

GAA GAMES DEVELOPMENT CONFERENCE



Coach Behaviour Analysis: Being a Coaching, Developing Coach Behaviour

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Background

- Why coach behaviour?
- Impacts:
 - Performance
 - Social & emotional well-being
 - Affect
- Controllable
 - Measurable & Changeable (research, interventions)



- A key determinant in effect of coaching programmes is the relationship between coach and athlete
- No right way to coach, but ...

•Learners Learn

- Coaches (through practice & behaviour) help that process – sometimes.

Systematic Observation

- 'Systematic observation permits a trained observer to use a set of guidelines and procedures to observe, record and analyse observable events and behaviours, with the assumption that other observers using the same observation instrument, and viewing the same sequence of events, would agree with the recorded data' (Franks, 1998, p.179)

Systematic Observation

- Provides valid & reliable baseline data
- Front porch
 - Links to cognition, reflection, development
- Interventions
 - Use data as feedback
 - Reinforcement of appropriate performance
 - Recommendations

Some implications from research

- Coaches notoriously poor at describing their own behaviour (low self awareness)- 80:20

(e.g. Smith & colleagues, Cushion & Jones, Partington & Cushion inter-alia)

- “I use a lot of questioning”
- ‘I don’t ask any questions, they never know the f*****g answer’
- (we’ll come back to questioning!)
- Limited understanding of relationship between practice, behaviour & learning

Coaches Low Self-Awareness

- Cushion & Redwood-Brown (2010)- 12 coaches 'high performance' track-coaching representative athletes range of sports
- 75% of the coaches had only one behaviour where perception matched actual behaviour
- 75% of the sample had no agreement between coach and athlete perceptions
 - Perceived 7 rated (1-7) 0% actual
- Only one coach had agreement between coach and athlete perceptions and actual behaviour

Developing Coach Behaviour Research: Relationship between coach behaviour & practice type

- Ford et al., (2010)- 25 youth coaches U9, U13, U16 x elite, sub-elite, non-elite
- Modified ASUOI analysed coach behaviour, 70 sessions
- Training form (Tf) versus Game form (Gf)
 - 60% coaching time 'training form'- no diff by age
- Largest single behaviour- Instruction
 - "few differences in coaching behaviour by function of age and skill" (p.493)

Development of Coach Analysis Intervention System

- Technology!
- No existing all encompassing Instrument
- Primary and Secondary Behaviour & Practice Environment
 - 5 Step Validation Process (See Cushion et al. 2012).
 - Lit review, Initial Instrument- peer review, pilot data, revision
 - Observer Training, Pilot (Season long data collection)
 - Revise- Content validity
 - Face Validity- 'expert panel'
 - Intra- Inter-Observer reliability

Coach Analysis Intervention System (Cushion, Harvey, Muir & Nelson, 2012)

- 23 Primary Behaviours
- Secondary Behaviours
 - Timing
 - Recipient
 - Content
 - Questioning Type
 - Silence
 - Practice Type (9 plus other/transitions)



Hand held CAIS application (iPAD)



- Hand-held device 'customised' templates from CAIS-
 - Multiple 'bespoke' coding templates
- Focus on specific primary & secondary behaviours
- Code 'live'- give instant feedback
- Synch to video
- Coach education/ coach development tool
 - Integrate into coaching system

Using CAIS

- Partington & Cushion (2011)- 12 Elite Youth coaches- behaviour & practice type
 - Used CAIS (Cushion et al., 2012) analysed 65 coaching sessions plus follow-up interviews
 - 52% Training form (Tf)- no diff by age
 - Instruction largest single behaviour but reduced 46%(Tf) - 38%(Gf) ($p < 0.001$)
 - Silence increased 4.4%(Tf)- 8.8(Gf) ($p < 0.011$)
 - Questions reduced 11%(Tf)- 9%(Gf)
 - Twice as likely to ask a 'closed' or 'convergent' question regardless of age or form

Low Self-Awareness!

