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A Matter of Degrees? Views of EMS Online Degrees' Value and Design

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A Matter of Degrees? Views of EMS Online Degrees' Value and Design: Peer Reviewed Presentation

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Matter of Degrees?

Views of EMS Online Degrees' Value and Design

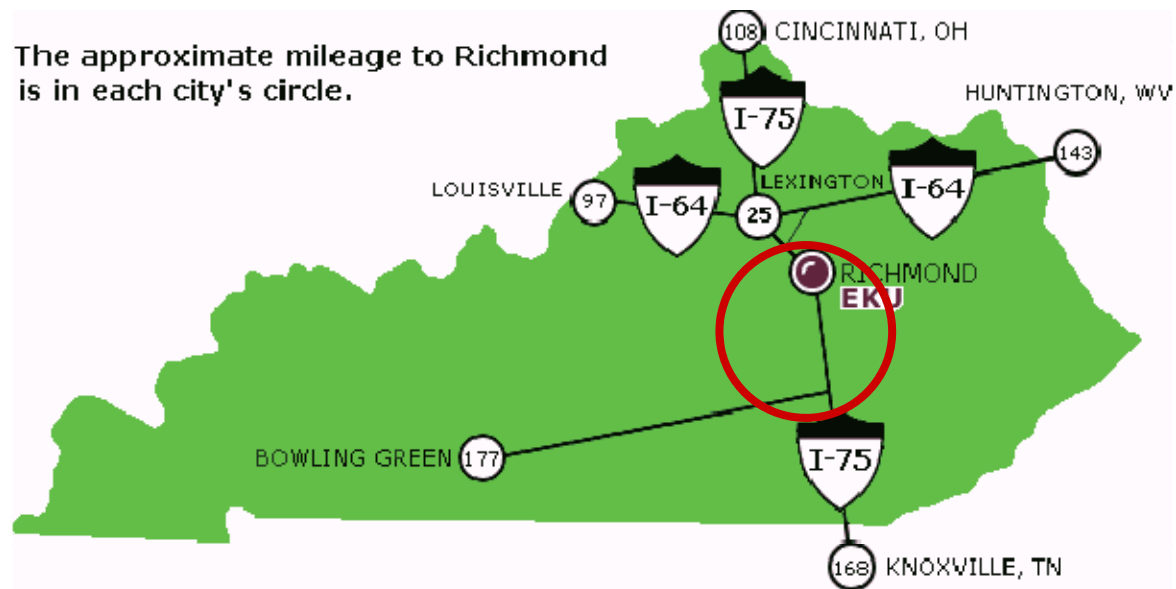
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Objectives

- ✱ Who are prospective students?
- ✱ What value they see in degree?
- ✱ What courses they want?
- ✱ Implementation issues?

Eastern Kentucky University Paramedic Program



Conflict: No commercial; professor



Current Status

* Land grant

* ~ 16,000 students

* AS 40 years old (CoA #002)

* Paramedicine BS has 3 tracks

History

- ✱ BS growing (med school)
- ✱ Availability to “hitch” onto existing MS degree as track
- ✱ E-campus growing

Fall 14 = 2,6000 “E-campus students”

Typical Cohorts

- ✱ BS and AS students
- ✱ Admin, Fire, and Science
- ✱ Men & Women
- ✱ Some Intertnl.



Level of Diversity



PRIDE

Paramedic Recruitment Initiative
for Diversity in EMS Scholarship

Grow or Stagnate

- ✱ Program needs to reach out
- ✱ More students need to work
- ✱ Reach out to military



Public needs Paramedics



Raising academic bar helps.

Why Academics?

✱ Teaches and allows time to learn **CRITICAL THINKING**



Sure, I think there are exciting things going on “online”!



E-campus Option

Goal is to offer new opportunities to students.



Current Degree:

Core and a track in safety



Current MS (plan)

- ✱ Core and 4 – 6 classes
- ✱ Classes are safety related
 - ✓ We recognize... Students are busy!

EMS thesis



Commonwealth of KY

✚ Board of EMS
✓ (NREMT state)

✚ Paramedic

✚ AEMT (limited)

✚ EMT

✚ EMR

Decision by P.I. to focus upon
“Paramedics”



Survey Items

- ✚ Education level?
- ✚ Percent of education EMS related?
- ✚ Currently employed in EMS?
- ✚ Military service?

continued



Survey Items

✚ EMS job description?

✚ **How much earning an
online EMS degree
would help career?**



Decision Point

Sample?

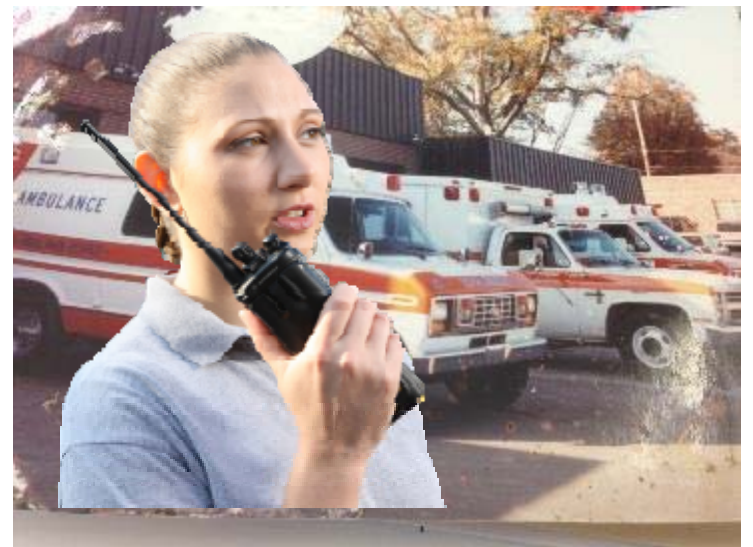
Census?

9- item survey



Needs Assessment

- ✚ IRB approval obtained
- ✚ Mailing list obtained
- ✚ E-mails distributed



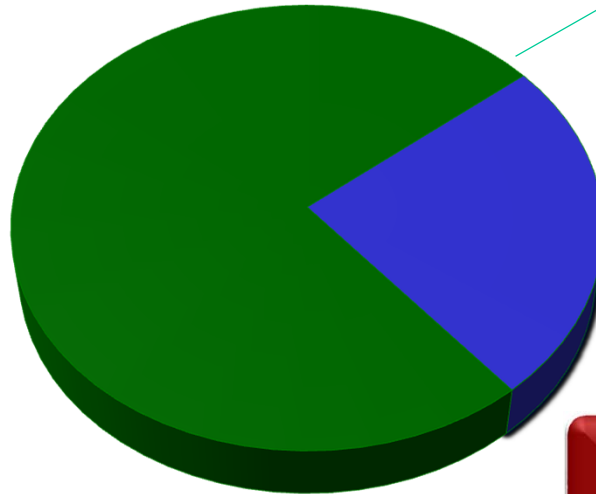
Population and Sample

* 2817 e-mail addresses

✓ 108 bounced back

* 2709 valid addresses

Response
Rate 25%



Limitation Recognized.

Results

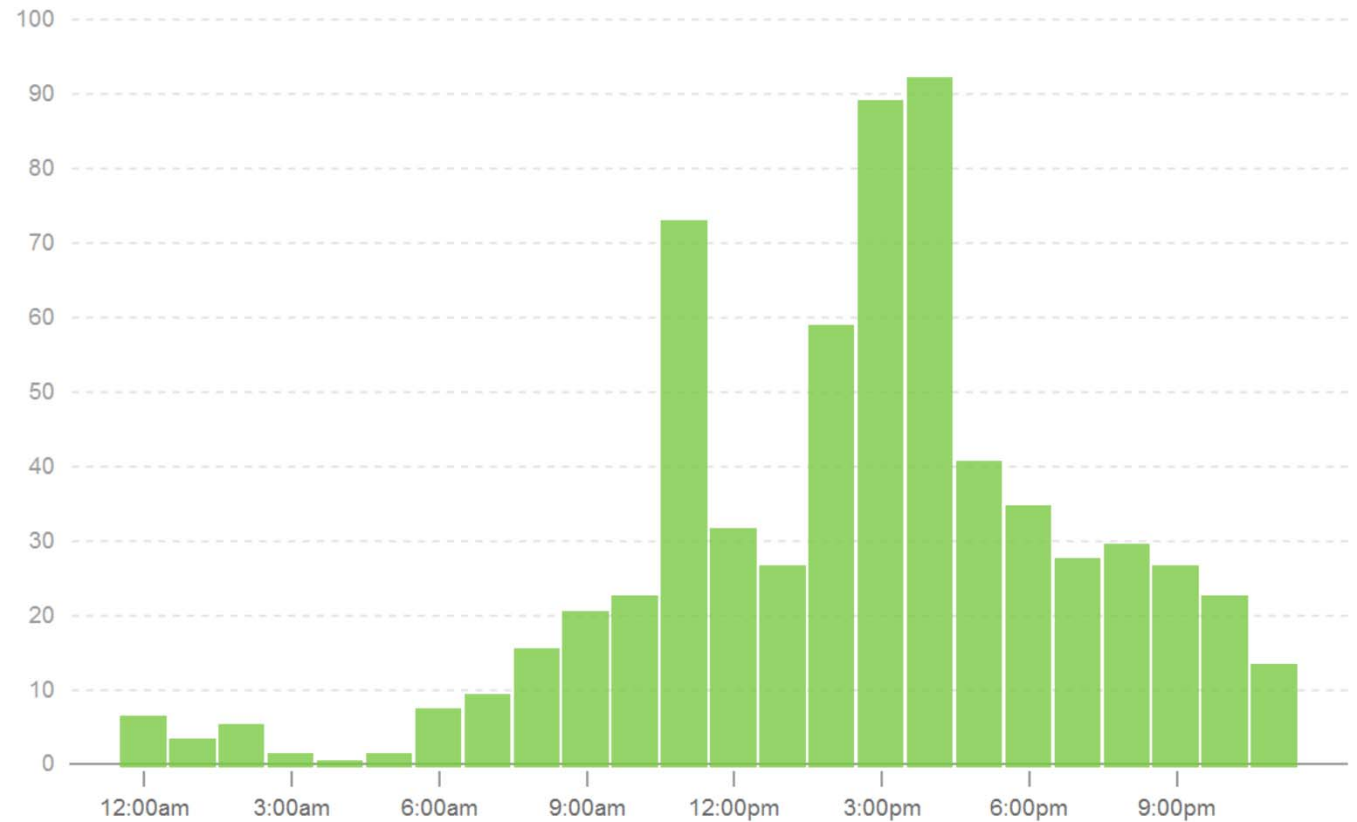




Qualtrics

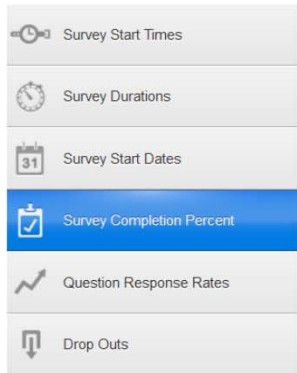
🕒	Survey Start Times
🕒	Survey Durations
📅	Survey Start Dates
📋	Survey Completion Percent
📈	Question Response Rates
📉	Drop Outs

Survey Start Times

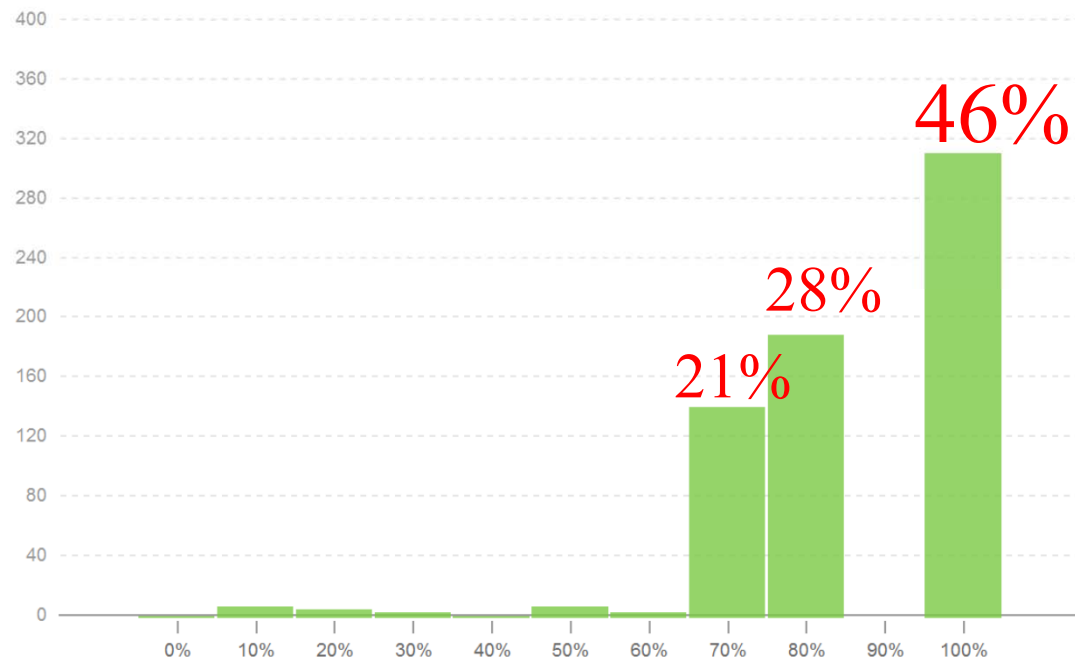


Most in mid-afternoon

Percent Completing 10-item Survey

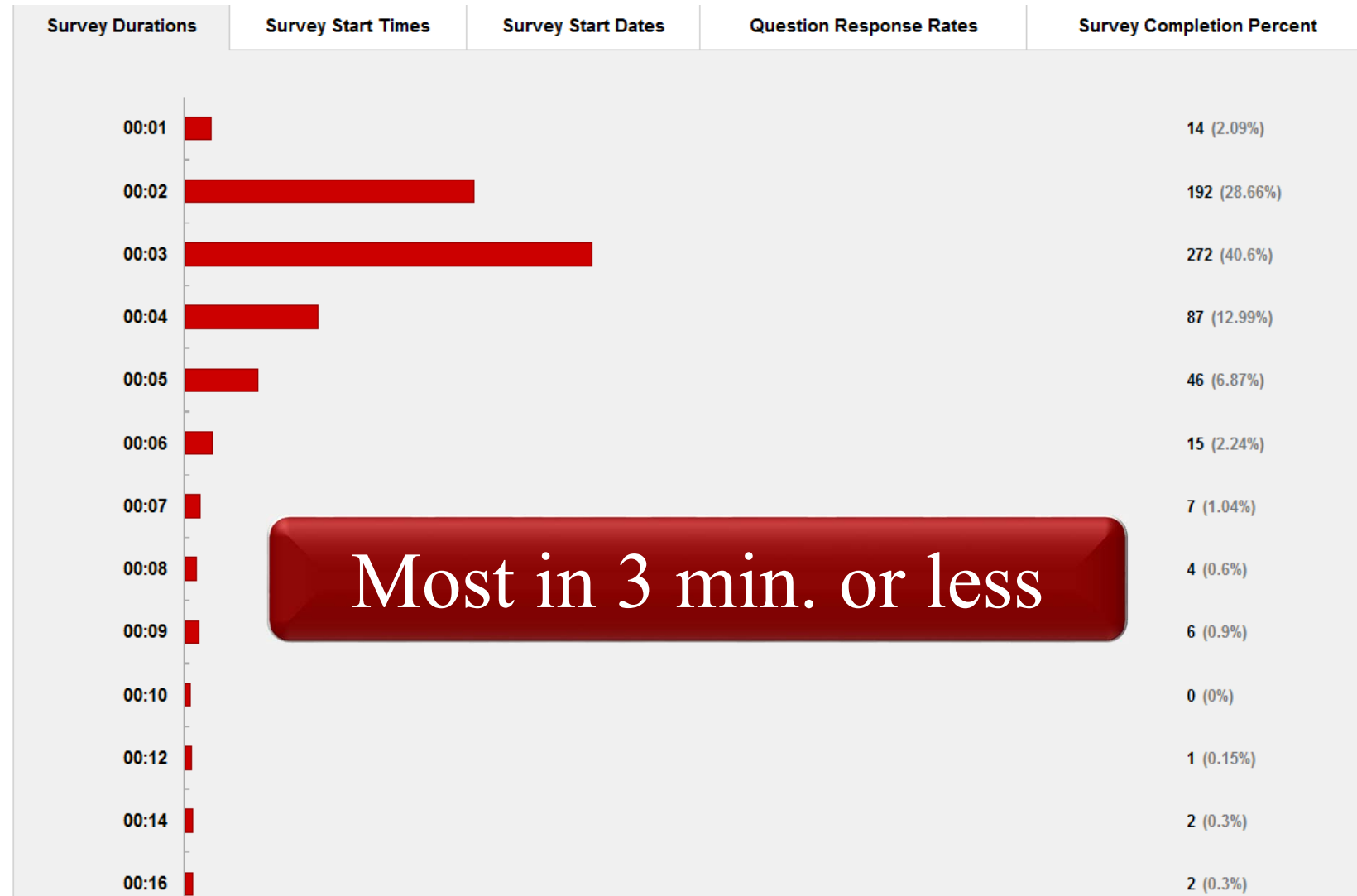


Survey Completion Percent



Not everyone needed to answer all questions.

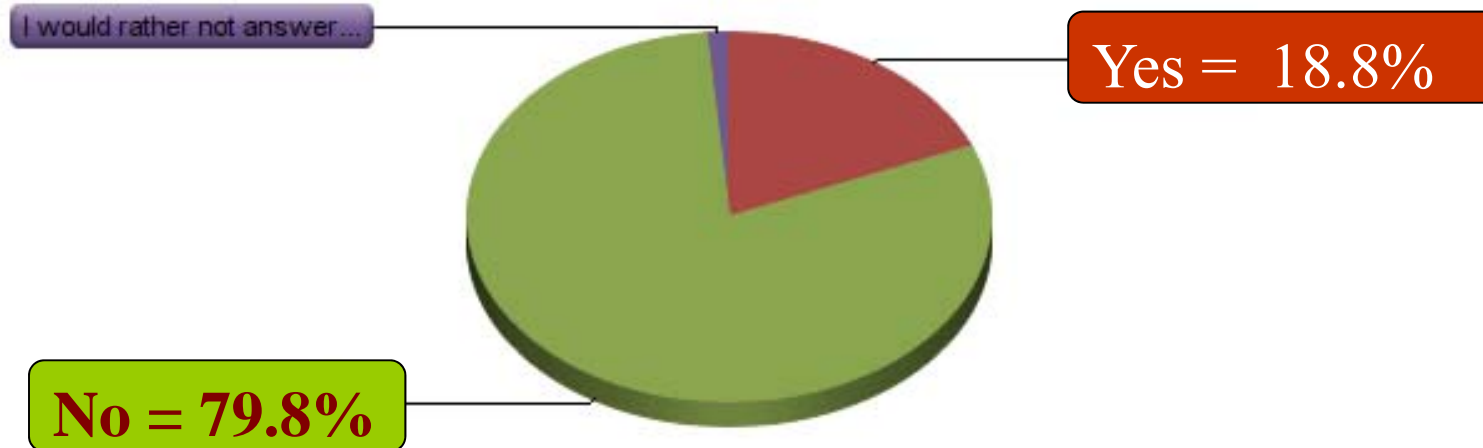
Minutes to Complete Survey



Most in 3 min. or less

Are you currently or have you served as a member of the United States Military?

