

# AIR Self-Determination Descriptive Statistics

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## Demographics

The following tables were completed using  $n = 86$  participants for initial testing. Table 1 shows the demographics of the sample including gender, race, and ethnicity. The majority of students identify as female ( $n = 49$ ), and white ( $n = 74$ ). Table 1 includes the total number and percentage of students.

**Table 1.**

<b>Demographics</b>		
	<i>n</i>	percentage of sample (of 86)
<b>Gender</b>		
Female	49	57.0%
Male	36	41.9%
NonBinary	1	1.2%
<b>Race</b>		
White	74	86.0%
Black, African American	1	1.2%
Not Reported	8	9.3%
Missing	3	3.5%
<b>Ethnicity</b>		
White	70	81.4%
Black, African American	1	1.2%
Asian	1	1.2%
American Indian	0	0%
Alaska Native	0	0%
Two	5	5.8%
Not Reported	8	9.3%

## Grade Level Distribution

Table 2 below reports the grade levels represented in the sample.

**Table 2.**

Grade Level	<i>n</i>	percentage of sample (of 86)
2	9	10.5
3	6	7.0
4	10	11.6
5	13	15.1
6	12	14.0
7	7	8.1
8	5	5.8
9	8	9.3
10	5	5.8
11	0	0
12	5	5.8

## Item Means

Table 3 reports the means and standard deviations for each of the 24 items. Means are based on a Likert scale (1 = never, 2 = almost never, 3 = sometimes, 4 = almost always, 5 = always). Mean scores and standard deviations are consistent, indicating that most students scored in the “sometimes to always” range for the items, with consistent variability across individual items.

**Table 3.**

### Item Means and Standard Deviations

Factor/Item	Mean	Standard Deviation
<b>Factor 1: Things I Do</b>		
I know what I need, what I like, and what I’m good at.	3.98	0.920
I set goals to get what I want or need. I think about what I am good at when I do this.	3.24	1.207
I figure out how to meet my goals. I make plans and decide what I should do.	3.28	1.214
I begin working on my plans to meet my goals as soon as possible.	3.15	1.260
I check how I’m doing when I’m working on my plan. If I need to, I ask	3.00	1.389



others what they think of how I'm doing.		
If my plan doesn't work, I try another one to meet my goals.	3.27	1.358

**Factor 2: How I Feel**

I feel good about what I like, what I want, and what I need to do.	4.02	0.982
I believe that I can set goals to get what I want.	3.76	1.137
I like to make plans to meet my goals.	3.42	1.350
I like to begin working on my plans right away.	3.21	1.275
I like to check on how well I'm doing in meeting my goals.	3.31	1.340
I'm willing to try another way if it helps me to meet my goals.	3.59	1.121

**Factor 3: What Happens at School**

People at school listen to me when I talk about what I want, what I need, or what I'm good at.	3.37	1.237
People at school let me know that I can set my own goals to get what I want or need.	3.14	1.424
At school, I have learned how to make plans to meet my goals and to feel good about them.	3.37	1.320
People at school encourage me to start working on my plans right away.	3.17	1.489
I have someone at school who can tell me if I am meeting my goals.	3.29	1.371
People at my school understand when I have to change my plan to meet my goals. They offer advice and encourage me when I'm doing this.	3.09	1.436

**Factor 4: What Happens at Home**

I have someone at home who can tell me if I am meeting my goals.	3.79	1.398
People at home listen to me when I talk about what I want, what I need, or what I'm good at.	4.24	0.945



At home, I have learned how to make plans to meet my goals and to feel good about them.	3.69	1.210
People at home let me know that I can set my own goals to get what I want or need.	3.95	1.245
People at home encourage me to start working on my plans right away.	3.74	1.348
People at home understand when I have to change my plan to meet my goals. They offer advice and encourage me when I'm doing this.	3.90	1.355

### Factor Averages

Table 4 includes factor averages by mean score. Overall, Opportunity, which included an examination of what happens at home and school, included higher scores than Capacity. Overall scores indicate that students reported slightly positive scores (over 3).

**Table 4.**

#### Mean Averages by Factor

<b>Factor</b>	<b>Mean Score</b>	<b>Standard Deviation</b>
Factor 1: Things I Do	3.32	0.913
Factor 2: How I Feel	3.55	0.899
Factor 3: What Happens at School	3.24	1.016
Factor 4: What Happens at Home	3.89	1.036
Capacity (F1 + F2)	3.44	0.864
Opportunity (F3 + F4)	3.56	0.886
Total	3.50	0.792

## Grade Level Average Scores

Table 6 includes average scores across grade levels. PK scores are skewed lower, likely due to the age of the one student included in this group. Third graders included the highest overall average scores.