- Behaviour-
 - “I thought my levels of instruction would be a lot less, this is quite surprising”.
 - “I don’t really appreciate behaviour changes...I don’t plan to change my behaviour between a warm-up [Tf] or a phase of play [Gf]”
- Questioning
 - “When I have asked players questions...it takes longer for them to understand so I then use instruction”
 - “I mainly use questions which I have heard... but if I’m honest I struggle to devise my own divergent questions”
- Approach
 - “Decision making players”, “facilitating knowledge construction”, “player ownership by asking questions”
 - Limited underpinning knowledge/understanding, ‘epistemological gap’

Using CAIS

- Harvey, Cushion, Cope & Muir (2012)- 3 coaches, 3 different sports
- Using CAIS, season long observations, games & practice, plus interviews.
 - Instruction largest category for all & significant difference between Tf practice states & others
 - GenPosFeedback; CorrFeedback; PveModeling; significantly greater in Tf practice states
 - Behaviour pattern: 'technical' , 'concurrent', 'individual'.
 - Interviews: Generally low self awareness/understanding, 'epistemological gap'

Using CAIS

- Partington & Cushion (2012)- 12 Academy coaches- Relationship between coaching behaviour and three player age groups (U10/11's, u12-14's, u15/16's)
- Using CAIS analysed 67 training sessions plus follow-up interviews
 - Significant Differences-
 - Instruction (u10/11's 49%-u15/16's 34%)
 - Questioning (Divergent) (u10/11's 0.85%-u15/16's 3.2%)
 - Feedback (u10/11's 5.8%-u15/16's 14%)
 - Punitive (u10/11's 0.95%-u15/16's 4%)

‘Folk Pedagogy’

- Instruction:
 - “When they are playing a game in training it is quicker to tell them how to improve, rather than stopping the session” (under 11’s coach)
 - “There is an expectation from parents for the coach to be giving instruction whilst watching instead of just being silent. I try not to think about this but it naturally effects you when coaching” (under 10’s coach)
- Silence
 - “I am silent because I have nothing to coach..... no mistakes are being made” (under 12’s coach)
 - “I do not think of using silence when I coach, if I’m silent there is no process to this” (under 15/16’s coach)
- Questioning
 - “I use questioning because on my Level 2 & 3 I had to use questions to pass the assessment” (under 11 coach)
 - “I don’t use as much questioning because the players at this age might have not done this before” (under 10’s coach)

Interventions to change coach behaviour/ practice?

- Yes! For example...
 - Morgan (2006)
 - Impacted feedback patterns, perceptions of learning
 - 24 weeks, 7 week intervention
 - Harvey, Cushion & colleagues (2010/2011)
 - Practice structure, feedback patterns
 - Players game involvement/ decision making
 - 15 weeks, 8 week intervention
 - Underlying assumptions, coach knowledge
 - So; Time, Context, Follow-up
 - Computer/video research/intervention (CAIS) (Cushion et al., 2012)
 - Data + Video= **powerful reflective tool**

What about practice?

- To be good at something need to practice a lot!!! (10k hours?)
- Activity alone is insufficient for learning
 - Quality of practice key
 - Learning linked to: Random Variable Practice, Contextual interference, Feedback/instructional quality (type, timing, investment in learning)
- All learners able to draw appropriate learning?
 - Singular approach to learning- athlete centered?
- Time spent in Practice States?
- Quality of Instruction/Guidance- to whom?

Research Evidence

- **Educational Psychology** (e.g. Kirschnher et al., 2006; Mayer, 2004; Merrill, 2009)
 - Non-directive coaching ALONE does not work
 - No evidence of superiority of any single instructional model/ approach (e.g.,TGfU, PBL, Discovery Learning)
 - Depends on previous knowledge & experience
- **Principles of Instruction** (Merrill, 2009), learning incremental and includes:
 - Demonstrate- observe demonstration
 - Application- apply new knowledge
 - Task-centered- increasingly complex whole tasks
 - Activation- link to prior knowldege/ experience
 - Integration- Use the new skill in everyday practice
 - Information only instruction is 'zero level instructional strategy'
- In practice- directive and non-directive forms of coaching are poorly implemented.

