The self-concept of pre-adolescent children of Aruba

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INTRODUCTION

WHAT IS SELF-CONCEPT?

Self-concept is one of the oldest and more important constructs in the social sciences. Previously being thought of and investigated as an unidimensional construct (self-esteem), self-concept is currently viewed as being a multidimensional construct designed to explain why persons perceive themselves the way they do. This new way of thinking, theorizing and investigating self-concept originated with the development of the Shavelson, Hubner and Stanton hierarchical model of self-concept[1]. According to this model, a person's self-concept is formed through experience with and interpretations of that person's environment. Evaluations by significant others and reinforcement of a person's behavior are especially important in this process. As persons move from childhood to adulthood, self-concept is believed to become more diverse and multi-dimensional.

DOES SELF-CONCEPT VARY WITH AGE AND SEX?

International research conducted on the self-concept of children and adolescents has provided evidence of a steady decline in self-concept during preadolescence and early adolescent years, after which a leveling out of self-concept is observed during late adolescence and early adulthood. These findings are in accordance with scientific literature on child development, which suggests that young children have consistently high, less differentiated self-concepts which may be unrealistic and relatively independent of external criteria. As children grow older, their self-concepts become more differentiated and more correlated with external criteria, such as with information about their actual skills and abilities and with information from significant others[2-5].

The decline of self-concept in preadolescence and early adolescence was observed in measures of general self-concept as well as in self-perceptions of ability in specific areas, such as physical ability and mathematical ability. This decline was observed in both boys and girls. However, especially where self-perceptions of mathematical ability are concerned, researchers have reported a sooner and larger drop in girls when compared to boys. There have also been studies suggesting a sex difference in self-perceptions of physical abilities favoring boys and of reading abilities favoring girls. However, these differences were very small[5-7].

WHY MEASURE SELF-CONCEPT IN CHILDREN OF SCHOOL AGE?

Self-concept has proven in numerous studies to be an important mediator not only of psychological outcomes, such as happiness, anxiety, and depression, but also of behavioral and educational outcomes, such as motivation, academic striving and academic achievement. In addition, academic self-concept has been demonstrated to play a significant role in students' choices of what subjects they want to study in the future, in what they actually do pursue, and in their subsequent academic accomplishments[8-11].

Furthermore, studies conducted on the self-concept of children of school age have indicated that the construct of self-concept provides a good starting point for developing interventions on important educational issues, such as underachievement, dropping out of school, and bullying. The latter, in particular, has been internationally recognized as being a major public health problem in the sense that it is damaging to the psychological, social, academic and physical well-being of children and adults alike[12]. School-based anti-bullying prevention programs have shown, for instance, to be effective in preventing youth violence, which worldwide account for some 250 000 homicides among youth 10-29 years of age each year, which represents 41 percent of the total number of homicides globally[13].

Thus, the positive psychological approach fostered by the self-concept construct which focusses on how to achieve full human potential can be used as a powerful tool for developing preventive strategies to address important issues regarding school age children. Enhancing self-concept as such is fundamental to maximizing human potential from early development to school achievement to physical and mental health and to overall well-being[14].

WHY CONDUCT A STUDY ON SELF-CONCEPT IN ARUBA?

The school participation rate of 4 to 16 year olds in Aruba has historically been very high. According to data gathered during the 2010 Population and Housing Census, 98.2 percent of children in this age category were enrolled in school[15]. In addition, the Aruban Parliament unanimously approved the law on compulsory education for children between 4 and 16 years of age. Starting February 4, 2013, all children aged 4 – 16 years will be obliged to attend school[16]. However, on Aruba, underachievement, over aged children in primary schools, and bullying are important challenges to be dealt with.

Challenges experienced in the educational system of a country are inevitably made visible when analyzing the educational level of the population of that country. In Aruba, despite the high school participation rate, the highest level of education of 40.6 percent of the adult population (persons between 25 and 64 years of age) is primary school or lower[15]. In comparison, in the Netherlands, 7.0 percent of the adult population has primary education or lower[17]. This large discrepancy is, without

question, partly due to the yearly emigration of a substantial number of youngsters who, after finishing secondary school, leave Aruba to continue their studies abroad, only a few returning to the island after having finished their education. However, other factors, such as dropping out of school and underachievement are important issues to take into consideration in this respect. Ultimately, the main goal of the educational system is to produce (young) adults who can fully contribute to the economic growth and social development of a country. Adolescents, who after finishing primary education drop out of school or do not finish secondary school, pose a serious danger to reaching this goal.

Conducting a study on self-concept in Aruba could provide educators, social workers at schools, school boards and other organizations involved in child care and guidance with important information on why some children do not achieve their full potential (in school) and on how these children could be guided in the right direction by designing prevention strategies based on the data obtained.

Issues that warrant special attention are the physical and emotional health of children, adolescents and young adults. During to the 2010 Census, 5.1 percent of teenage boys and 8.2 percent of teenage girls reported having a bad general health and 5.1 percent of teenage boys and 11.9 percent of teenage girls reported having a bad emotional health[15]. In addition, the STEPS Aruba Health Survey held in 2006 revealed that 12.9 percent of young adult men and 21.3 percent of young adult women between 25 and 34 years of age reported feeling lonely most of the time[18]. Intervening at an early stage of development could prevent children from developing more serious physical and mental health problems later on in life.

METHODS

THE SCOPE OF THE STUDY

The study aimed at gathering data on the self-concept of children in 4th, 5th and 6th grade of primary schools in Aruba, in order to provide teachers, school boards, and policy makers with accurate and reliable data on the self-concept of children in Aruba.

Prior to conducting this study, consent was obtained from the Minister of Economic Affairs, Social Affairs, and Culture, the Minister of Justice and Education, the Inspector General of Education and from all participating school boards and individuals schools.

Consent was also asked to all parent/guardians of children invited to participate. Parents/guardians were informed of the study by means of a letter, requesting their consent (see Appendix I).

THE PARTICIPANTS

For the purpose of the study, all children in grades 4, 5, and 6 of all primary schools on
Aruba were invited to participate, totaling 4413 children in the ages of 8 to 15 years (see Table 1). Of all children invited, 4119 participated in the study, resulting in a response rate of 93.3 percent.

Table 1: Number of participants by school board and grade

SCHOOL BOARD	GRADE 4	GRADE 5	GRADE 6	TOTAL
SKOA	898	943	884	2725
DPS	331	365	340	1036
SPCOA	61	64	67	192
SVEOA	19	21	15	74
SOC	25	22	27	37
ISA	16	11	10	55
TOTAL	**1350**	**1426**	**1343**	**4119**

Children who did not participate did so because of three different reasons. In total, 154 children did not participate because they were not in school on the day their school was visited by the team of Central Bureau of Statistics coordinating the study. Another 100 children did not participate because their parents/guardians

declined to provide consent for their child to participate, and 40 children did not participate because it was unclear whether parents/guardians had provided consent.

THE QUESTIONNAIRE

Data on the self-concept of children was gathered by means of the Self-Description Questionnaire I, developed by Marsh (see Appendix II)[5]. It is a 76-item self-report questionnaire assessing eight areas of self-concept: physical abilities, physical appearance, reading, mathematics, peer relations, parent relations, general self, and general school (see Figure 1). The three academic self-concept scales were designed according to the Shavelson model.

The SDQ-I was developed for children in grades 4 through 6 (ages 8 through 12; two other instruments, The SDI-II and the SDQ-III were developed for young adolescents and late adolescents/young adults, respectively). Research on the validity of the responses to the SDQ-I point to a sound construct validity of the instrument. In addition, the SDQ-I has been found to reliably measure distinct aspects of self-concept.

Figure 1: General description of the eight scales of the SDQ-I

Physical Abilities	• Student ratings of their skills and interest in sports, games and physical activities
Physical Appearance	• Student ratings of their physical attractiveness, how their appearance compares with others, and how they think they look
Reading	• Student ratings of their skills, ability, enjoyment and interest in reading
Mathematics	• Student ratings of their skills, ability, enjoyment and interest in mathematics
Peer Relations	• Student ratings of their popularity with peers, how easily they make friends, and whether others want them as a friend
Parent Relations	• Student ratings of how well they get along with their parents, and the quality of their interactions with their parents
General Self	•Student ratings of themselves as effective, capable individuals, who are proud and satisfied with the way they are
General School	•Student ratings of their skills, ability, enjoyment and interest in school subjects in general

THE PROCEDURE

For the purpose of the study described in this paper, the English version of the SDQ-I was translated into Papiamento, Spanish, and Dutch. The SDQ-I was administered in the classroom, and children were offered the opportunity to complete the questionnaire in the language they felt most comfortable in (English, Papiamento, Spanish or Dutch). Children were asked to complete all questions by choosing one out of five possible answers: false, mostly false, sometimes false/sometimes true, mostly true, and true. On average, children completed the questionnaire in 30 minutes. Children in 4th grade needed, on average, more time to complete the questionnaire and more help completing the questionnaire. In some instances, teachers of 4th grade children choose to read the items aloud. When necessary, personnel of the CBS assisted teachers and children in the classroom.

Children completed the questionnaire individually and they were instructed not to discuss their answers with anyone during the completion of the questionnaire to prevent bias introduced by peer pressure or social desirability. In addition, no names were recorded and children were assured that their responses would be kept confidential. To further ensure confidentiality, questionnaires were scanned at the CBS office using a combination of optical mark reading and optical character recognition. Subsequently, data was verified, edited and analyzed by CBS personnel. The Statistical Package for the Social Sciences (SPSS) was used for data analyses.

Children's responses were scored according to the guidelines described in the SDQ-I manual[5]. Responses on each item were converted in the following score: False=1, Mostly False=2, Sometimes False/Sometimes True=3, Mostly True=4, True=5. Scores were then summed to arrive at raw scores for the eight scales of the SDQ-I. Each scale was made up of 8 questions. The remaining twelve items are generally used to check for inconsistencies and to control for negative bias. However, for the purpose of the analyses described in this paper, these control scores were not computed.

For each scale the raw scores ranged between 8, being the lowest possible score, and 40, being the highest possible score. A Total Academic score was calculated by summing up the raw scores on the Reading, Mathematics, and General School scales. A Total Nonacademic scale score was calculated by summing up the raw scores on the Physical Abilities, Physical Appearance, Peer Relations, and Parent Relations scales. The Total Academic Score and the Total Nonacademic score were summed to compute the Total Self Score.

In accordance with the guidelines of the SDQ-I, the responses of 158 children were not included in the analyses described in this paper, given that their responses on four or more items were omitted or invalidated. In this paper, raw scores will be presented and discussed, and comparisons will be made with data from other countries, where possible.