Entire sample



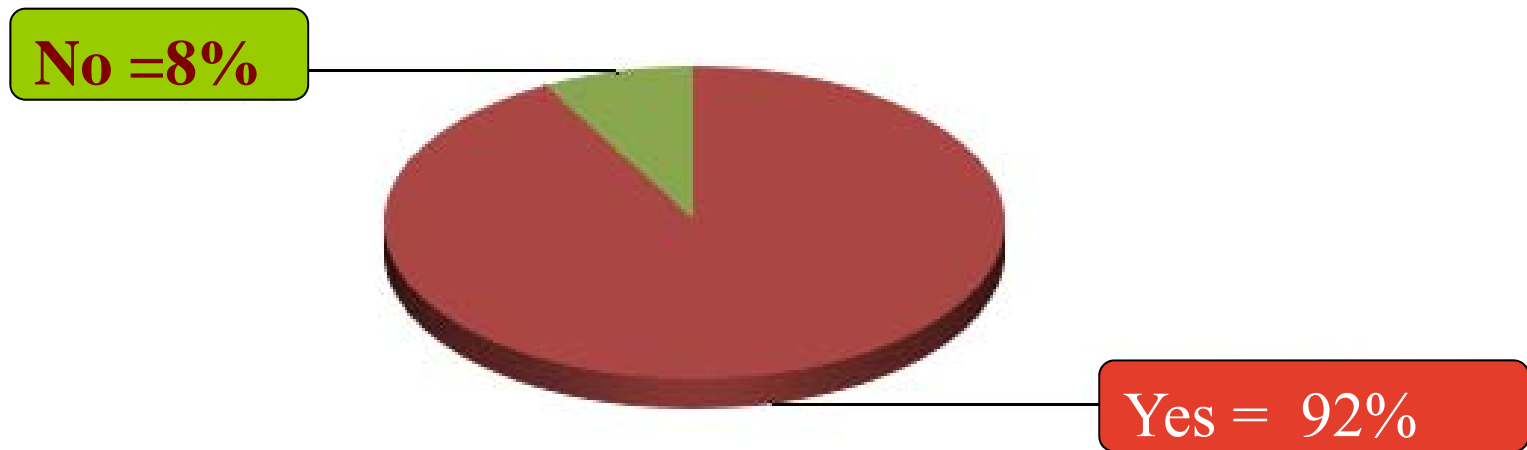
Are you currently employed in an EMS job?

Entire sample



Are you currently employed in an EMS job?

Bachelor's degree ONLY



Degree-level of Paramedics Field

53% = **Some College**

18% = AS degree

15% = **BS degree**

11% = High School Diploma or GED

2% = Master's degree

0% = Doctoral degree (including MD/DO)

*Standard Rounding used

Degree-level of Field Fire-Based

55% = **Some College**

Higher

15% = AS degree

Higher

23% = BS degree

Higher

6% = High School Diploma or GED

Lower

1% = Master's degree

0% = Doctoral degree (including MD/DO)

*Standard Rounding used

Degree-level of Supervisors

57% = Some College

12% = AS degree

18% = BS degree

9% = High School Diploma or GED

3% = Master's degree

0% = Doctoral degree (including MD/DO)

*Standard Rounding used

Education for Field Paramedics

53.3% = Some College

18.4% = AS degree

14.5% = BS degree

11.4% = High School Diploma or GED

2.4% = Master's degree

0% = Doctoral degree (including MD/DO)

All: Which best describes your primary job?

Other

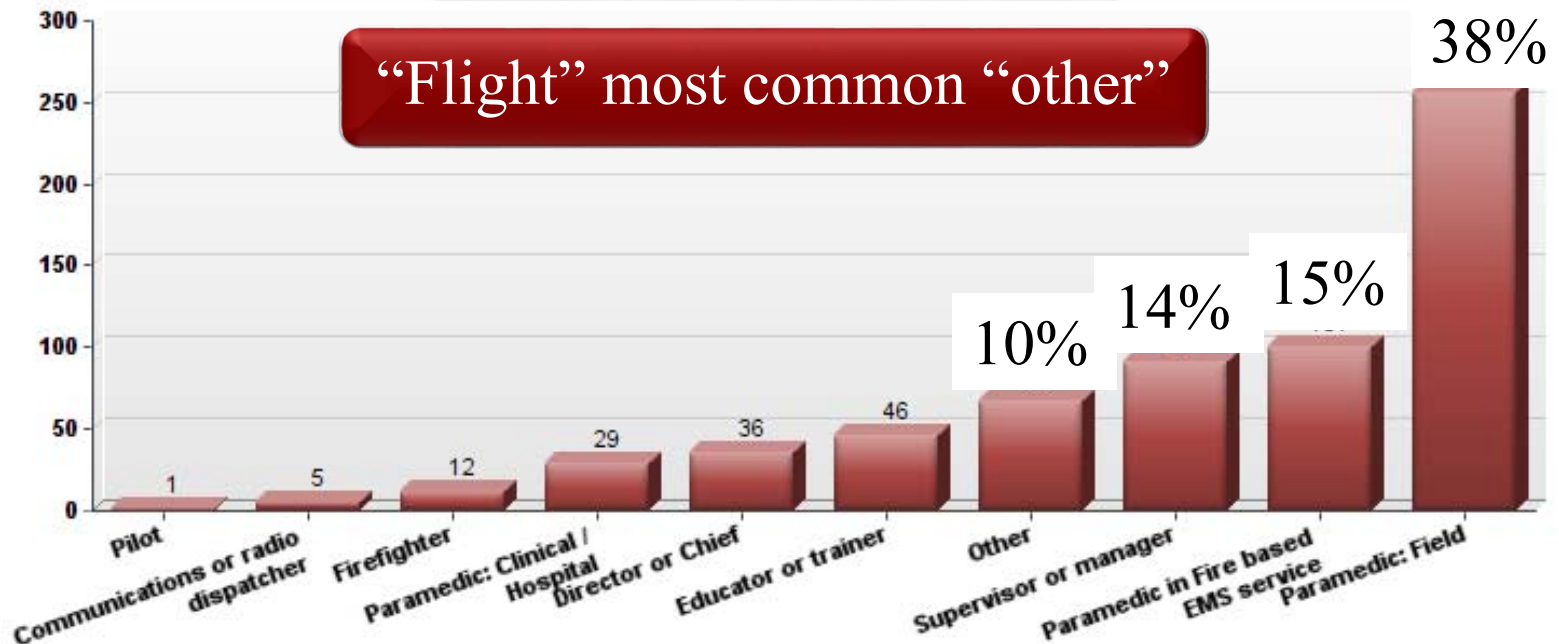
Supervisor

Paramedic in Fire-Based

Paramedic Field

↑ TOP FOUR ↑

“Flight” most common “other”



n=667

100% of Sample Responded

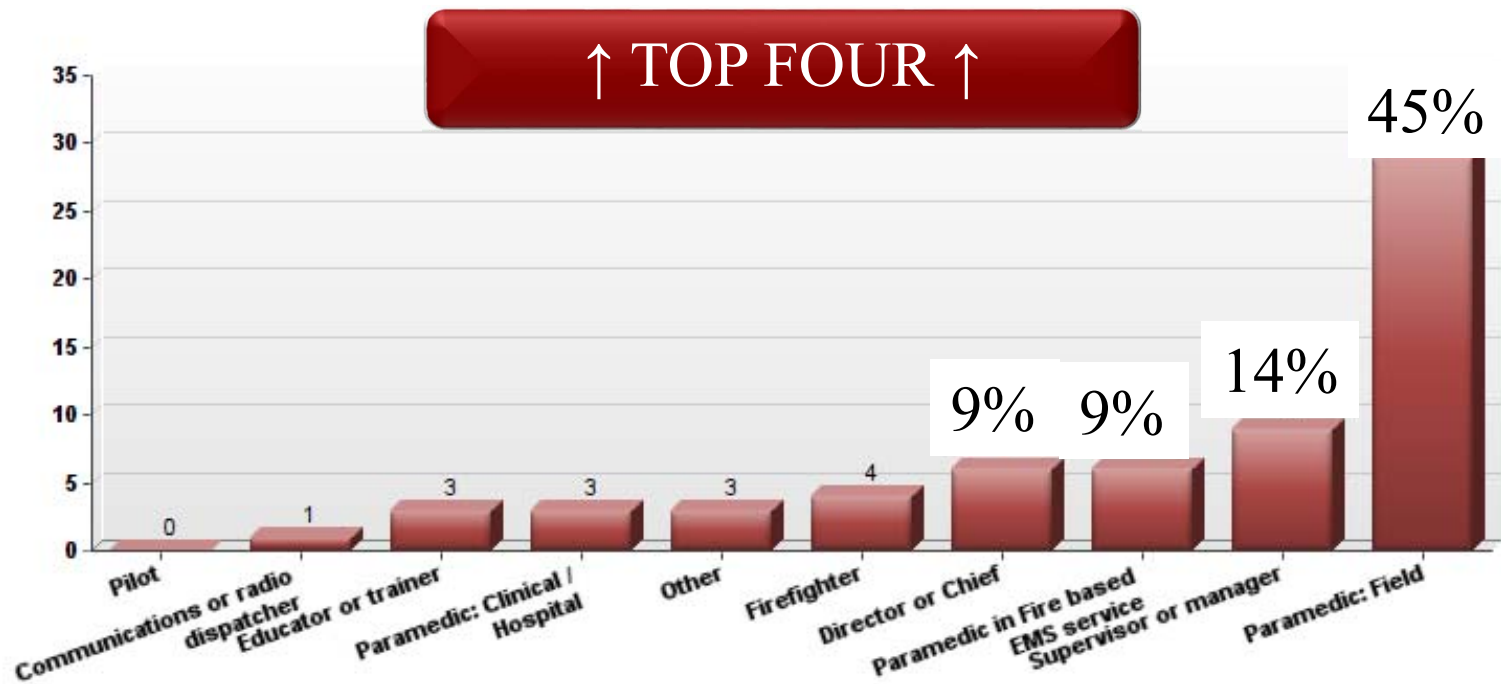
HS or GED: Which best describes your primary job?

Director/Chief

Paramedic / Fire-Based

Supervisor

Paramedic Field

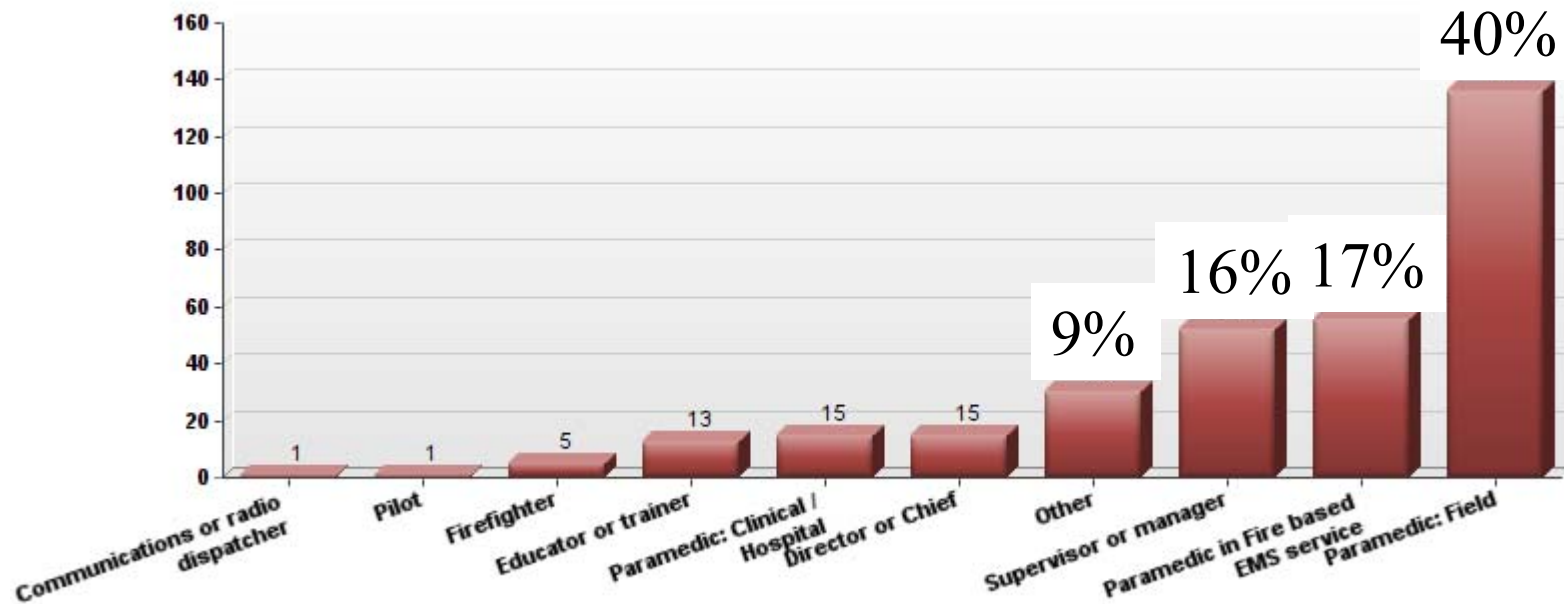


n=65 or 10%

Some College: Which best describes your primary job?

Other Supervisor/Mgr Paramedic / Fire-Based **Paramedic Field**

↑ TOP FOUR ↑



n=336 or 50%

AS Degree: Which best describes your primary job?

Supervisor

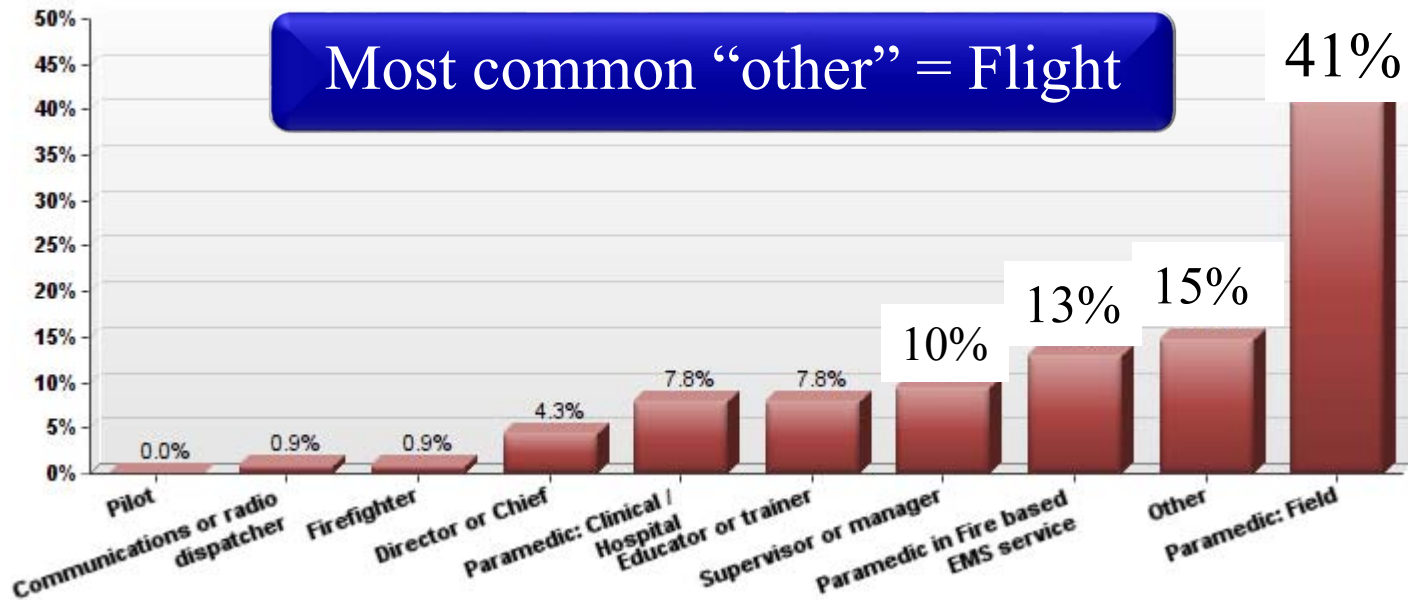
Paramedic in Fire-Based

Other

Paramedic Field

↑ TOP FOUR ↑

Most common "other" = Flight



n=120 or 18%

BS Degree: Which best describes your primary job?

