

eAGREE Training Tool: An electronic educational tool designed to improve a learner's performance, satisfaction, and self-efficacy with the AGREE II

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Research Team

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Funding and Conflict of Interest

Funding received from the Canadian Institutes of Health Research

Brouwers, Cluzeau and Burgers are trustees of the AGREE Research Trust a non-profit entity that promotes the AGREE enterprise and research in this area.

With the exception of Levinson, Gagliardi and Schünemann, all members of the team were co-investigators in the AGREE II project.



Background

- ▶ AGREE II (Brouwers et al., CMAJ 2010)
 - new 7-point response scale
 - ½ items modified, added, or deleted
 - completely restructured User's Manual
 - construct validity established
- ▶ now....facilitate uptake of AGREE II

Objective

- ▶ To design, execute and evaluate two educational strategies to accelerate uptake of AGREE II

Educational Interventions

- ▶ evidence of effectiveness in other contexts
- ▶ web-based

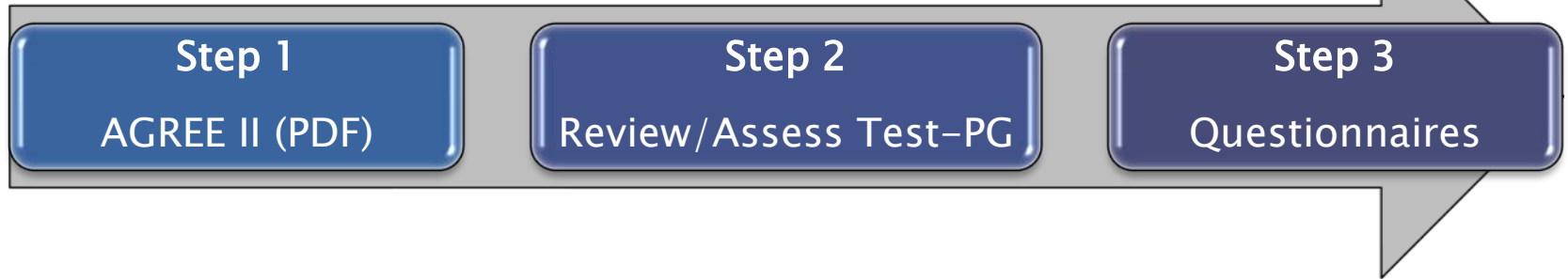
TUTORIAL	PRACTICE EXERCISE
virtual coach	directed learning & feedback

- ▶ vs. pass instruction – PDF of AGREE II

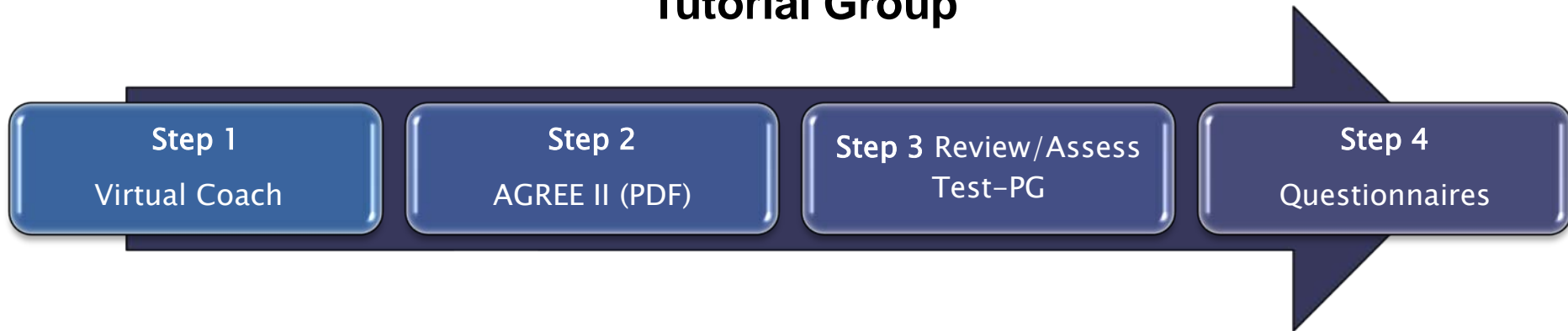
Methods

- ▶ Participants
 - trainees, clinicians, methodologist, researchers, policy
 - recruited internationally
 - limited to no experience with the AGREE enterprise
- ▶ Randomized to 1 of 3 conditions

