CyberPatriot VI Post-Season Competitor Survey

2013-2014

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SURVEY DESIGN

During May 2014, student participants in the CyberPatriot VI season of competition were surveyed in seven areas as follows:

1. Their knowledge of cybersecurity principles pre- and post- CyberPatriot participation

2. Their knowledge of cybersecurity career opportunities pre-and post- CyberPatriot participation

3. Their likelihood pre- and post- CyberPatriot participation of pursuing a STEM education or career

4. Their likelihood pre- and post-CyberPatriot participation of pursuing an education or career in cybersecurity

5. Their perception pre- and post-CyberPatriot participation of the degree to which they perceive females are welcomed to the cybersecurity career field

6. The degree to which they assessed the CyberPatriot competition as being engaging

7. The degree to which they assessed the CyberPatriot competition as being fun

641 students responded to the survey (n=641).

KNOWLEDGE OF CYBERSECURITY PRINCIPLES

The vast majority of the 641 respondents characterized their pre-CyberPatriot knowledge of cybersecurity principles as poor. 87% of respondents characterized their pre-CP experience as "No knowledge," "Limited knowledge," or "Some knowledge." However, the students assessed their post-CP far stronger, with fully 93% assessing themselves as having an "Advanced understanding of" (20%), "A lot of knowledge" (50%), or "Some knowledge" (23%) of cybersecurity principles.

Competitors' Knowledge of Basic Cybersecurity Principles
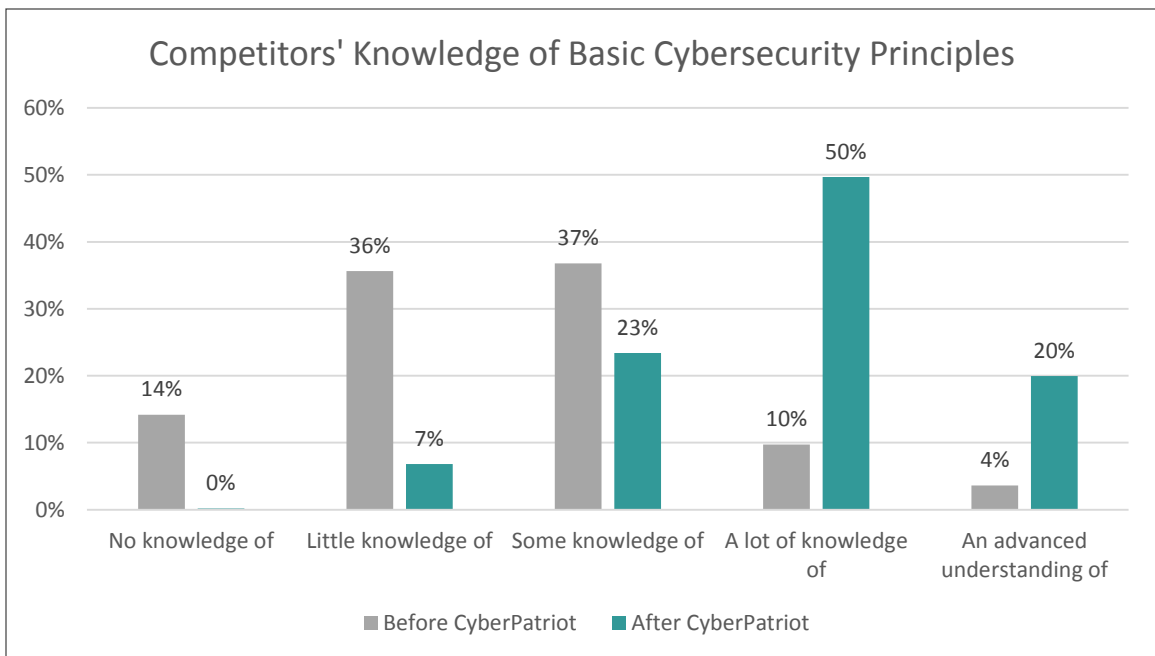
KNOWLEDGE OF CYBERSECURITY CAREER OPPORTUNITIES

Students assessed their knowledge of cybersecurity career opportunities as markedly improved by their CP experience. While 85% of respondents said their pre-CP-VI understanding represented "No knowledge" (15%), "Very little knowledge" (33%), or "Some knowledge" of cybersecurity career opportunities, post CP-VI the numbers skewed strongly in a favorable direction. After their season of CyberPatriot, fully 94% believed they now had "Some," (37%) "A lot" (40%), or strong knowledge and understanding of cybersecurity careers (17%).