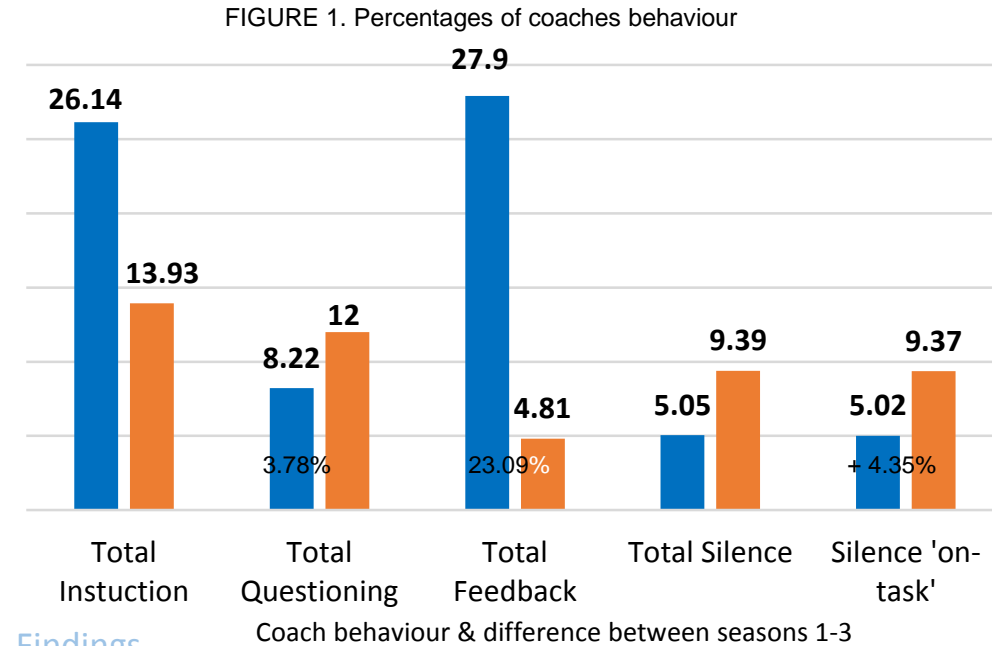
THE IMPACT OF VIDEO FEEDBACK ON PROFESSIONAL YOUTH FOOTBALL COACHES' REFLECTION AND PRACTICE BEHAVIOUR: A LONGITUDINAL INVESTIGATION OF BEHAVIOUR CHANGE

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Introduction

- Researchers have shown the importance of reflective practice but key in changing practice is *critical reflection* (Cushion et al., 2012).
- Coaches need to reflect critically to challenge ideological beliefs or practices and 'tools' that encourage self-reflection. One such tool is video-based feedback
- This study investigated changes (or stability) in coaches' practice over time to understand how video-based feedback intersected with, informed, and impacted coaches' reflective practice.



