
  
**Perceptions of Fair Testing: What Do Candidates Think?**

  
2009 Annual Conference  
September 10 - 12

Presenters: Greg Pope, Questionmark  
Krista Breithaupt, AICPA  
Bruno D. Zumbo, University of British Columbia  
Sept. 12, 2009: 10:30am to noon

*Promoting Regulatory Excellence*

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**Introduction**

- Overview of project
- Data collection and methods
- Presentation of results
- Next steps
- Discussion and questions

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**Overview of project**

- What we did:
  - Surveyed people who took, or were in the queue to take, certification or licensing exams
  - We asked 31 questions:
    - 5 demographic
    - 26 regarding what test takers think about test taking practices in a number of areas (all 4 point Agreement scale; Likert)
- Purpose:
  - To find out what candidates think about testing practices in order to help our industry understand our test takers better

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### Data collection and methods

- Put out the call to colleagues in the certification and licensing industry for their membership to participate in the survey
  - Nursing, Dental, Medical, Computer Science, Pharmacy, etc.
- Received a lacklustre response from colleagues
  - No organizations (save one) got back to us about participating with their membership
  - Only a little over 60 individuals took the survey despite rigorous marketing of the survey in numerous venues

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### Data collection and methods

- The one saving grace: American Institute of Certified Public Accountants (AICPA; thanks to Dr. Krista Breithaupt) participated fully in the survey
- AICPA sent out a newsletter to their membership with a link to the survey and a request for responses
- We obtained a fantastic response: 3586 completed responses from the AICPA membership which we will be presenting today
- We used Questionmark Perception to author and administer the surveys via internet delivery

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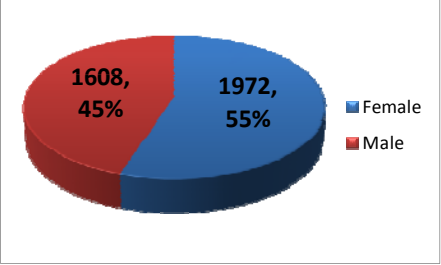
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### Demographics – Gender



Gender	Count	Percentage
Female	1972	55%
Male	1608	45%

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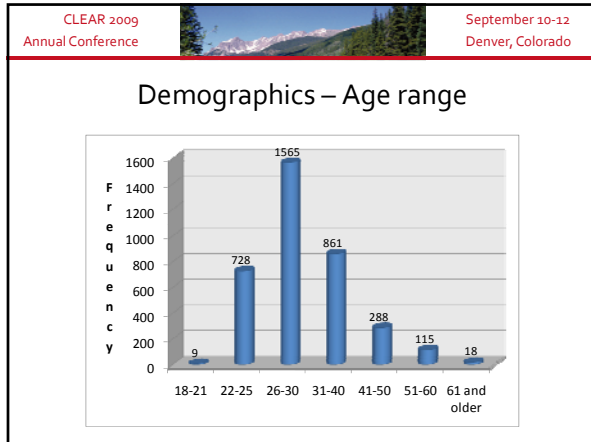
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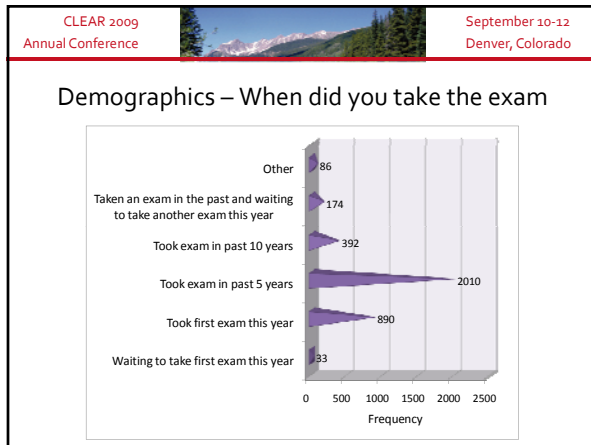
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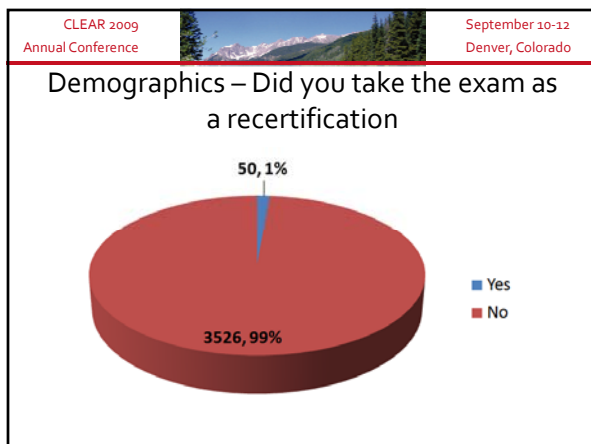
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### Demographics – Country