RESULTS

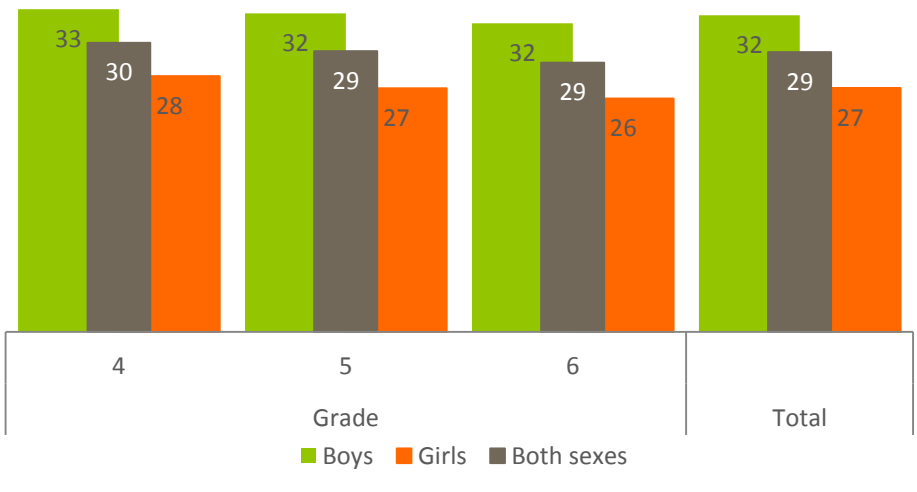
PHYSICAL ABILITIES

The Physical Abilities subscale of the SDQ-I assesses children's perceptions of their qualities and standing in the physical domain of functioning. As such, it provides a good understanding of children's motivation and interests in engaging in physical activities. Children who perceive themselves as being less skillful in physical activity settings and who show less interest in physical activities are less prone to engage in physical activities, which in turn negatively affects their physical health and overall well-being[19].

Research conducted on the physical self-concept of pre-adolescent children has pointed to a significant sex difference in children's perceptions of their physical abilities favoring boys, and to a linear decline in physical self-concept with increasing age[20]. The results of the survey described in this paper are partially in accordance with these research findings.

Overall, it must be noted that children who participated in this survey rated their physical ability as relatively high. Out of a possible maximum score of 40, children scored on average 29. However, as mentioned before, there was a statistically significant discrepancy between the sexes where their ratings of their physical abilities was concerned, boys scoring, on average, 32 and girls 27 ($p<.001$; see Figure 2).

Figure 2: Children's ratings of their physical abilities by grade and sex



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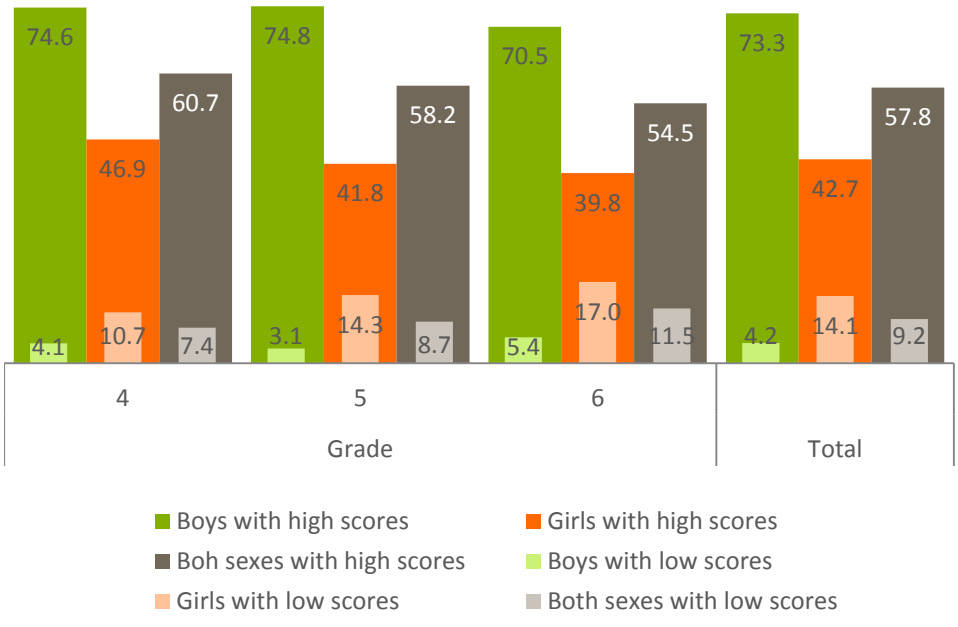
is significant difference was present in all grades and in children of all ages who participated in the survey. A linear regression analysis conducted to explain the variance in children's scores on the Physical Abilities scale showed a significant contribution of sex, in particular, and grade, to a lesser extent (r^2=.16, p<.001, and r^2=.01, p<.001, respectively). Age however did not contribute significantly to the explanation of the variance in children's' scores on the Physical Abilities scale.

Further analyses on children's scores on the eight questions used to calculate the Physical Abilities scale showed that 73.3 percent of boys had high ratings of their physical abilities on more than half the questions asked, compared to only 42.7 percent of girls. Moreover, whilst 4.2 percent of boys had low ratings of their physical abilities on more than half the questions asked, 14.1 percent of girls had (see Figure 2).

Figure 3: The percentage of boys and girls with high ratings of their physical abilities compared to the percentage of boys and girls with low ratings of their physical abilities by grade



As can be seen in Figure 3, the percentage of children with high ratings of their physical abilities dropped with increasing grade, especially where girls where concerned. Between grades 4 and 6, the percentage of girls with high ratings of their physical abilities dropped with 15.1 percent, relative to a drop of only 5.5 percent in boys. On the other hand, the percentage of children who rated their physical abilities as being low increased with increasing grade. This increase was, again, especially pronounced in girls, where the percentage of girls with low ratings of their physical abilities increased with 58.9 percent between grades 4 and 6, compared to an increase of only 3.2 percent in boys.

These significant differences between boys and girls notwithstanding, boys and girls did not differ in their dislike of sports and games. In total, 6.3 percent of girls and 6.0 percent of boys reported hating sports and games.

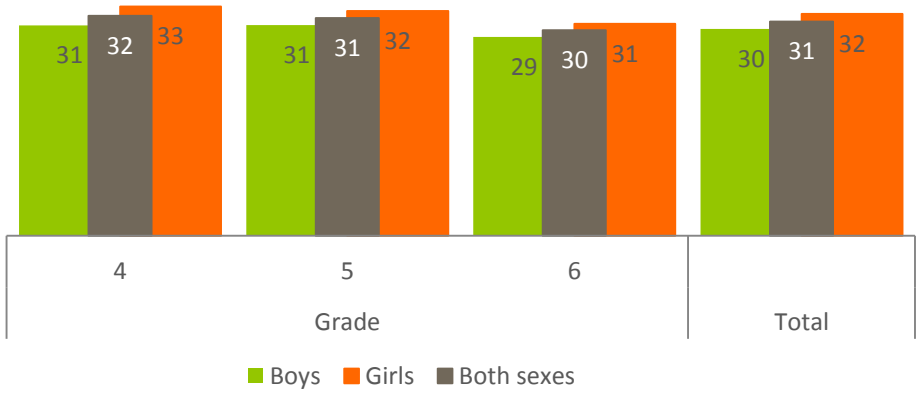
PHYSICAL APPEARANCE

Research has indicated that just like in adolescents and in adults, children's perceptions of their physical appearance are strongly related to their overall self-concept. Studies on children as young as five years old have demonstrated that even at this young age, children can become dissatisfied with their bodies and develop weight concerns[21-23]. Children are sensitive to societal norms and media influences which can affect their perceptions of their physical appearance before they reach adolescence[24,25]. In adolescence, perceptions of physical appearance have been linked to disordered eating patterns[26], including frequent dieting[27,28], bulimic symptoms and dietary restraint[28-29], and weight gain[30]. In addition, body dissatisfaction has been linked to negative mental health outcomes such as symptoms of depression and depressive mood[31,32].

Although in adolescence, young adulthood, and adulthood, women tend to be less satisfied with their physical appearance than men[33-37], research has been inconsistent in finding significant differences in satisfaction with physical appearance between girls and boys[23]. However, numerous studies have indicated that in girls as young as 6 of 7 years of age, disordered eating attitudes are common[38,39]. Between ages 7 to 11 years, an astounding 10 to 20 percent of girls have been reported with disordered eating patterns[40,41].

Contrary to what would be expected given these research findings, girls who participated in the current survey scores significantly higher on the physical appearance scale of the SDQ-I when compared to boys. Out of a maximum score of 40, girls scored on average 32, and boys 30 ($p<.001$; see Figure 4). However, both boys' and girls' ratings of their physical appearance decreased evenly between grades 4 and 6.

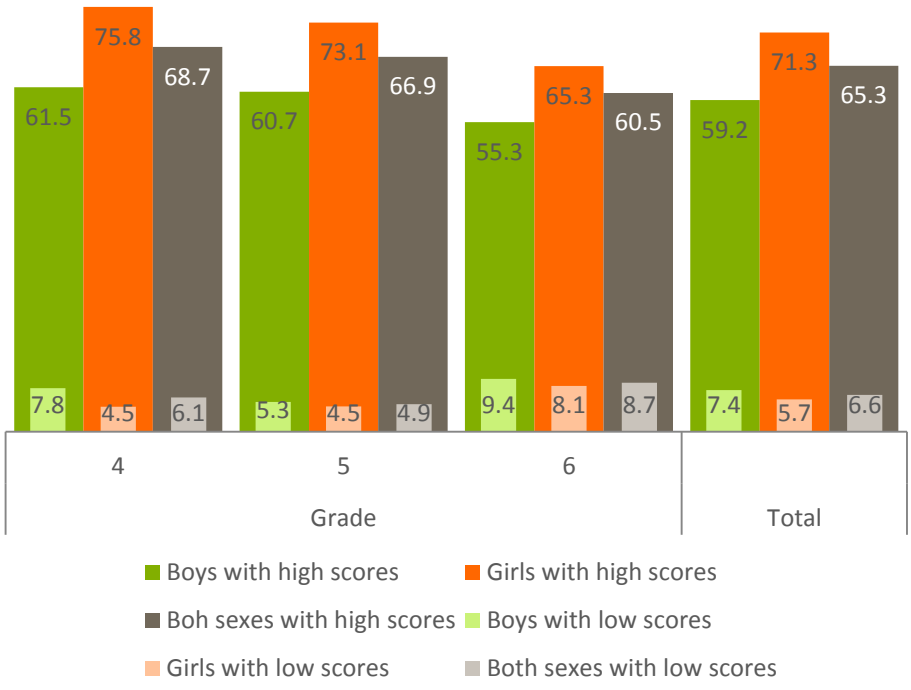
Figure 4: Children's ratings of their physical appearance by age and sex



When taking into account the responses of boys and girls on the eight questions of the Physical Appearance scale, the findings of the current survey reveal that whilst in grade 4, 61.5 percent of boys had high ratings of their physical appearance on more than half of the questions asked, in grade 6, 55.3 percent of boys rated their physical appearance highly, a decrease of 10.1 percent (see Figure 5). In girls, a relatively larger decrease was observed in the percentage with high ratings of their physical appearance, amounting to a decrease of 13.9 percent between grades 4 and 6. However, in grade 6, still nearly two thirds of girls had high ratings of their physical appearance.