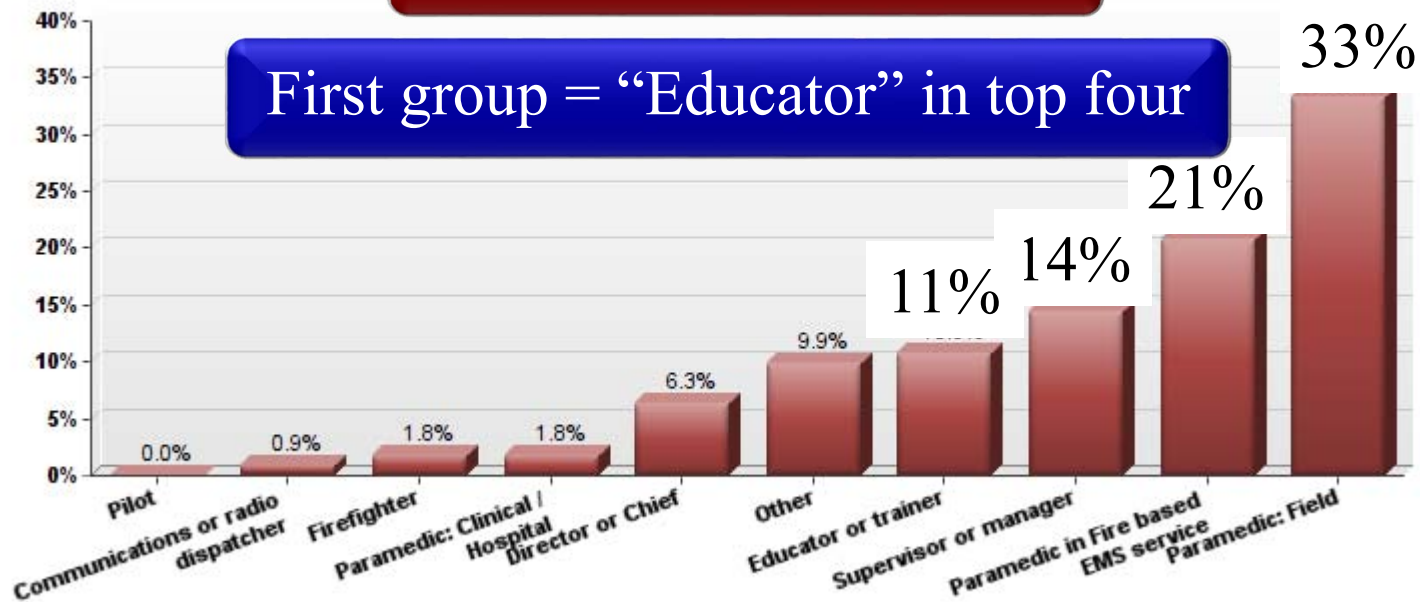
Educator

Other

Paramedic in Fire-Based

Paramedic Field

↑ TOP FOUR ↑



First group = "Educator" in top four

"other" is mixed group

n=114 or 17%



Master's degree jobs

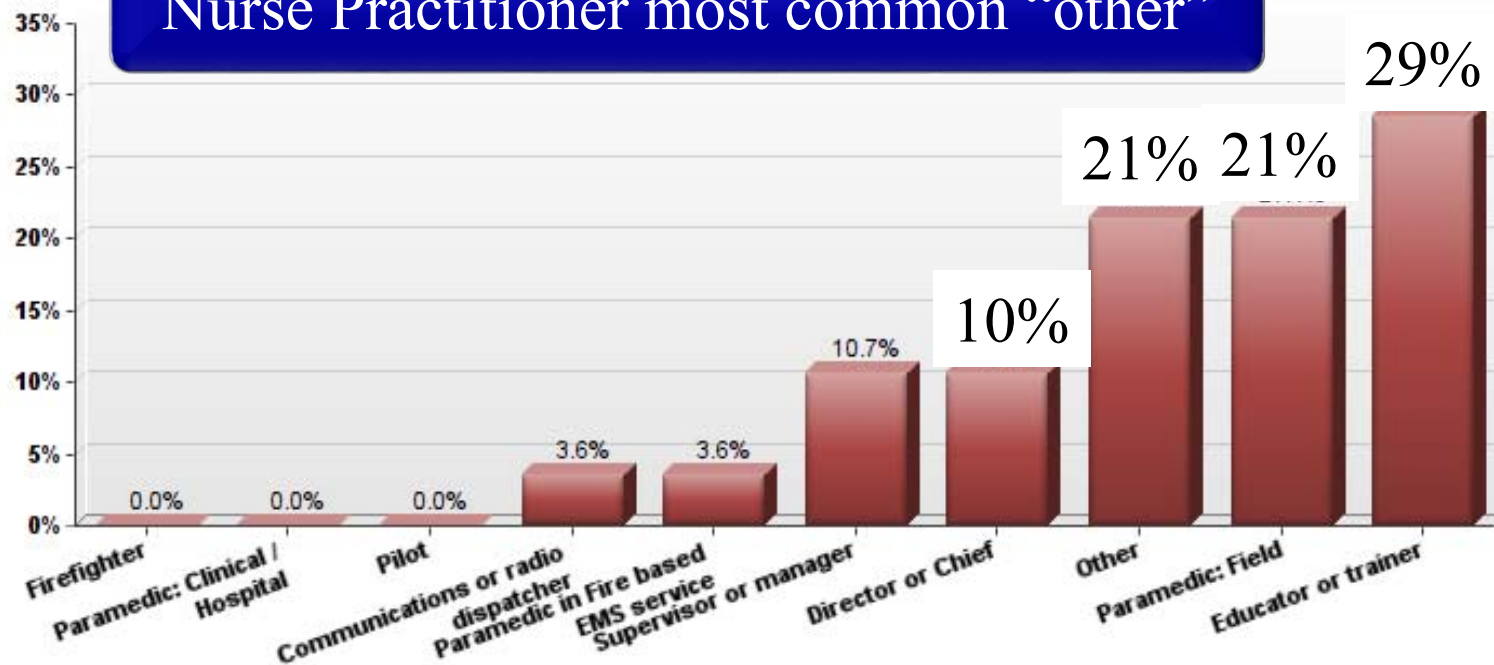
Director

Other

Paramedic Field

Educator

Nurse Practitioner most common "other"



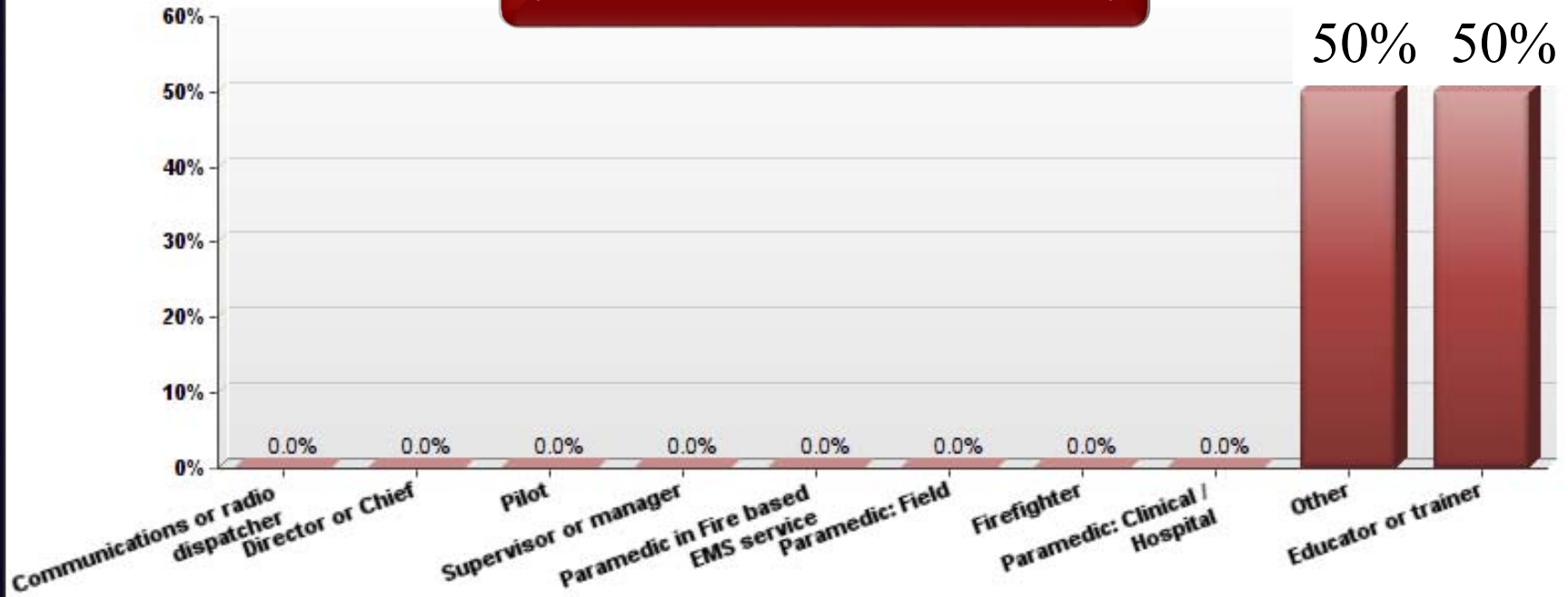
n=29 or 4%

Doctoral degree jobs

Other

Educator

↑ ONLY TWO LISTED ↑



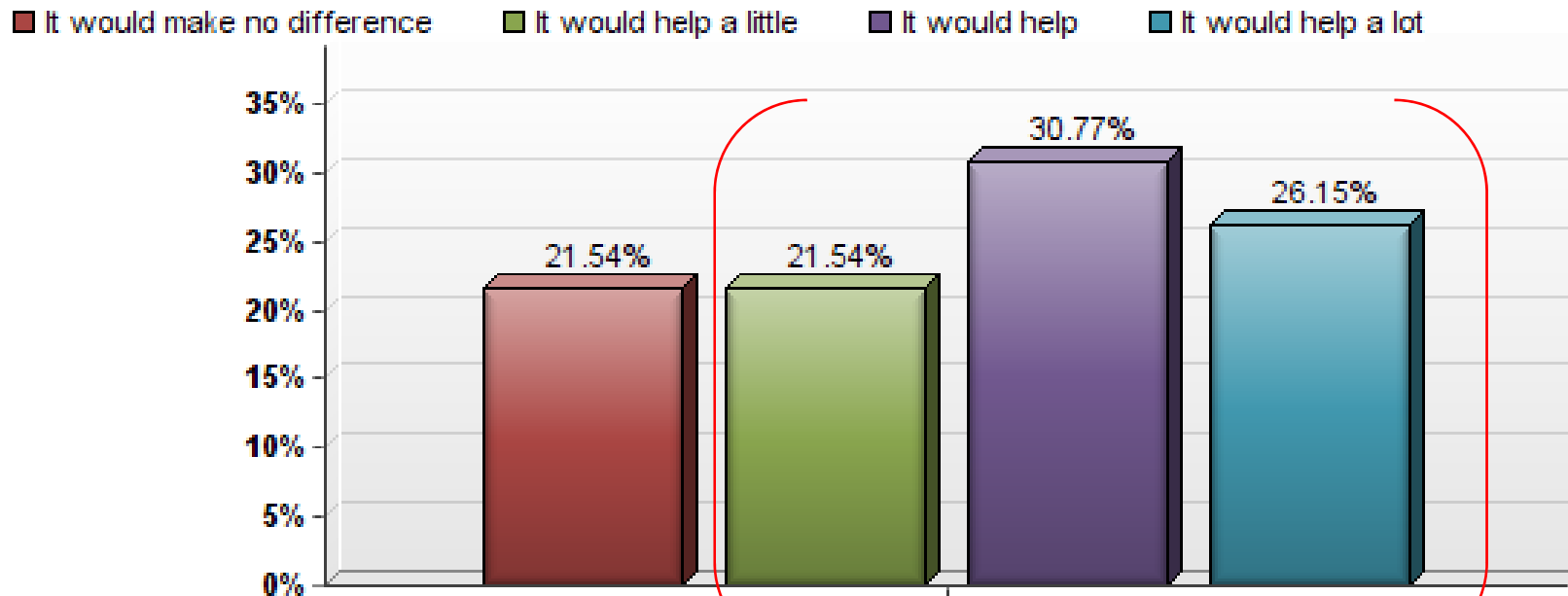
n=3 or .004%



Degree and a Difference?

HS or GED

How much would it help your career to complete a 2-year degree online in EMS?



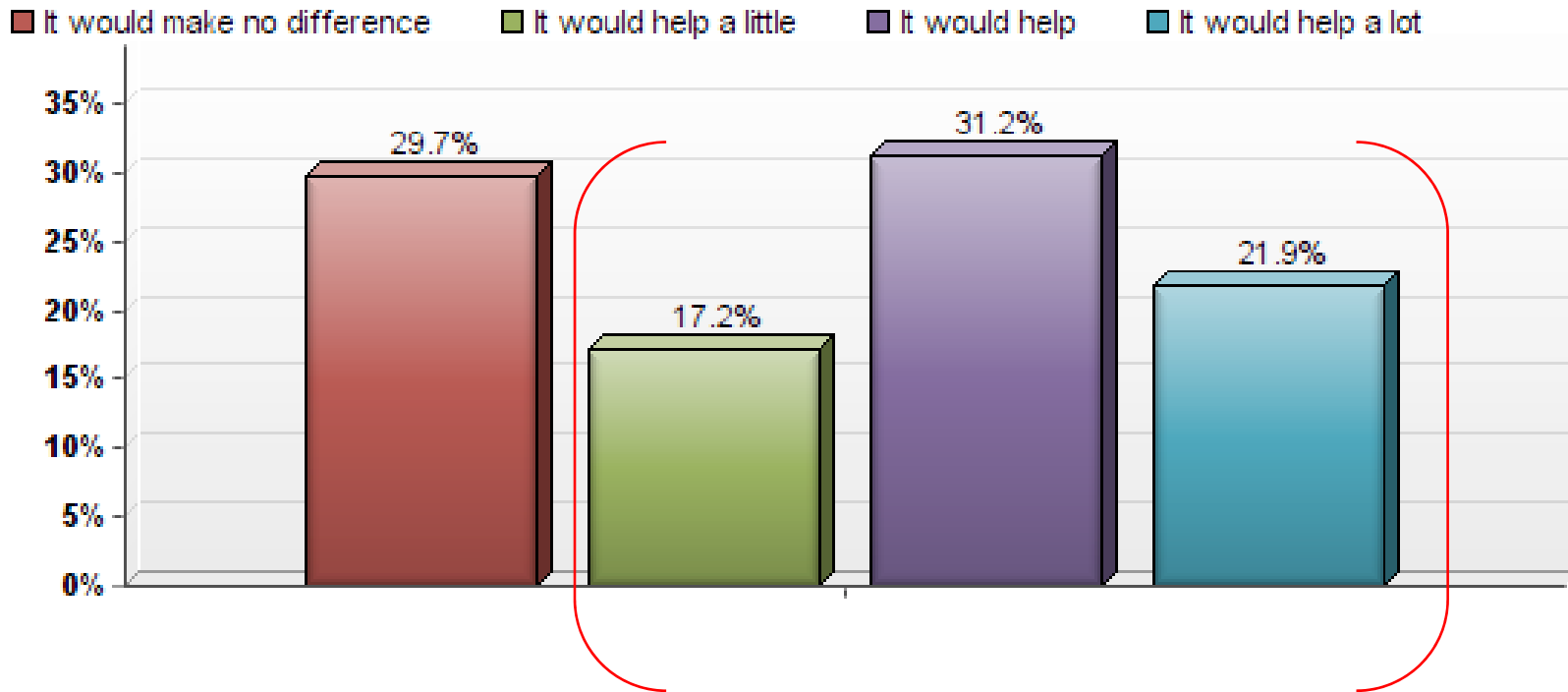
78%

It would help.

n=65 or 10%

HS or GED

How much would it help your career to complete a 4-year degree online in EMS?



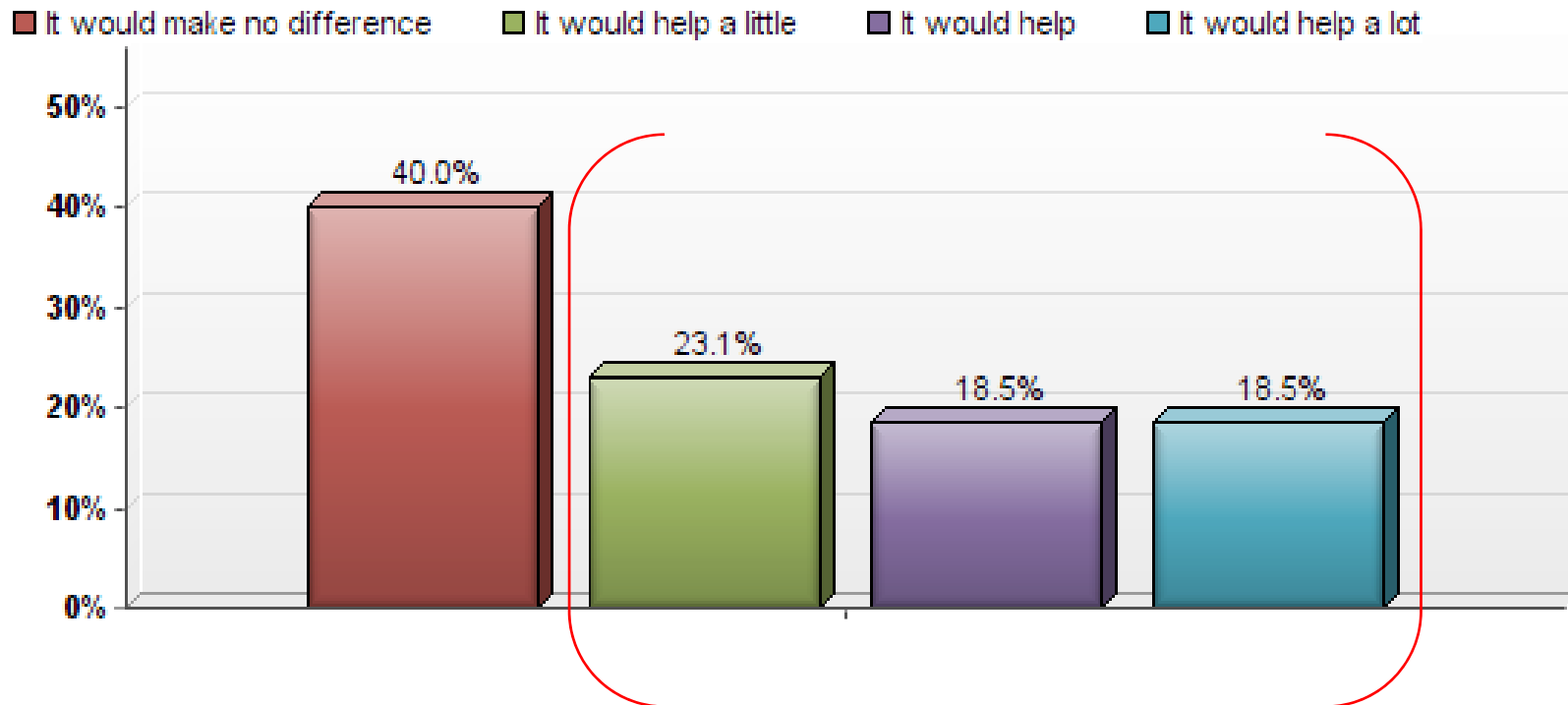
70%

It would help.

n=65 or 10%

HS or GED

How much would it help your career to complete a Master's degree online in EMS?

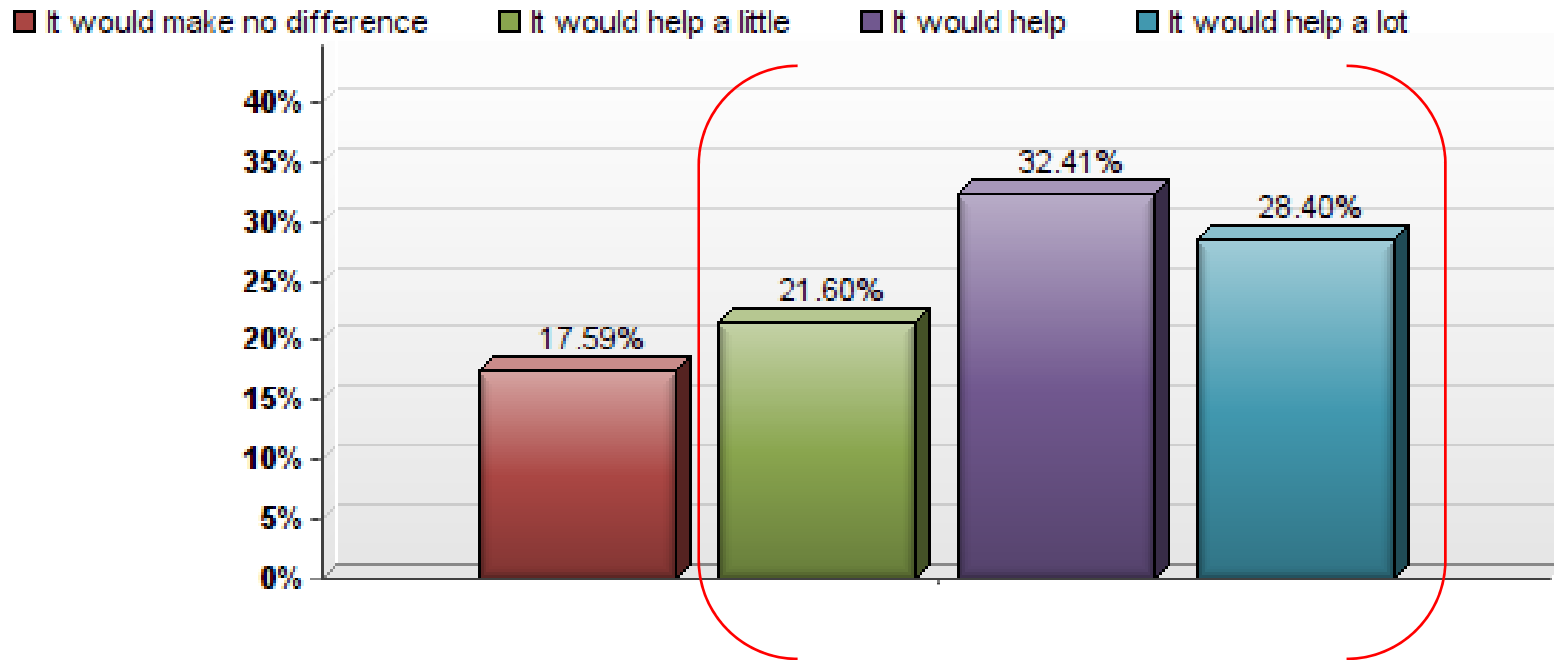


n=65 or 10%

60%
It would help.