Country	Number	Percentage
Australia	1	0.03
China	3	0.08
Canada	4	0.11
Other	12	0.34
United Kingdom	14	0.39
United States	3535	99.05

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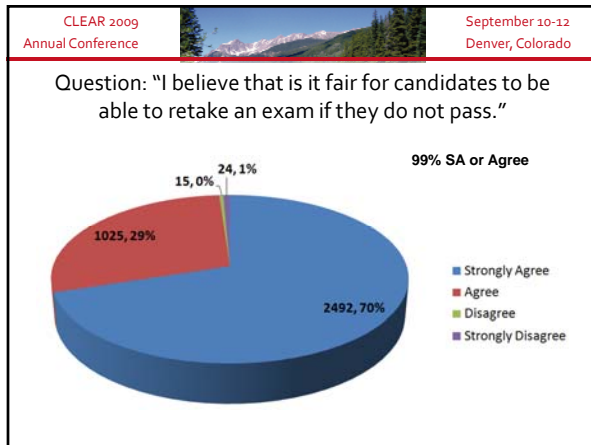
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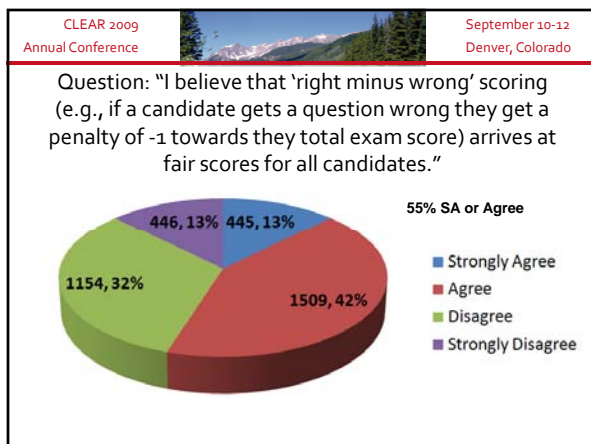
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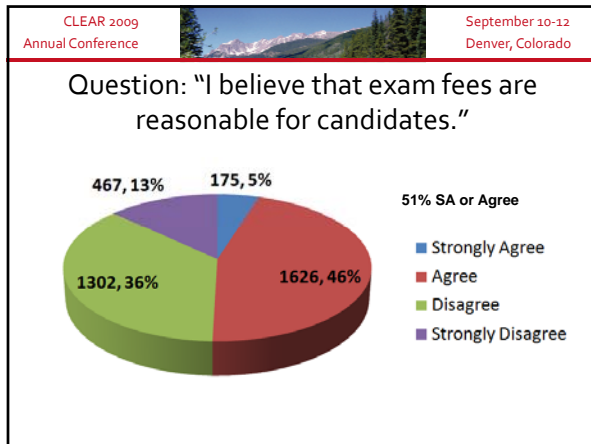
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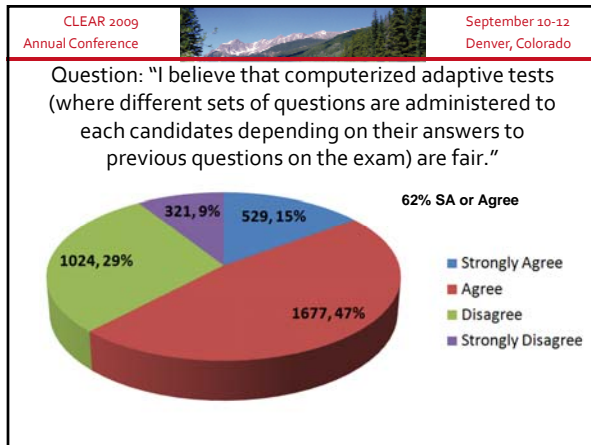