On the other hand, it is important to mention that in grade 6, nearly ten percent of both boys and girls (9.4 percent, and 8.1 percent, respectively) had low ratings of their physical appearance on more than half of the questions asked. In addition, 8.9 percent of boys and 9.6 percent of girls in grade 6 reported perceiving themselves as being ugly.

Figure 5: The percentage of boys and girls with high ratings of their physical appearance compared to the percentage of boys and girls with low ratings of their physical appearance



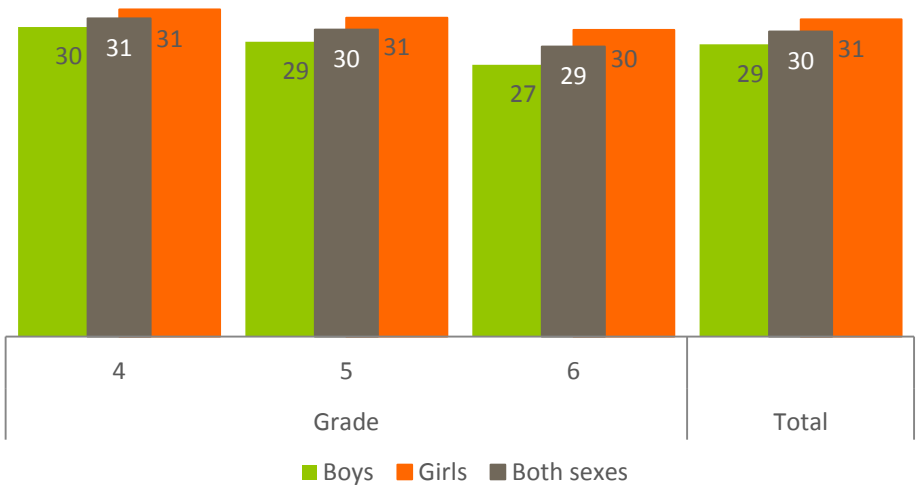
READING

Without question, children's reading abilities play an important role in their overall academic performance and academic success. For example, studies conducted on the reading abilities of college studies have demonstrated that students' reading abilities are significantly related to both their comprehension of and their attitude towards literacy activities[42,43]. At a postgraduate level, reading abilities have been shown to play a mediating role in students' understanding of research concepts, methodologies, and applications[44].

Children's perceptions of their reading abilities develop at an early age with their initial experiences in learning to read[45], and are influenced by their subsequent accomplishments in reading and by evaluations of significant others, such as teachers and parents. Therefore, it is important to assess children's perceptions of their reading abilities as well as their overall enjoyment of reading at an early age.

Research has been consistent in finding a significant gender difference in children's perceptions of their reading abilities, favoring girls[46]. The results of the current survey are in accordance with these findings. Whilst both boys and girls scored relatively high on the Reading scale of the SDQ-I, there was a small but statistically significant difference between the scores of boys and girls. Out of a maximum score of 40, boys scored on average 29, and girls 31 ($p<.001$; see Figure 6). In addition, whilst girls' scores on the Reading scale dropped slightly between grades 4 and 6, boys' scores showed a substantial drop (see Figure 6). A linear regression analysis conducted to explain the variance in children's scores on the Reading scale showed a very small but significant contribution of sex, grade, and age ($r^2=.01$, $p<.001$; $r^2=.01$, $p<.001$; $r^2=.02$, $p<.001$, respectively).

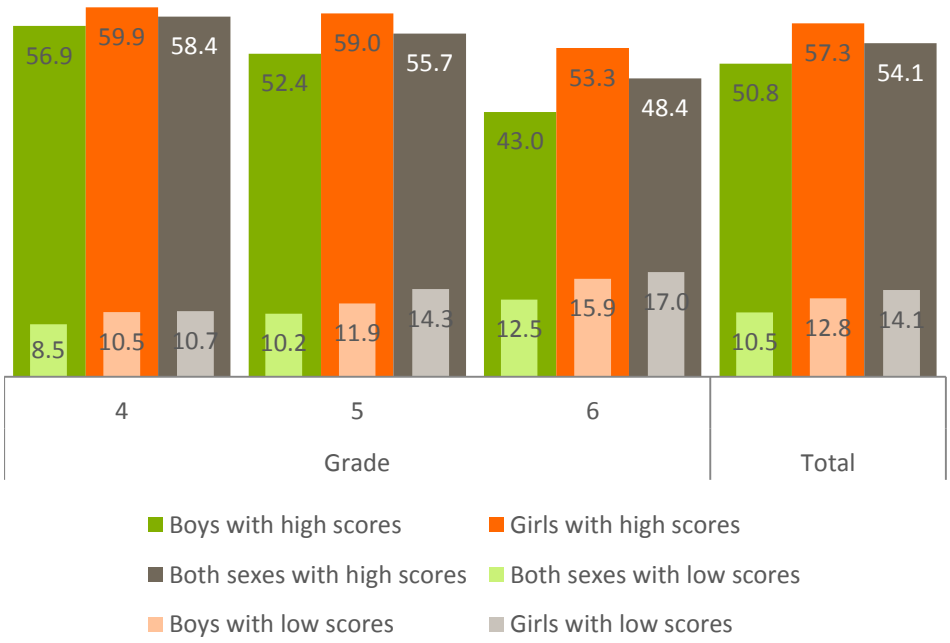
Figure 6: Children's ratings of their reading abilities by grade and sex



Moreover, when taking into account children's scores on the eight questions of the Reading scale, the results show that in grade 6 less than half of boys (43.0 percent) had high ratings of their reading abilities on more than half the questions asked (see Figure 7). In addition, in grade 6, 12.5 percent of boys had low ratings of their reading abilities on more than half the questions asked.

Although from grade 4 to grade 6, both boys' and girls' ratings of their reading abilities decreased, the percentage of boys with high ratings of their reading abilities dropped with 24.4 percent between grades 4 and 6, compared to only 11.0 percent in girls. Furthermore, it is important to mention that in total, 17.2 percent of boys and 11.0 percent of girls reported hating reading. In grade 6, these figures are even more alarming, given that 12.8 percent of girls and 19.5 percent of boys reported hating reading. In addition, 7.9 percent of boys and 4.6 percent of girls reported perceiving themselves as being dumb at reading. Fortunately, these percentages drop between grades 4 and 6. In grade 6, 3.9 percent of girls perceive themselves as being dumb at reading compared to 6.4 percent in grade 4. Where boys were concerned, in grade 6, 7.9 percent reported perceiving themselves as being dumb at reading compared to 8.5 percent in grade 4.

Figure 7: The percentage of boys and girls with high ratings of their physical abilities compared to the percentage of boys and girls with low ratings of their reading abilities



MATHEMATICS

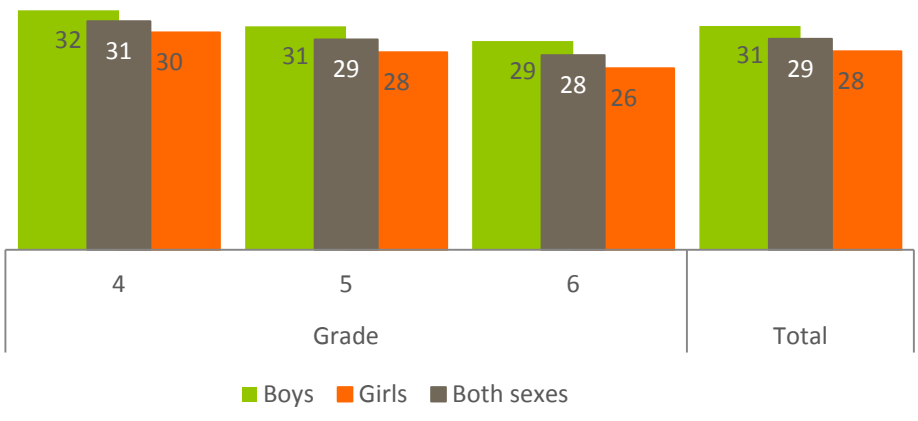
Children's abilities in mathematics are, just like their reading abilities, essential to academic performance and achievement. However, research on mathematics self-concept has focused mainly on gender differences. Results typically point to higher mathematics self-concepts in males[47,48]. These gender differences emerge during elementary school years and persist through adolescence and adulthood where they remain stable[48-51]. The same gender differences were observed in studies conducted on children's interest in mathematics. Already in 5th grade, significant differences were observed between boys and girls self-reported interest in mathematics, favoring boys [52].

However, it is important to mention that although females tend to have significantly lower self-concepts in mathematics, research has demonstrated that they often outperform males in mathematics as measured by objective test scores[6,48,51]. Societal norms, family values and classroom characteristics are offered as possible explanations for gender differences in mathematics self-concepts[47,52].

Overall, recent studies have been consistent in finding that perceptions of mathematics abilities tend to decrease over time in both boys and girls[47,52]. This decline was observed in different cultural settings. Although various explanations have been proposed, such as contextual (e.g. school curriculum) and biological factors (e.g. puberty), the reasons for the observed decline remain unclear.

