High fidelity silicone patient simulation (HFSPS) [MaskED^tm KRS]: confidence, competence & decision making.

Dr Allison Wiseman & Dr Maria Miklaucich, School of Health Sciences, University of Surrey

AIM: To evaluate the effectiveness of HFSPS on healthcare students' confidence, competence and decision making

BACKGROUND: developing healthcare students require safe & supportive learning strategies & environments to develop their confidence, competence to care(Lasater, 2007). Although high fidelity patient simulation (HFPS) is commonly used to facilitate learning there may be a disconnection between the student and the simulation activity (Wolf, 2008), due to the perceived lack of interpersonal interaction and realism. Although actors as simulated patients may address this disconnection they are not able to replicate the spontaneity of student/ simulator interaction (Reid-Searl K, Eaton A, Vieth L, Happell B, 2011). High fidelity silicone patient simulation (HFSPS) may offer an alternative simulation modality to augment HFPS providing unscripted, knowledgeable encounters where the expert educator inside the mask facilitates the development of students skills across the domains of learning (Kable, Levatt Jones 7 Reid-Searl, 2013).

DESIGN:
Methodology: Quantitative descriptive study
Participants: Convenience sample of 90 first year student nurses
Data collection: Questionnaires using a 4 point likert scale (*disagree: agree: strongly agree: not applicable*). Adapted Simulation effectiveness tool [SET] (Elfrink-Cordi V, et al., 2011) collating statistical data and freeform comments. Data collected March 2016
Data analysis: Statistical analysis using SPSS.