Findings

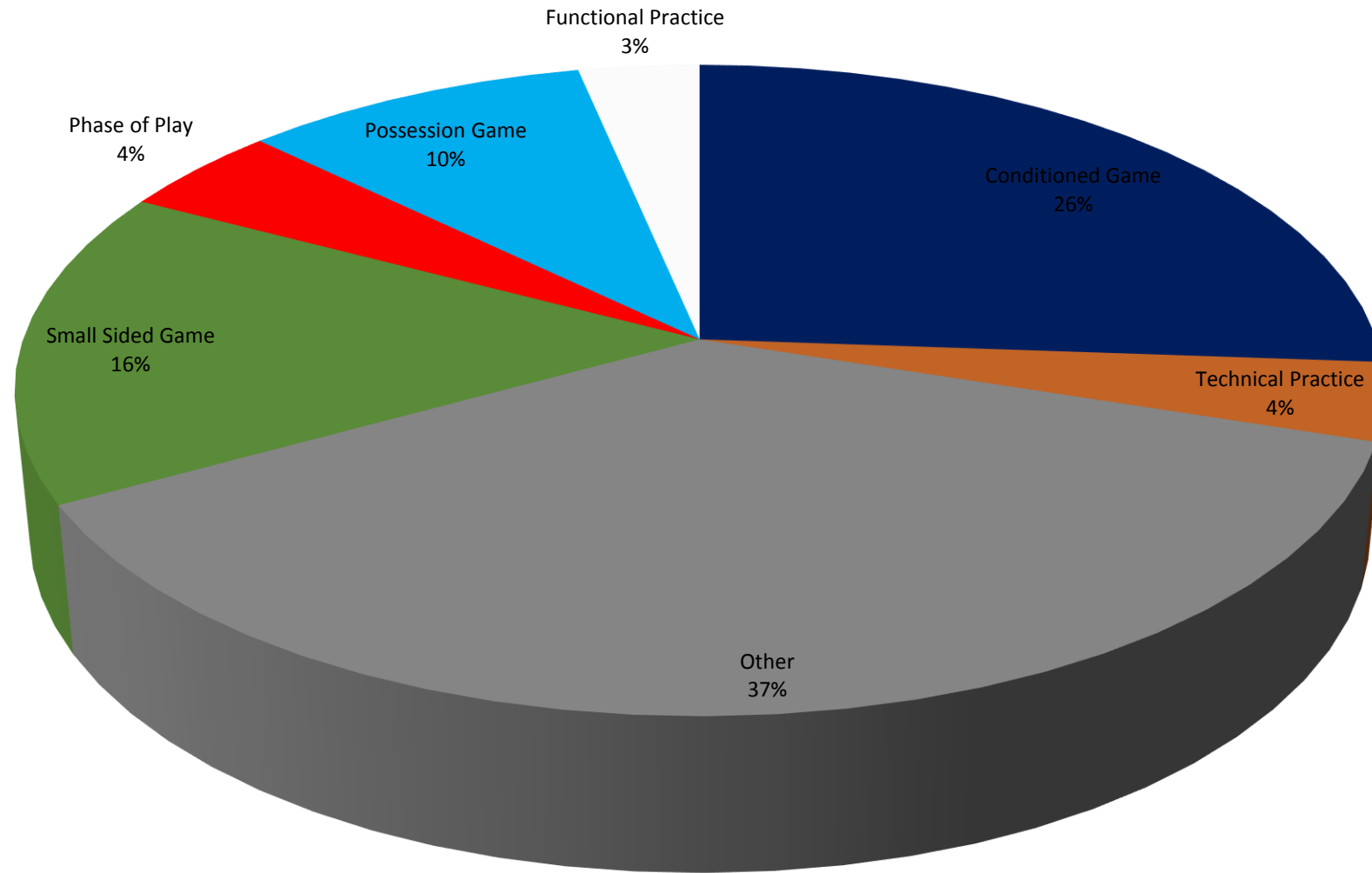
- Each of the coaches showed changes in their behavioral profile over the three seasons.
- Reflection, using technology and discussing practice in light of data, was a key strategy to enable coaches' beliefs and dispositions to be made explicit.
- The use of video and discussion with other coaches enabled deeper, more critical levels of reflection.
- Contextualised video-based reflection and discussions with others (including the research process) helped the coaches develop self-awareness and triggered learning, by developing and reinforcing new knowledge in practice.