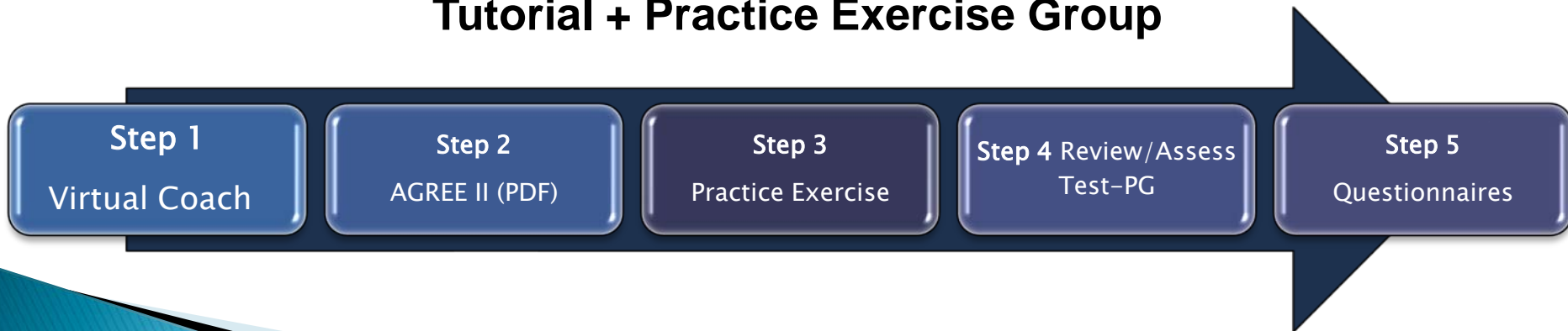
Control Group



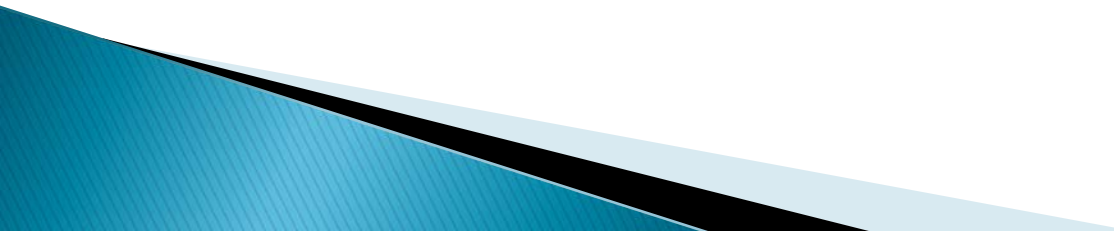
Tutorial Group



Tutorial + Practice Exercise Group



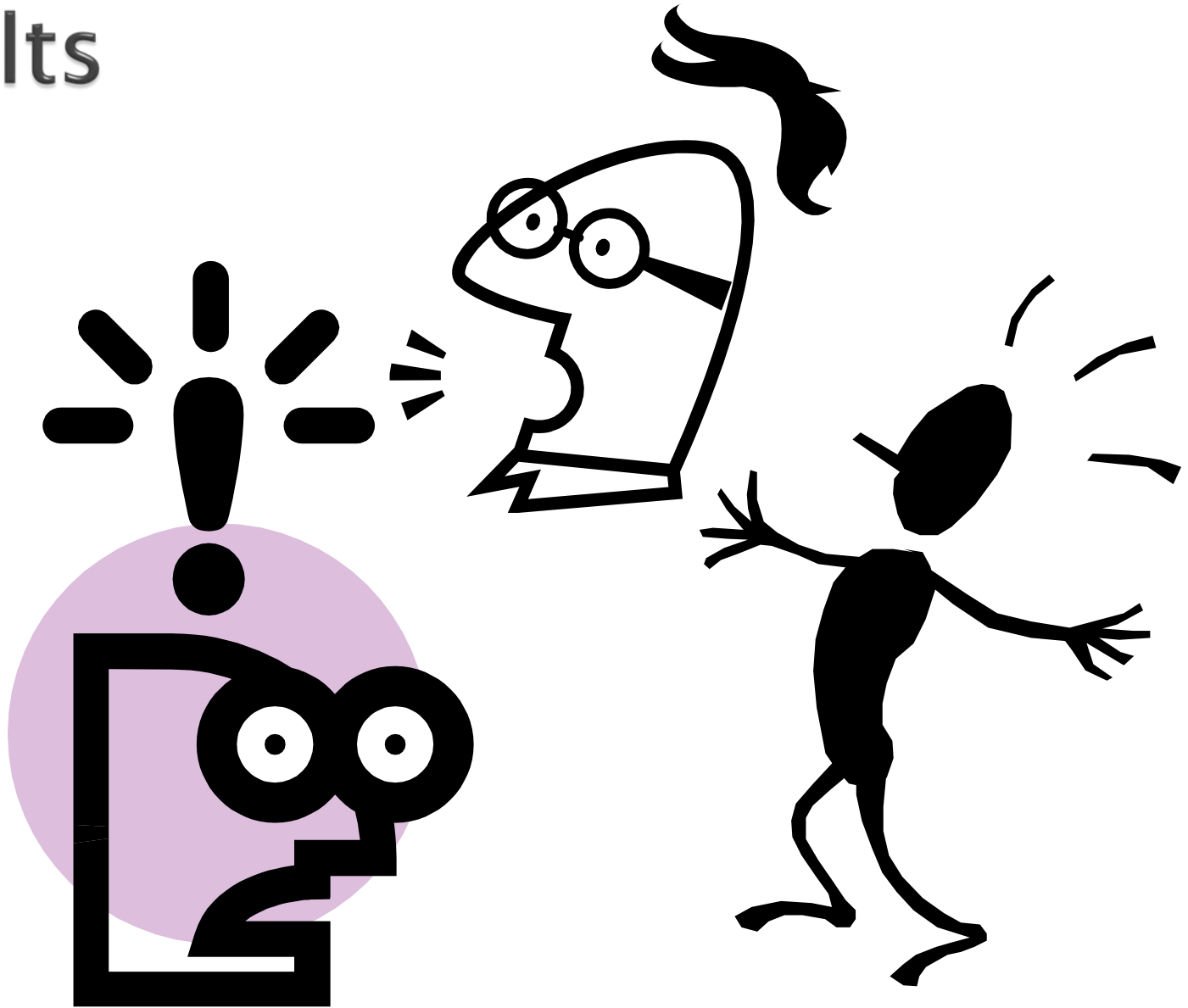
Outcomes

- ▶ time on task
 - ▶ training satisfaction
 - ▶ mental effort
 - ▶ self efficacy
 - ▶ performance – pass/fail criteria
 - ▶ performance – compared to “experts”
 - ▶ perceptions of AGREE II
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Hypotheses

- ▶ educational inventions superior to control on all outcome measures

Results



Results: Time on Task (min)

- ▶ NO significant differences.
- ▶ Huge variability.

	PDF Review	Test PG
Control	38.4 (18.3)	75.6 (50.0)
Tutorial	31.7 (25.0)	70.5 (52.9)
Tutorial + Practice	29.1 (22.8)	61.9 (29.5)

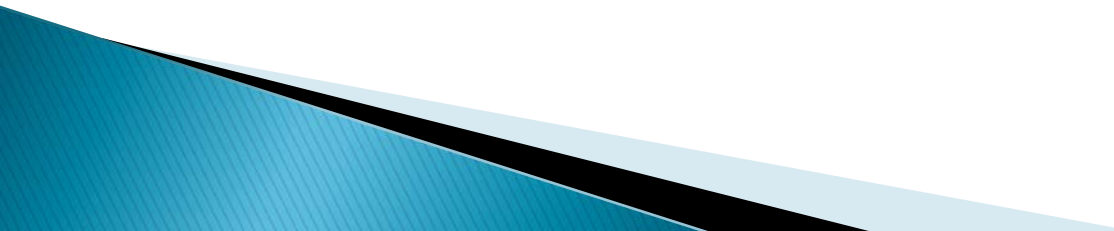
Results: Training Satisfaction

- ▶ High levels of satisfaction
(means 5.9 or higher)
- ▶ NO differences: appropriate level
valuable learning
positive learning
increased understanding
increased confidence
able to navigate
information was logical
met training objectives
met learning needs
overall satisfaction

Results: Mental Effort

	Control	Tutorial	Tutorial + Practice
TUTORIAL	NA	3.0	2.5
PDF AGREE II	3.3	3.8	2.7
PRACTICE EXERCISE	–	–	3.8
PG TRAINING	4.0	3.6	3.7

Results: Self Efficacy

- ▶ NO differences between groups.
 - ▶ High levels of self-efficacy (means 5.4 or higher):
 - confidence in ability to use AGREE II
 - comfort with structure of AGREE II
 - comfort with content of AGREE II
 - confidence in applying AGREE II skills
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Results: AGREE II Performance

- ▶ Pass / Fail Criteria