Competitors' Knowledge of Cybersecurity Career Opportunities

| Category	Before CyberPatriot	After CyberPatriot
No knowledge of	15%	1%
Very little knowledge of	33%	5%
Some knowledge of	37%	37%
A lot of knowledge of	12%	40%
Knowledge of and understanding of how to pursue	3%	17%
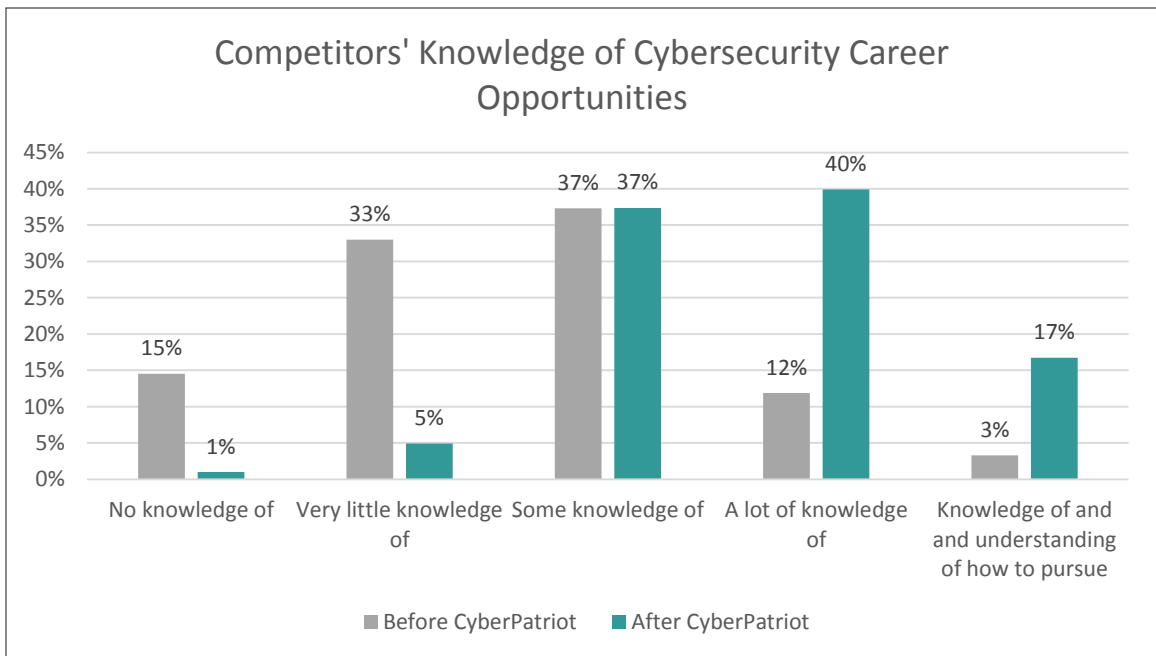
LIKELIHOOD TO PURSUE STEM EDUCATION OR CAREERS

