A study of 24 Maori children in grades 3-6 who were invited to perform at a children's festival in Turkey and two control groups (control 1, n=24; control 2, n=23) of Maori children who did not participate in the festival examined the effect of an intense cultural program on children's self-esteem, locus of control, and academic performance. Literature related to adventure programs and developing ethnic identity was drawn upon extensively in structuring the Maori cultural training program. The study group and two control groups were pre-tested on a self-esteem scale, a locus of control scale, and a range of academic measures. Post-testing was completed 1 year later. A subgroup of the Maori children, their caregivers, and teachers was also interviewed regarding their experience of the program. The standardized testing showed that children in the Maori Culture Group made significant positive changes in self-esteem and locus of control, changes not matched in the control groups. Both parents and teachers noted developments in the social skills, confidence, and social maturity of the Maori children. Although the group activities were not theoretically related to the academic activities assessed by the standardized tests, a facilitative effect on academic achievement was suggested. Moreover, both the results of testing and the interviews with the Maori children, their caregivers, and teachers suggested positive developments in these children's academic performance, a more positive attitude toward school, improved organizational skills, and more time spent on their homework. (Contains 37 references and 6 tables.)
Kia Kaha: Improving Classroom Performance through Developing Cultural Awareness

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This study considers the effect of a Maori Culture Group experience on the self-esteem, locus of control and academic performance of the participants. A range of intervention procedures designed to enhance self-esteem and increase internality formed the basis of the training programme which culminated in representing New Zealand at a children's festival in Turkey. Literature related to adventure programmes and developing ethnic identity was drawn upon extensively in structuring the training programme.

Maori Culture Group members and matched controls were pre-tested on a self-esteem scale, a locus of control scale and a range of academic measures. Post-testing was completed one year later. A subgroup of Maori Culture Group children, their caregivers and teachers were also interviewed regarding their experience of the programme.

Statistically significant positive changes in the self-esteem and locus of control of the children in the Maori Culture Group were not paralleled by the control subjects. The interviews confirmed these developments. Furthermore, although the cultural group intervention was not linked directly to the academic activities assessed by the testing, a facilitative effect of the intervention on academic achievement is suggested in the data. This finding was also reinforced by the interviews.

The results are discussed in terms of their significance for educators in designing educational programmes for children from low socioeconomic backgrounds and minority groups in particular. The usefulness of an intense learning experience outside of the traditional classroom context is considered. Potential directions for future research are suggested.
The failure of ethnic minority and low socioeconomic groups to achieve either academically or socially at a level comparable to that of the dominant culture has concerned educationalists in many western nations ((Chapple, Jefferies, & Walker, 1997; Hirsh, 1990; Hohepa & Jenkins, 1996; Smith & Smith, 1996). In the United States, African American youth are reported to be particularly at risk of academic and social failure, with less than 15% of these children living clearly above the poverty line throughout their childhood (Duncan, 1991). Hispanics fare even worse achieving at levels below African Americans at every level of schooling (Horton & Smith, 1990). In Great Britain, similar trends are evident with children from low socioeconomic areas performing well below national averages on external examinations. This later transfers into these children leaving school with minimal qualifications, and forming the largest group of unemployed (Pullinger & Summerfield, 1998). Of further concern is the plight of indigenous peoples. In Australia, the Aboriginal and Torres Strait Islander people have been identified as severely disadvantaged in terms of access to and participation in education. In 1994, 83.1% of these indigenous people had no post-school qualification (McLennan, 1996).

Similarly, in New Zealand, low levels of achievement, antisocial behaviour and high adult unemployment amongst Maori are interpreted by some as signaling an education system that cannot be considered equitable in its output (Hirsh, 1990; Jenkins, 1994; Smith, 1990a; Smith & Smith, 1996). International surveys in reading, mathematics
and science all show Maori performing at significantly lower levels than non-Maori at Years 4 and 5, with achievement levels comparable to children in Iceland and Iran. Non-Maori students meanwhile perform at levels more similar to children in Canada and England (Education, 1997). At the secondary school level Maori leave school with a lower level of qualification than non-Maori. In 1996, 39% of Maori school leavers were without qualifications compared with only 15% of non-Maori school leavers (Education, 1997).