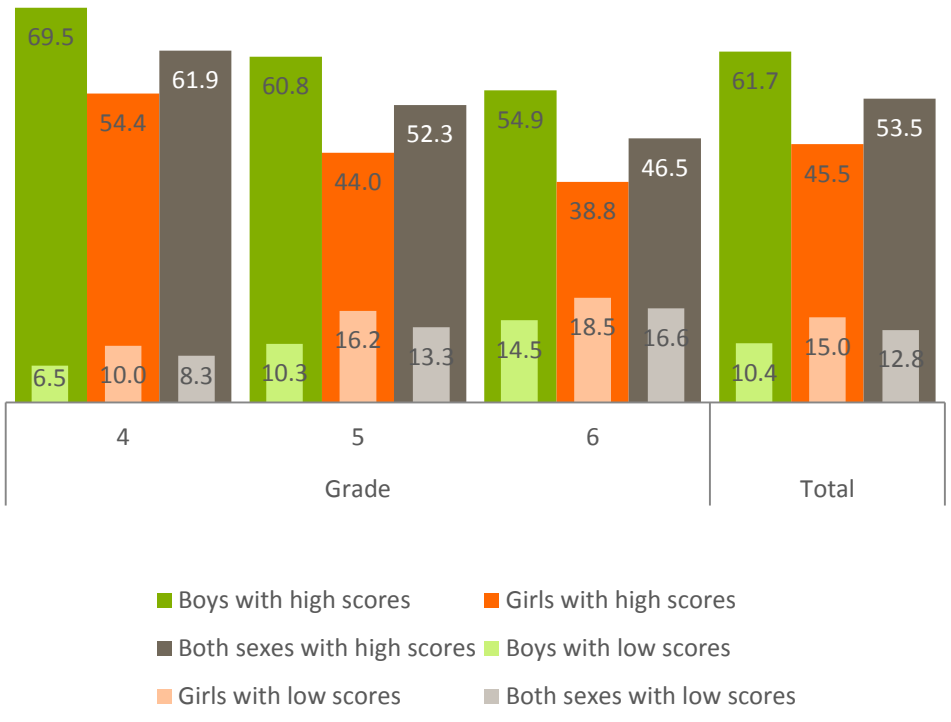
The results of the current study are in accordance with international literature. Although both boys and girls had relatively high ratings of their mathematics abilities, there was a statistically significant difference between boys and girls ratings, favoring boys. Out of a maximum score of 40, boys scored, on average, 31 and girls 28 (see Figure 8). In addition, the results pointed to an overall decrease in perceived mathematics abilities between grades 4 and 6 in both boys and girls. A linear regression analysis conducted to explain the variance in children's perceived mathematics abilities showed a small but significant contribution of sex, grade, and age (r^2=.02, p<.001; r^2=.02, p<.001; r^2=.02, p<.001, respectively).

Figure 8: Children's ratings of their abilities in mathematics by grade and sex



Furthermore, when taking into account children's scores on the eight questions of the Mathematics scale of the SDQ-I, gender differences in perceived mathematics abilities and changes in perceived mathematics abilities over time are more clearly visible (see Figure 9). Overall, while 61.7 percent of boys had high ratings of their mathematics abilities on more than half the questions asked, less than 50 percent of girls had (45.5 percent). Moreover, between grades 4 and 6, the percentage of boys and girls with high ratings of their mathematics abilities decreased substantially but equally for boys and girls. In boys, the percentage with high ratings of their mathematics abilities decreased with 21 percent, and in girls with 28.6 percent. The same trend was observed in the percentage of boys and girls with low ratings of their mathematics abilities. Between grades 4 and 6, the percentage of boys and girls with low ratings of their mathematics doubled or almost doubled. In this light it is important to mention that in total, 16.5 percent of boys and 20.4 percent of girls reported hating mathematics. Between grades 4 and 6, the percentage of boys and girls who reported hating mathematics increased steadily. In grade 6, nearly a quarter of girls (23.6 percent) and 17.9 percent of boys reported hating mathematics up from respectively 15.7 percent, and 14.3 percent in grade 4.

Figure 9: The percentage of boys and girls with high ratings of their abilities in mathematics compared to the percentage of boys and girls with low ratings of their abilities in mathematics

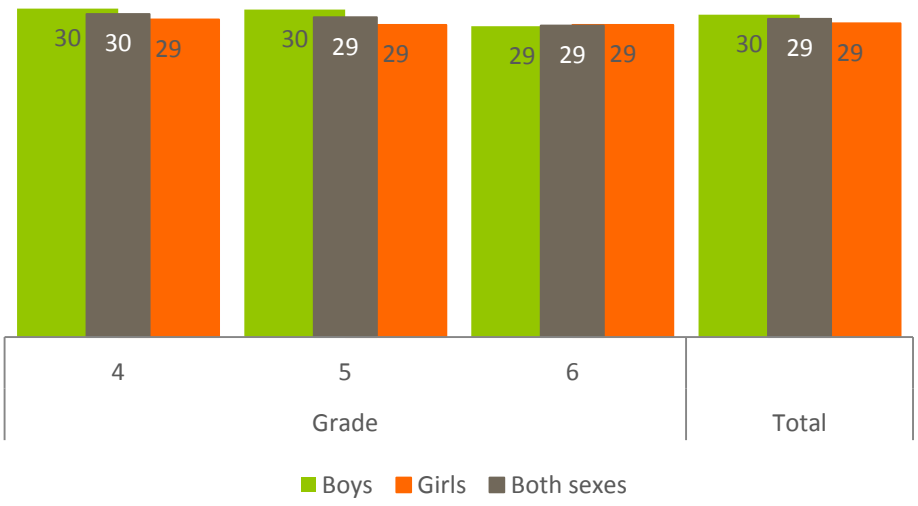


PEER RELATIONS

The nature of children's relationship with their peers is important in shaping their self-concept, in that interactions with these significant others provide children with important information on how they perform in social settings and on how they are viewed by others. In adolescents, peer relations have been found to influence psychological well-being and social adjustment[53,54]. In addition, adolescents who experience supportive peer (and teacher) relationships have been found to participate more actively in classes and in school life and to be less likely to be involved in deviant behavior and in bullying[55,56]. The latter is a very important finding and much more so in the light of the current international focus on bullying. Peer relations have demonstrated to play an important role in that they can influence the occurrences of bullying. Low popularity and a lack of friends have been identified as risk factors for victimization. In addition, gaining respect and admiration from peers is one of the driving forces of bullies. Intervening in the nature of the peer relations of victims of bullies as well as in the nature of the peer relations of bullies themselves, could render very positive results for ending the vicious circle often encountered in these situations [57].

The results of the SDQ-I revealed that children rated their peer relations as relatively good. Out of a maximum score of 40, boys scored, on average, 30, and girls 29 (see Figure 10). Contrary to the declining trend in children's scores on the SDQ-I scales discussed previously, children's ratings of their peer relations did not show any significant changes between grades. In addition, no significant differences were observed between boys' and girls' ratings of their peer relations.

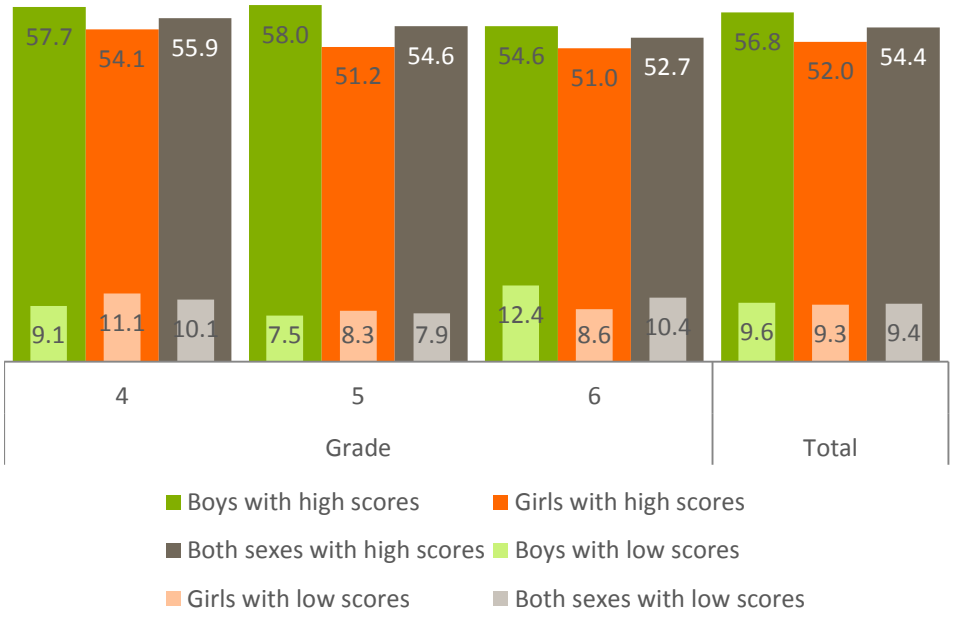
Figure 10: Children's ratings of their peer relations by grade and sex



When investigating which percentage of children had high ratings of their peer relations, the results showed than slightly more than half of both boys and girls rated their peer relations highly on more than half of the questions asked (56.8 percent, and 52.0 percent, respectively; see Figure 11). On the other hand, nearly ten percent of boys and girls (9.6 percent, and 9.3 percent, respectively) had low ratings of their peer relations on more than half the questions asked. Again, there were no significant differences between grades where the percentage of children with high ratings or the percentage of children with low ratings of their peer relations were concerned.

Although children's scores on the Peer Relations scale point to a school environment where children relate to their peers in a positive way, it is important to take into account that nearly half of boys and girls reported that most kids had more friends than they did (48.2 percent, and 49.9 percent, respectively). It is quite possible that these perceptions are a reflection of a lack of opportunity for children to relate to their peers both during school hours as well as outside of the school setting.

Figure 11: The percentage of boys and girls with high ratings of their peer relations compared to the percentage of boys and girls with low ratings of their peer relations

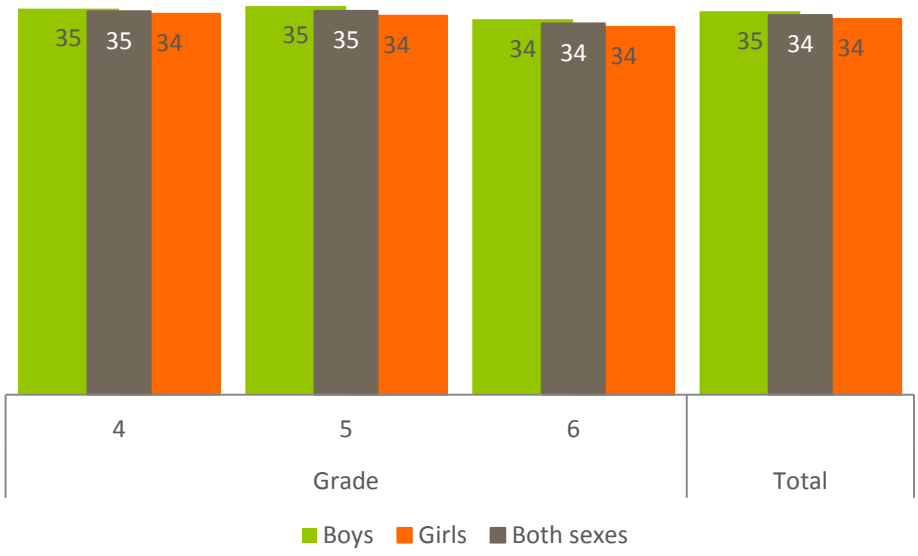


PARENT RELATIONS

As mentioned before, self-concept is formed through experience with and interpretations of situations encountered in everyday life and through evaluations from significant others. For children, parents are one of the most important sources of information and feedback. Therefore, children's perception of their relationship with their parent(s) is of utmost importance in the formation and shaping of their self-concept. For example, children's perceptions of their competence in different areas of functioning develop, among others, through their interaction with their parents and through children's own perception and interpretation of the messages their parent(s) convey[58]. Research conducted on this topic indicated that beyond and over the contribution of children's IQ and their actual school achievement, children's perceptions of their parent(s) judgments and expectations accounted for their perceived competence[59].