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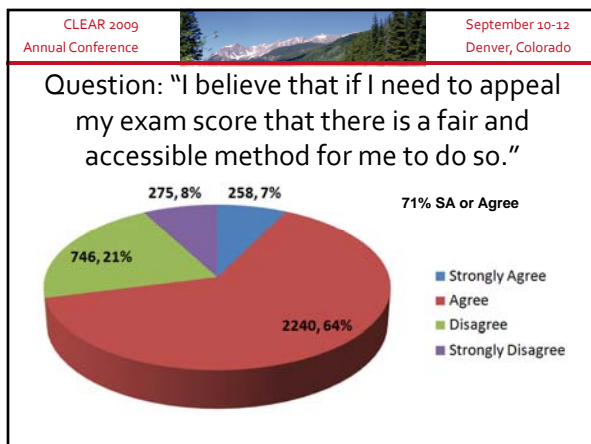
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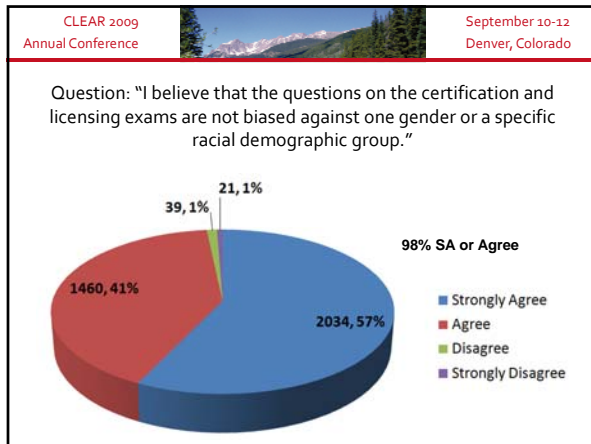
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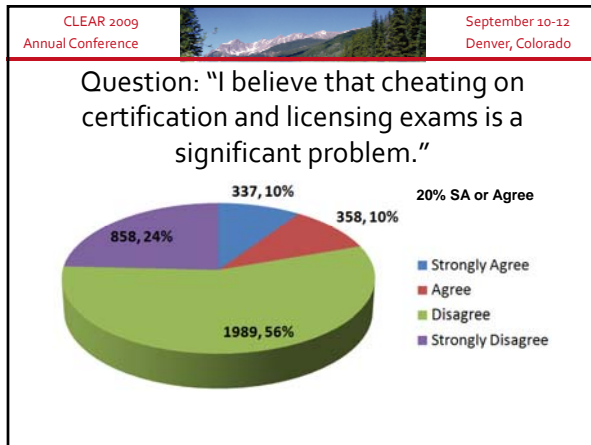
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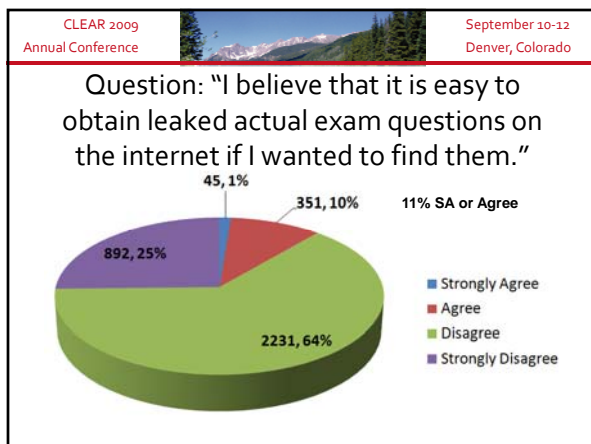
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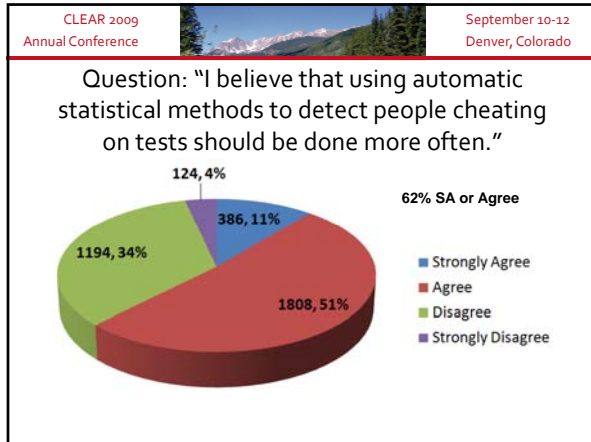
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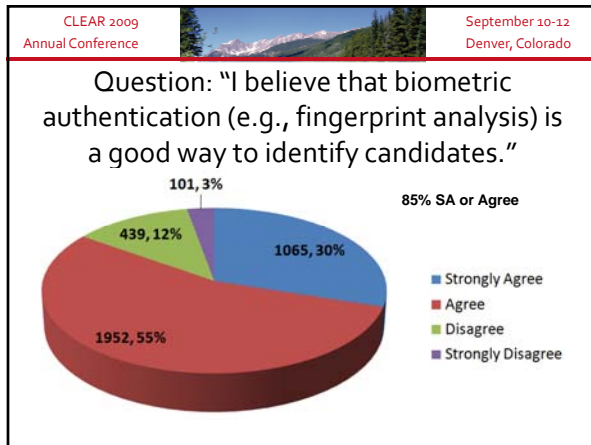