Some researchers (Grolnick & Ryan, 1990; Ho, Lempers, & Clark-Lempers, 1995; Weaver & Matthews, 1993; Wiggins & Wiggins, 1992) have suggested that poor self-esteem contributes to the comparative lack of success for children from ethnic minority and low socioeconomic groups. Other writers (Duke & Lewis, 1979; Levenson, 1981; Nowicki & Strickland, 1973; Strickland, 1989) have reported that an external locus of control means that such children are less likely to succeed in the school system.

The Maori response to low levels of achievement and behavioural difficulties in schools has included the establishment of full immersion Kohanga Reo (preschool) and Kura Kaupapa (primary) where Maori language, culture and teaching styles are respected and valued. These bicultural institutions are designed to optimise the links between Maori and Pakeha society while assisting children to develop a secure, positive view of themselves (Hohepa & Jenkins, 1996). However, currently only 2.3% of Maori school students are enrolled in Kura Kaupapa. It is the state system which is accountable for providing a world class education to all New Zealanders (Irwin, 1998). The requirement that all teachers include a Maori perspective in all
curriculum areas provides the potential to include programmes which enable Maori students to feel a sense of identity, self-worth and belonging.

Studies by Phinney, Cantu and Kurtz (1997) and Phinney and Chavira (1992) show that ethnic identity and self-esteem are significantly related to each other for African Americans and Hispanics. They suggest that a clear understanding of one’s background and culture contribute to children developing a secure, positive view of themselves. In a similar study to these (Martinez & Dukes, 1997), an increase in ethnic identity was found to result in an increase in social-psychological well-being. The higher the score of an individual on ethnic identity, the higher was self-esteem, purpose in life and self-confidence.

In Canada, attempts have been made to instruct Inuit Indians in their heritage language as this was seen as a clear affirmation of the value and status of their language and of the people who spoke it (Wright & Taylor, 1995). Moreover, such instruction was found to have a positive effect on the personal and collective self-esteem of these students. Due to the strong correlations between self-esteem and academic performance found in this study, heritage language instruction was seen as a necessary remedy for the patterns of school failure for Inuit Indians (Wright & Taylor, 1995).

Adventure programmes have also been found to have a striking and significant impact on aspects such as academic performance (Duke, Johnson, & Nowicki, 1977; Grayson, 1997; Hattie, Marsh, Neill, & Richards, 1997), leadership competencies (Hattie et al., 1997; Scherman, 1989), personality (Hattie et al., 1997), interpersonal
skills (Cason, Gillis, Schwarz, & Bell, 1993; Duke et al., 1977; Hattie et al., 1997), self-esteem (Cason et al., 1993; Grayson, 1997; Hattie et al., 1997; Scherman, 1989), and locus of control (Cason et al., 1993; Duke et al., 1977; Hattie et al., 1997; Nowicki & Barnes, 1973). With regard to self-esteem and locus of control, positive gains have been also been maintained over time (Cason et al., 1993; Hattie et al., 1997; Nowicki & Barnes, 1973).

Whilst the current study does not involve outdoor education or camping there are several parallel components since many of the activities involved outside class experiences. As with adventure programmes, these children were to undergo an intense and enriching learning experience not found in the traditional classroom (Cason et al., 1993; Hattie et al., 1997). Furthermore, part of the founding philosophy of Outward Bound was that creating stressful situations would unify groups and that hard won successes would establish confidence and a more positive self-image (Hahn, 1957). These ideas have formed the basis of many adventure programmes. Such experiences include challenging and demanding tasks which require effort, determination and cooperation. Children are set difficult yet specific goals and structured tasks which are attainable with group cooperation (Cason et al., 1993; Grayson, 1997; Hattie et al., 1997; Nowicki & Barnes, 1973). Hence the emphasis is on competition and cooperation among group members to accomplish goals (Grayson, 1997; Hattie et al., 1997; Scherman, 1989). All these aspects of adventure experiences were to be incorporated into the programme designed for the Maori Culture Group.
The children who were the focus of the current study were a Maori Culture Group from a low socioeconomic area of Auckland in 1997. They were invited to perform in the International Children’s Festival in Ankara, Turkey in 1998. It was felt that the activities in which the children would be involved would provide an opportunity to develop cultural identity and self-esteem.