According to the results of this survey, children scored highly on the Parent Relations scale, higher than on any other SDQ-I scale. Out of a maximum score of 40, children scored, on average, 34 (see Figure 12). Children's ratings of the relationship with their parent(s) did not differ on the basis of their age, gender or grade.

Figure 12: Children's ratings of their relationship with their parent(s) by grade and sex

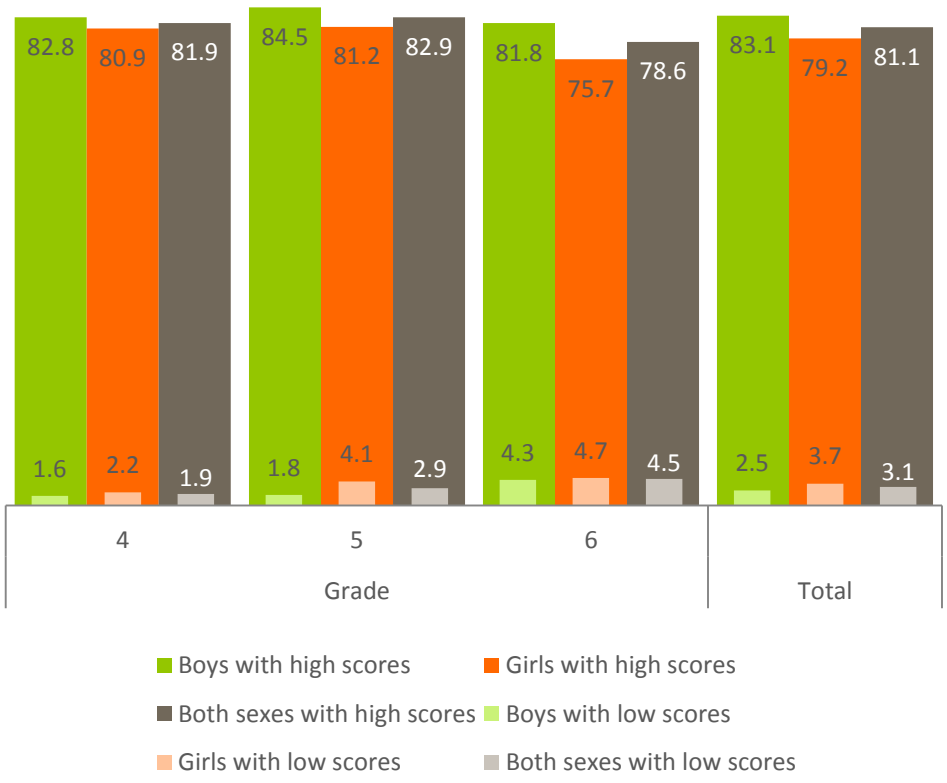


Taking into account children's scores on the eight questions of the Parent Relations scale, the results showed that, in total, 83.1 percent of boys and 79.2 percent of girls had high ratings of their relationship with their parent(s) on more than half the questions asked (see Figure 13). In addition, only 2.5 percent of boys and 3.7 percent of girls had low ratings of the relationship with their parent(s). Although there was an increase in the percentage of children with low ratings of their

relationship with their parent(s) between grades 4 and 6, in grade 6, less than 5 percent of children had low ratings of their parent relations.

However, it is important to mention that during the survey, one third of boys and girls (38.1 percent, and 33.0 percent, respectively) reported that their parents were usually unhappy or disappointed with what they did. A significantly higher percentage of boys compared to girls reported experiencing unhappiness or disapproval from their parents for their behavior (p<.001). Moreover, the percentage of children reporting disappointment and unhappiness from their parents was significantly higher in grade 4 (39.5 percent of boys and 33.9 percent of girls), and then decreased in subsequent grades, especially in girls.

Figure 13: The percentage of boys and girls with high ratings of their relationship with their parent(s) compared to the percentage of boys and girls with low ratings of their relationship with their parent(s)



General Self

The General Self Scale is a measure of children's ratings of themselves as being capable and competent individuals. As such it is a good indicator of children's self-concept and of children's satisfaction with themselves[5].

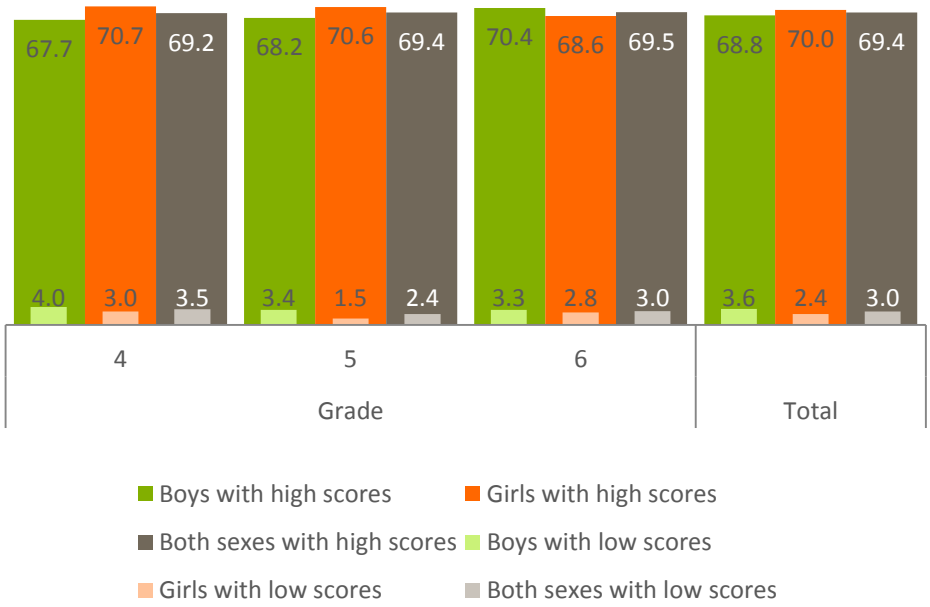
The results of the survey revealed that children scored relatively highly on the General Self scale. Out of a maximum score of 40, both boys and girls scored 32 (see Figure 14). There were no significant age, gender or grade differences in children's scores on the General Self scale.

Moreover, when analyzing children's scores on the eight questions of the General Self scale, the results showed that the great majority of children (70 percent of boys and 68.8 percent of girls; see Figure 15) had high rating of their general self. In addition, only 3.0 percent of children had low ratings of their general self. Overall, neither the percentage of children with high ratings nor the percentage of children with low ratings of their general self, showed any significant changes across grades.

Figure 14: Children's scores on the General Self Scale by grade and sex

However, during the survey, an alarming 9.1 percent of boys and 8.9 percent of girls reported perceiving themselves as being "no good". Especially in girls and boys in grade 4, these percentages were particularly high (9.8 percent of boys and 11.2 percent of girls). Between grades 4 and 6, the percentage of both boys and girls perceiving themselves in this very negative way decreased slightly.

Figure 15: The percentage of boys and girls with high ratings of their general self, compared to the percentage of boys and girls with low ratings of their general self

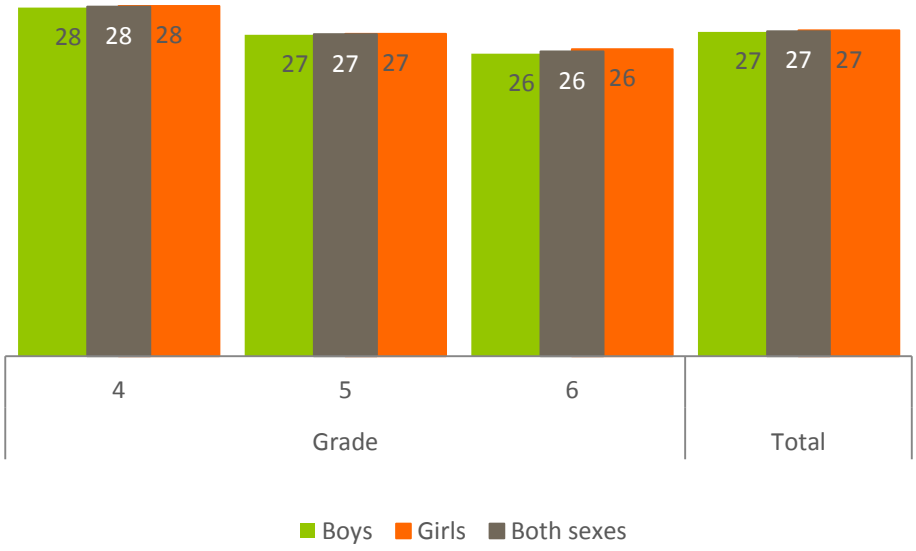


General School

Children spend a relatively large amount of their time at school. Therefore, the school setting provides children with important information about, among others, their academic interests and their academic skills and abilities. Research has indicated that children who perceive themselves as competent individuals at school and who show an interest and enjoyment in school subjects are more motivated to manage their own learning and develop the necessary skills to become effective learners. On the other hand, children who feel alienated and disengaged form school and experience little enjoyment in school subjects are less likely to develop effective learning skills (OECD), heightening the risk of dropping out of school[60, 61].

The results of the survey described in this paper revealed that when comparing children's scores on the eight scales of the SDQ-I, children in grades 4 to 6 scored lowest on the General School scale. Out of a maximum score of 40, both boys and girls scored 27 (see Figure 16). Moreover, between grades 4 and 6, a gradual but significant decrease was observed in children's scores on the General School scale ($p<.001$). Children's scores proved to be significantly negatively related to both their age and their grade ($r2=-.23$, $p<.001$, and $r2=-.14$, $p<.001$, respectively).

Figure 16: Children's scores on the General School scale by grade and sex



Furthermore, when analyzing children's scores on the General School scale, the results showed that only 39.3 percent of children had high ratings of their general school experience on more than half the questions asked (see Figure 17). In addition, 13.5 percent of children had low ratings of their general school experience on more than half the questions asked. Between grades 4 and 6, a substantial drop in the percentage of both boys and girls with high ratings of their general school experience (a drop of 21.9 percent in boys and 22.1 percent in girls) was accompanied by a substantial increase in the percentage of boys and girls with low ratings of their general school experience (an increase of 109.2 percent in boys and 86.8 percent in girls).