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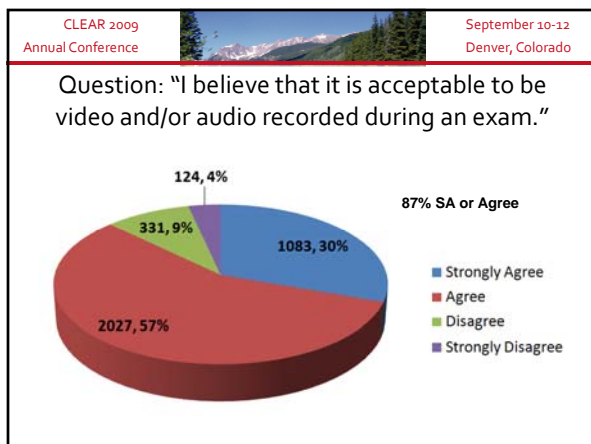
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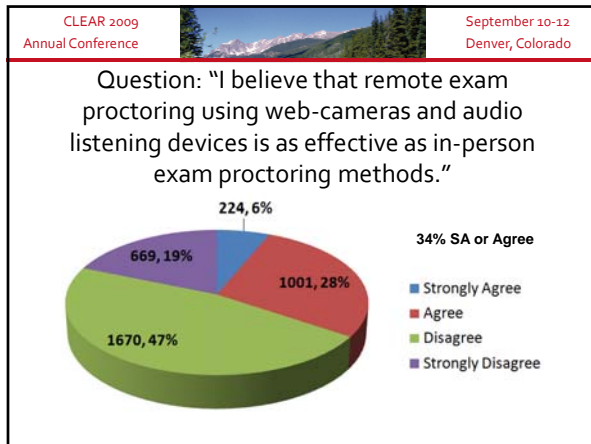
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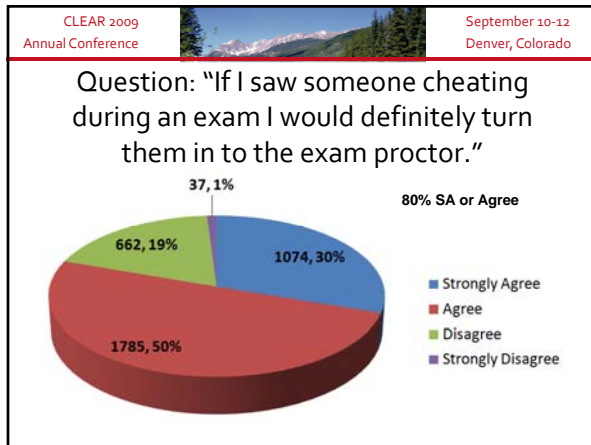
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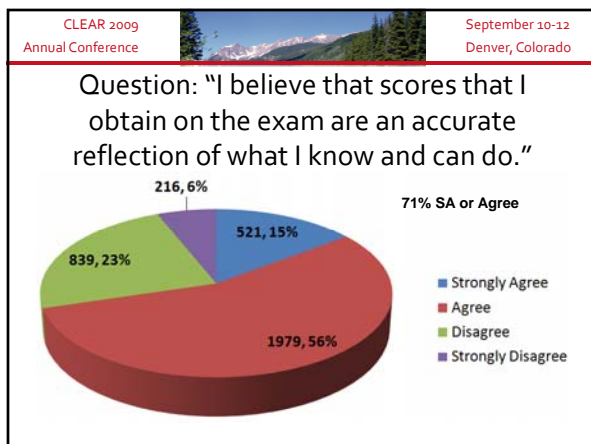
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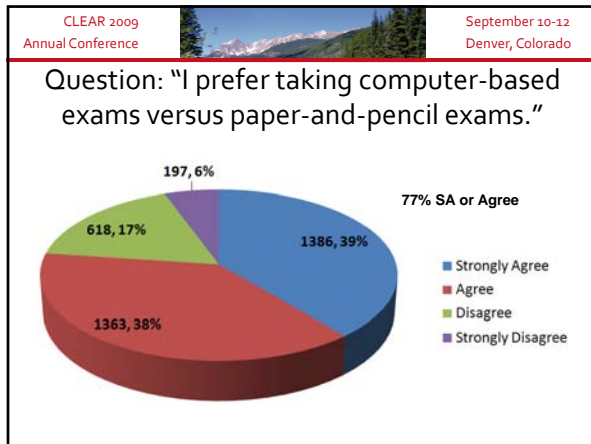
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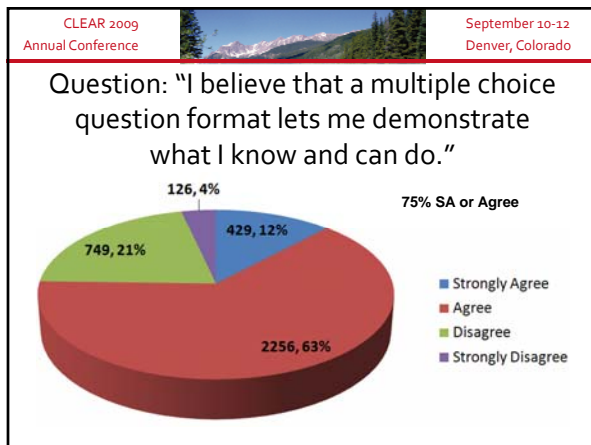