**Table 6.**

**Average score means and standard deviations by grade level**

<b>Grade Level</b>	<b><i>n</i></b>	<b>Average Total Score</b>	<b>Standard Deviation</b>
2	9	3.43	1.099
3	6	4.24	0.549
4	10	3.48	1.064
5	13	3.52	0.471
6	12	3.24	0.550
7	7	3.94	0.630
8	5	3.11	1.090
9	8	3.59	0.600
10	5	3.44	0.476
12	5	3.63	0.566

## Reliability Estimates

The following data were reported for  $n = 84$  responses. Overall reliability estimates show that the survey has good reliability. Factors 3 and 4, focused on What Happens at School and Home showed higher reliability than Factors 1 and 2. Reliability estimates were also conducted with  $n = 139$  participants from times 1 and 2, though the scores were consistent. Therefore, only Time 1 is included below.

**Table 7.**

<b>Reliability estimates</b>		
<b>Factor</b>	<b><math>n = \text{items}</math></b>	<b>Cronbach's alpha</b>
Factor 1: Things I Do	6	.834
Factor 2: How I Feel	6	.839
Factor 3: What Happens at School	6	.830
Factor 4: What Happens at Home	6	.904
Capacity (F1 + F2)	12	.888
Opportunity (F3 + F4)	12	.909
Total	24	.931

## Mean Changes Across Time

Table 8 includes mean changes over time. From 46 students who were measured across three times, the scores show consistency across each time.

**Table 8.**

### Mean Changes Over Time

<b>Factors</b>	<b>Mean Time 1</b>	<b>Mean Time 2</b>	<b>Mean Time 3</b>
F1: Things I do	20.40	20.27	20.37
F2: How I feel	21.67	21.15	21.43
F3: What happens at school	20.45	20.75	19.59
F4: What happens at home	23.35	23.18	23.35
Capacity (F1 + F2)	42.07	41.42	41.80
Opportunity (F3 + F4)	43.80	43.95	42.93
Total Self-Determination	85.87	85.35	84.74

## Mean Average Changes Across Time

Table 9 includes mean average changes over time. From 46 students who were measured across three times, the scores show consistency across each time.

Table 9 includes average changes over time by factor.

**Table 9.**

### Avg Changes Over Time

<b>Factor</b>	<b>Avg Time 1</b>	<b>Avg Time 2</b>	<b>Avg Time 3</b>
F1: Things I do	3.31	3.38	3.39
F2: How I feel	3.54	3.52	3.57
F3: What happens at school	3.28	3.46	3.26
F4: What happens at home	3.89	3.86	3.89
Capacity (F1 + F2)	3.42	3.45	3.48
Opportunity (F3 + F4)	3.59	3.66	3.58
Total Self-Determination	3.50	3.56	3.53

## Distribution Across Likert Scales per Item

Table 10 shows the frequency of students who were measured at Times 1, 2, and 3. We include how many students chose each option per item.

**Table 10.**

### Distribution Across Likert Scales per Item

<b>Factor/Item</b>	<b>Always</b>	<b>Almost Always</b>	<b>Sometimes</b>	<b>Almost Never</b>	<b>Never</b>
<b>Factor 1: Things I Do</b>					
I know what I need, what I like, and what I'm good at.	20	12	9	0	1
I set goals to get what I want or need. I think about what I am good at when I do this.	7	11	13	6	5





I figure out how to meet my goals. I make plans and decide what I should do.	11	7	13	6	5
I begin working on my plans to meet my goals as soon as possible.	13	5	13	7	4
I check how I'm doing when I'm working on my plan. If I need to, I ask others what they think of how I'm doing.	10	10	11	2	9
If my plan doesn't work, I try another one to meet my goals.	12	5	13	6	6

**Factor 2: How I Feel**

I feel good about what I like, what I want, and what I need to do.	15	19	6	0	2
I believe that I can set goals to get what I want.	14	10	14	1	3
I like to make plans to meet my goals.	13	8	12	6	3
I like to begin working on my plans right away.	10	7	15	5	5
I like to check on how well I'm doing in meeting my goals.	14	7	9	6	6
I'm willing to try another way if it helps me to meet my goals.	14	9	14	2	3

**Factor 3: What Happens at School**

People at school listen to me when I talk about what I	11	13	11	3	4
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want, what I need, or what I'm good at.					
People at school let me know that I can set my own goals to get what I want or need.	13	7	11	5	6
At school, I have learned how to make plans to meet my goals and to feel good about them.	12	8	12	5	5
People at school encourage me to start working on my plans right away.	13	7	7	7	8
I have someone at school who can tell me if I am meeting my goals.	11	6	14	2	9
People at my school understand when I have to change my plan to meet my goals. They offer advice and encourage me when I'm doing this.	9	7	14	2	10

**Factor 4: What Happens at Home**

I have someone at home who can tell me if I am meeting my goals.	15	10	8	2	7
People at home listen to me when I talk about what I want, what I need, or what I'm good at.	22	7	11	2	0
At home, I have learned how to make plans to meet my goals and to feel good about them.	10	13	11	3	5
People at home let me know that I can	18	9	8	3	4



set my own goals to get what I want or need.					
People at home encourage me to start working on my plans right away.	14	6	12	3	7
People at home understand when I have to change my plan to meet my goals. They offer advice and encourage me when I'm doing this.	19	6	10	3	4