The purpose of this study then was to consider the effect of an intense cultural programme on children’s self-esteem, locus of control and academic performance. Of particular interest were the following questions:

- Would the wide-ranging experiences of the Maori Culture Group have a positive effect on the children’s self-esteem?
- Would the experiences of the Maori Culture Group result in a more internal locus of control?
- If changes in these social factors occurred, would there also be changes in academic achievement?

Of further interest were other questions related to the children’s social development:

- Would parents and teachers report changes in the children’s interpersonal skills over the time the children spent in the Maori Culture Group?
- Would the parents and teachers report changes in the children’s intrapersonal skills over the time the children spent in the Maori Culture Group?
METHOD

Subjects:

Participants in this study were boys and girls in Years 3-6 recruited from two Auckland primary schools. The Maori Culture Group and Control 1 both attended the same Decile 2 school in West Auckland. Control 1 was a matched sample of children not in the Maori Culture Group, but from within the same school. Control 2 was also a matched sample who attended a similar, but slightly higher decile school (Decile 4) in the same area of Auckland. Both the Maori Culture Group and Control 1 consisted of 24 children. Control 2 comprised 23 children. In a preliminary series of one way analyses of variance of test scores obtained before the programme started, the three groups (Maori Culture Group, Control 1, Control 2) did not differ in mean age, self-esteem scores, degree of externality, scholastic abilities, or age percentiles on the PAT tests of reading comprehension, mathematics and listening comprehension.

Instruments:

Coopersmith Self-Esteem Inventory:

The Coopersmith Self-Esteem Inventory (Coopersmith, 1993) is designed to measure evaluative attitudes toward the self in social, academic, family and personal areas of experience. The school form consists of 58 short statements which are answered ‘like me’ or ‘not like me’. The manual reports split half reliability coefficients between .87 and .92.
Nowicki-Strickland Locus of Control Scale for Children:

Locus of control was measured using the Nowicki-Strickland Locus of Control Scale for Children (Nowicki & Strickland, 1973). This paper-and-pencil measure consists of 40 questions answered either 'yes' or 'no', with higher scores associated with an external orientation. Split half reliability coefficients up to .68 have been established (Nowicki & Strickland, 1973).

The Progressive Achievement Tests:

The PAT tests are administered in a majority of New Zealand primary schools during the first week of March each year. An advantage of using these tests was that they were administered in a normal classroom situation by the classroom teacher thereby reducing the possibility of a 'Hawthorne Effect' (Cason et al., 1993). The Listening Comprehension, Reading Comprehension and Mathematics tests were used in this study to provide a broad overview of these children's academic performance.

The Listening Comprehension Test (Reid, Johnston, & Elley, 1994) consists of seven passages followed by five or six multiple-choice items each with four or five options. The manual (Reid et al., 1994) presents split half reliability coefficients above .85.

The Progressive Achievement Test of Reading Comprehension (Reid & Elley, 1991) consists of 40 multiple-choice items each with four or five options. Split half reliability and validity coefficients in excess of .80 are reported in the manual (Reid & Elley, 1991). The Progressive Achievement Test of Mathematics (Reid, 1993) consists of 50 multiple-choice questions with four or five options. The manual reports split half reliability and validity coefficients above .80.
Test of Scholastic Abilities:

The Test of Scholastic Abilities (Reid, Jackson, Gilmore, & Croft, 1981) is designed to measure numerical and verbal abilities. Classification and operational convergent reasoning are also tested. The test comprises 70 multiple-choice and completion items graded in difficulty. The manual (Reid et al., 1981) cites reliability and validity coefficients above .85.