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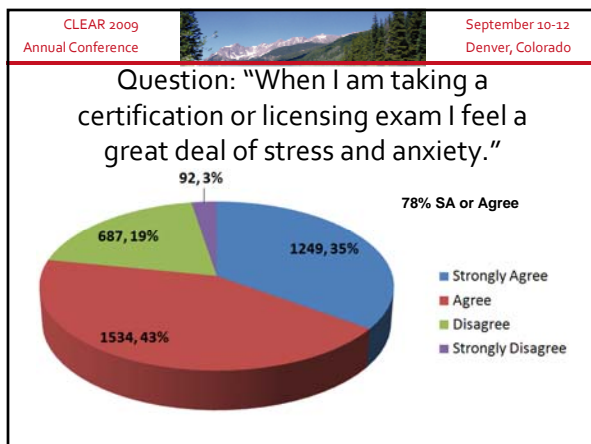
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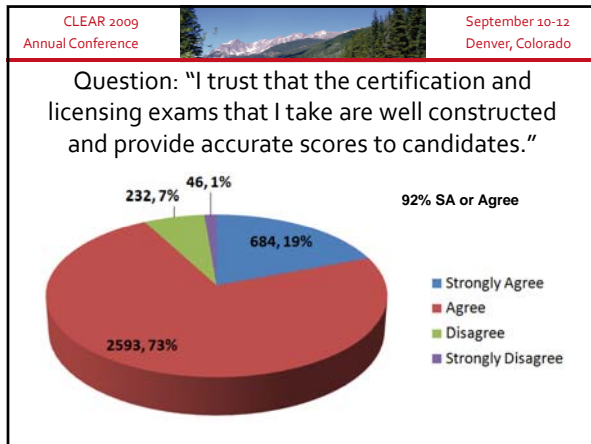
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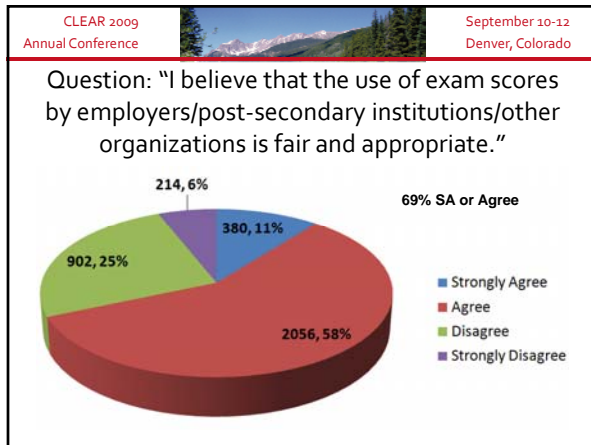
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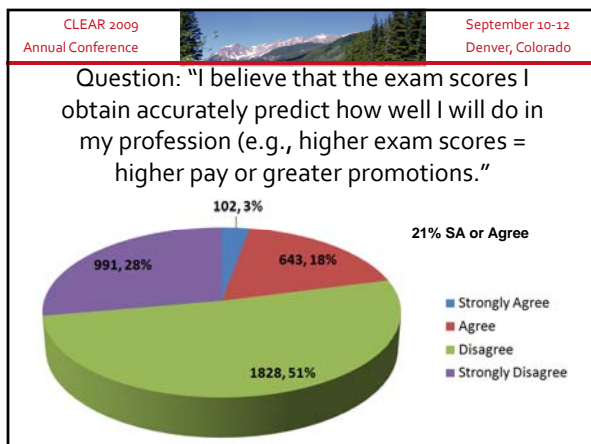
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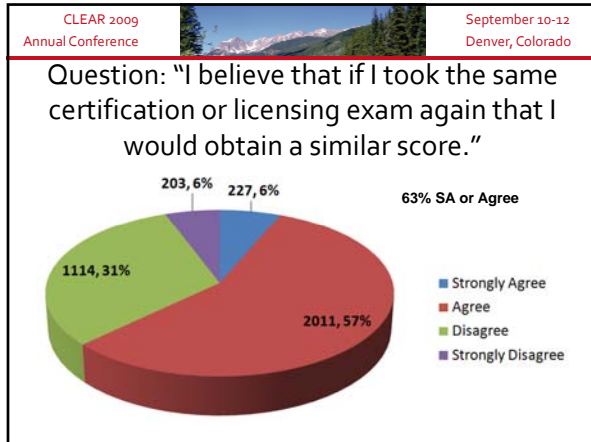
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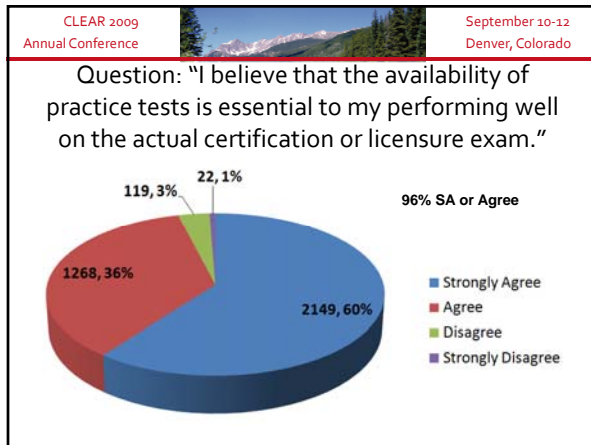