- ▶ Practice Exercise (one group)

86.4% pass rate vs. 73% with historical controls

Results: AGREE II Performance

- ▶ Pass / Fail Criteria
- ▶ Test Exercise (all groups)
- ▶ NO difference between groups BUT....

Control	Tutorial	Tutorial + Practice Exercise
85%	60%	70%

Results: AGREE II Performance

- ▶ Pass / Fail Criteria
- ▶ Test Exercise (all groups) X Topic
- ▶ NO difference between groups BUT....

	Control	Tutorial	Tutorial + Practice
% Pass - Cancer	87.5	57.1	90.0
% Pass - Critical Care	100.0	50.0	66.7
% Pass - Cardiovascular	71.4	66.7	42.9

Results: AGREE II Performance

- ▶ Comparison with Expert Scores
- ▶ NO differences between groups.

Domain	tutorial	tutorial + practice	control	p value
Scope and Purpose	3.21	2.61	1.90	0.67
Stakeholder Involvement	1.68	2.03	1.71	0.89
Rigour of Development	1.90	1.85	1.02	0.53
Clarity of Presentation	0.93	2.86	2.14	0.12
Applicability	3.03	1.92	2.05	0.45
Editorial Independence	3.18	2.84	2.63	0.60

Results: AGREE II Perceptions

- ▶ NO differences between groups.
- ▶ Favorable perceptions of AGREE II (means 6.0 or higher):
 - AGREE II useful tool to inform PG development.
 - AGREE II useful tool to inform PG reporting.
 - AGREE II useful tool to evaluate PG.
 - User's Manual will enhance my skill applying the AGREE II.

Interpretation



Is the GLASS half full?

Is the GLASS half empty?

Or am I just drinking a glass of wine?

Interpretation

- ▶ Interventions did not work.

OR

- ▶ User's Manual is a lot better than what we first thought.

OR

- ▶ Many training options – individuals can match their learning style and needs.

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For All Things AGREE