RESULTS: Student evaluations suggest that HFSPS is beneficial to their learning. It positively influences their critical thinking, development of skills, ability to link theory to practice, develops their confidence & enhances their decision making.
Qualitative feedback suggests some students find the HFSPS daunting however most positively report its impact on their development as healthcare professionals
- "made me feel comfortable asking for help"
- "made my group think critically & respond effectively to George"
- "learnt about my own practice"
- "had fun learnt loads"
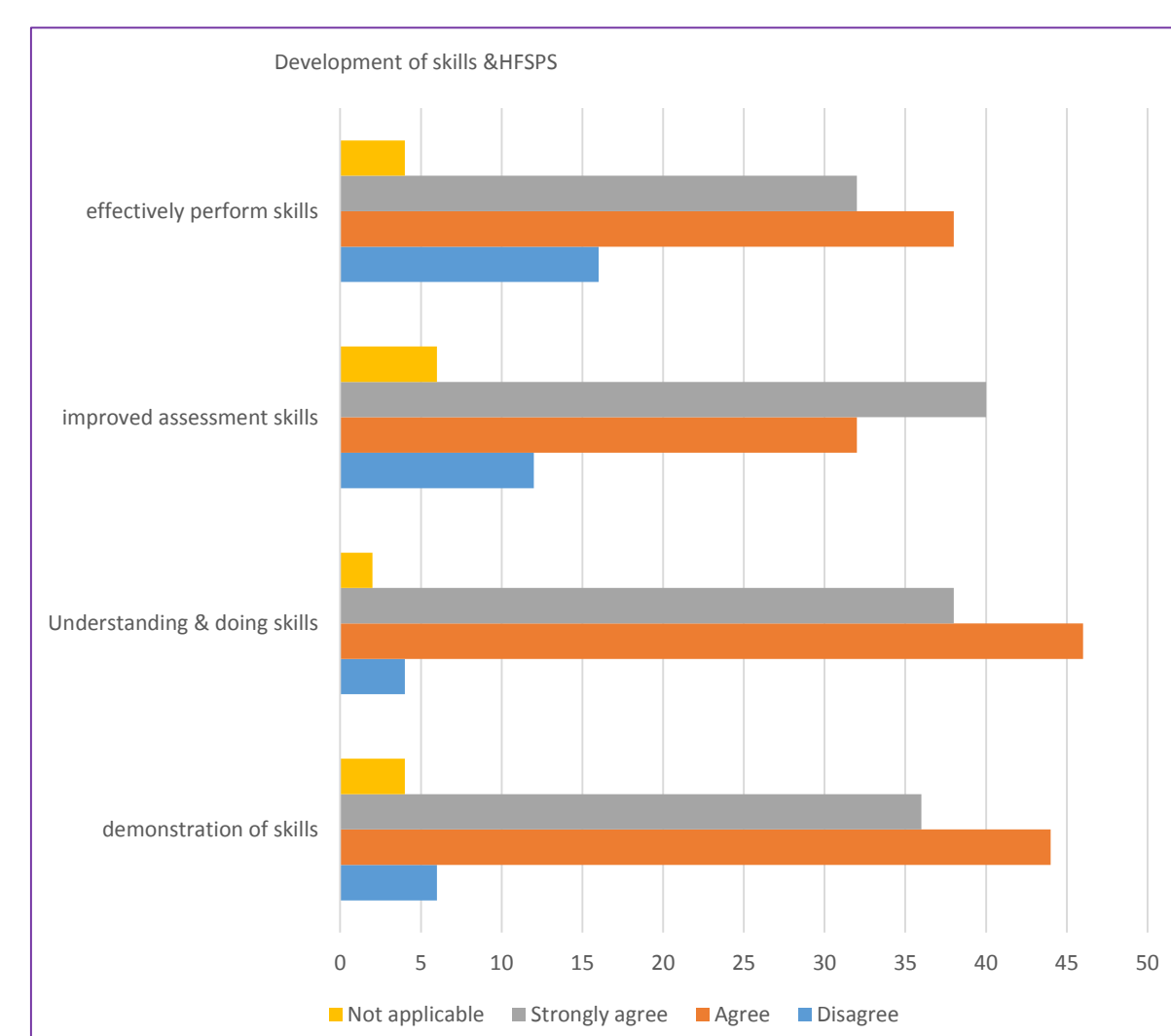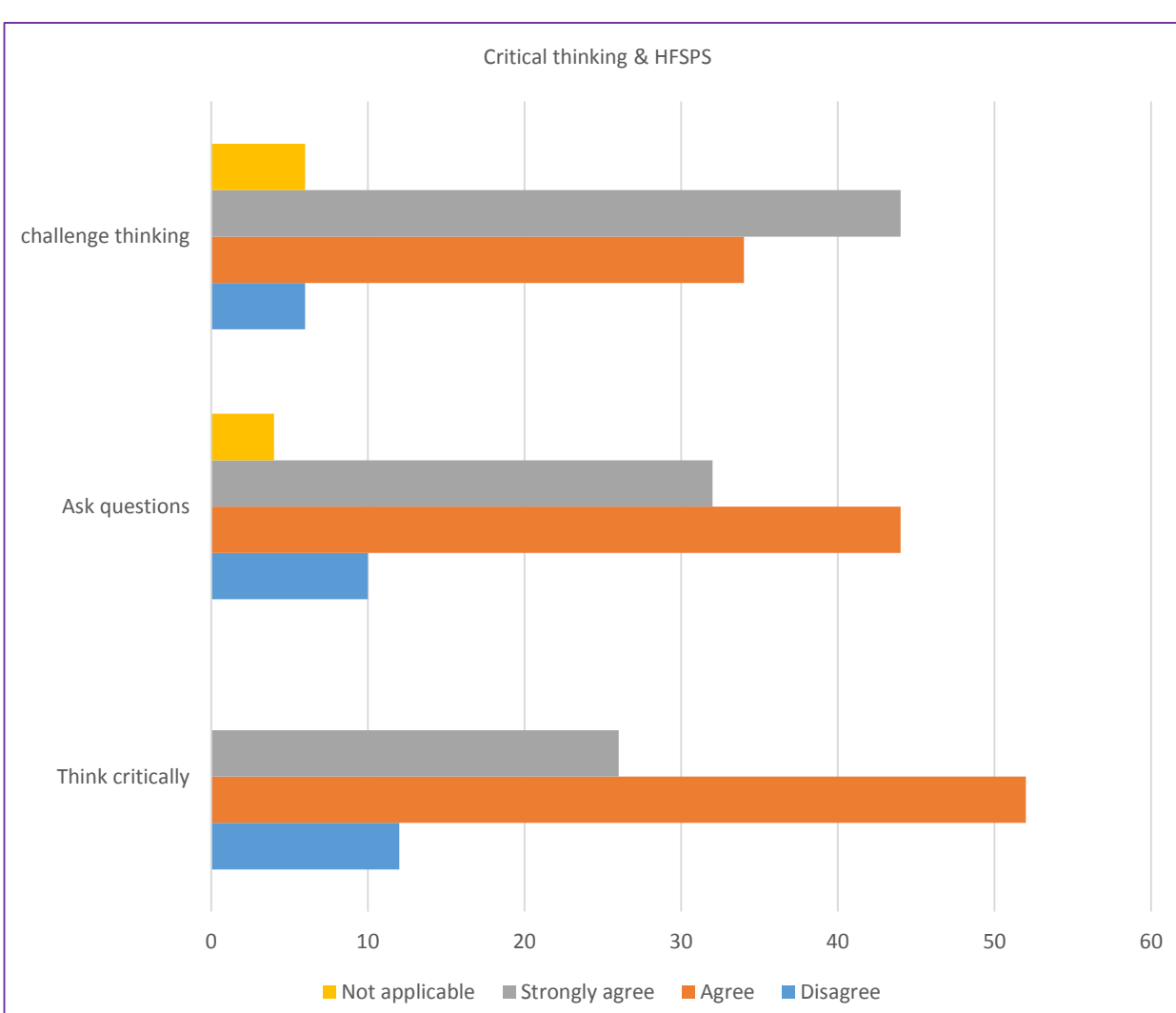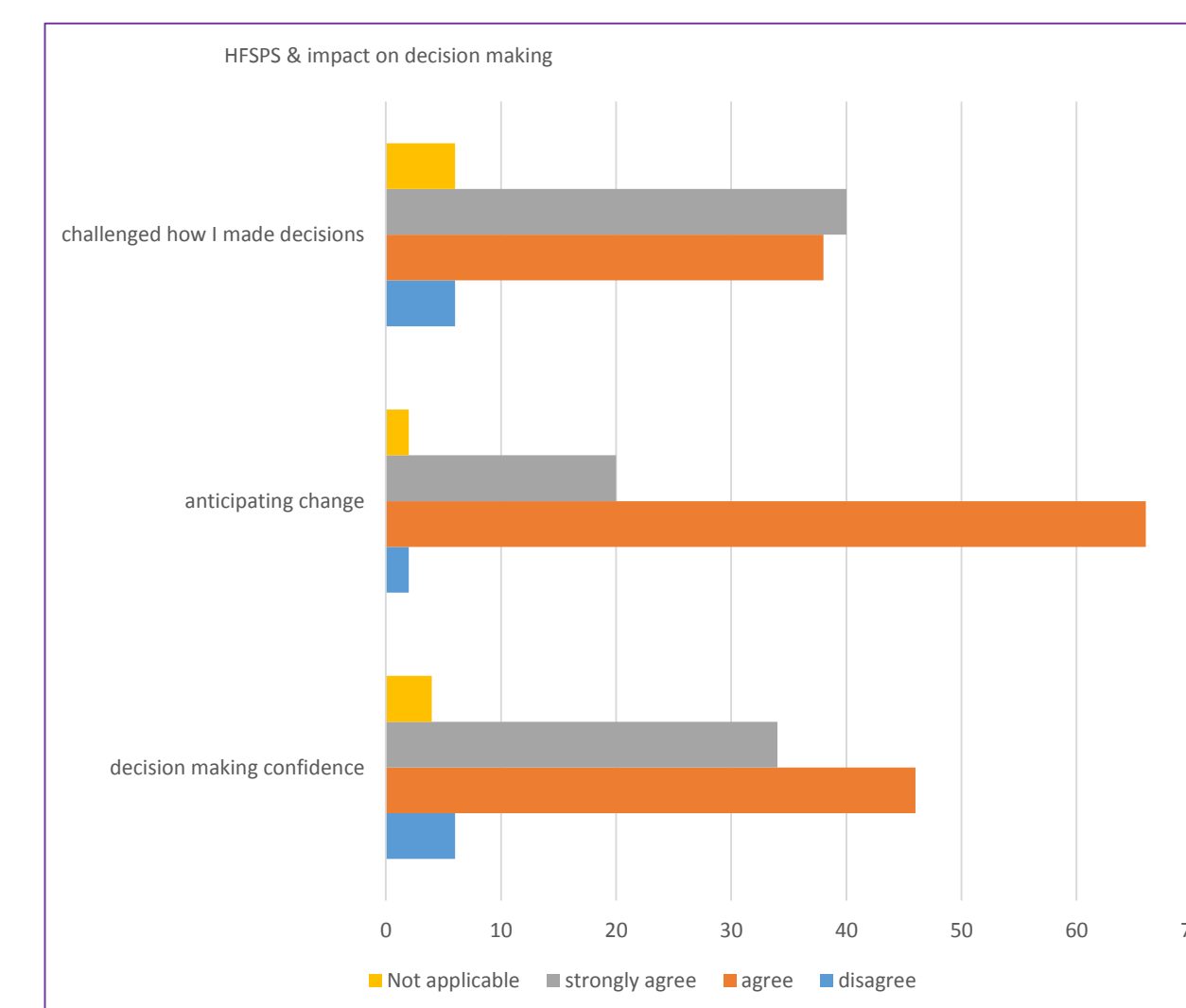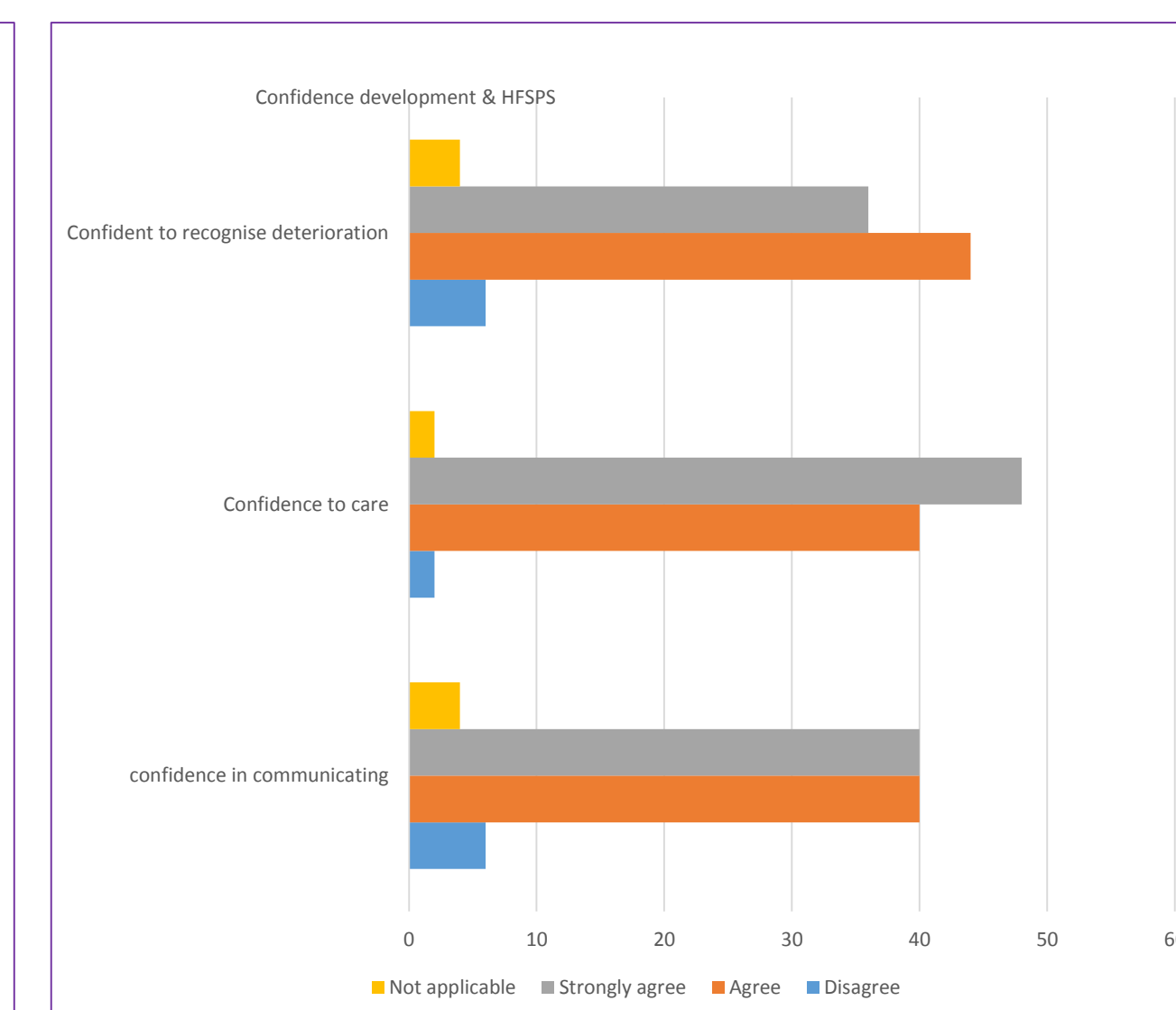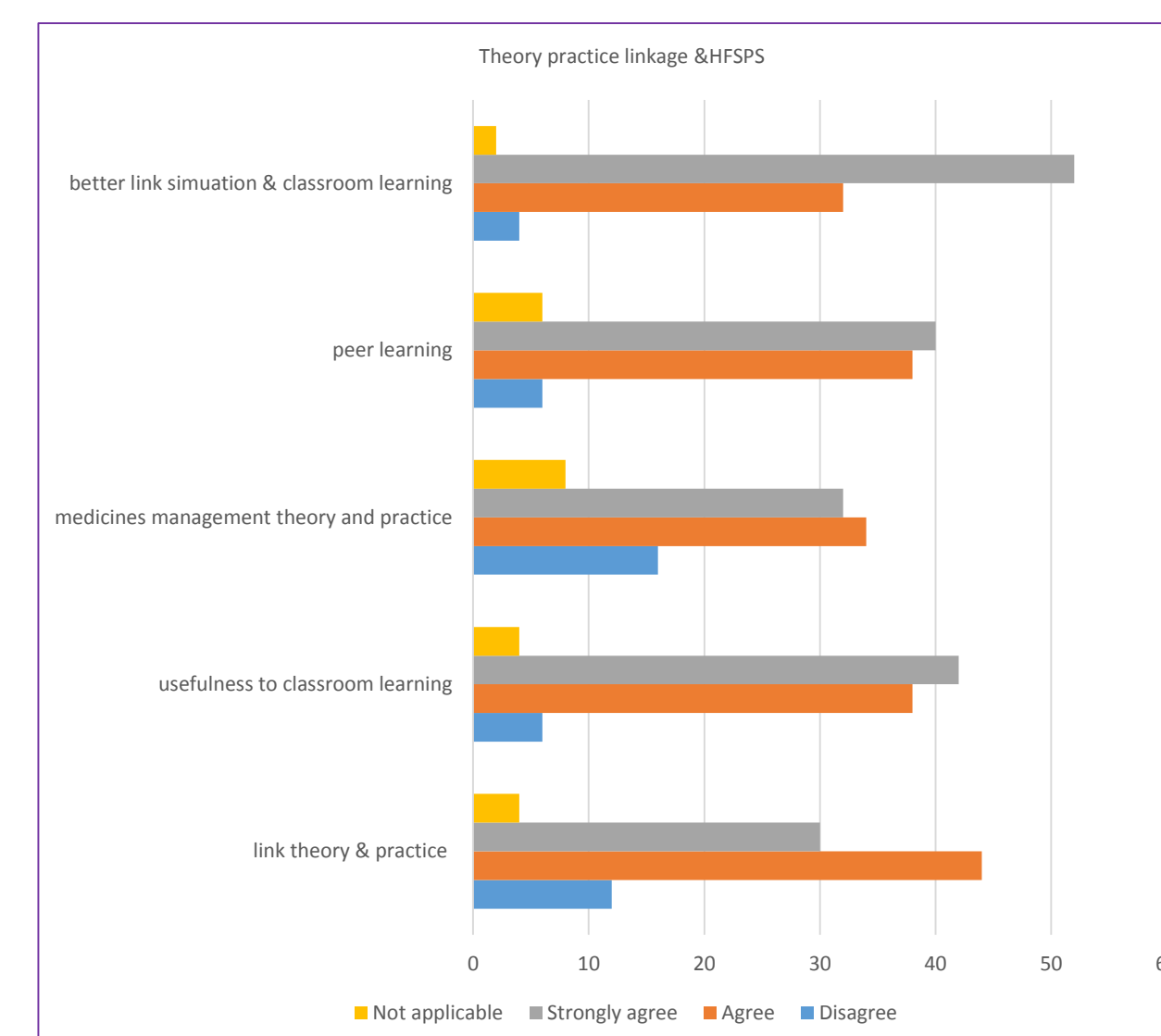- "made me think about what I was doing"