Some college

How much would it help your career to complete a 2-year degree online in EMS?

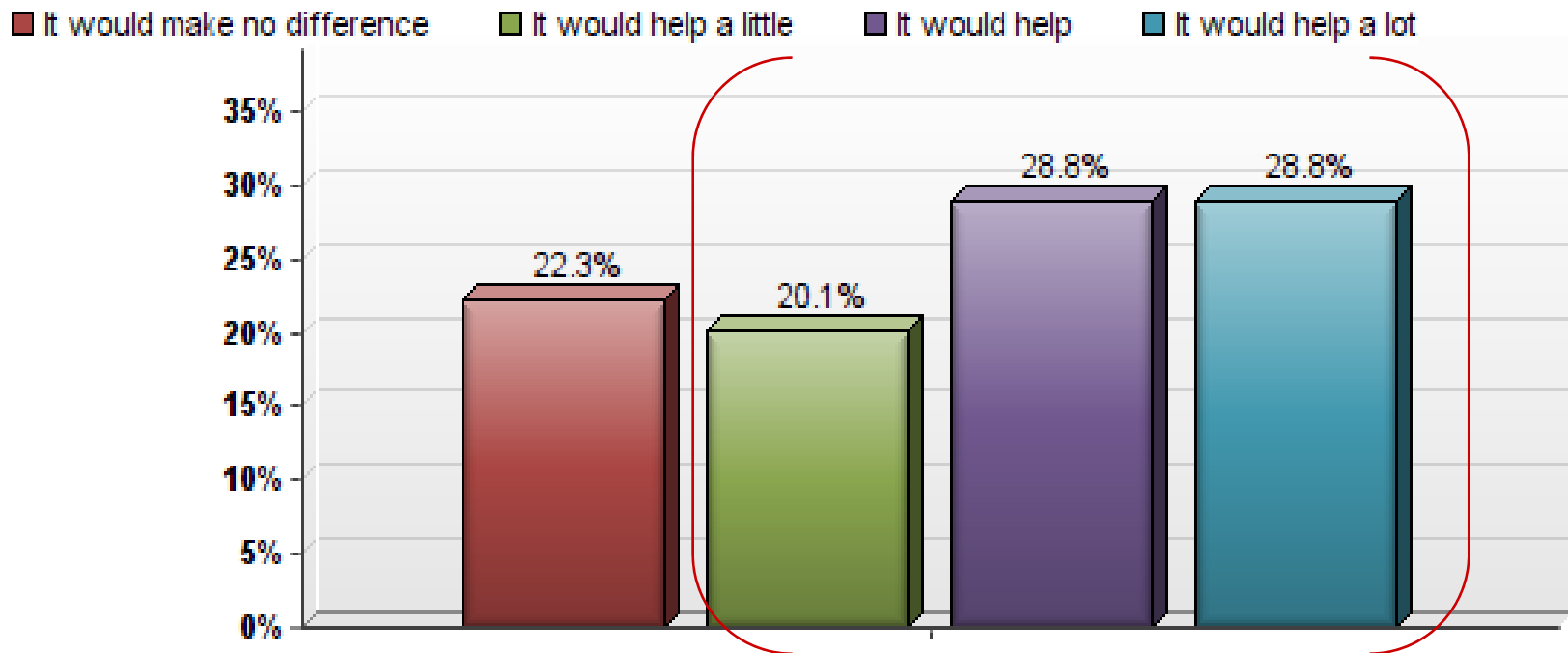


82%
It would help.

n=336 or 50%

Some college

How much would it help your career to complete a 4-year degree online in EMS?

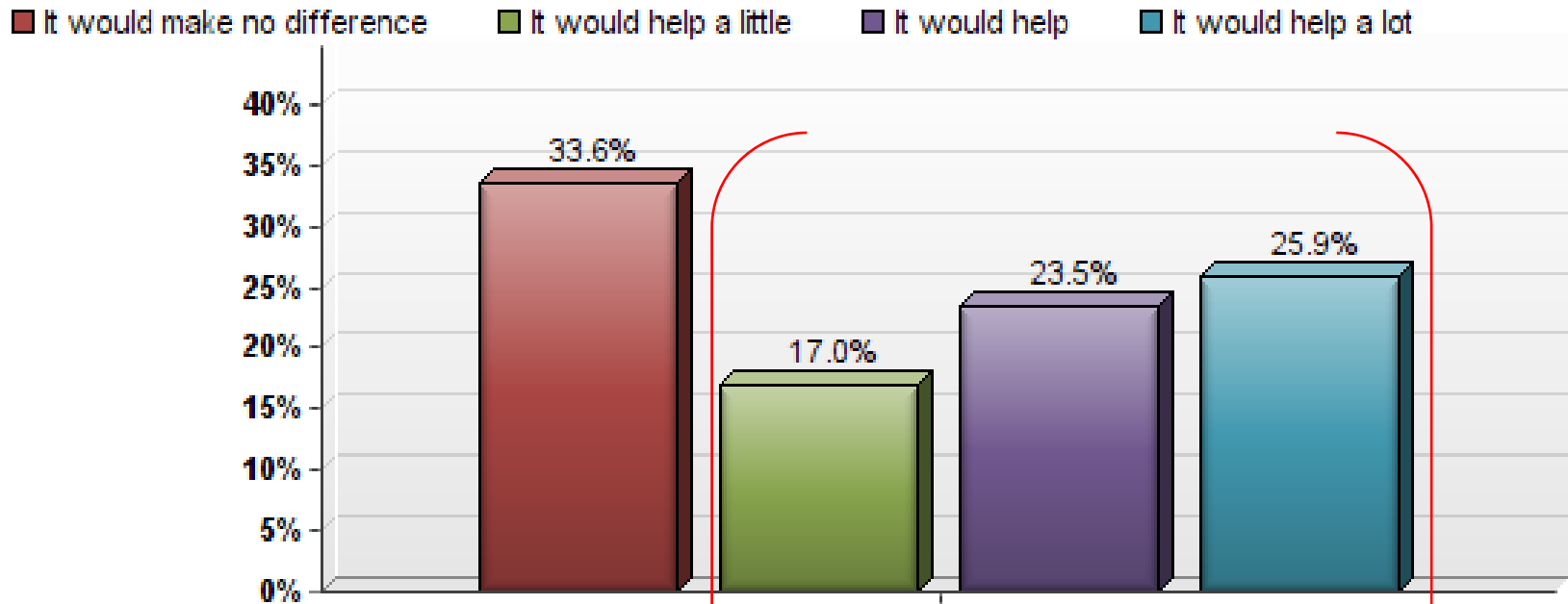


78%
It would help.

n=336 or 50%

Some college

How much would it help your career to complete a Master's degree online in EMS?

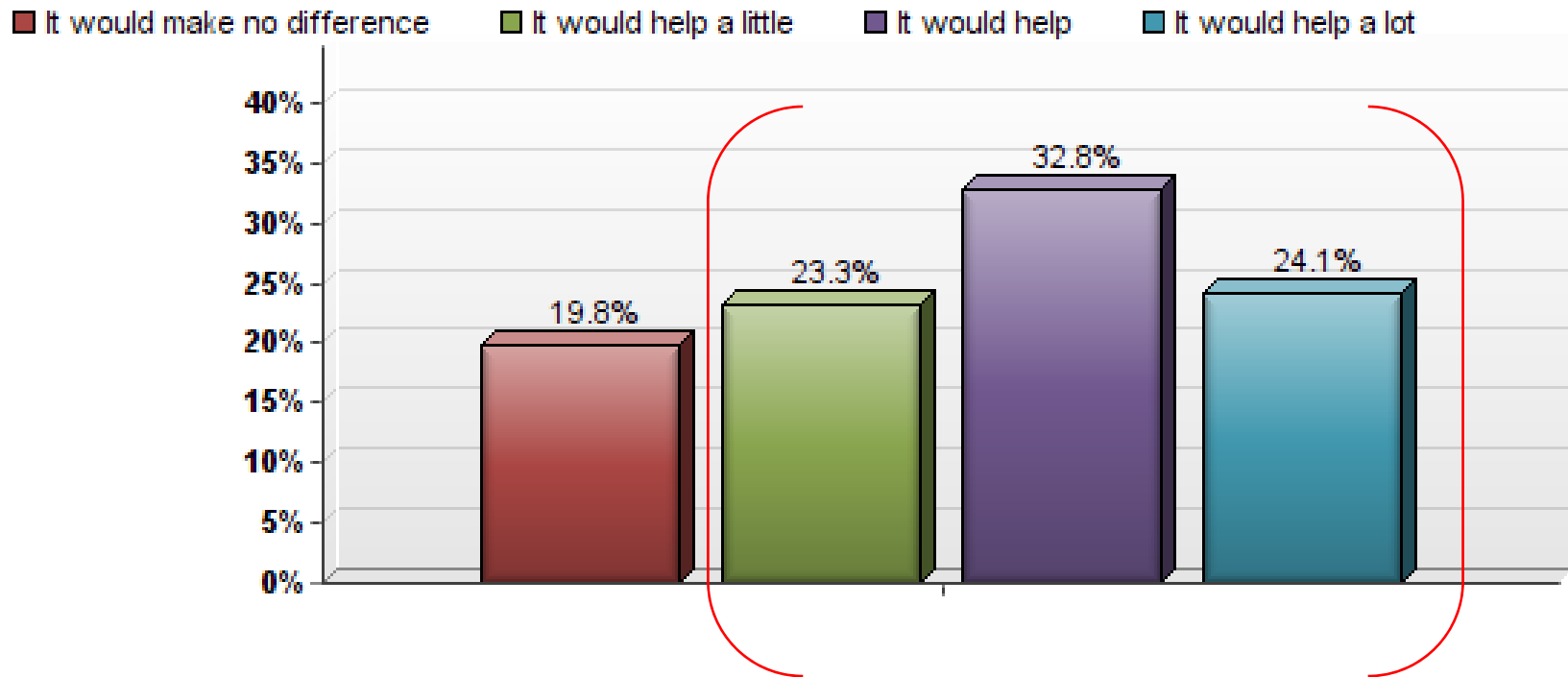


n=336 or 50%

66%
It would help.

AS Degree

How much would it help your career to complete a 4-year degree online in EMS?

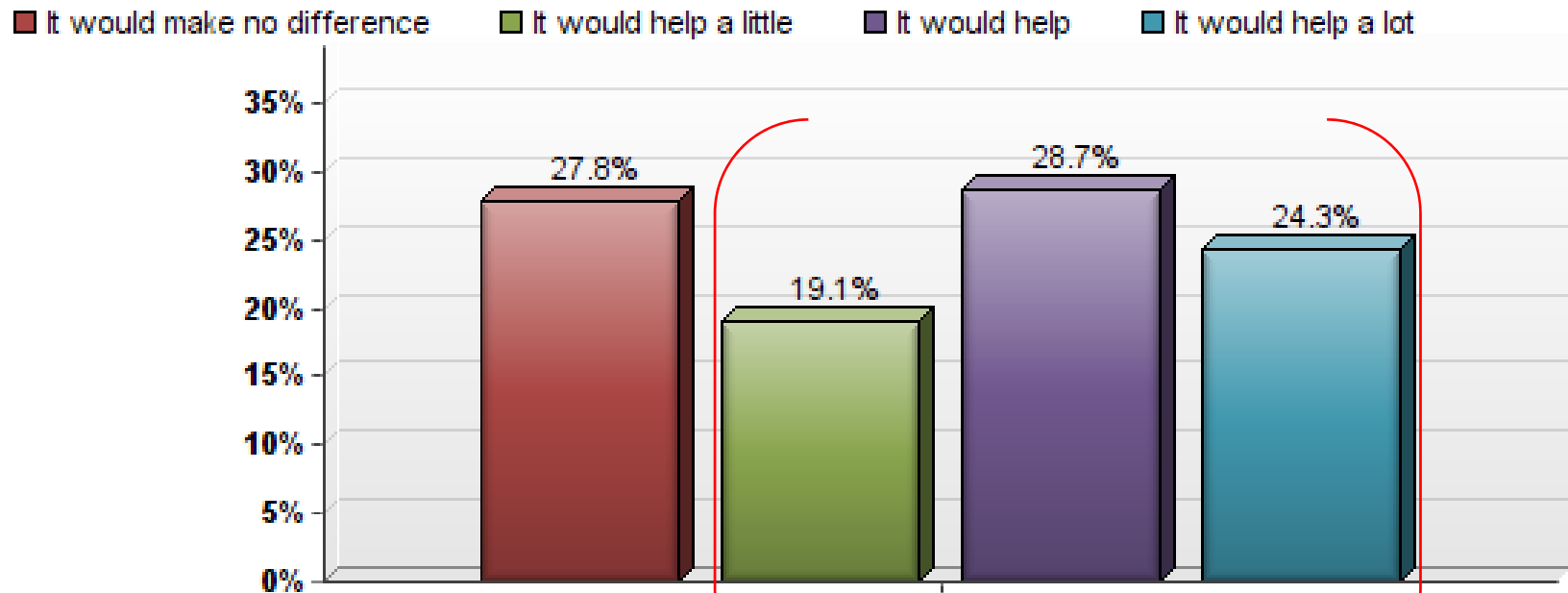


n=120 or 18%

80%
It would help.

AS Degree

How much would it help your career to complete a Master's degree online in EMS?

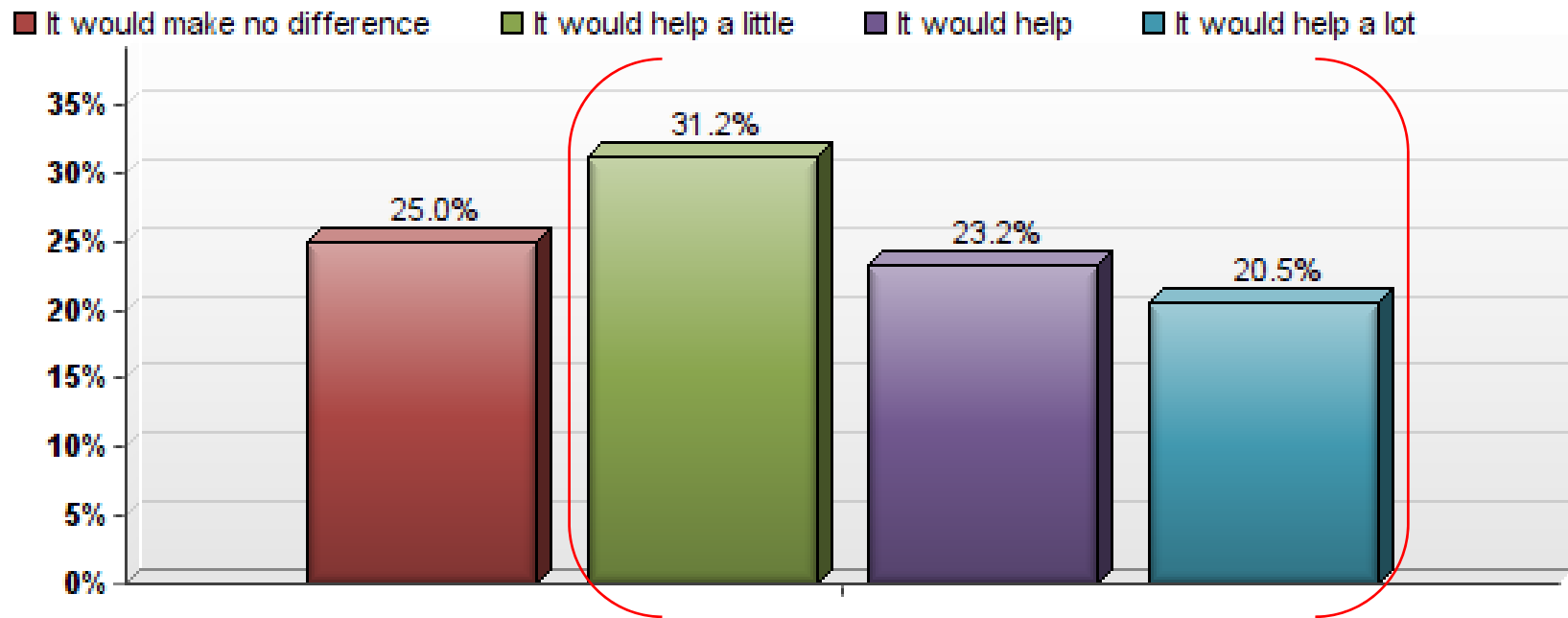


n=120 or 18%

72%
It would help.

BS Degree

How much would it help your career to complete a Master's degree online in EMS?



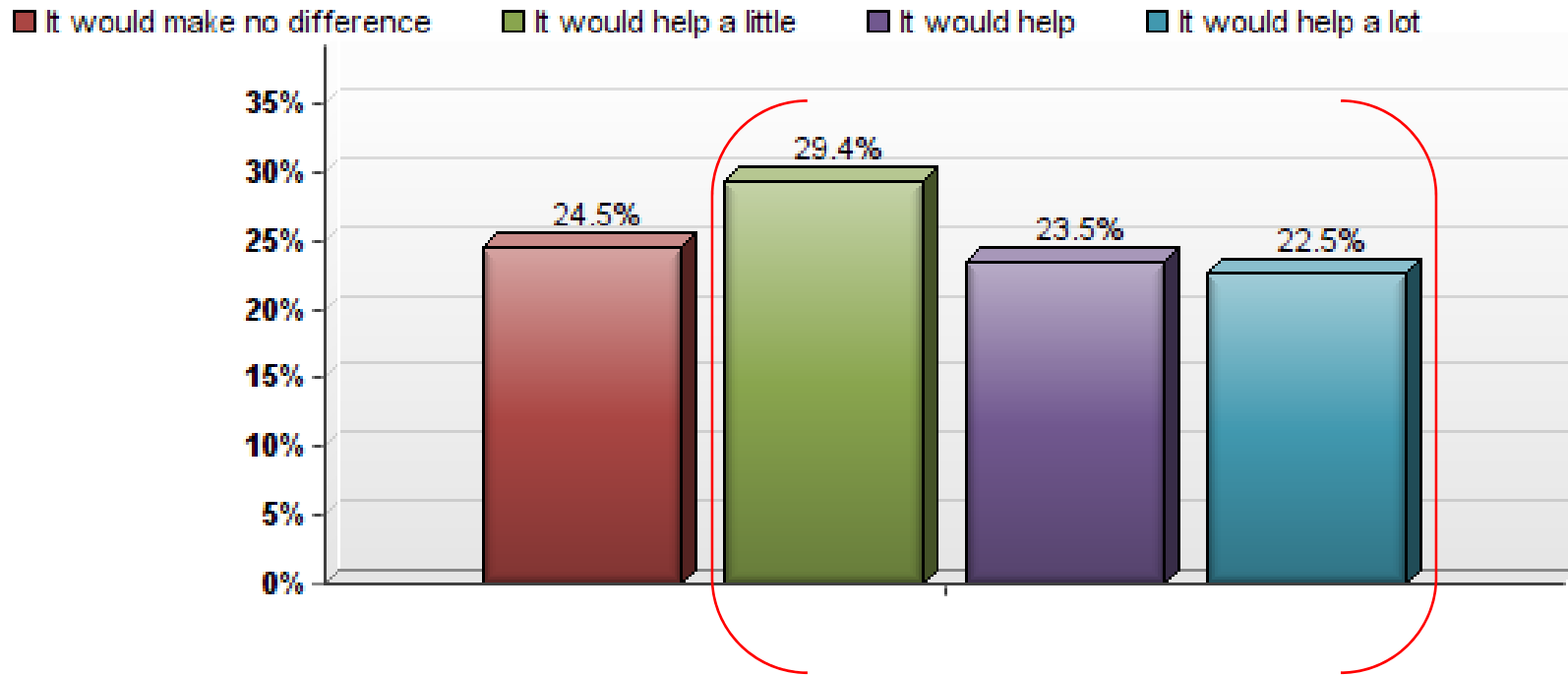
75%

It would help.

n=114 or 17%

BS Degree WORKING in EMS

How much would it help your career to complete a Master's degree online in EMS?