Students' assessment of their likelihood to pursue STEM education and careers was dramatically increased by their CyberPatriot experience. Prior to their CP experience, 68% of respondents said they were either "Somewhat likely" (31%), "Somewhat unlikely" (17%) or "Very unlikely" (12%) to pursue education or careers in STEM. After their CyberPatriot experience, fully 88% said they were "Somewhat likely" (28%) or "Very likely" (60%) to do so. Most notably, the "Very unlikely" characterization to pursue a STEM education or career dropped from 12% pre-competition to just 1% after the competition. Equally dramatic was the increase of "Very likely" responses from 41% before the CyberPatriot experience to fully 60% after CyberPatriot.
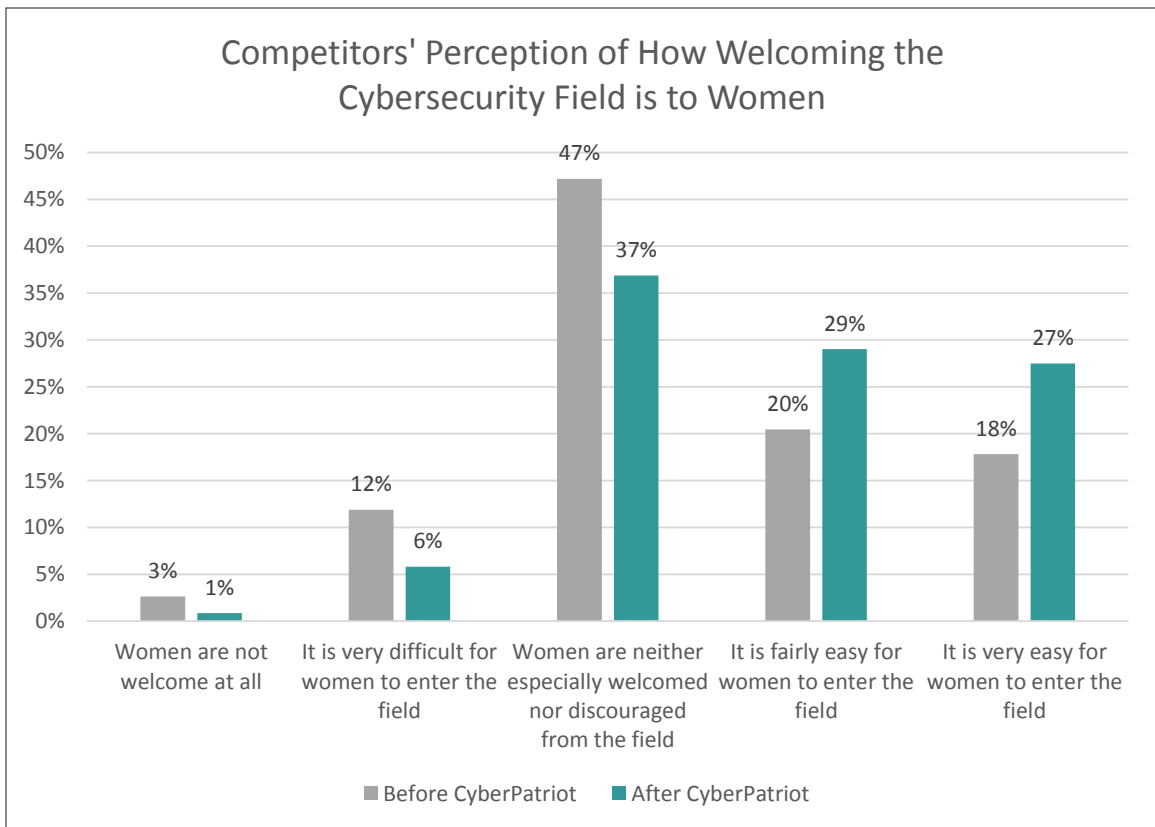

Competitors' Likelihood to Pursue Education or a Career in a STEM Field
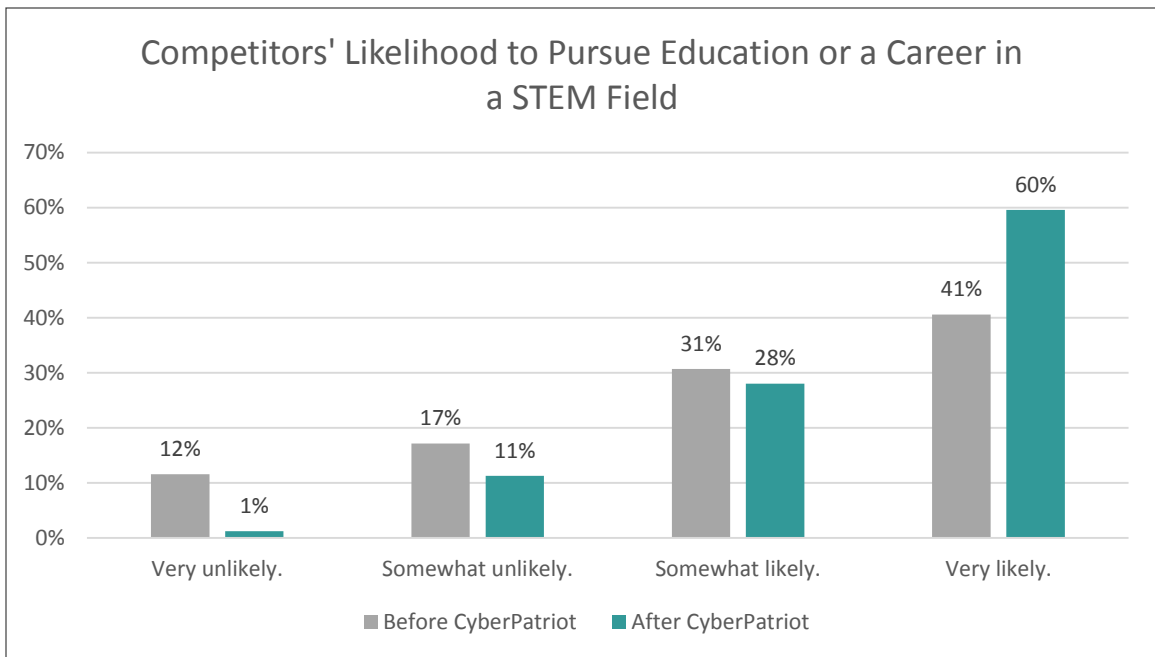
LIKELIHOOD TO PURSUE CYBERSECURITY EDUCATION OR CAREERS