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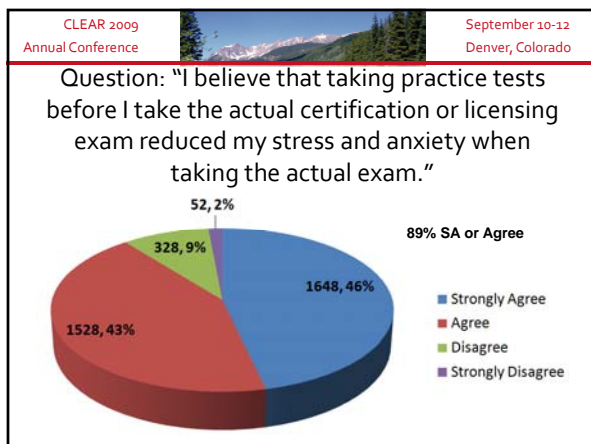
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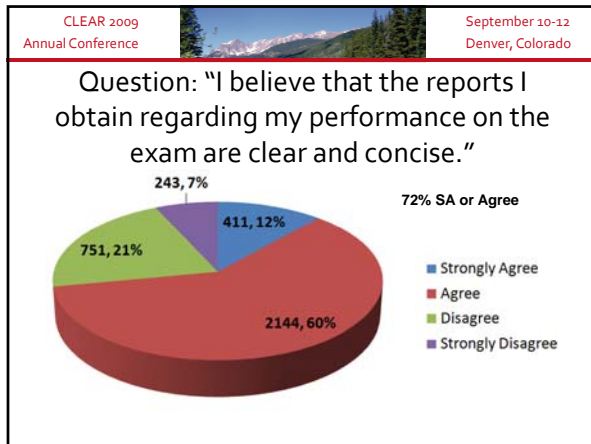
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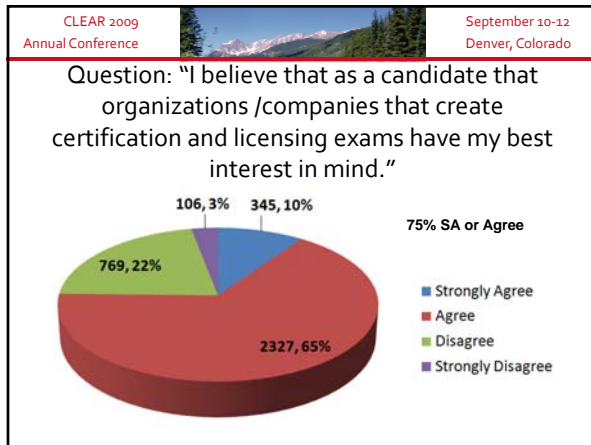
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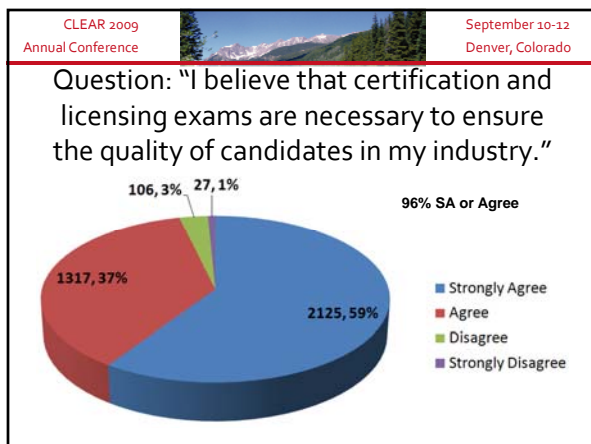
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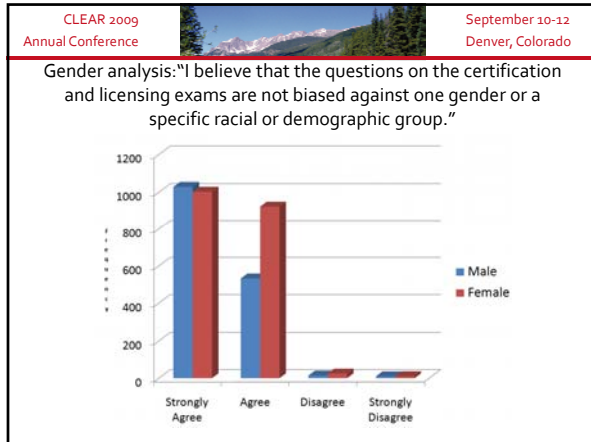
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Slicing and dicing: Age range (data)