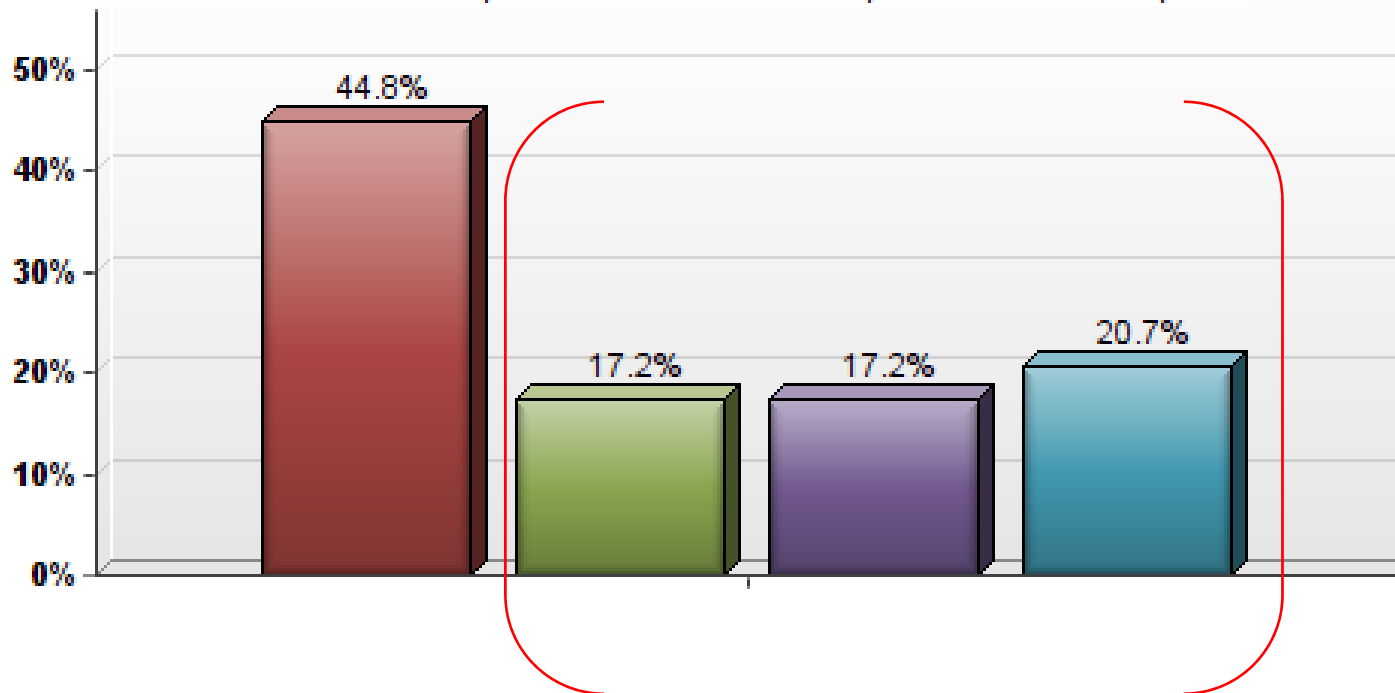
n=112 or 17%

75%
It would help.

Master's Degree

How much would it help your career to complete a Master's degree online in EMS?

■ It would make no difference ■ It would help a little ■ It would help ■ It would help a lot



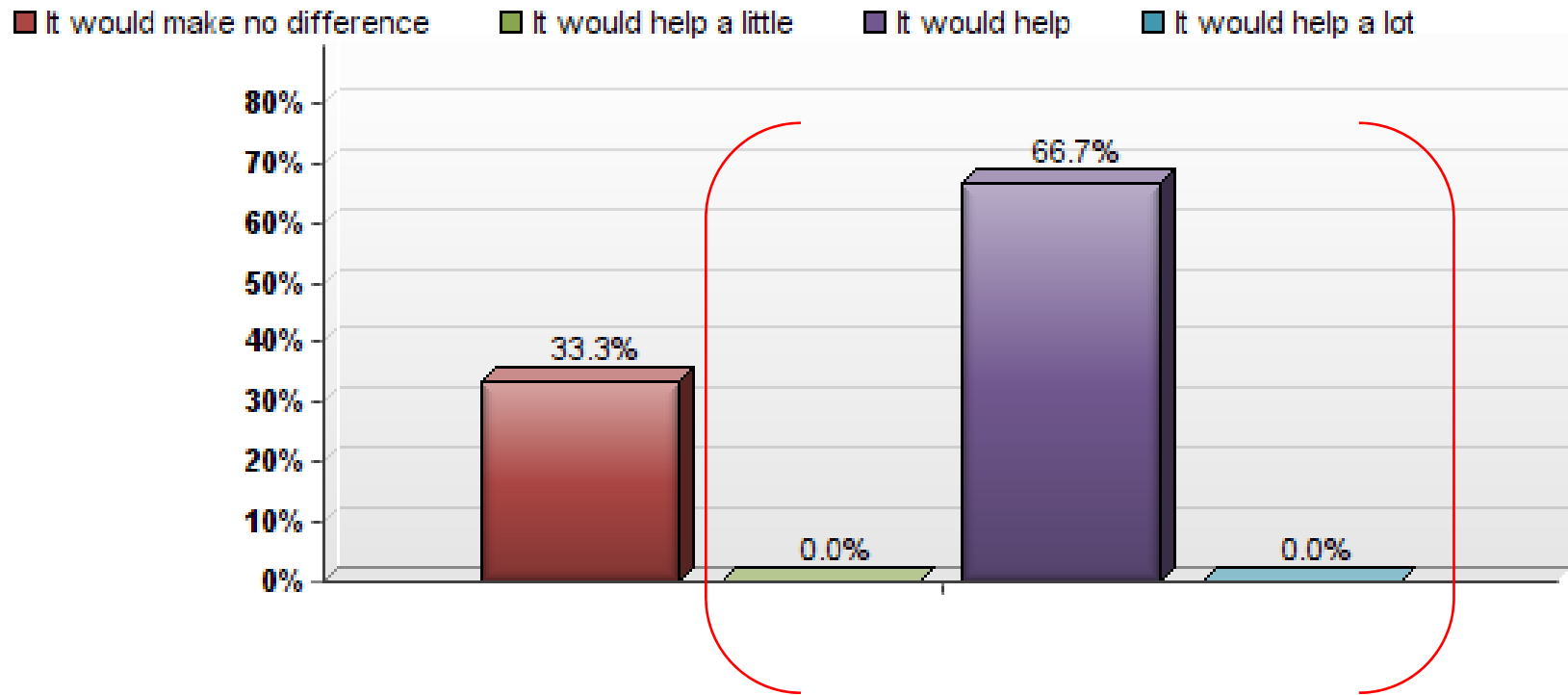
n=29 or 4%

55%

It would help.

Doctoral Degree

How much would it help your career to complete a Master's degree online in EMS?



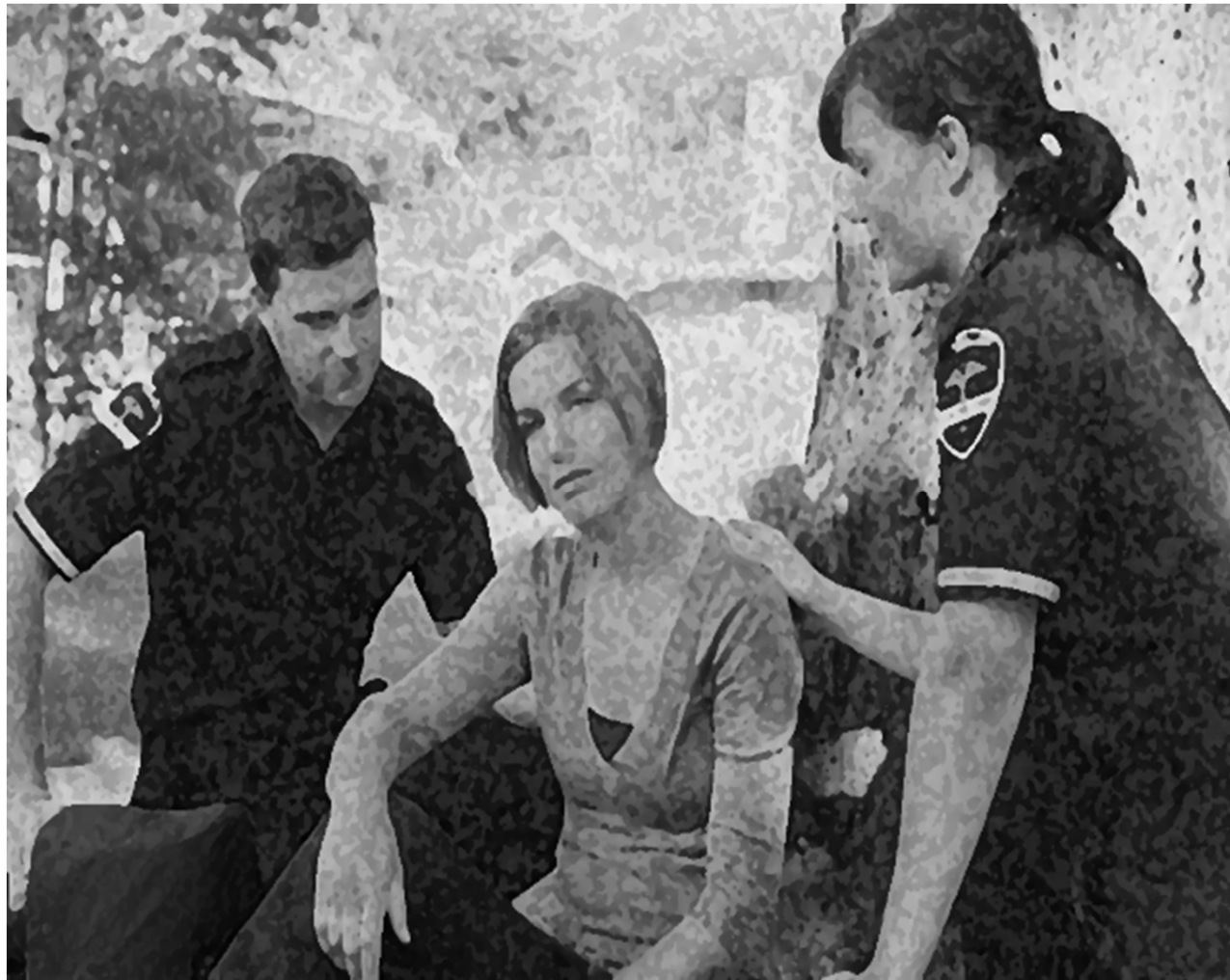
n=3 or .004%

67%

It would help.

Current Degree:

Core and a track in safety



What topics did they want
in an online degree?

- Administration
- Culture and Diversity
- Critical Care Paramedicine
- Finances
- Legal and Ethical Issues
- Pathophysiology
- Training Officer
- Technology
- Research
- “Other”



All (currently working): courses chosen

Technology

Ethical & Legal

Emergency Ser. Admin

Critical Care

↑ TOP FOUR ↑



n=604 or 91%

HS or GED courses chosen

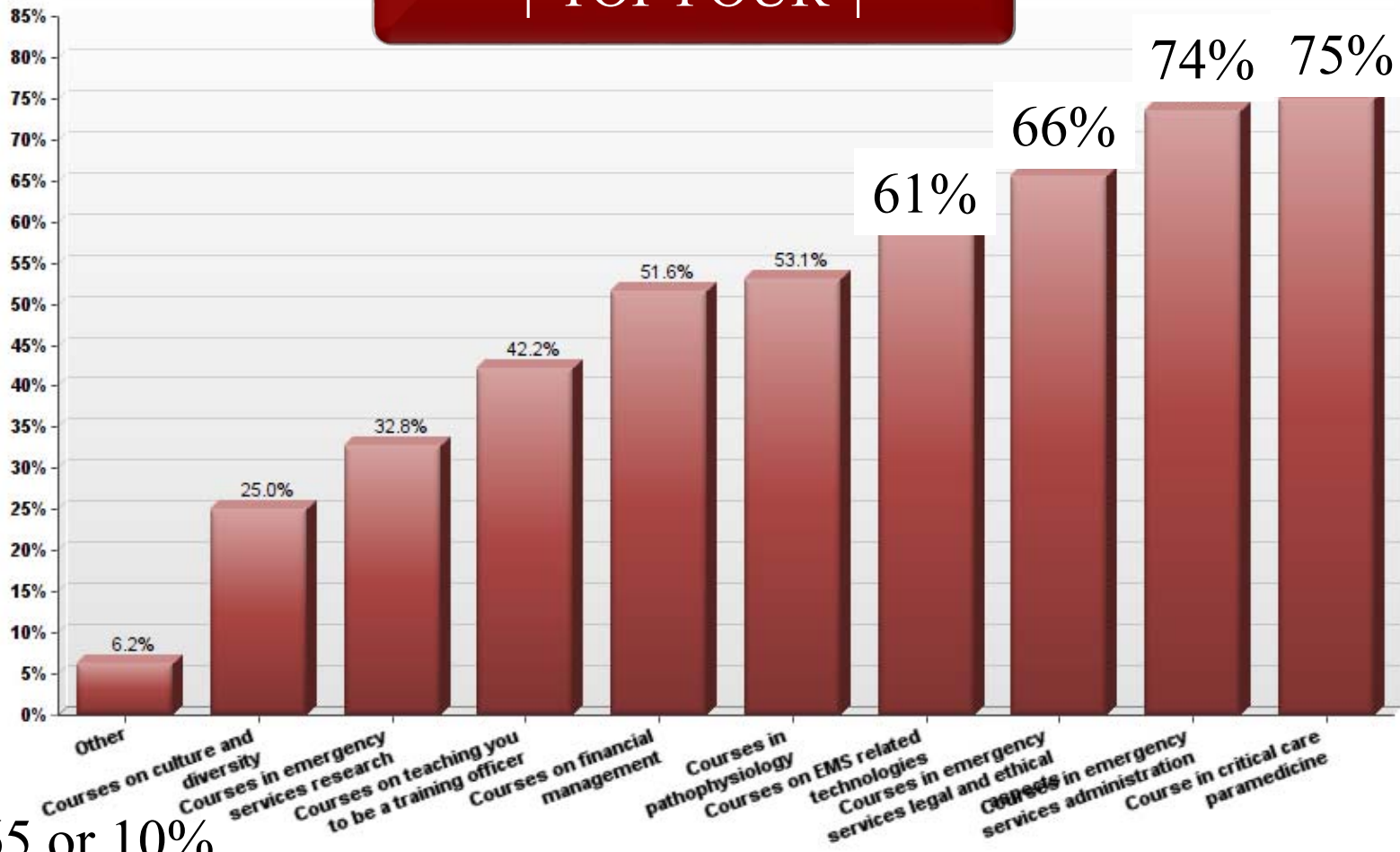
EMS Tech.

Ethical & Legal

Emergency Ser. Admin

Critical Care

↑ TOP FOUR ↑



n=65 or 10%

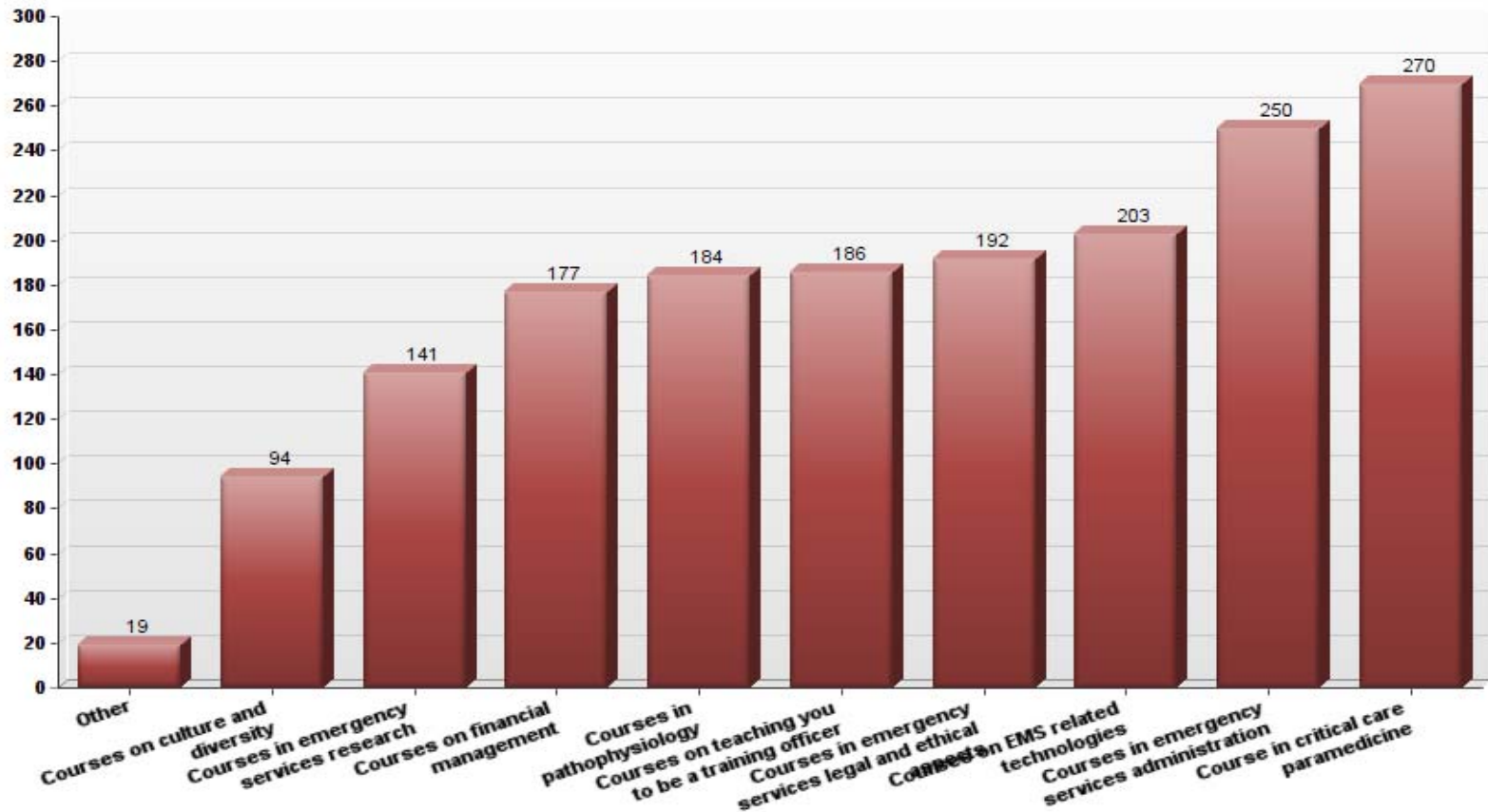
Some College courses chosen

EMS Tech.