Students were also asked to compare their propensity for a cybersecurity education or career. Their inclinations to do so were profoundly affected by their participation in CyberPatriot. Prior to the CyberPatriot experience, a significant majority of students said they were generally unlikely to pursue education or careers in cybersecurity. 25% said they were "Very unlikely," 38% said they were "Somewhat unlikely," and 30% said they were just "Somewhat likely" to do so. After their experience with CyberPatriot, however, fully 74% of respondents said they were either "Somewhat likely" (43%) or "Very likely" (31%). Notably, the percentage of students saying they were "Very unlikely" to pursue cybersecurity dropped from 25% to just 4% when measured from pre- to post-CyberPatriot, and the number of "Very likely" respondents increased from only 7% before their CyberPatriot experience to nearly one third of respondents afterward (31%).

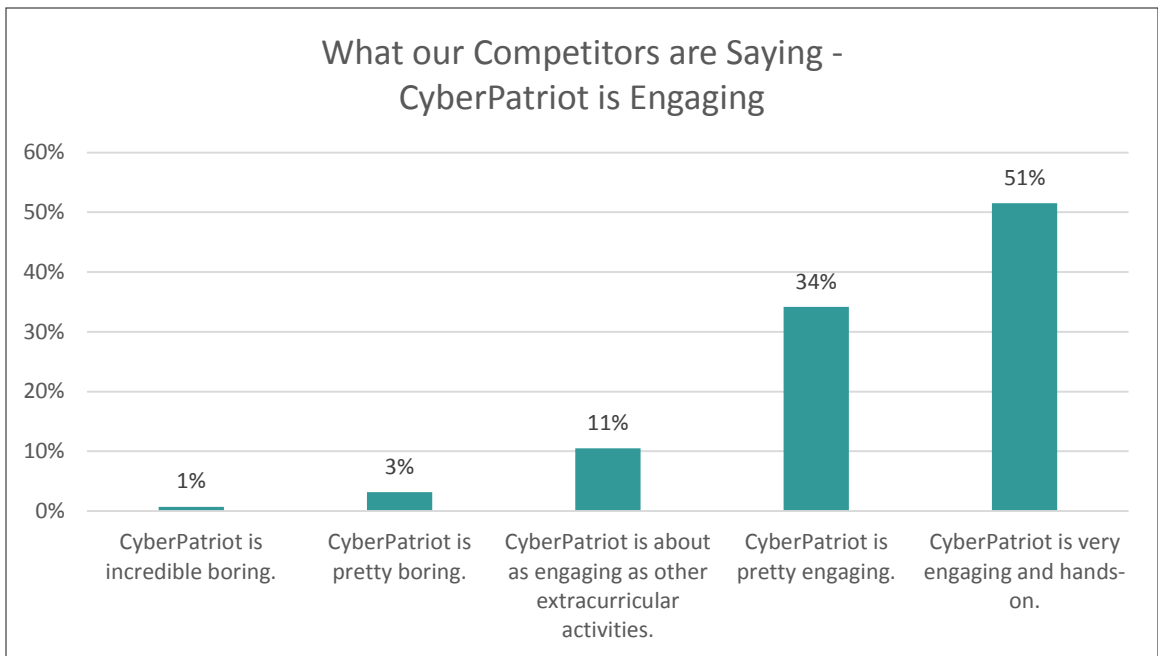Competitors' Likelihood to Pursue Education or a Career in Cybersecurity
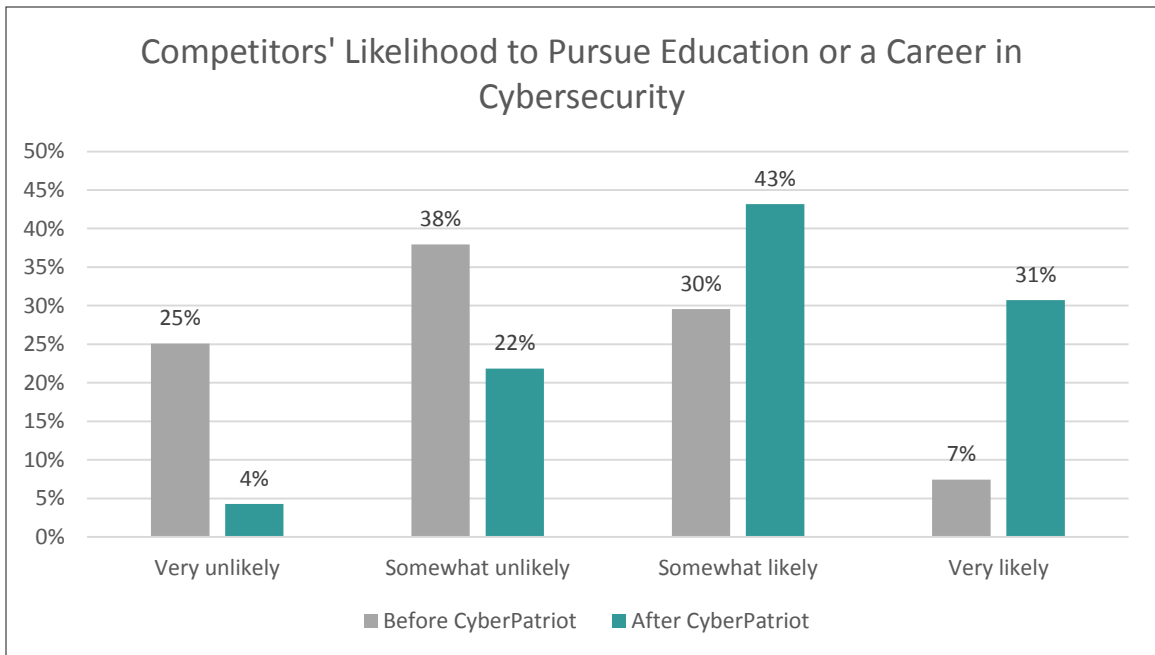
PERCEPTION OF CYBERSECURITY FIELD BEING WELCOMING TO FEMALES

