variation in human be-
havior, a concern related to all kinds of motivational
questions. Walberg, Schiller, & Haertel (1979) in an
analysis of reviews of educational research in the last
decade, pointed out that six factors seem to be predicting
cognitive, affective, and behavioral learning outcomes in
the school, one of them was the student motivation and the
social-psychological climate of the classroom another.
In sum, there exist important interactions between self-
perceptions, feelings, and motivation in the classroom.
This is a fact reflected among researchers in different
fields today (see f.i. Izard, 1977; Kifer, 1977; Harter,
1978; Deci, 1980). In accordance with these ideas perceived
control of events is considered a motivational variable that
oftentimes affects students' academic achievements (Stipek
& Weisz, 1981). As far as motivation is concerned different
approaches as to conceptualization and measurement can be
taken as the point of departure. Here the achievement
motivation theory as presented by Atkinson & Feather (1966)
and slightly revised by Nygård (1977), will be chosen as the
main perspective. Achievement motivation theory suggests
that reactions to failure as well as to success in performances
are predominantly determined by perceived task difficulty
and the constellation of the two personality variables
called Motive for Success (Ms) and Motive to avoid Failure
(Mf), the latter often defined as anxiety. According to
the achievement motivation theory behavior related to
achievement is an inverted U-shaped function of perceived
probability of success for individuals of Ms>Mf and a
U-shaped function of perceived probability of success for
individuals of Ms< Mf. This will, then, indicate an approach behavior and an avoidance behavior, respectively. Besides the person's constellation of (the two) achievement motives and his perceived probability of success, the incentive value (relative attractiveness) of the goal or outcome, will influence his resultant motivation for the task in question. A refinement of this theory was proposed by Nygård (1977), as he meant to find that Ms< Mf-subjects tend to have greater tolerance for both easy tasks (probability of success > .85) and very difficult tasks (probability of success < .15), compared to Ms Mf-subjects. Clifford (1980) has pointed out that results of several other studies appear to be compatible with these suggested refinements of Nygård.

In recent years there are several examples of a broader perspective of research in the field of human motivation (Cf. Lillemyr 1981a). Several of the studies are in particular focusing the connection between self-perceptions and motivation. This counts for Weiner's attributational approach to motivation (Weiner, 1979) as well as deCharms' personal causation approach (deCharms et al., 1976). One of the most comprehensive and thoroughly developed theoretical perspectives advocating that a close relation exists between self-perceptions and classroom motivation, was presented by Maehr (1976; 1978). He asks for a renewed look at "self-as-a-motivator", in order to explore its importance for a "continuing motivation". Important questions of student motivation are therefore how the student's meaning of the task mediates resultant motivation, what his perceived causes of achievement are, and what his perceived goals regarding achievement behavior are. As to the goals, Maehr & Nicholls (in press) suggested that researchers regularly touch upon three different kinds of achievement-related goals or achievement behavior: self-enhancing
achievement behavior, task-oriented achievement behavior, and socially desirable behavior. In this way the authors are integrating their ideas of how cognitions mediate achievement behavior to the attributional points of view.

In sum, recent theories on human motivation seem to emphasize that a close relationship exists between motivation and self-perceptions. As indicated in the above presentation, the same tendency counts for several of the current approaches in the self-concept research.

**Method and results**

The relationships between different aspects of self-perception and between self-perceptions and motives in children, have been studied before in the U.S., but whether the same trends would be found in a selection of Norwegian children in the city of Trondheim, was a main purpose of the present study. Besides that, an important purpose of the pilot study was to try out adapted instruments of measurement, to be employed in a larger (main) investigation later in the project. In the main investigation, which is now being carried out (1981/82), interrelations between motivation, self-perceptions, and other student characteristics and teacher attitudes and classroom behaviors, constitute the major elements of the research problems. The whole project is confined to the fourth grade of the Norwegian Comprehensive School (elementary level), which in age is comparable to fifth grade in the American elementary school. The pilot study was carried out in spring 1980 in an open Comprehensive School (elementary level), located in a suburban area in the city of Trondheim. This school district includes people with varied socio-economic status, the majority of which can probably be labeled middle class. Being a pilot study, no randomization in the attainment of the sample was attempted. The two school classes selected consisted of
18 and 26 students, respectively. The two classroom teachers both agreed to participate in the study.