Ethical & Legal

Emergency Ser. Admin

Critical Care



n=336 or 50%

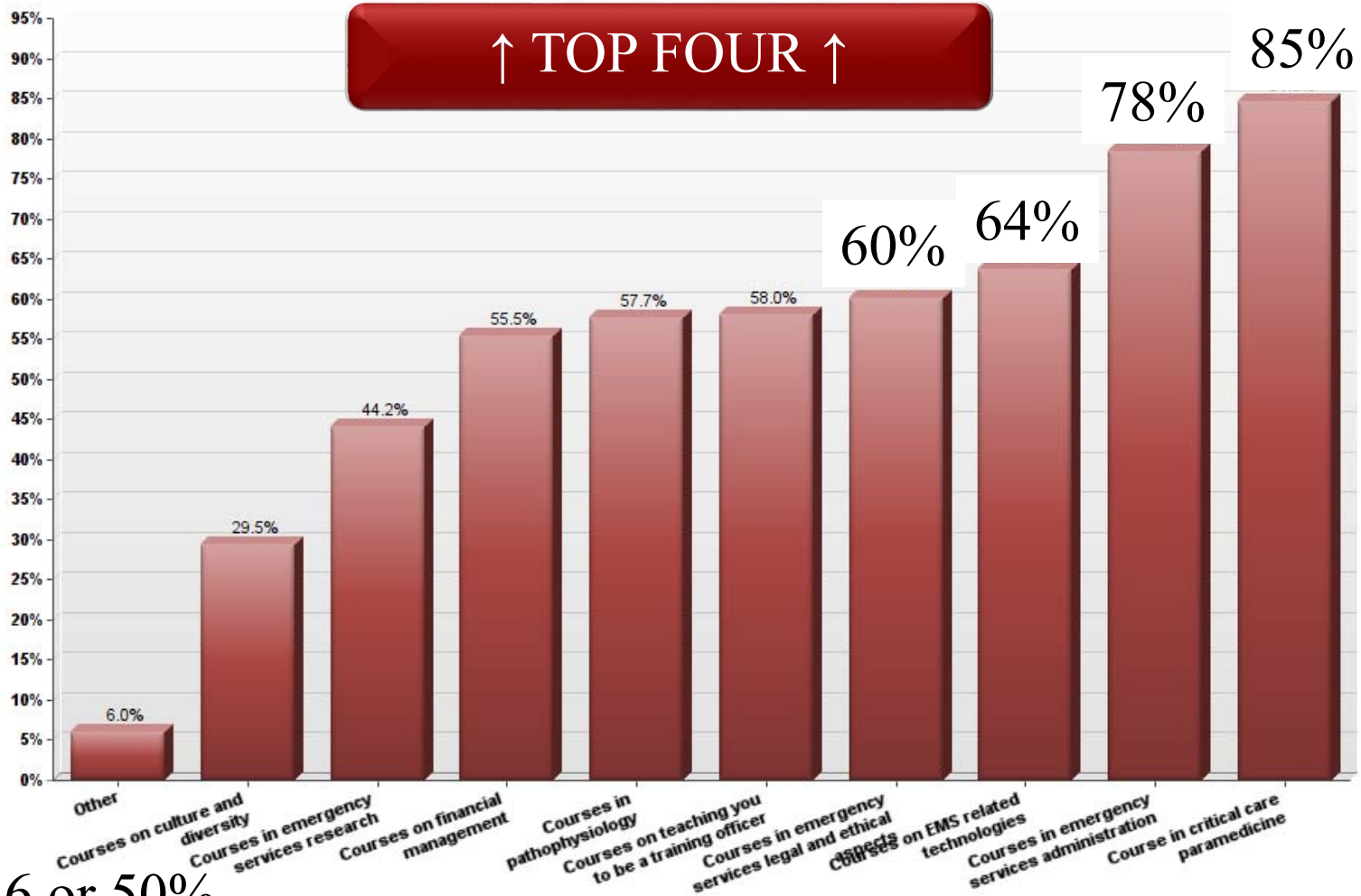
Some College courses chosen

Ethical & Legal

EMS Tech.

Emergency Ser. Admin

Critical Care



n=336 or 50%

AS Degree courses chosen

EMS Tech.

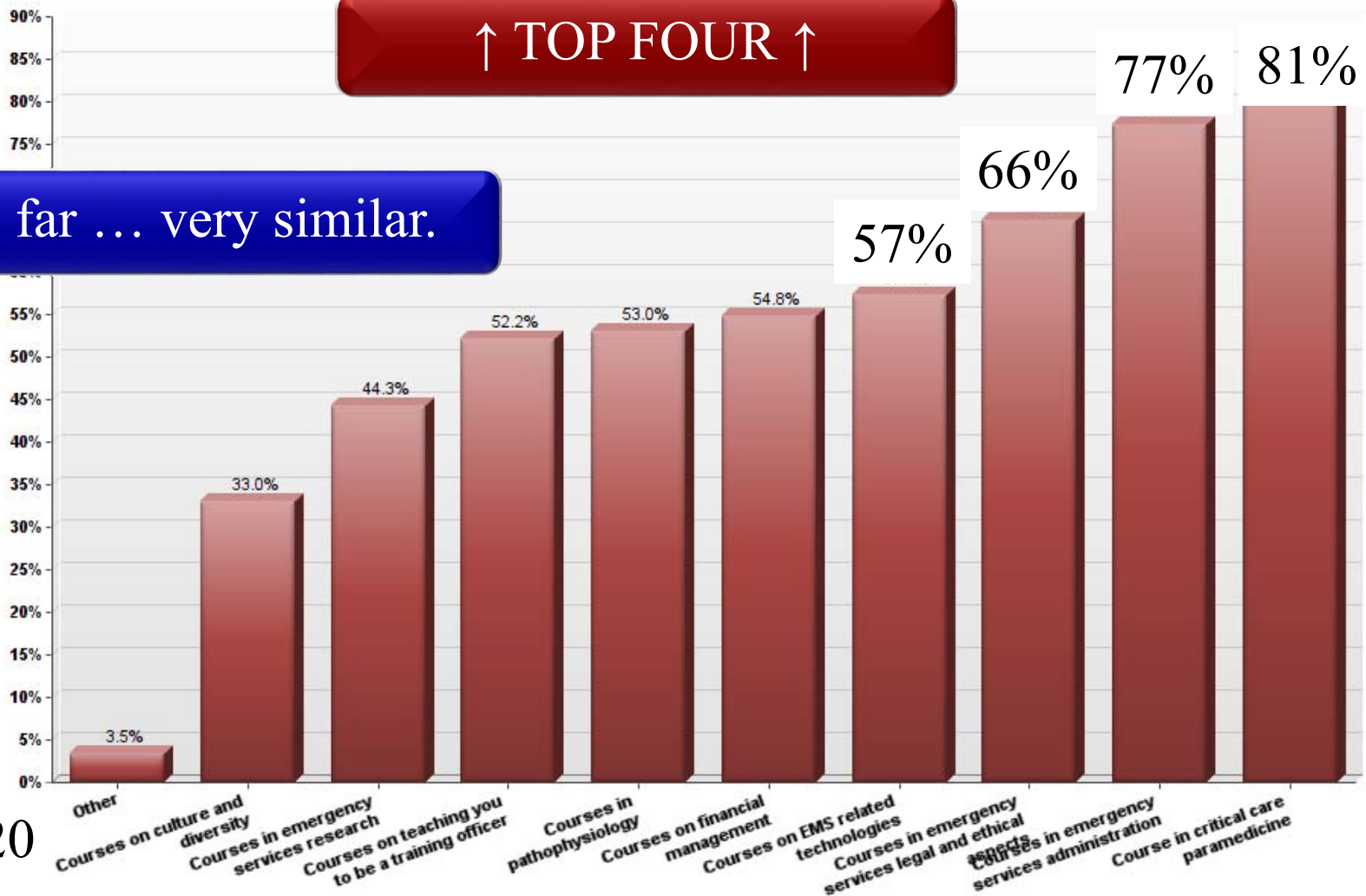
Ethical & Legal

Emergency Ser. Admin

Critical Care

↑ TOP FOUR ↑

So far ... very similar.



n=120
18%

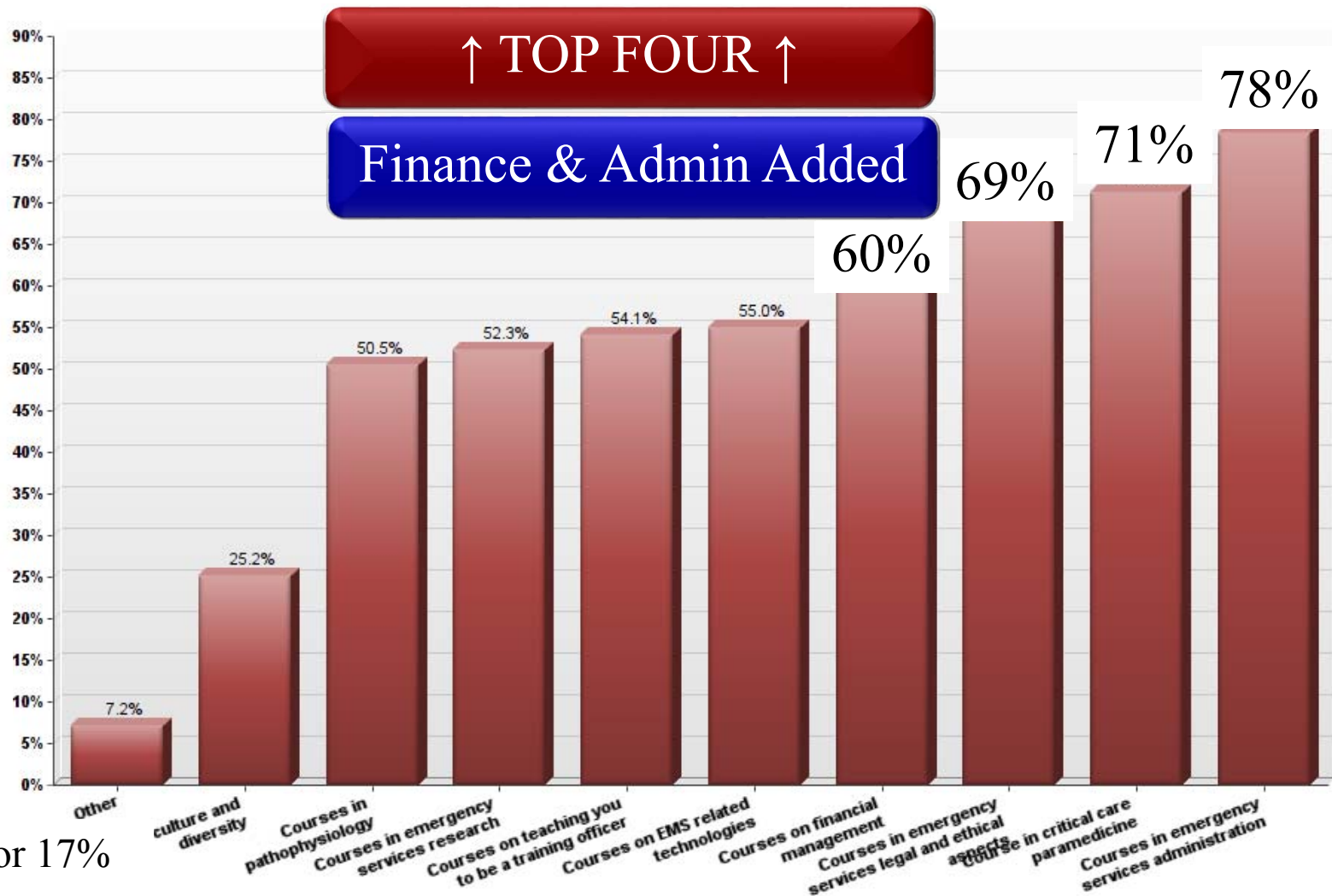
BS Degree courses chosen

Financial Mgt.

Ethical & Legal

Emergency Ser. Admin

Critical Care



n=114 or 17%



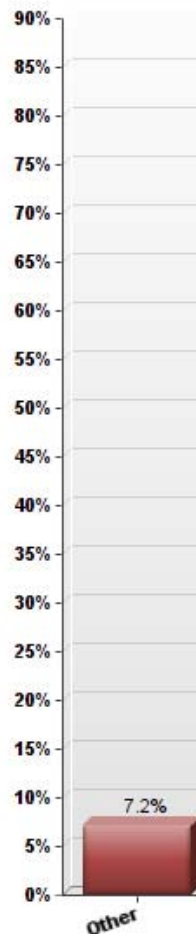
BS Degree courses chosen

Financial Mgt.

Ethical & Legal

Emergency Ser. Admin

Critical Care



“Other”:

- Grant writing
- Public Information Officer

n=114 or 17%

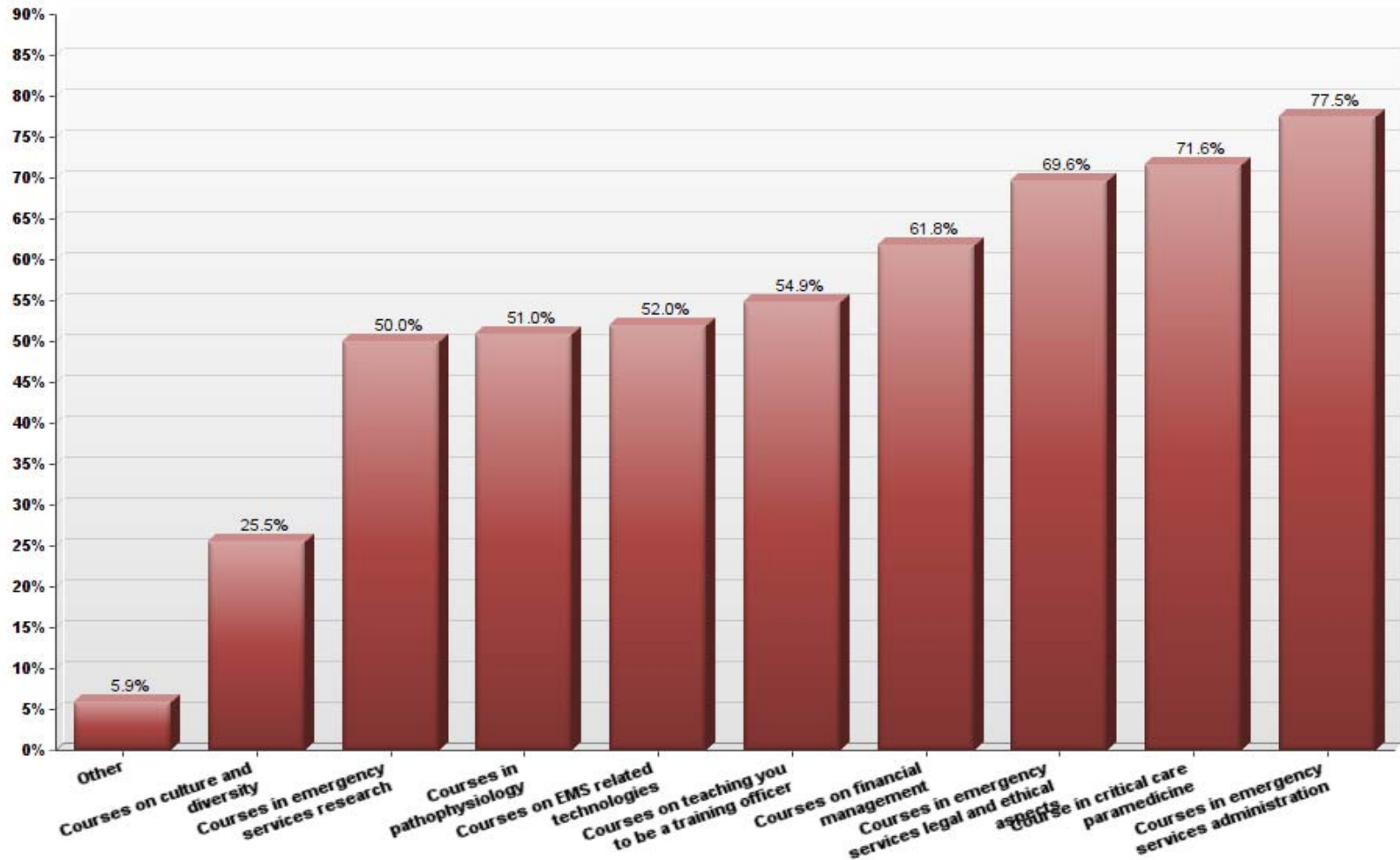
BS & Working courses chosen

Financial Mgt.