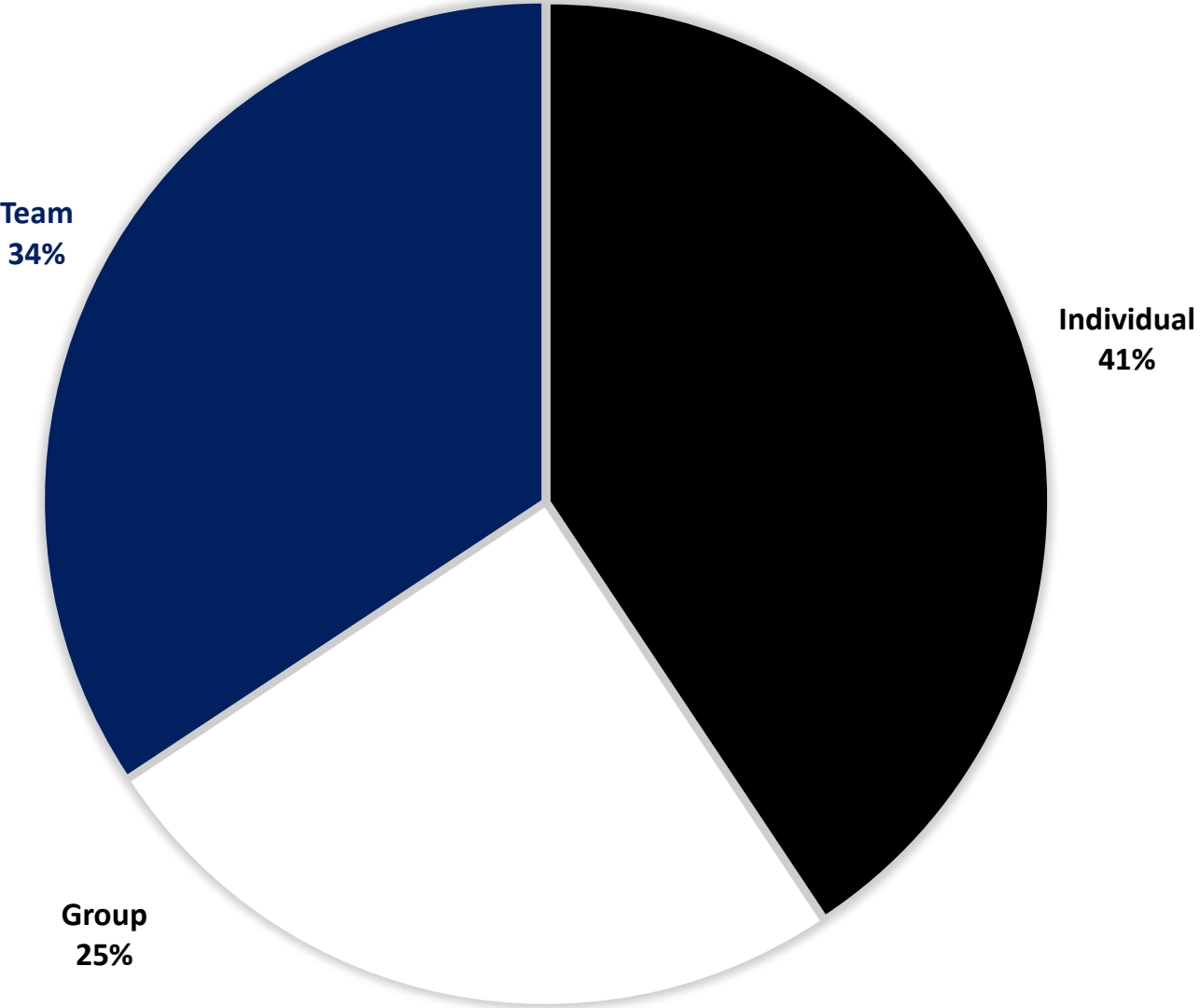
Process Outline

- Groups are fixed for the season
- The group will agree on 3 key areas to improve
- We will meet every 6 weeks
- 1 coach will be recorded before each time we meet
 - They will be the focus of the meeting
 - 10-15 minutes of their session will be watched in the meeting (and made available on HUDL to watch before and after the meeting)
 - The group will discuss problems the coach is having with the 3 areas we are all working as a group to improve and will help develop strategies to resolve these problems
- Resources will be available in the 6 weeks between meetings