In this light it is important to mention that 5.8 percent of boys and 4.2 percent of girls reported perceiving themselves as being dumb in all school subjects. In addition, 9.7 percent of boys and 5.9 percent of girls reported hating all school subjects. Although the percentage of boys and girls perceiving themselves as being dumb in all subjects decreased between grades 4 and 6, the percentage of boys and girls who reported hating all school subjects remained quite stable.

Figure 17: The percentage of boys and girls with high ratings of their general school compared to the percentage of boys and girls with low ratings of their general school

Total Academic Score, Total Non-Academic Score and Total Self Score

The Total Academic, Total Non-Academic, and Total Self Scores were computed by summing up the raw scores on the different scales of the SDQ-I. In Figure 18, three important findings are depicted.

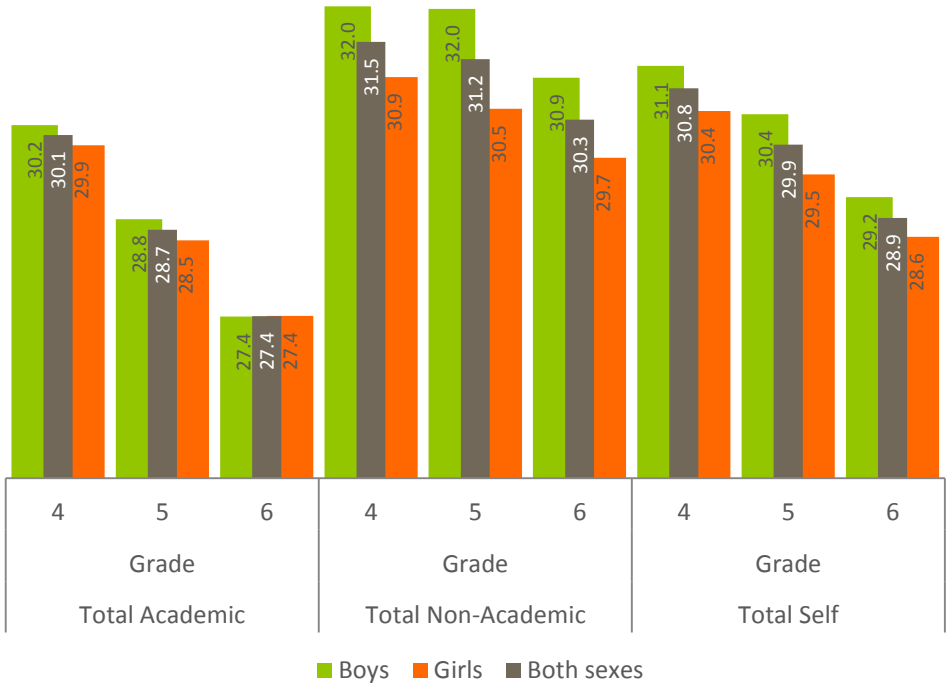
Firstly, there was a significant difference between children's scores on the three composite scales. Children scored significantly lower on the Total Academic scale when compared to their scores on the Total Non-Academic and Total Self scale ($p<.001$). This difference was present in both boys and girls. This finding is primarily related to the relatively low scores of both boys and girls on the General School scale, given that their scores on the Reading and Mathematics scale were relatively high. As such, these findings point to children's perceived lack of skills, abilities and enjoyment in other school subjects.

Secondly, gender differences were observed in children's scores on all three composite scales, favoring boys. These gender differences were particularly significant in the Total Non-Academic and Total Self scale and were in accordance with international research on self-concept, where boys often outscore girls. Overall, sex differences are more pronounced in certain components of self-concept, such as perceived physical ability and perceived physical appearance,

where sex stereotyping often plays a role[5]. In the survey described in this paper, gender differences were predominantly observed in children's ratings of their physical ability, physical appearance, reading abilities, and abilities in mathematics.

Thirdly, in accordance with international literature on the self-concept of preadolescents[5], in all three composite scales, a declining trend was observed in both boys and girls. This decline was more pronounced in the Total Academic scale, where children's scores dropped with 9.0 percent.

Figure 18: Children's scores on the Total Academic, Total-Non-Academic, and Total Self scales by grade and sex



SELF-CONCEPT SCORES BY GAC-ZONE

Children's experiences with and their interpretations of their environment are essential to the development of their self-concept (Marsh). Therefore, when conducting a survey on self-concept, it is important to include in the analyses, data on the home and school environment. However, during the survey discussed in this paper, only the address of the school children visited was recorded and coded according to the Geographical Address Classification (GAC) of the Central Bureau of Statistics. This lack of data posed serious limitations to conducting analyses on the relationship between children's self-concept and their environment.

In addition, primary schools in Aruba are clustered in certain areas of the island, particularly in Oranjestad East. Consequently, children do not necessarily attend a school in the same zone as where they live (see Table 2). For example, whilst 25.5

percent of children who participated in this survey attended a school in Oranjestad East, according to data collected during the 2010 Population and Housing Census, only 12.2 percent of children attending 4th, 5th and 6th grade of primary school, actually lived in Oranjestad East. Figure 19 presents a geographic visualization of the broad spread of the home address of children relative to the location of their primary school.

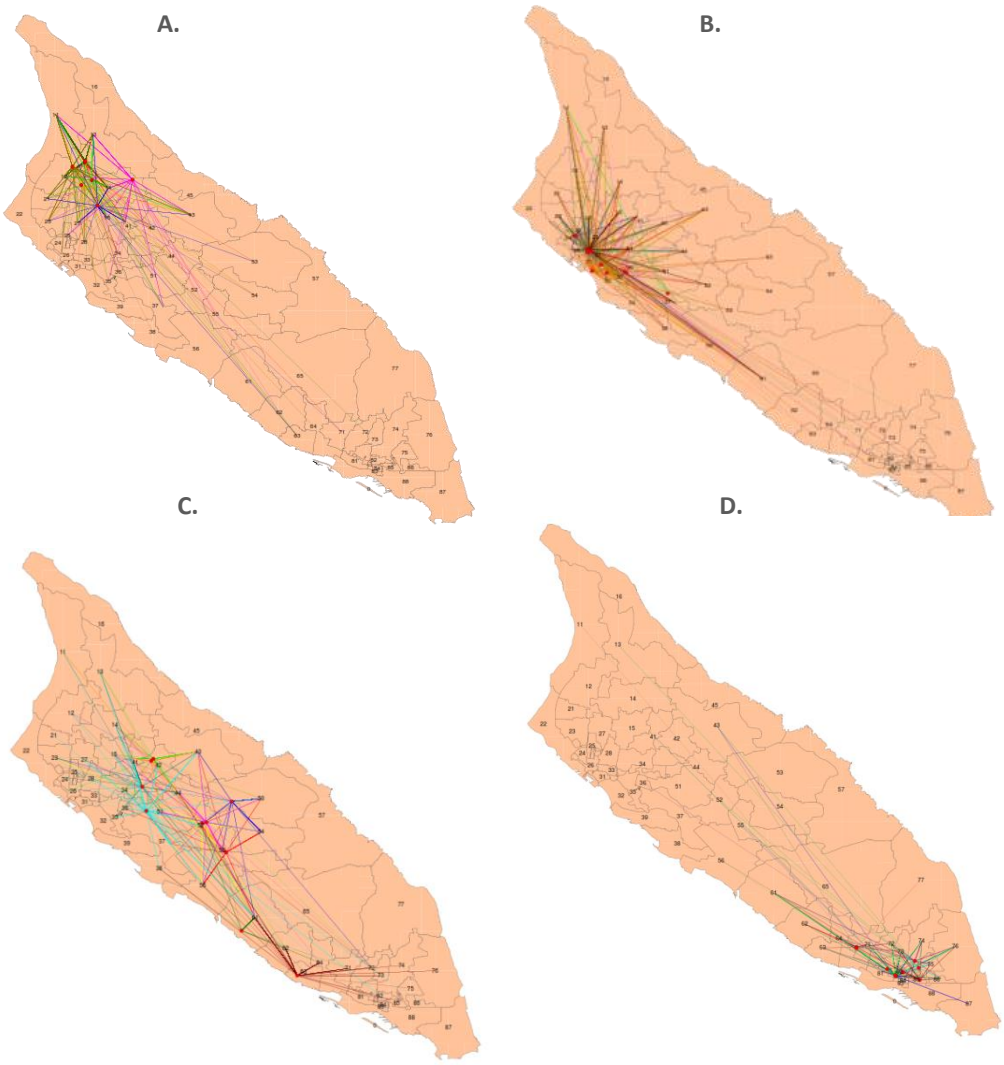
Table 2: The distribution of children in 4th, 5th and 6th grade of primary school according to the GAC-zone of their home address and the GAC-zone of their school*

GAC-zone	Number of children living in this zone*	Number of children attending a primary school in this zone (grades 4 to 6)*	Difference
Noord/Tanki Leendert	22.7	23.2	0.6
Oranjestad West	12.2	3.3	8.9
Oranjestad East	12.6	25.5	12.9
Paradera	13.5	7.7	5.8
Santa Cruz	12.0	16.3	4.3
Savaneta	11.6	7.4	4.3
San Nicolas North	11.0	9.9	1.1
San Nicolas South	4.3	6.7	2.4
Total	100.0	100.0	100.0