What is HFSPS?
Trained, experienced educator "masked" from the students to suspend disbelief
Unscripted encounters based upon aims and objectives identified pre-encounter

Requires:
Educator training
Time to deliver & develop
Catalogue of characters with a rich biography-
Believable
Experience of healthcare
Adaptable across different curricular
Mobile

Characters:
Janet- Ex nurse.
Main carer for her mum & a profoundly disabled son
Always kept up to date
Would have liked to return to practice.
George- Retired major responsible for medics
Main carer for wife who is now in a nursing home
Granddaughter Emily (2nd year student nurse) lives with him. He helps her revise

Theory practice linkage &HFSPS

Confidence development & HFSPS

HFSPS & impact on decision making

DISCUSSION: HFSPS has the potential to enhance the realism of simulated patient encounters. It facilitates 2 way interaction between the character & the student, whereby the expert uses unscripted encounters to engage the student in learning . It has the potential to positively influence students Critical thinking, confidence, competence decision making and linkage of theory and practice to assist with knowledge and skills transfer and preparation for their first clinical placement.

CONCLUSION: HFSPS is an emerging simulation technology that has the potential to facilitate the development of students' critical thinking, application of theory to practice, confidence, decision making and patient care skills through immersive, unscripted clinical encounters with the masked educator. Larger evaluation studies are required to fully test its impact on students' learning in a simulated practice environment

Critical thinking & HFSPS

Development of skills &HFSPS

References
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