Since self-perception was considered an important aspect of students' achievement motivation, the Self-Perception Inventory (Soares & Soares, 1975) was selected as a suitable instrument for our purposes, having satisfactory values of reliability and validity. Six of the ten forms of the SPI Student Scales were adapted and translated into Norwegian: (1) Myself, (2) What My Teacher Thinks of Me, (3) How I Would Like to Be, (4) How I Am as a Student, (5) Teacher Ratings of the Student as a Person, and (6) Teacher Ratings of the Student as a Student (Lillemyr, 1980).

The motivation variables were the Motive to Achieve Success (Ms) and the Motive to Avoid Failure (Mf). These were measured with an adapted version of the Achievement Motives Scale (Gjesme & Nygård, 1970; Lillemyr & Nygård, 1980). The AMS consists of two subscales, one for each of the two achievement motives, and satisfactory reliability and validity values of the scale have been presented (Rand, 1978). The Norwegian version of the SPI-Student Scales, was administered to the 44 students in the two fourth grades. The teacher ratings (5 and 6) were completed and collected before students' self-ratings were obtained. Before the administration of the AMS to the same students, teacher evaluations (rankings) of students' achievement motives were collected.

Table 1 provides the values of internal consistency (coefficient alpha) in the different subscales of SPI and AMS. In parentheses are presented comparable coefficient alpha values obtained in a prestudy the author carried out with three fifth grades (79 students) at the Urbana elementary school, Illinois, in spring 1981. The values
presented seem to give us a relatively satisfactory impression of reliability in both instruments. The impression is strongly supported by the data of the Urbana study.

Table 2 gives a general view of the intercorrelations as calculated from scores of the Norwegian version of the SPI and the adapted version of the AMS. As the table indicates, the student ratings of Self Concept correlate fairly well with Reflected Self-Teacher (.74), but only moderately so with the other forms of the instrument (.39 and .50), and least well with Teacher Ratings of Self Concept (.14). Reflected Self-Teacher and Ideal Concept both correlate moderately with all the other forms of the SPI. The same tendency counts for Student Self. More significantly to notice is the fact that all the four kinds of student ratings correlate fairly high to very high with the Total SPI-Student Ratings (.82, .75, .67, and .83). As can be seen from the table a rather modest, but negative correlation was found between Motive for Success scores and Motive to Avoid Failure scores (-.27). Furthermore, moderate correlations were found between Motive for Success and Ideal Concept (.29), Student Self (.42), and Total SPI-Student Ratings (.37). Motive to Avoid Failure correlated moderately and negatively with Self Concept (-.28), Reflected Self-Teacher (-.31), and Ideal Concept (-.32). The correlation between Motive to Avoid Failure and Total SPI-Student Ratings was negative and moderately high (-.35). When comparing the intercorrelations to the corresponding correlations from the Urbana study, an interesting pattern seems to emerge. Some of the correlations show some disagreements (high values become lower and low values become higher), with some clear exceptions as to the correlations between each of the subscales and the Total SPI-Student Ratings, the correlation between the Motive for Success and the Motive to Avoid Failure scores, and the correlations
between scores of the two achievement motives and the Total SPI-Student Ratings. These correlations, as obtained from the Urbana study, are given below:

<table>
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<tr>
<th></th>
<th>SC</th>
<th>RST</th>
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<th>SS</th>
<th>Tot</th>
<th>Ms</th>
<th>Mf</th>
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<td></td>
<td></td>
<td></td>
<td>.844</td>
<td></td>
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</tr>
<tr>
<td>Tot.</td>
<td>.803</td>
<td>.768</td>
<td>.576</td>
<td>.844</td>
<td></td>
<td>.368</td>
<td>-.291</td>
</tr>
<tr>
<td>Ms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.368</td>
<td>-.262</td>
</tr>
<tr>
<td>Mf</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.291</td>
<td>-.262</td>
</tr>
</tbody>
</table>

For all values: \( p < .01 \)

As can be seen, these figures give a solid support to our data from the Trondheim sample. (For comparison, see table 2.)

In order to analyze differences between the various motivational groups, median splits were used both with the Motive for Success and the Motive to Avoid Failure scores. Discriminant analysis was applied to determine the nature of the group differences (Tatsuoka, 1970), since rather strong intercorrelations were found between some of the variables, and since different aspects of self-perception were conceived of as characteristics on which the motivational groups could be expected to differ. Table 3 shows the general tendency (means, SD, and univariate F's) from the analysis of groups high vs. low in Motive for Success (Ms), whereas table 4 shows the trend as to the groups high vs. low in Motive to Avoid Failure (Mf). Subjects high in Ms had high self-perceptions, particularly so in the case
of Ideal Concept and Student Self. Subjects high in Mf had low self-perceptions, particularly concerning Self Concept and Ideal Concept. None of the teacher ratings of self-perception gave significant F-ratio's, with one exception.