Interview Schedule:

In order to provide a broader perspective of the ways in which social relationships, behaviour and academic performance had been influenced by involvement with the Maori Culture Group, a sample of the children in the Maori Culture Group, their caregivers and teachers were interviewed in mid-1998, after their return to New Zealand. These were the children who still remained at their original primary school in 1998. A range of open and closed questions were incorporated into a standard interview schedule for the three groups.

Procedure:

Initial data collection took place over a six-week period in March and April of 1997. PAT testing was done as part of the regular class programme. The Test of Scholastic Abilities, the Nowicki-Strickland Locus of Control Scale and the Coopersmith Inventory were administered by the researcher on two separate occasions to groups containing both Maori Culture Group children and Control Group 1 students in a withdrawal situation. Students in Control 2 completed the questionnaires in a
withdrawal situation at their own school. Post-testing was conducted in March and April of 1998 shortly before the Maori Culture Group’s departure overseas.

Individual interviews with the sub-group of children in the Maori Culture Group were conducted individually at school in a withdrawal situation. Teachers were interviewed about each child separately at school while caregivers were interviewed in their own homes.

**Culture Group Experiences:**

The Culture Group was led by a kaiako (teacher) who included activities designed to develop the children’s cultural pride and awareness. In consultation with the researcher, the kaiako ensured that the children were given increasing challenges over the time they were involved in the group. They began by practising together to develop group cohesion. Practices began during afternoons at school. But these sessions were quickly replaced with weekend live-ins that from June to December of 1997 averaged one every three weeks. In 1998, these increased to every weekend for the two months before the children left for overseas. In total the children spent six half-days in practice at school, five full days, 14 live-ins and one three-day stay at Parawhenua Marae in Northland.

Initially the children performed for each other in small groups. Later they performed alone. Audience performances were also developed gradually. These were introduced once the children had built up a degree of expertise and confidence. The children performed first at school in front of their peers, then at school for their parents, whanau (extended family) and children of the school. Out-of-school
performances were first at local primary schools, then at more distant schools. Later performances were at a large multi-cultural festival and at intermediate schools. Adult audiences also moved from the known to the unknown. Having performed for family and friends at a social event where some adults were known, the children went on to performing in a shopping mall and then to an unknown audience at a large Expo Centre. Later performances were to unknown audiences in Northland, before venturing overseas to perform for live audiences in excess of 20,000 people and to a televised audience of several million. The children also represented New Zealand at Gallipoli for Anzac Day.

Approximately 50 waiata (action songs), haka (challenges), poi (a ball on a string which is gracefully twirled) and chants were learnt by the children. They were also taught how to use ti rakau (sticks), patu (clubs) and taiaha (spears). Many aspects of Maori Culture were incorporated into the teaching: karakia (prayers and blessings), powhiri (welcome ceremony), caring, support for each other and cooperation.

RESULTS

Quantitative Results:

Coopersmith Inventory:

Scores on the Coopersmith Inventory were analysed in a Groups (Culture Group, Control 1, Control 2) x Time (Pre-test/Post-test) factorial analysis of variance with repeated measures on the second factor. The mean scores for this analysis are shown in Table 1. There was a significant Group x Time interaction, $F(2,68) = 4.08, p <.05$. The mean self-esteem score for the Culture Group was substantially higher at the time of post-test than at pre-test, while the control groups made a smaller gain (Control 2).
or even a small decline (Control 1). The interaction effect was further examined using tests of simple main effects of time for each of the three groups. Only the Culture Group showed a significant increase in self-esteem over time, $t(1,68) = 3.82$, $p < .01$.