Ethical & Legal

Critical Care

Emergency Ser. Admin



n=114 or 17%

BS & Working courses chosen

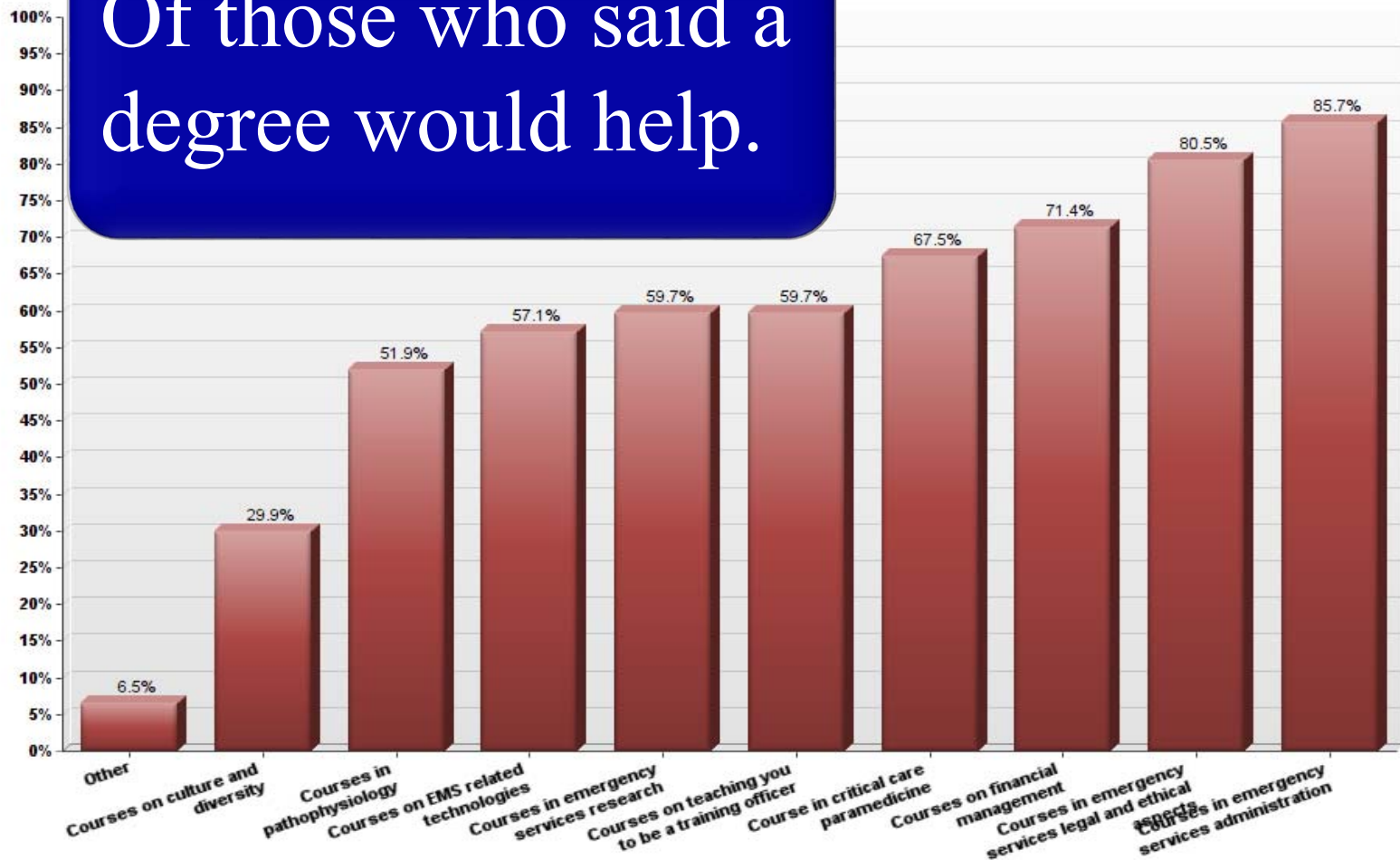
Critical Care

Financial Mgt.

Ethical & Legal

Emergency Ser. Admin

Of those who said a degree would help.



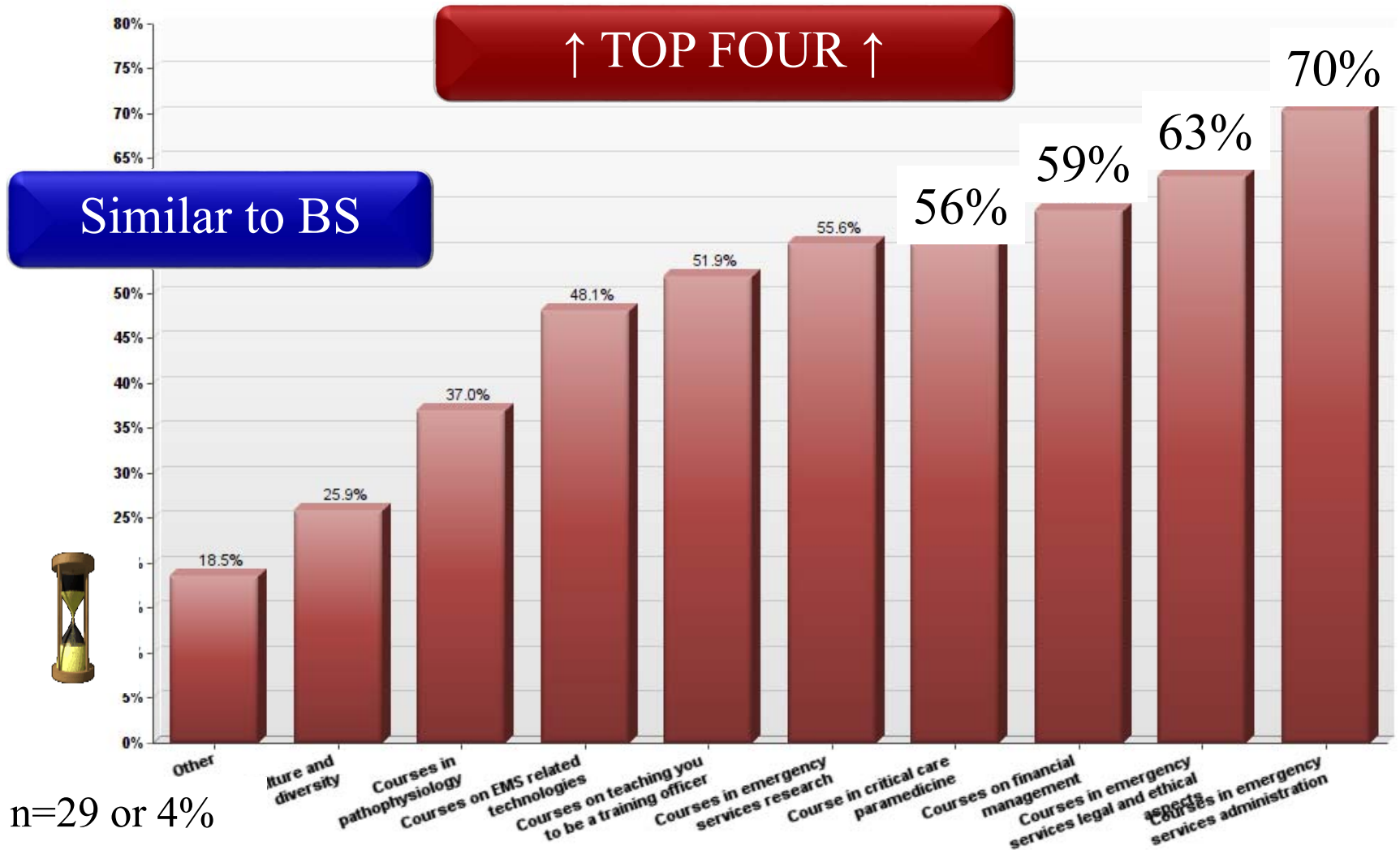
Master's Degree courses chosen

Critical Care

Ethical & Legal

Emergency Ser. Admin

Critical Care



Doctoral Degree courses chosen

Technology

Physiology

Emergency Ser. Admin

Critical Care

↑ TOP FOUR ↑

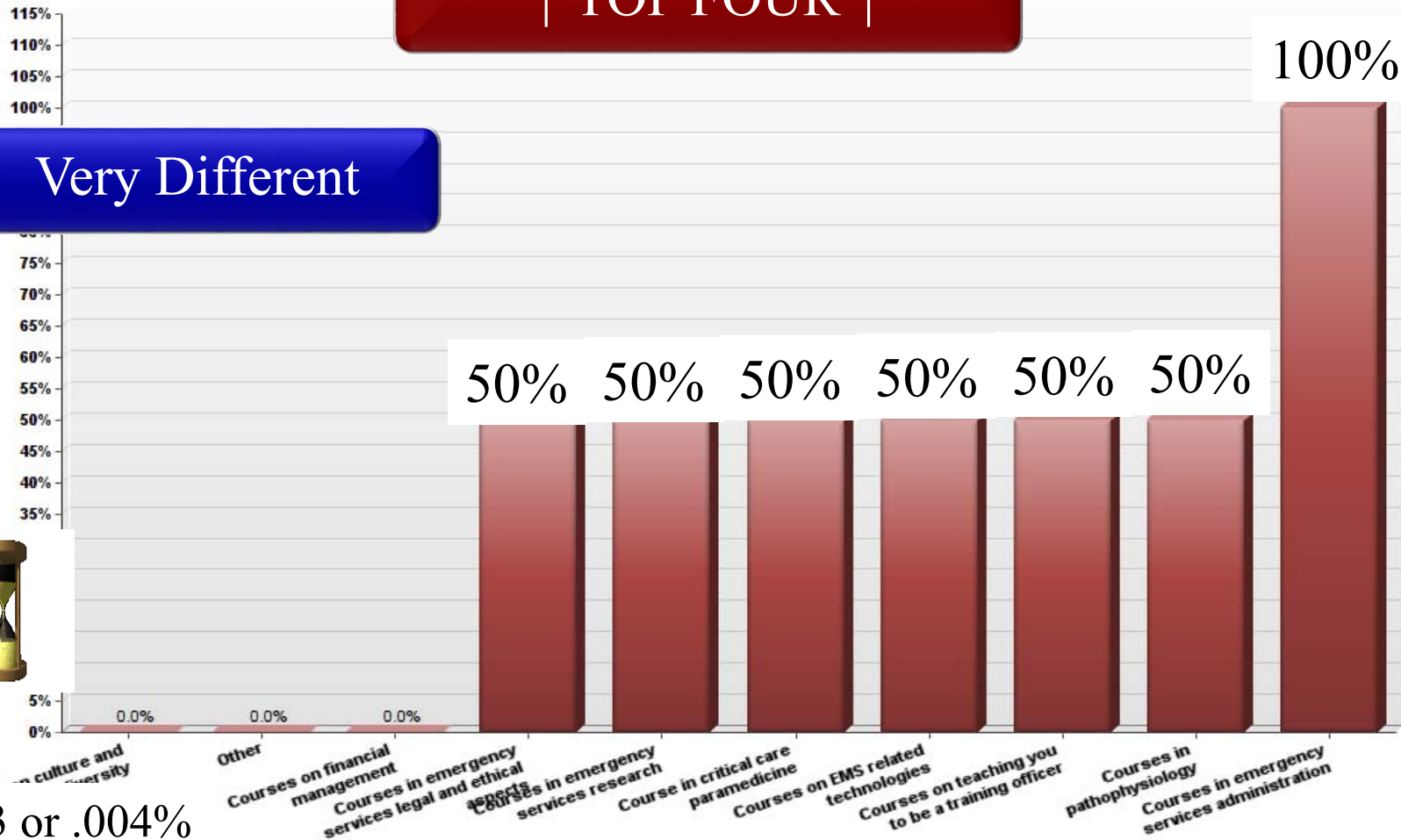
Very Different

100%

50% 50% 50% 50% 50% 50%



n=3 or .004%



Supervisors & Directors: courses chosen

Critical Care

Ethical & Legal

Finances

Emergency Ser. Admin

↑ TOP FOUR ↑



n=604 or 91%

Similar BS Foundations

Many have similar “tracks” = helpful

Set in accredited programs = helpful

Scholastic habits learned = helpful

Admin

Med. School



Courses to Choose?



Clearly Wanted

Critical Care

Emergency Services Administration

Ethics and Legal

Finances

Technology

59% - 78% BS students wanted these



Supervisors & Directors

Emergency Services Administration

Finances

Ethics and Legal

Critical Care



These are already leaders.

Challenges



Critical Care

Who will teach these courses?
MD/DO? or Paramedics?

Clinicals or Not?

Interfacility?
Community Medicine?

Emergency Services Administration

Ethics and Legal

Finances

Technology



Delivery Strategy

Critical Care



Vignettes?

High Fidelity?



Low Fidelity On-line

Images & Scenario Test



Challenges

Critical Care

Emergency Services Administration

Credit for learning?

Ethics and Legal

Finances

Technology



Challenges

Critical Care

Emergency Services Administration

Ethics and Legal

Finances

Technology



Legal Expertise?

Time consuming
assessments?
Generational Ethics?



Challenges



Critical Care

Emergency Services Administration

Ethics and Legal

Finances

Technology

Cost of delivery online?

Educator qualifications?

Challenges



Critical Care

Emergency Services Administration

Ethics and Legal

Finances

Technology

Needed to create/deliver

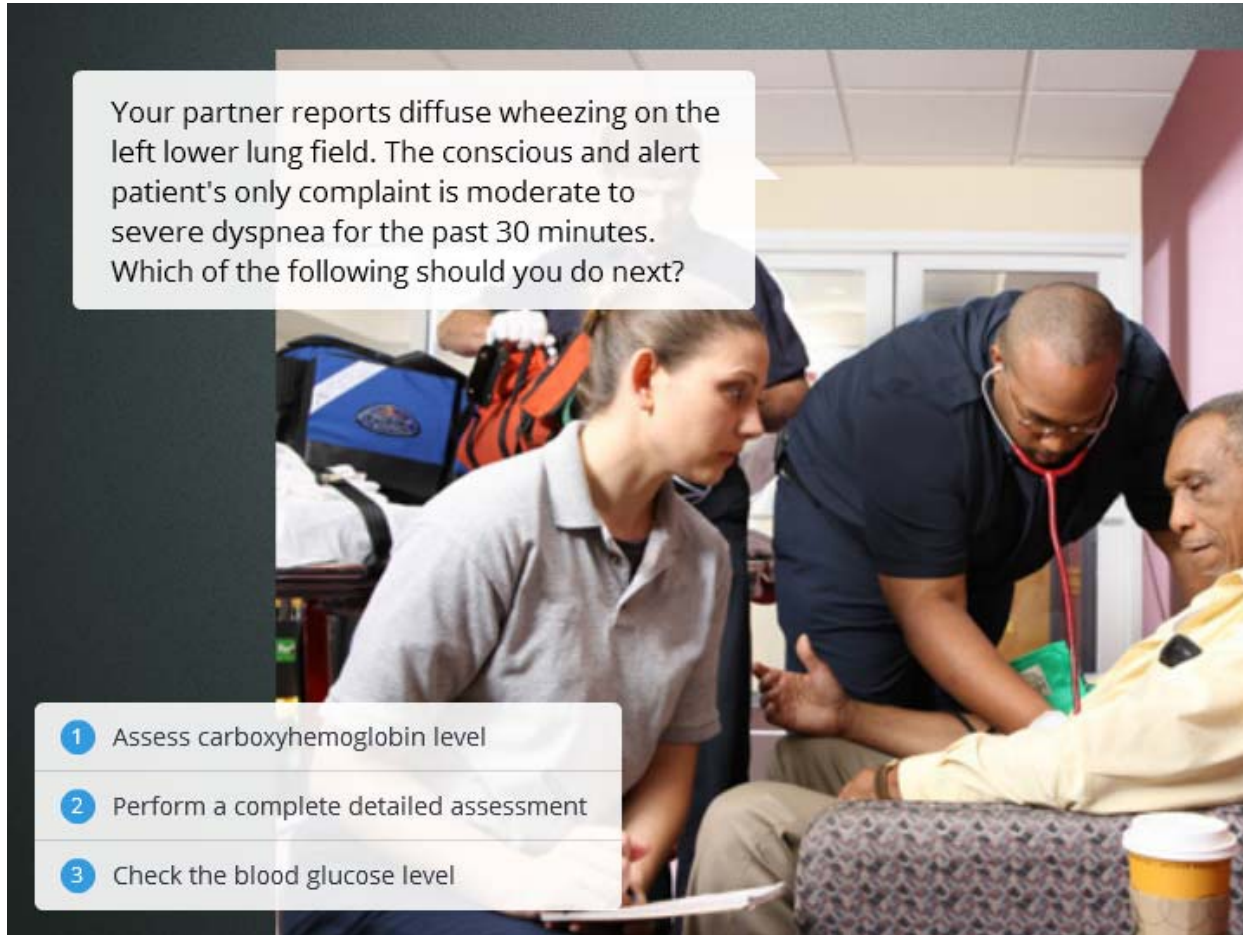
Security of high stakes?

Simulation

Click the **Simulation** button to edit this object

Your partner reports diffuse wheezing on the left lower lung field. The conscious and alert patient's only complaint is moderate to severe dyspnea for the past 30 minutes. Which of the following should you do next?

- 1 Assess carboxyhemoglobin level
- 2 Perform a complete detailed assessment
- 3 Check the blood glucose level



Expected Findings!

HS & GED, Some College AS & BS Degree Holders

Client Want Online Degree.