As these results can be somewhat misleading, being so dependent upon in what order the variables are considered, a stepwise variable selection and discriminant function analysis, was carried out. Results from this analysis (table 5) confirmed that subjects high in Ms tend to have higher scores on Student Self and lower scores on Motive to avoid Failure, compared to subjects low in Ms. (Presented here are only those variables which obtained the strongest discriminant weights.) These two variable scores yielded a Wilks' Lambda of .76, approximated by a multivariate F of 4.77 (p < .03). As table 6 discloses, subjects high in Mf tend to have higher scores on Student Self and Teacher Ratings of Self Concept and lower scores on Teacher Ratings on Student Self, Self Concept, and Motive for Success, compared to subjects low in Mf. The five variable scores produced a Wilks' Lambda of .52, approximated by a multivariate F of 5.06 (p < .005). The canonical correlation of the function with Ms group membership was .57, and the canonical correlation of the function with Mf group membership was .78.
Discussion

In general, the reliability of the Norwegian version of the Self-Perception Inventory and the adapted version of the Achievement Motives Scale, must be considered very satisfactory. The validity of the SPI, indicated by the correlation between student ratings and teacher ratings on similar sets of items concerning Self Concept, was rather unsatisfactory ($r = .14$). However, the correlation between student ratings and teacher ratings of Student Self was moderately high ($r = .55$), and to our purpose, satisfactory. (The similar validity coefficients from the author's Urbana study were $r = .38$ and $r = .39$.) The validity calculations from the AMS scores of the study, bi-jerial correlations between AMS scores and teacher evaluations (not presented in this paper), gave a rather unconvincing impression of the instrument's validity (Lillemyr & Nygård, 1980).

These validity results deserve some comments. First, the SPI results cannot be said to be surprising if evaluated against the results reported by Soares & Soares (1975, 1978). And Cronbach (1970) has claimed that a criterion-related validity value very seldom exceeds .60. Furthermore, teacher ratings, used as a criterion with both instruments, are subjective judgements and can be more or less biased by factors outside the actual matter, and not all teachers are to the same extent able to rate their students according to dynamic characteristics like motives and self-perceptions. These are facts of particular importance to our data, collected from just two school classes and with only two teachers participating. Though, there are satisfactory values of reliability and validity reported with the original instrument versions. Nevertheless, assessments of the psychometric properties of the instrument versions used in this study, need to be further examined in future. In particular
it appears necessary to find several and different indications of the level of validity. However, one attempt along these lines was made in the study reported. As the authors of the AMS claim their instrument actually measure a special kind of self-perception, the correlation between the SPI (student ratings) and our adapted version of the AMS, would give us an additional indication of the validity of the SPI. The results obtained seem to support the picture of a satisfactory validity, with $r_{MS} = .37$ and $r_{MF} = -.35$. (The corresponding results from the Urbana study were $r_{MS} = .37$ and $r_{MF} = -.29$.)

A multitrait-multimethod matrix design, could have been applied with our SPI data. There were mainly three reasons why this approach was not endeavoured. First of all somewhat more convincing reliability values with all subscales would have been preferable, although the reliability of the Total SPI - Student Ratings appeared sufficiently high (.86). Furthermore, as results reported by Soares & Soares (1978) seem to indicate, student ratings and teacher ratings might not be the best point of departure when intending to compare measurements of the same traits of self-perception from different methods. Finally, this small-scale study constituted a too slender basis of data for a powerful method like the multitrait-multimethod approach. Though, results of a multitrait-multimethod matrix design in a large study by Soares & Soares (1981), encompassing a sample of 1.852 subjects, are indicating internal consistency, convergent validity and discriminant validity in two of the same subscales as were used in our Norwegian version of SPI: Self Concept and Student Self (in addition to other subscales).

Because of the fact that our sample lacked randomization and was modest in size, no generalizations will actually be possible. However, the intercorrelations presented seem
to indicate some support to research results reported by Soares & Soares (1977), advocating for distinctive self-perceptions among the students and suggesting that independent factors are necessary for explaining self concept. The present study found moderate correlations between student ratings of Self Concept, Reflected Self-Teacher, Ideal Concept, and Student Self. The intercorrelations ranged from .29 to .50, except for the correlation between Self Concept and Reflected Self-Teacher, which turned out to be .74. However, high correlations (from .67 to .83) were found between each of the different subscales of SPI and the Total SPI-Student Ratings. In general, the intercorrelations of the different aspects of SPI are compatible with the results reported by Soares & Soares (1975).