*Source: 2010 Aruba Census

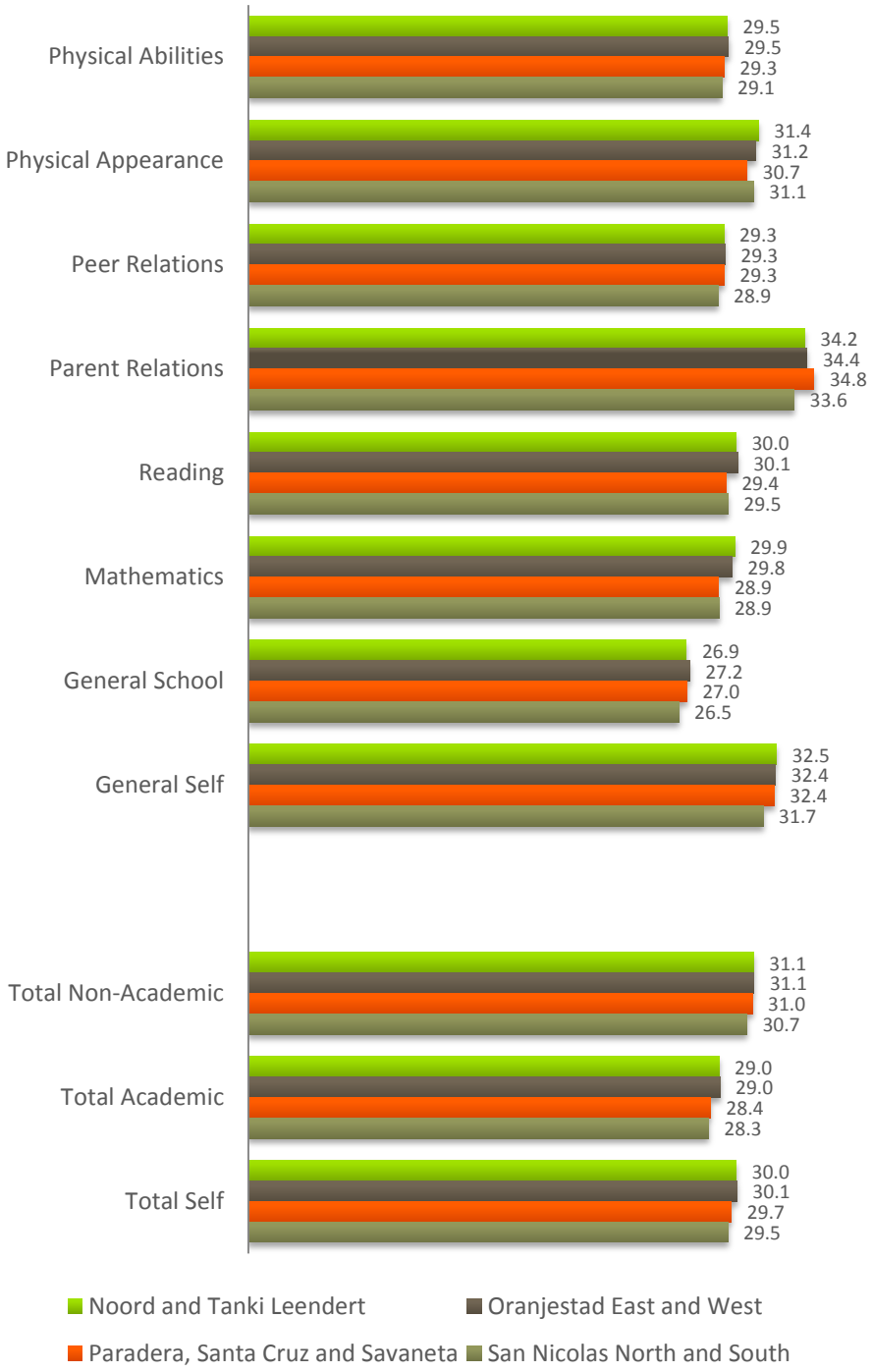
In conclusion, the results of analyses conducted on children's scores on the SDQ-I based on the zone in which their school was located, should be interpreted with the necessary caution. For the purpose of these analyses, GAC-zones were combined as to create more comparable zones with a more equal distribution of number of children per combined zone. As such, four zones were created: Noord and Tanki Leendert remained zone number one; Oranjestad East and Oranjestad West were combined into a second zone; Paradera, Santa Cruz and Savaneta were combined into a third zone; and San Nicolas North and San Nicolas South were combined into a fourth zone (see Figure 19).

Figure 19: Spider-graphs of the location of primary schools on Aruba combined with the home address (GAC-zone) of children attending these schools (2010 Aruba Census). A: Primary schools in Noord; B: Primary schools in Oranjestad; C: Primary schools in Paradera, Santa Cruz, and Savaneta; D: Primary schools in San Nicolas.



Overall, when the zone of the school children were attending was taken into account, the results showed small differences in children's scores on the SDQ-I. Only where children's scores on the Parent Relations scale were concerned, the analyses revealed a small but significant difference ($p<.001$), children attending schools in San Nicolas scoring significantly lower than children attending schools in other GAC-zones (see Figure 20). Thus, in conclusion, children attending schools all over Aruba showed the same trends in their scores on the SDQ-I.

Figure 20: Children's ratings on the SDQ-I scales by GAC-zone of the school they were attending



INTERNATIONAL COMPARISONS

Despite the fact that few cross-national or cross-cultural studies have been conducted on self-concept, the findings of those studies that have been conducted show that despite differences in language, culture, school structure, and even methodology used to assess self-concept, important similarities are observed[5,47]. Firstly, cross-national surveys have invariably reported a decline in self-concept between preadolescent years and adulthood. Secondly, sex differences in children's perceptions of their academic and non-academic abilities have also been reported (see Table 3)[62-65].

Table 3: Mean scores of Aruban, Australian[61], Lebanese[62], Nigerian[63], and Nepalese[64] children on the SDQ-I

	Country									
	Aruba*		Australia**		Lebanon**		Nigeria**		Nepal**	
SDQ-I scales	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Physical Abilities	32(32)	26(27)	34	30	34	28	31	27	28	24
Physical Appearance	30(30)	31(32)	28	26	28	31	34	35	27	26
Reading	26(29)	29(31)	30	32	34	38	34	35	30	31
Mathematics	28(31)	25(28)	29	27	35	32	30	30	30	28
Peer Relations	29(30)	29(29)	31	30	29	29	32	33	29	28
Parent Relations	33(35)	32(34)	35	35	35	35	34	35	32	33
General Self	32(32)	31(32)	33	32	23	23	34	34	28	28
General School	23(27)	24(27)	28	29	32	33	30	32	29	29

Note: *The mean scores of 12-13 year old boys and girls are presented first, and between brackets, the mean scores of all children who participated in the survey (8-15 years); **The mean scores of 12-13 year old boys and girls are presented

When comparing the scores of children of Aruba who participated in the current survey to the scores of children in other countries, a number of important differences can be identified. Firstly, the perceived reading abilities of children of Aruba are relatively low when compared to that of children in other countries, especially where boys were concerned. These findings were to be expected given that in grade 6, 12.8 percent of girls and 19.5 percent of boys reported hating reading. The lack of a reading culture in Aruba is one of the most probable causes of these alarming statistics.

In addition, the perceived mathematical abilities of children of Aruba, especially girls, are relatively low when compared to that of children in other countries. It is unclear why especially girls in Aruba have relatively low perceptions of their mathematical abilities. Given that regional data on self-concept of preadolescent children is not readily available, it is not possible to assume that cultural differences could be responsible for the differences observed. Further research on this topic is certainly warranted.

Thirdly, compared to children from other countries, children of Aruba scores relatively low on the General School subscale of the SDQ-I. Differences in culture

notwithstanding, this finding in itself is very important given that it points to a possible general lack of engagement, motivation and enjoyment on the part of children of Aruba with doing work on school subjects. This is a very important piece of information given that research has clearly demonstrated that a lack of engagement with school in general, a lack of motivation to do well in school, and a lack of enjoyment in doing school work, are important predictors of developing less adequate learning skills and dropping out of school[60,61].

CONCLUSIONS

In this paper the findings of a very successful survey conducted on the self-concept of preadolescent children in Aruba are presented. With the invaluable cooperation of all school boards, headmasters, teachers and parents/guardians, 93.3 percent of children attending 4th, 5th, and 6th grade of primary schools in Aruba, completed the SDQ-I. Given that in the age category included in the survey, 98.5 percent of children in Aruba attend school results obtained are an accurate reflection of the self-concept of pre-adolescent children in Aruba.

The information collected during this survey revealed that, overall, children in Aruba have a relatively high self-concept, particularly where the non-academic aspects of self-concept are concerned. However, a number of important trends were observed that merit special attention and discussion.

Firstly, in general, the self-concept of children involved in this study showed a declining trend between grades 4 and 6. However, despite the fact that enhancing self-concept is currently viewed as being fundamental to maximizing children's potential[14], a decline in self-concept in preadolescence and early adolescence has been reported in numerous international studies[2-5]. This decline is explained by researchers in the field of self-concept as being an inevitable consequence of children growing older and developing more differentiated self-concepts based on performance, performance feedback and external criteria[2-5]. However, it is important to take notice of the fact that according to the data gathered during the survey described here, the self-concept of children tended to decline in some areas at a relatively faster pace than in others. In the Academic areas of self-concept, in particular, a relatively larger decline was observed between grades 4 and 6, than in the Non-Academic areas of self-concept. The inherent nature of visiting school could be offered as a possible explanation for this finding. At school, children are constantly judged on their skills and abilities an could therefore show, earlier than in other areas of functioning, a drop in their self-concepts. This theory definitely warrants further investigation.

Secondly, on average, boys involved in this survey outscored girls on the Academic as well as on the Non-Academic areas of functioning. This finding is also in accordance with international research, where girls often tend to report a lower self-concept than boys[5-7]. In general, traditional sex-roles are believed to play an important role in the differences observed in the self-concept of boys and girls, favoring boys. However, it is also argued in scientific literature that self-concept scales tend to assess qualities that are typically viewed as "masculine", such as assertiveness and confidence[19,66]. Therefore it would come as no surprise that boys tend to score higher than girls on these scales. Further research should be conducted to investigate whether adding more "feminine" items to self-concept scales show a different picture.

Thirdly, despite the fact that children's responses on twelve negatively worded items of the SDQ-I are generally not included in the calculation of the individual scale scores or total scores, children's responses on these items provided some valuable insights into their perceptions of their skills, abilities and enjoyment of different academic and non-academic activities. Most interesting were children's responses on items concerning their perceptions of their skills and interests in reading, in mathematics and in school subjects in general, where 14.0 percent of children reported hating reading (nearly twenty percent of boys and slightly more than ten percent of girls), 18.5 percent of children reported hating mathematics (nearly twenty percent of boys and slightly more than twenty percent of girls), and 7.8 percent of children reported hating all school subjects (nearly ten percent of boys and slightly over five percent of girls). These children also fostered lower self-concepts of their skills and abilities in reading, mathematics and in school subjects in general. Despite the fact that during this survey, children's actual performance on these school subjects was not measured, it would come as no surprise that these children would also perform less well on objective measures of reading and mathematical abilities. Future investigations on self-concept of (pre-adolescent) children should include objective measures of children's performance on at least such important school subjects as reading and mathematics.

Moreover, it is important to mention that the results of this survey reveal that there is a relatively small but for professionals in the field of education and public health, a significant group of children who reported perceiving themselves as being ugly (7.2 percent of all children) or as being "no good"(9.0 percent of all children). These children also scored lower on the General Self scale of the SDQ-I, pointing to an overall dissatisfaction with themselves and a perception of themselves as being less capable and less effective individuals. In the light of scientific research on the field of self-concept and mental health and overall well-being, it must be stated that this group of children are most probably at risk for developing mental health issues that can impact their overall well-being. Further research on these findings is certainly warranted and should preferably include measures of overall health and well-being.