Student perceptions of how welcoming cybersecurity is to women were substantially shaped by CyberPatriot. While the majority of respondents believed the field was not welcoming, had barriers to entry for females, or was neutral to women before they experienced CyberPatriot, after the CyberPatriot experience, nearly all (93%) saw the field as neutral, easy to enter, or very easy to enter for women.

Competitors' Perception of How Welcoming the Cybersecurity Field is to Women

Category	Before CyberPatriot	After CyberPatriot
Women are not welcome at all	3%	1%
It is very difficult for women to enter the field	12%	6%
Women are neither especially welcomed nor discouraged from the field	47%	37%
It is fairly easy for women to enter the field	20%	29%
It is very easy for women to enter the field	18%	27%

PERCEPTION OF THE DEGREE TO WHICH CYBERPATRIOT IS "ENGAGING"

Students were asked if CyberPatriot was engaging, that is, if it is an activity that draws and keeps their attention. 85% 0f respondents said it was "Pretty engaging" (34%) or "Very engaging" (51%). Only 4% found it "boring."

What our Competitors are Saying - CyberPatriot is Engaging

Response	Percentage
CyberPatriot is incredible boring.	1%
CyberPatriot is pretty boring.	3%
CyberPatriot is about as engaging as other extracurricular activities.	11%
CyberPatriot is pretty engaging.	34%
CyberPatriot is very engaging and hands-on.	51%

PERCEPTION OF THE DEGREE TO WHICH CYBERPATRIOT IS "FUN"

Students were asked whether CyberPatriot was enjoyable or fun. Remarkably, 49% said it was "Very fun," and fully one third (33%) of the respondents said that when considering all the extracurricular activities in which they had participated, CyberPatriot was the most fun of all.

What our Competitors are Saying - CyberPatriot is Fun