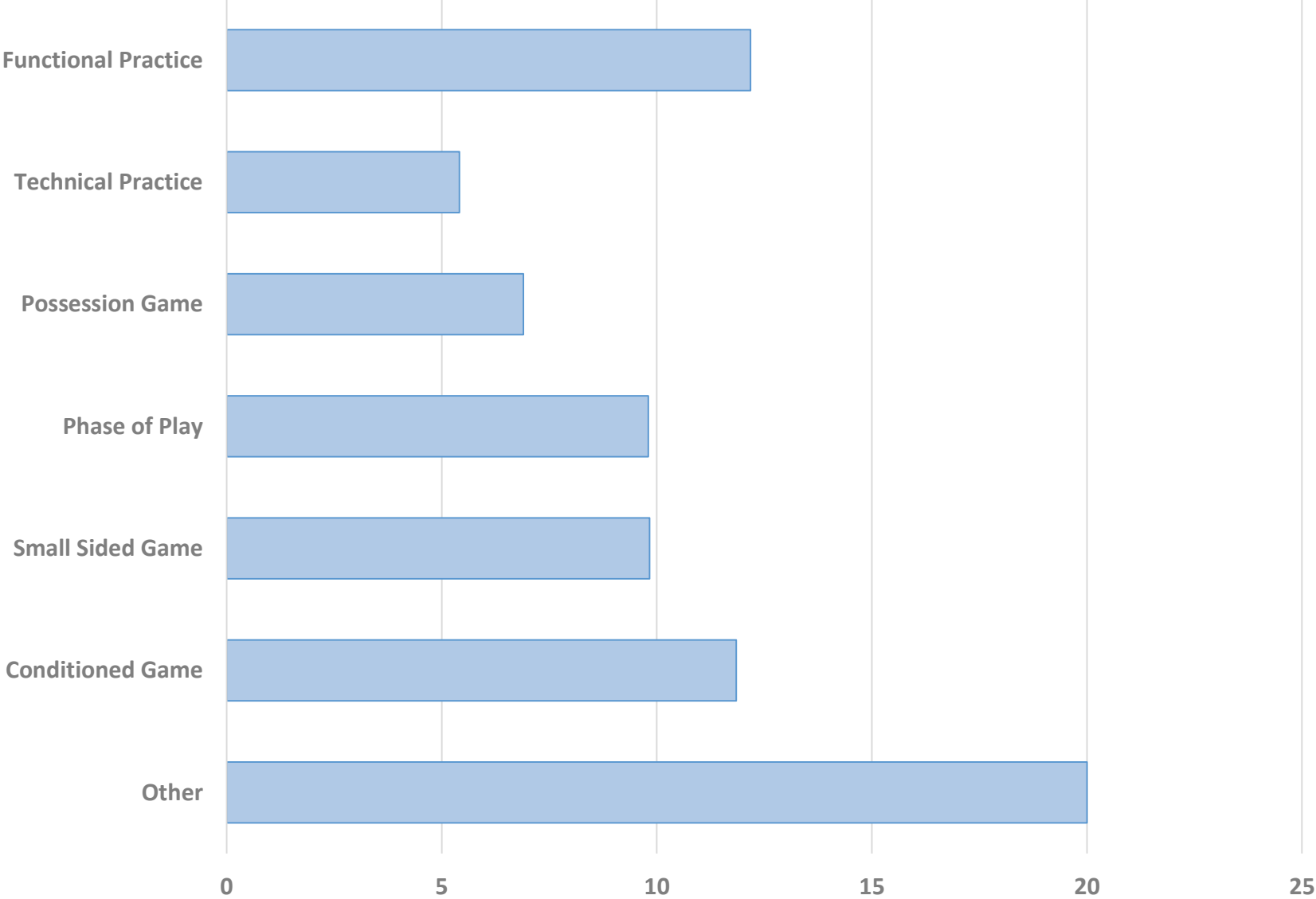
Time Breakdown