Finally, there is a need of regional data on the self-concept of pre-adolescent children. Studies have been conducted on this topic but differences in measures and methodologies used impede scientifically sound comparison. Differences in language, school systems and culture are, without question, important factors to take into account when comparing the self-concept of children on Aruba to that of children in other countries. Therefore, a lot of work on this topic is still to be done and regional cooperation and exchange of information should be promoted.

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APPENDIX I: LETTER OF CONSENT

CENTRAL BUREAU OF STATISTICS

Social Profile * Economic Profile * Tourism Profile * Labor Dynamics * Consumer Price Index * National Accounts * Foreign Trade Statistics * Budget Research * Geographical Information System * Statistical Yearbook

cbs
central bureau of statistics

To: All parents/legal guardians of primary school students

Uw nummer: Uw brief van Ons nummer: /12

Onderwerp: Information letter for parents

Bijlagen:

File:

Oranjestad, September 2012

During the period of 10 - 28 of September 2012 the Central Bureau of Statistics (CBS) in cooperation with the respective school boards of governors of the primary schools in Aruba, will conduct a survey among the students of the fourth, fifth and sixth grade. Using a list of 76 statements, an inventory will be made of the interests and skills of the students in the fields of education, hobbies and sports. We will also measure what the students think of themselves, of their physical condition and of their relations with friends and parents. According to international studies, the self-image of students from primary schools has a great influence on their education and on their physical and emotional health. The survey includes amongst others the following statements: 'I like reading'; 'I'm good in sports', 'I like myself the way I am' and 'I make friends easily'.

The survey will be completely anonymous and the answers will not be shared with other persons and departments. The survey will be held in school and the students will complete the questionnaire in class. Completing the questionnaire will take 30 minutes. The teacher will supervise while the questionnaires are completed. CBS is in charge of the logistics of the survey and will also handle the processing of the data, which will also be done anonymous.

This survey is without a doubt of great value for the educational system and the results are very important when trying to formulate a policy in the fields of education, social affairs and physical- and emotional health. That is why we would like to inform the parents with this letter about the above mentioned survey and we hope that they will give their cooperation. Therefore we request the parents to complete the form below indicating that they give permission to their child to participate in the survey. We kindly request you to submit the forms to the teacher as soon as possible. If the form not submitted to the teacher, CBS will assume that the parents have given permission to their child to take part in the survey.

In case of questions or remarks the parents can contact mr. Manolo Giel, Central Bureau of Statistics, during office hours at telephone number: 5837433, ext. 249.

We thank you beforehand.

Drs. Ing. M.J. Balkestein
Director CBS

I, parent/legal guardian of .....,
Class .....

Give/do not give permission to my child to participate in the survey of the CBS

....
Name parent/legal guardian Signature

APPENDIX II: THE SDQI

SDQI®

In te vullen door administratie

+

PLEASE READ THE INSTRUCTIONS HERE FIRST

This is not a test – There are no right or wrong answers

This is a opportunity to look at yourself. **It is not a test.** There are no right or wrong answers and every one will have different answers. You must be sure that your answers show what you think about yourself. Please, do not talk to any one about your answers. We will keep your answers private and we will not show them to other people.

When you are ready to start, read every sentence and decide what your answer will be (You can read quietly for yourself while I will read out loud). There are five possible answers for every sentence beginning with "False" until "True" and in between them there are three other possible answers. The answers are written above the sentences. Choose your answer and mark a cross in the box that reflects your answer. Mark a cross with a **pencil** in this manner:

☒ 

You may only choose one answer. Do not read your answer out loud or talk to another person about it. Before you start, here are three examples:

A. I like to read 'comic books'
Bob marked a cross in the box "True". This means that he really likes 'comic books'.
If Bob does not like to read 'comic books', he should have marked a cross in the box "False" or "Mostly false".

B. Generally I am neat and clean
Bob marked a cross in the box "Sometimes false, sometimes true", because he is not very neat, but he is not very messy either.

C. I like to watch television
For this sentence you have to choose the answer that is the best for you. First you have to decide if the sentence is "True" or "False" or one of the other answers. If you really like to watch television a lot, you have to mark a cross in the box "True". If you hate watching television, you have to mark a cross in the box "False". If your answer varies between these two answers, then you can choose one of the other answers.

	False	Mostly false	Sometimes false, sometimes true	Mostly true	True
A. I like to read 'comic books'	☐	☐	☐	☐	☒
B. Generally I am neat and clean	☐	☐	☒	☐	☐
C. I like to watch television	☐	☐	☐	☐	☐

PLEASE ANSWER ALL SENTENCES. DO NOT LEAVE ANY ROW EMPTY.
If you do not understand something, or if you are not sure about something, please ask for help.

Date of birth: Day ☐☐ Month ☐☐ Year ☐☐☐☐ Sex: Male ☐ Female ☐ Grade: 4 ☐ 5 ☐ 6 ☐ Letter: A ☐ B ☐ C ☐

	False	Mostly False	Sometimes false, sometimes true	Mostly True	True
01. I am good looking	☐	☐	☐	☐	☐
02. I am good al all **school subjects**	☐	☐	☐	☐	☐
03. I can run fast	☐	☐	☐	☐	☐
04. I get good marks in **reading**	☐	☐	☐	☐	☐
05. My parents understand me	☐	☐	☐	☐	☐

+

+	False	Mostly False	Sometimes false, sometimes true	Mostly True	True
06. I hate **mathematics**	☐	☐	☐	☐	☐
07. I have lots of friends	☐	☐	☐	☐	☐
08. I like the way I look	☐	☐	☐	☐	☐
09. I enjoy doing work in all **school subjects**	☐	☐	☐	☐	☐
10. I like to run and play hard	☐	☐	☐	☐	☐
11. I like **reading**	☐	☐	☐	☐	☐
12. My parents are usually unhappy or dissapointed with what I do	☐	☐	☐	☐	☐
13. Work in **mathematics** is easy for me	☐	☐	☐	☐	☐
14. I make friends easily	☐	☐	☐	☐	☐
15. I have a pleasant looking face	☐	☐	☐	☐	☐
16. I get good marks in all **school subjects**	☐	☐	☐	☐	☐
17. I hate sports and games	☐	☐	☐	☐	☐
18. I am good at **reading**	☐	☐	☐	☐	☐
19. I like my parents	☐	☐	☐	☐	☐
20. I look forward to **mathematics**	☐	☐	☐	☐	☐
21. Most kids have more friends than I do	☐	☐	☐	☐	☐
22. I am a nice looking person	☐	☐	☐	☐	☐
23. I hate all **school subjects**	☐	☐	☐	☐	☐
24. I enjoy sports and games	☐	☐	☐	☐	☐
25. I am interested in **reading**	☐	☐	☐	☐	☐
26. My parents like me	☐	☐	☐	☐	☐
27. I get good marks in **mathematics**	☐	☐	☐	☐	☐
28. I get along with kids easily	☐	☐	☐	☐	☐
29. I do lots of important things	☐	☐	☐	☐	☐
30. I am ugly	☐	☐	☐	☐	☐
31. I learn things quickly in all **school subjects**	☐	☐	☐	☐	☐
32. I have good muscle	☐	☐	☐	☐	☐
33. I am dumb at **reading**	☐	☐	☐	☐	☐
34. If I have children of my own, I want to bring them up like my parents raised me	☐	☐	☐	☐	☐
35. I am interested in **mathematics**	☐	☐	☐	☐	☐
36. I am easy to like	☐	☐	☐	☐	☐
37. Overall, I am no good	☐	☐	☐	☐	☐
38. Other kids think I am good looking	☐	☐	☐	☐	☐
39. I am interested in all **school subjects**	☐	☐	☐	☐	☐
40. I am good at sports	☐	☐	☐	☐	☐

+

	False	Mostly False	Sometimes false, sometimes true	Mostly True	True +
41. I enjoy doing work in **reading**.....	☐	☐	☐	☐	☐
42. My parents and I spend a lot of time together.....	☐	☐	☐	☐	☐
43. I learn things quickly in **mathematics**.....	☐	☐	☐	☐	☐
44. Other kids want me to be their friend.....	☐	☐	☐	☐	☐
45. In general, I like being the way I am.....	☐	☐	☐	☐	☐
46. I have a good looking body.....	☐	☐	☐	☐	☐
47. I am dumb in all **school subjects**.....	☐	☐	☐	☐	☐
48. I can run a long way without stopping.....	☐	☐	☐	☐	☐
49. Work in **reading** is easy for me.....	☐	☐	☐	☐	☐
50. My parents are easy to talk to.....	☐	☐	☐	☐	☐
51. I like **mathematics**.....	☐	☐	☐	☐	☐
52. I have more friends than most other kids.....	☐	☐	☐	☐	☐
53. Overall, I have a lot to be proud of.....	☐	☐	☐	☐	☐
54. I am better looking than most of my friends.....	☐	☐	☐	☐	☐
55. I look forward to all **school subjects**.....	☐	☐	☐	☐	☐
56. I am a good athlete.....	☐	☐	☐	☐	☐
57. I look forward to **reading**..... +	☐	☐	☐	☐	☐
58. I get along well with my parents.....	☐	☐	☐	☐	☐
59. I am good at **mathematics**.....	☐	☐	☐	☐	☐
60. I am popular with kids of my own age.....	☐	☐	☐	☐	☐
61. I can't do anything right.....	☐	☐	☐	☐	☐
62. I have nice features like nose, and eyes, and hair..	☐	☐	☐	☐	☐
63. Work in all **school subjects** is easy for me.....	☐	☐	☐	☐	☐
64. I am good at throwing a ball.....	☐	☐	☐	☐	☐
65. I hate **reading**.....	☐	☐	☐	☐	☐
66. My parents and I have a lot of fun together.....	☐	☐	☐	☐	☐
67. I can do things as well as most other people.....	☐	☐	☐	☐	☐
68. I enjoy doing work in **mathematics**.....	☐	☐	☐	☐	☐
69. Most other kids like me.....	☐	☐	☐	☐	☐
70. Other people think I am a good person.....	☐	☐	☐	☐	☐
71. I like all **school subjects**.....	☐	☐	☐	☐	☐
72. A lot of things about me are good.....	☐	☐	☐	☐	☐
73. I learn things quickly in **reading**.....	☐	☐	☐	☐	☐
74. I am as good as most other people.....	☐	☐	☐	☐	☐
75. I am dumb at **mathematics**.....	☐	☐	☐	☐	☐
76. When I do something, I do it well.....	☐	☐	☐	☐	☐

Thank you for your cooperation! +