Question	Relationship	Question	Relationship
Fair to retake	0.040*	Scores reflect	-0.035*
Right minus wrong	0.001	Prefer CBT	-0.116**
Exam fees	0.201**	MC format	-0.037*
CAT fair	-0.062**	Stress and anxiety	0.000
Appeal exam	0.061**	Well constructed	0.006
Item bias	-0.082**	Use of scores	-0.110**
Cheating problem	0.027	Scores predict	0.013
Obtain leaked items	0.106**	Test retest similar	-0.053**
Stat cheater detect	0.053**	Practice test perform	0.018
Biometrics	-0.019	Practice test stress	0.044**
Video/audio	-0.080**	Reports clear	0.030
Remote proctor	0.035*	Best interests in mind	-0.044**
Turn in cheater	0.020	Exams are necessary	0.020

Age range coded as 1=18-21, 7=61 or older; Questions coded 4=Strongly Agree, 1=Strongly Disagree  
 \*Statistically significant to 0.05, \*\*Statistically significant less than or equal to 0.01

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Slicing and dicing: Age range(translation)

Question	Age agreeing more	Question	Age agreeing more
Fair to retake	Older (small diff)	Scores reflect	Younger (small diff)
Right minus wrong	No difference	Prefer CBT	Younger (small/med diff)
Exam fees	Older (med diff)	MC format	Younger (small diff)
CAT fair	Younger (small diff)	Stress and anxiety	No difference
Appeal exam	Older (small diff)	Well constructed	No difference
Item bias	Younger (small diff)	Use of scores	Younger (small/med diff)
Cheating problem	No difference	Scores predict	No difference
Obtain leaked items	Older (small diff)	Test retest similar	Younger (small diff)
Stat cheater detect	Older (small diff)	Practice test perform	No difference
Biometrics	No difference	Practice test stress	Older (small diff)
Video/audio	Younger (small diff)	Reports clear	No difference
Remote proctor	Older (small diff)	Best interests in mind	Younger (small diff)
Turn in cheater	No difference	Exams are necessary	No difference