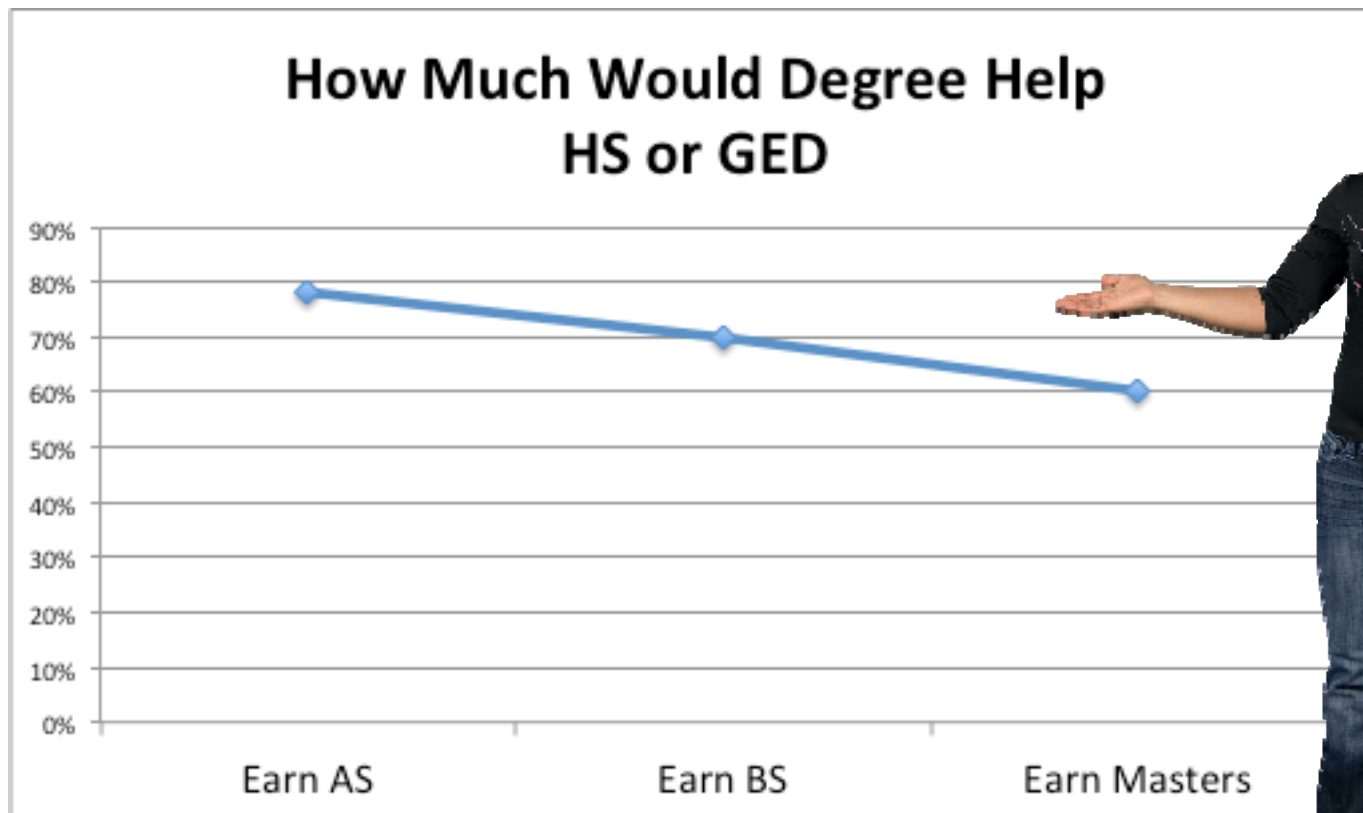
Programs Must

Be cultural competent



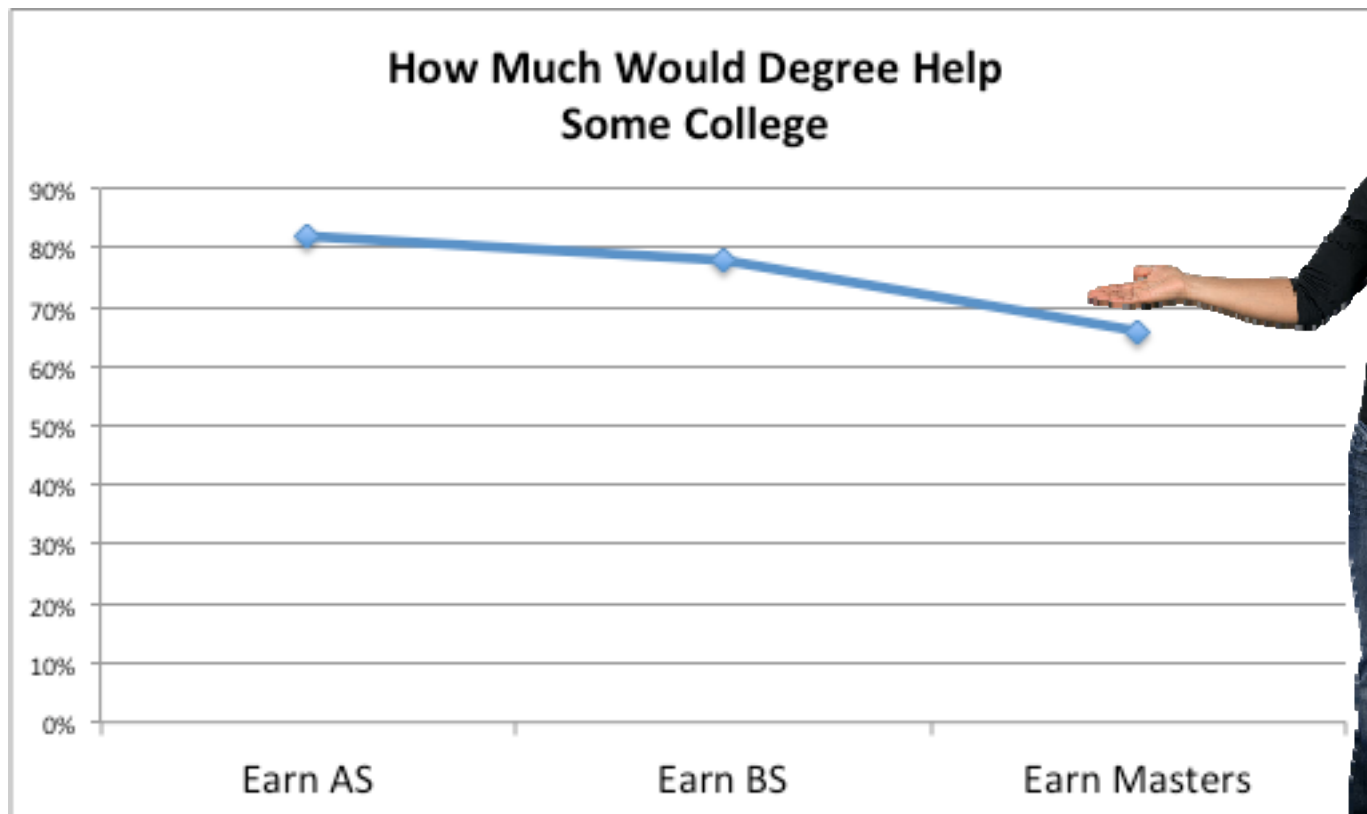
Surprise Findings!

Perceived Usefulness Declines – All Levels



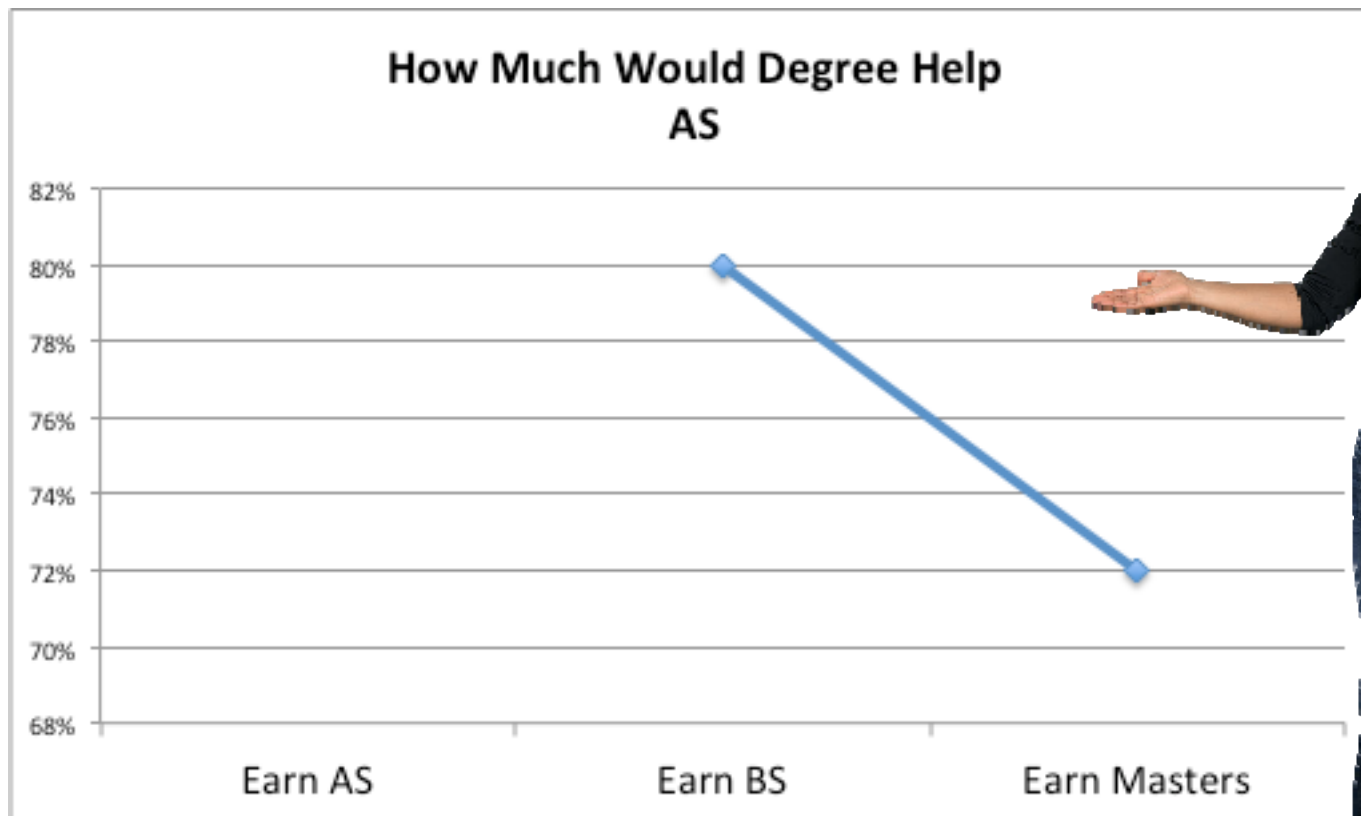
Surprise Findings!

Perceived Usefulness Declines – All Levels



Surprise Findings!

Perceived Usefulness Declines – All Levels



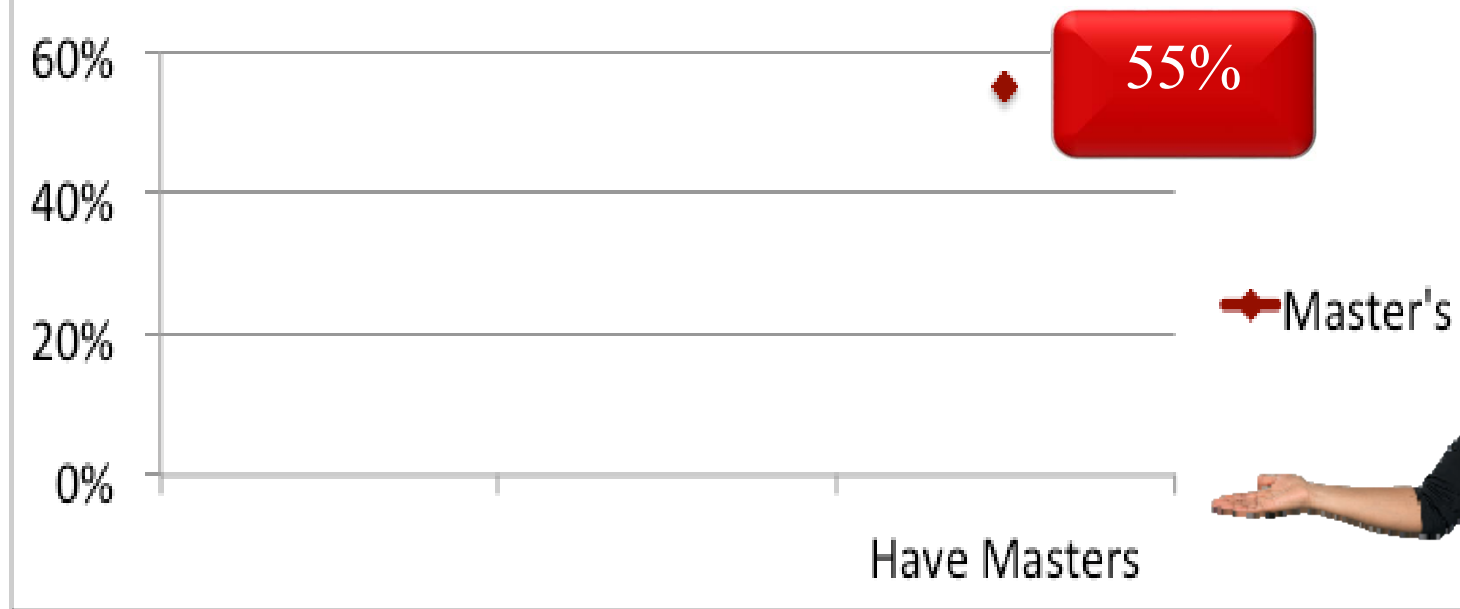
Surprise Findings!

Master's and Doctoral Degree Holders

Still Want EMS Degree

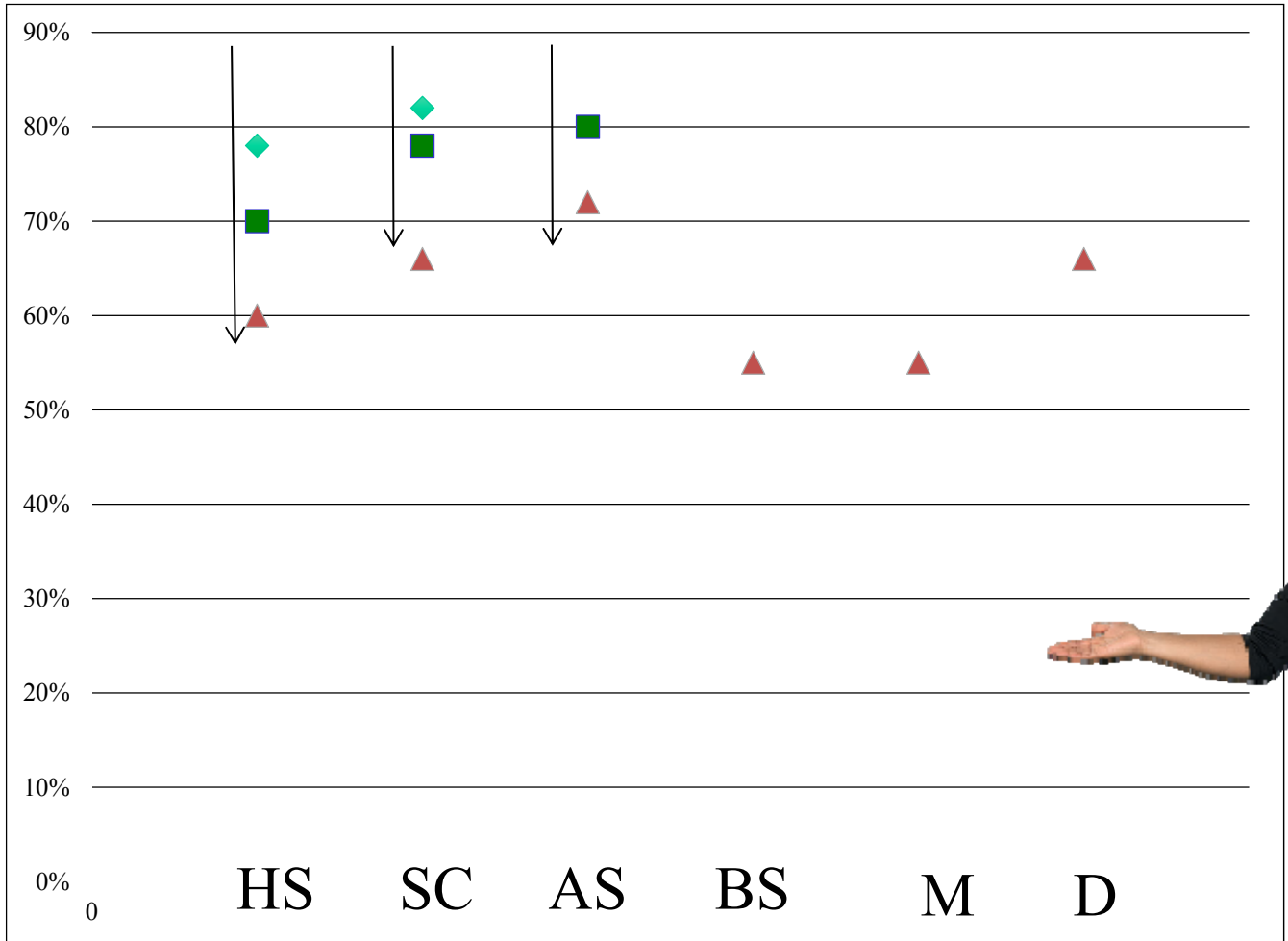


Value of Earning Master's Degree



*Doctoral = 66%





Discussion

- * Desire for degree is present among all levels of education! Desire drops slightly as level of degree increases relative to student's current standing.
- * Remained above 50% "useful"

True for all levels.



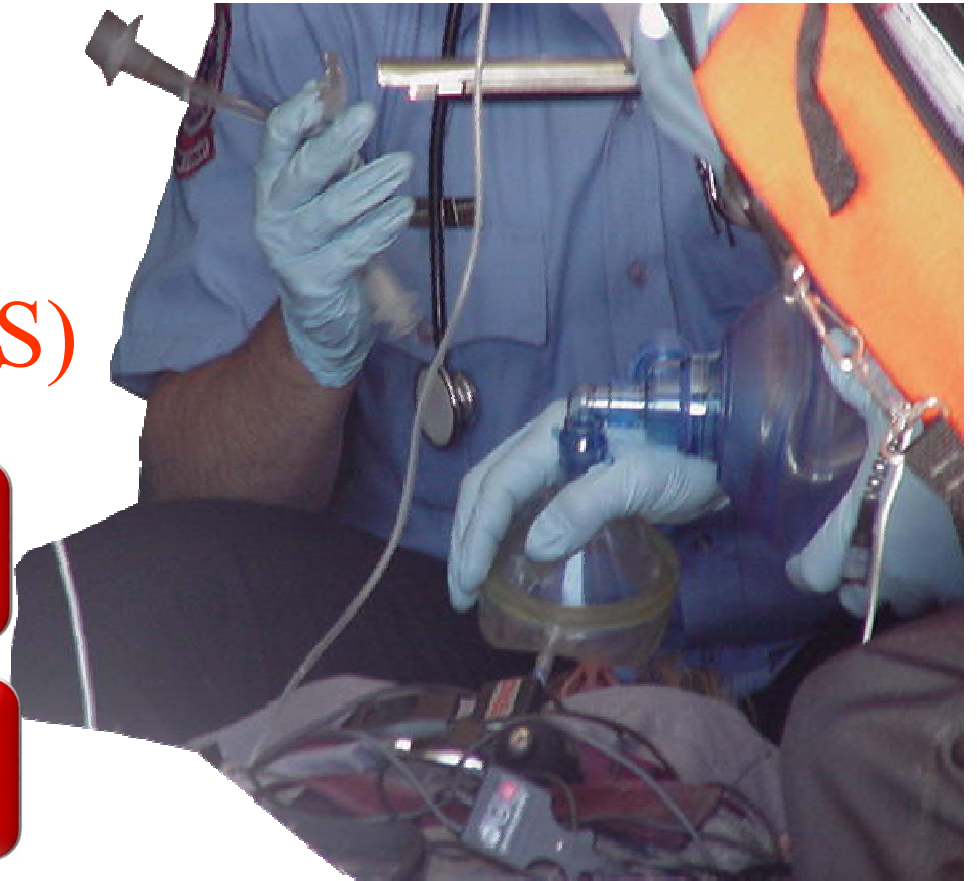
Discussion

✚ “Some College” is largest single population ...

✚ (97% work in EMS)

Work makes online attractive.

Online BS needs to continue.



Discussion

- ✚ Fire-based has more BS degrees
- ✚ Course work and theses will require “fire faculty”



Online BS needs to continue.


Discussion

- ✱ Most “non-military”
- ✱ Bringing in military will be helpful
- ✱ REPLICA compact

Online BS needs to continue.



Discussion

- ✚ Most course offerings are agreed upon.
- ✚ Some courses might need to be chosen despite low standing in survey 
 - ✓ e.g., diversity & culture; educator/training officer

Critical Care

EMS Administration

Ethics and Legal

Finances





Limitations

Needs Assessment

Census

Response Rate

Strengths

Most were working

Data “On-Topic”

Consistency of Trends

Conclusions

- ✱ Programs will need strong(er) physician support.
- ✱ Support from services/agencies

Critical Care

EMS Administration

Ethics and Legal

Finances



Conclusion

✚ Most course offerings are agreed upon.

✚ Some **despite** need to be chosen in survey

✓ e.g.



Conclusions

- ✱ Faculty preparation *could* be an issue.
 - ✓ (“EMS finance taught by finance department?”)
- ✱ Industry support (e.g., salaries)



Conclusions

- * CAPEMS should agree upon curriculum.
- * Marketing to **military**.

Technology



Conclusions

* Next steps

- ✓ Other programs should assess customers as well.

* Minimum standards implemented

Critical Care

Cultural Competency

EMS Administration

Ethics and Legal

Finances

Questions?



Thank you!

Sandy Hunter, PhD, NRP

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859 622 1030

Thanks: College of Justice and Safety & Graduate Assistant – Zack Charest