**Nowicki-Strickland Locus of Control Scale for Children:**
Scores on the Nowicki-Strickland Locus of Control Scale for Children were analysed in a Groups (Culture Group, Control 1, Control 2) x Time (Pre-test/Post-test) factorial analysis of variance with repeated measures on the second factor. The mean scores for this analysis are shown in Table 2. There was a significant Group x Time interaction, $F(2,68) = 4.84$, $p < .05$. The mean externality score for the Culture Group decreased across the duration of the study, while the mean score for the two control groups increased across the duration of the study. Tests of simple main effects of time for each of the groups revealed that the expected decrease in externality was not statistically significant, $t(1,68) = 1.74$, $p > .05$, although it approached significance ($p < .10$). Thus, the overall significance of the interaction effect was due to the combination of a decrease in externality for the Culture Group and an increase in externality in the two control groups, rather than to a significant reduction in the Culture Group alone.

In summary, the children in the Maori Culture Group showed significant positive changes in self-esteem and locus of control over the period of the intervention. These changes were not matched by the children in the other two groups.

**Test of Scholastic Abilities:**
Scores on the Test of Scholastic Abilities were analysed in a Groups (Culture Group, Control 1, Control 2) x Time (Pre-test/Post-test) factorial analysis of variance with repeated measures on the second factor. The mean scores for this analysis are shown in Table 3. There was a significant Group x Time interaction, $F(2,68) = 4.66$, $p < .05$. The mean Tosca score for the Culture Group was substantially higher at the time of post-test than at pre-test, while both control groups’ scores made a small decline. The interaction effect was further examined using tests of simple main effects of time for each of the three groups. Only the Culture Group showed a significant increase in Tosca score over time, $t(1,68) = 2.54$, $p < .05$.

**Progressive Achievement Tests (PAT):**

Scores on the PAT tests in Listening Comprehension, Reading Comprehension and Mathematics were each analysed in a Groups (Culture Group, Control 1, Control 2) x Time (Pre-test/Post-test) factorial analysis of variance with repeated measures on the second factor. There were no significant main or interaction effects involving time. The mean scores for these analyses are shown in Tables 4, 5 and 6. Although not statistically significant, the mean scores revealed a consistent pattern of differences between the Maori Culture Group and the control groups. In both Listening Comprehension and Reading Comprehension the mean score for the Maori Culture Group showed an increase across the duration of the study, while the scores for the control groups declined. In Mathematics, the mean for the Maori Culture Group remained comparatively stable, while the mean for both control groups showed a decline.
Although the Cultural Group intervention was not linked directly to the academic activities assessed by standardised tests in listening, reading comprehension and mathematics, the non-significant pattern of findings suggests a facilitative effect of the intervention on academic achievement.

**Qualitative Results:**

**Interview Data:**

When caregivers and teachers were asked about changes in the children’s confidence, the adults were able to identify improvements for every child ranging from the children being more confident (31.25% of caregiver responses) to being a lot more confident (68.75% of caregiver responses). Similarly, when discussing social maturity, 87.5% of caregiver responses and 75% of teacher responses indicated growth in this area. When questioned about relationships with others and friendships, caregiver responses indicated an improvement for all children whilst teachers commented favourably about the development in social relationships of 93.75% of the children in the Maori Culture Group. Not surprisingly then, 83.32% of caregiver responses and 81.25% of teacher responses indicated a general development in social skills.

Caregivers, teachers and the children themselves were all enthusiastic about the academic progress of the Maori Culture Group. Of the children’s responses, 93.75% showed that they felt they had improved to some degree. Responses indicating a large improvement made up 31.25%. For teachers the responses were similar with 81.25% indicating that the individual children had improved academically. The remaining 18.75% were children who were already making good progress academically prior to
joining the Maori Culture Group and this development had continued. However, for teachers 43.75% of the responses related to the children making large gains academically. When caregivers were asked about their children’s attitude to schoolwork, 93.12% commented on improvements they had noticed such as that the children were more interested or involved at school, that they had developed more independent work habits, that they were more confident and that they had improved in specific curriculum areas. As regards school reports, 93.75% of both caregiver and child responses indicated an improvement over previous reports, with 43.75% of child responses and 87.5% of caregiver responses showing that there had been a large improvement.

The teachers interviewed were unable to identify other children within their respective classes who had made the overall gains of the children in the Maori Culture Group.