A positive correlation means that older test takers agreed more with the question  
 A negative correlation means that younger test takers agreed more with the question

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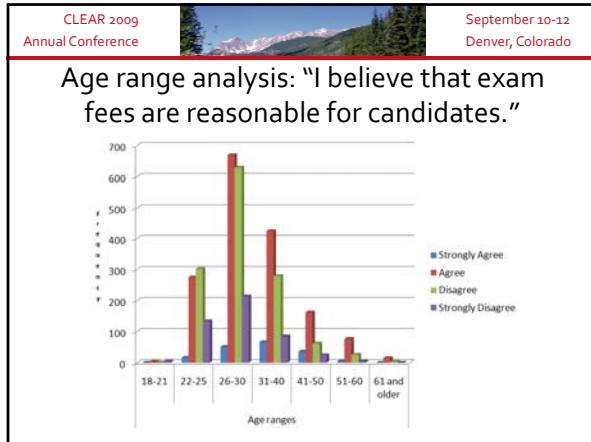
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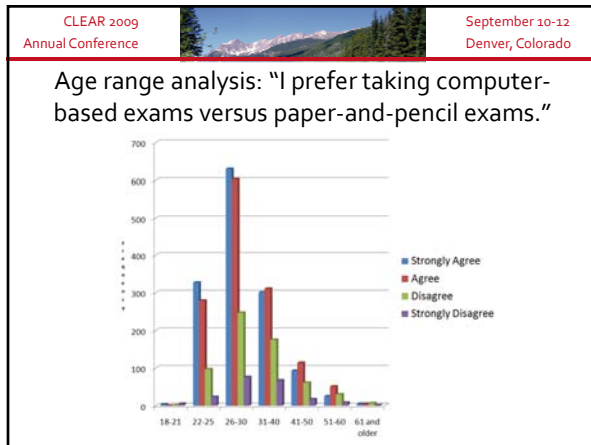
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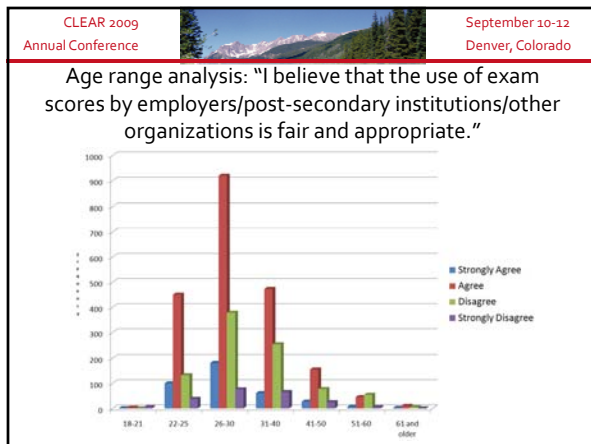
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### Next steps

- More slicing and dicing the data, working with AICPA on follow-up studies
- Expanding the study to more test takers in more/different areas (e.g., nursing, medical)
  - Interesting in being part of this? Let us know!
- Expanding the study to different areas. For example: "What employees at testing organizations think"

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### Discussion and questions

- Thank you for attending
- Discussion and Questions?

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### Speaker Contact Information

- Greg Pope, Analytics and Psychometrics Manager, Questionmark  
 • [greg.pope@questionmark.com](mailto:greg.pope@questionmark.com)  

- Krista Breithaupt, Director of Psychometrics and Research, AICPA  
 • [kbreithaupt@aicpa.org](mailto:kbreithaupt@aicpa.org)  

- Bruno D. Zumbo, Professor of Measurement and Statistics, University of British Columbia (UBC)  
 • [bruno.zumbo@ubc.ca](mailto:bruno.zumbo@ubc.ca)  


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