The correlation between the Motive for Success and the Motive to Avoid Failure scores (-.27), confirmed the results reported by Nygård & Gjesme (1972), indicating a rather small, but negative correlation between the two kinds of achievement motives. They therefore can be considered as two relatively independent motives.

The limitations of the present study are particularly severe as to interpretations of the results of the discriminant analysis presented, for which reason no generalizations beyond the sample will be attempted. When splitting up the scores of SPI (student ratings) into various motivational groups, the results disclose that students high in Motive for Success had higher self-perceptions than those low in Ms, and furthermore that students high in Motive to Avoid Failure had lower self-perceptions than those low in Mf. A stepwise variable selection and discriminant function analysis seemed to add some interesting modifications to this pattern. Firstly, in this sample it was a tendency among students...
high in Ms to rate themselves higher on Student Self, but not necessarily so on Self Concept, compared to students low in Ms. Secondly, in this sample students high in Mf tended to rate themselves higher on Student Self, but lower on Self-Concept, though, in this concern the teacher tended to rate the students in the opposite direction (higher on Self Concept and lower on Student Self).

Attempts of interpretation or generalization from these results should be postponed until further research on similar research issues and preferably employing similar instruments of measurement, can be carried out.

Throughout the paper some results from the author's prestudy carried out in the fifth grade of the Urbana elementary school (Illinois), have been presented as supportive to the results of the Trondheim sample. However, in this concern great cautiousness should be exercised, because the two studies were carried out in two separate cultures and within two different school systems. These aspects are important, although it was a fact that both studies were carried out by the same researcher, applying the similar set of instruments (but adapted to the language differences).

So far, self-perceptions would seem to be varied and multiple, with differentiating dynamics both interpersonally and intrapersonally, suggesting an interfacing of cognitive dimensions as well as behavioral determinants. Accordingly, they will be of great importance as mediators of motivation. Hopefully, future research will give more attention to important efforts concerning the nature of both self-perception and motivation as well as a closer examination of self-esteem or self-perception as the basic source of motivation in the classroom.
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Table 1. Values of internal consistency (coefficient alpha) in SPI and AMS. 1)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Coefficient alpha</th>
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<td><strong>SPI</strong></td>
<td></td>
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<tr>
<td>Self Concept (1)</td>
<td>.47 (.83)x</td>
</tr>
<tr>
<td>Reflected Self-Teacher (2)</td>
<td>.61 (.89)</td>
</tr>
<tr>
<td>Ideal Concept (3)</td>
<td>.67 (.85)</td>
</tr>
<tr>
<td>Student Self (4)</td>
<td>.79 (.91)</td>
</tr>
<tr>
<td>Total SPI/Student Ratings (1,2,3,4)</td>
<td>.86</td>
</tr>
<tr>
<td>Teacher Ratings of Student as a Person</td>
<td>.94 (.89)</td>
</tr>
<tr>
<td>Teacher Ratings of Student as a Student</td>
<td>.95 (.96)</td>
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<tr>
<td><strong>AMS</strong></td>
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<tr>
<td>Motive to Achieve Success (Ms)</td>
<td>.69 (.78)</td>
</tr>
<tr>
<td>Motive to Avoid Failure (Mf)</td>
<td>.76 (.81)</td>
</tr>
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</table>

xValues in paranthesis are taken from the author's pre-study in Urbana elementary school (N=79), spring 1981.

1) SPI = The Self-Perception Inventory
AMS = The Achievement Motives Scale
Table 2. Correlation matrix for subscales of SPI and AMS (Pearson PM).

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<thead>
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<td></td>
<td>.292</td>
<td>.393</td>
<td>.750</td>
<td>.176</td>
<td>.309</td>
<td>.223</td>
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<td>.292</td>
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<td>.414</td>
<td>.549</td>
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<td>.393</td>
<td>.462</td>
<td></td>
<td>.833</td>
<td>.437</td>
<td>.547</td>
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<td>-.206</td>
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<td>Tot</td>
<td>.821</td>
<td>.750</td>
<td>.665</td>
<td>.833</td>
<td></td>
<td>.399</td>
<td>.548</td>
<td>.371</td>
<td>-.346</td>
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<tr>
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<td>.437</td>
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<tr>
<td>Mf</td>
<td>-.279</td>
<td>-.310</td>
<td>-.317</td>
<td>-.206</td>
<td>-.347</td>
<td>-.156</td>
<td>-.369</td>
<td></td>
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</tr>
</tbody>
</table>

Explanations:

- SC: Self Concept
- RST: Reflected Self-Teacher
- IC: Ideal Concept
- SS: Student Self
- Tot: Total Self-perception, Student Ratings
- TRSC: Teacher Ratings of Self Concept
- TRSS: Teacher Ratings of Student Self
- Ms: Motive to Achieve Success
- Mf: Motive to Avoid Failure

*p < .01
*xx *p < .05
*xxx *p < .10
Table 3. Means, SD, and univariate F-ratio's for the selected variables by level of Motive for Success (Ms) groups.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low Ms (N=16)</th>
<th>High Ms (N=17)</th>
<th>Univar. F's&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Self Concept</td>
<td>56.19</td>
<td>5.3</td>
<td>57.94</td>
</tr>
<tr>
<td>Reflected Self-T.</td>
<td>56.13</td>
<td>7.4</td>
<td>56.71</td>
</tr>
<tr>
<td>Ideal Concept</td>
<td>68.75</td>
<td>6.1</td>
<td>72.29</td>
</tr>
<tr>
<td>Student Self</td>
<td>64.75</td>
<td>10.9</td>
<td>72.47</td>
</tr>
<tr>
<td>Teacher r.-Self C.</td>
<td>67.00</td>
<td>8.7</td>
<td>66.59</td>
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<tr>
<td>Teacher r.-Student S.</td>
<td>77.13</td>
<td>14.3</td>
<td>79.94</td>
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<tr>
<td>Mt</td>
<td>38.81</td>
<td>7.0</td>
<td>33.12</td>
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</tbody>
</table>

1) Degrees of freedom: 1 and 31

<x p < .03

<sup>xx</sup> p < .05

<sup>xxx</sup> p < .10
Table 4. Means, SD, and univariate F-ratio's for the selected variables by level of Motive to Avoid Failure (Mf) groups.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low Mf (N=15)</th>
<th>High Mf (N=18)</th>
<th>Univar. F's$^1$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Self Concept</td>
<td>59.87</td>
<td>4.2</td>
<td>54.78</td>
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<tr>
<td>Reflected Self-T.</td>
<td>58.53</td>
<td>5.6</td>
<td>54.67</td>
</tr>
<tr>
<td>Ideal Concept</td>
<td>73.27</td>
<td>2.9</td>
<td>68.33</td>
</tr>
<tr>
<td>Student Self</td>
<td>70.53</td>
<td>6.4</td>
<td>67.22</td>
</tr>
<tr>
<td>Teacher r.-Self C.</td>
<td>70.33</td>
<td>9.2</td>
<td>63.83</td>
</tr>
<tr>
<td>Teacher r.-Student S.</td>
<td>85.67</td>
<td>10.7</td>
<td>72.67</td>
</tr>
<tr>
<td>Ms</td>
<td>46.53</td>
<td>4.4</td>
<td>44.17</td>
</tr>
</tbody>
</table>

$^1$ Degrees of freedom: 1 and 31

x p < .01
xx p < .05
xxx p < .10
Table 5. Stepwise selection of variables for discriminant analysis on level of Motive for Success (Ms).

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>Wilks' Lambda</th>
<th>Approx. F for test of Lambda(^1)</th>
<th>Standard discriminant function weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Student Self</td>
<td>.840</td>
<td>5.91(^x)</td>
<td>1.01</td>
</tr>
<tr>
<td>2</td>
<td>Mf</td>
<td>.759</td>
<td>4.77(^x)</td>
<td>-.81</td>
</tr>
</tbody>
</table>

\(^1\) Degrees of freedom: 1/31 and 2/30, \(x p < .03\)
Table 6. Stepwise selection of variables for discriminant analysis on level of Motive to Avoid Failure (Mf).

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>Wilks' Lambda</th>
<th>Approx. F for test of Lambda¹</th>
<th>Standard. discriminant function weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self Concept</td>
<td>.755</td>
<td>10.06x</td>
<td>-1.47</td>
</tr>
<tr>
<td>2</td>
<td>Teacher r./Stud. S.</td>
<td>.677</td>
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<td>-2.84</td>
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<tr>
<td>3</td>
<td>Student Self</td>
<td>.622</td>
<td>5.88x</td>
<td>1.38</td>
</tr>
<tr>
<td>4</td>
<td>Ms</td>
<td>.567</td>
<td>5.35x</td>
<td>-.82</td>
</tr>
<tr>
<td>5</td>
<td>Teacher r./Self C.</td>
<td>.516</td>
<td>5.06x</td>
<td>1.61</td>
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</tbody>
</table>

¹) Degrees of freedom range from 1/31 on step 1 to 5/27 on step 5.

p < .005