**DISCUSSION**

This study was designed to capitalise on a cultural event of great significance in the lives of these children, their whanau and the school. The trip provided the focus for the development of cultural identity in a way that few schools would attempt. Whilst government policy now demands the inclusion of tikanga Maori (culture) and te reo Maori (language) in all New Zealand school programmes, some researchers (Smith, 1990b) have argued that these taha Maori programmes may be trivialised and reduced to mere tokenism, a ‘sticking plaster’ solution. The results achieved within the particular programme that is the centre of this study suggest that this need not be so. The children who were the focus of this study were involved in an intense cultural
experience that enabled them to feel a sense of identity, self-worth and belonging. They developed a pride in their achievements and in New Zealand's indigenous culture. They received praise and affirmations for their performances from both the children and adults who formed their audiences. They won acclaim through the media.

The standardised testing showed that the children in the Maori Culture Group made significant positive changes in self-esteem and locus of control over the period they were involved, changes not matched by those in the other two control groups. Furthermore, the interview data suggests that both parents and teachers noted developments in the social skills, confidence and social maturity of the children in the Maori Culture Group during the year of the study. Again these positive changes were not reported for any other children with whom the teachers were involved in their classrooms.

Importantly, the study also showed some change in the academic performance of these students. Although the cultural group activities were not theoretically related to the academic activities assessed by the standardised tests in listening, reading and mathematics, a facilitative effect on academic achievement is suggested. Moreover, both the results of the Tosca testing and the interviews with the Maori Culture Group, their caregivers and teachers suggest positive developments in these children's academic performance, a more positive attitude to school, improved organisational skills and more time spent on their homework.
This study was not designed to explore the causal links and the researcher has not attempted to determine what these are. This could be an area for future research. Furthermore, there do not appear to be any other systematic studies in New Zealand concerning the personal, social or academic effects of children participating in a Maori Culture Group. Considering how much a part of New Zealand schooling such groups have become, this is another area for future researchers to investigate. This study clearly showed that the children improved in self-esteem and that they became more internally self-regulated. There also appeared to be some academic improvement as well. Not only did the measurement instruments tell us this, so did the caregivers and the teachers. This programme was also extremely well-received by the community. The approach of the new Millenium is an opportune time to consider innovative programmes in schools which can lead to the social and academic success of children from ethnic minorities and from low socioeconomic areas.
REFERENCES


Table 1

Pre-test and Post-test Means (and Standard Deviations) for the Three Groups on the Coopersmith Inventory

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
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<tr>
<td></td>
<td>Mean</td>
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</tr>
<tr>
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</tr>
<tr>
<td>(n=24)</td>
<td>61.33</td>
<td>15.54</td>
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<td>64.16</td>
<td>12.93</td>
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<td>12.41</td>
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<tr>
<td>(n=23)</td>
<td>63.22</td>
<td>12.89</td>
<td>66.78</td>
<td>17.48</td>
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Table 2

Pre-test and Post-test Means (and Standard Deviations) for the Three Groups on the Nowicki-Strickland Locus of Control Scale for Children

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<tr>
<td></td>
<td>Mean</td>
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<tr>
<td>Culture Group (n=24)</td>
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<tr>
<td>Control 1 (n=24)</td>
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Table 3

Pre-test and Post-test Means (and Standard Deviations) for the Three Groups on The Test of Scholastic Abilities

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Table 4

Pre-test and Post-test Means (and Standard Deviations) for the Three Groups on the Progressive Achievement Test of Listening Comprehension

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<td></td>
<td>Mean</td>
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<tr>
<td>Culture Group</td>
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<td>Control 1</td>
<td>33.25</td>
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Table 5

Pre-test and Post-test Means (and Standard Deviations) for the Three Groups on the Progressive Achievement Test of Reading Comprehension

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Table 6

Pre-test and Post-test Means (and Standard Deviations) for the Three Groups on the
Progressive Achievement Test of Mathematics

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<td></td>
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<td>SD</td>
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<tr>
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<td>22.50</td>
</tr>
<tr>
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<td>30.32</td>
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<td>Control 2 (n=21)</td>
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