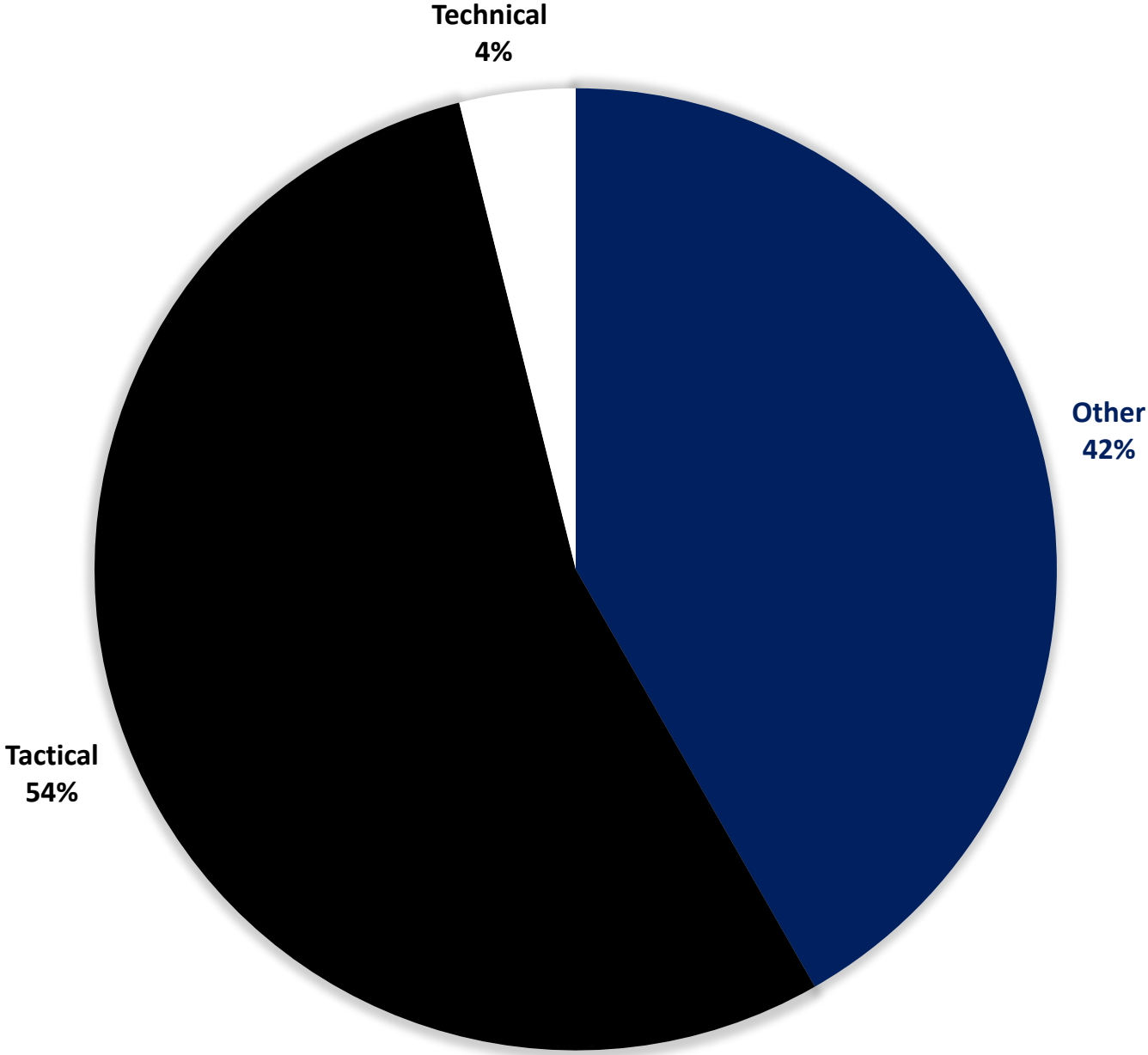
QUESTIONING RECIPIENTS



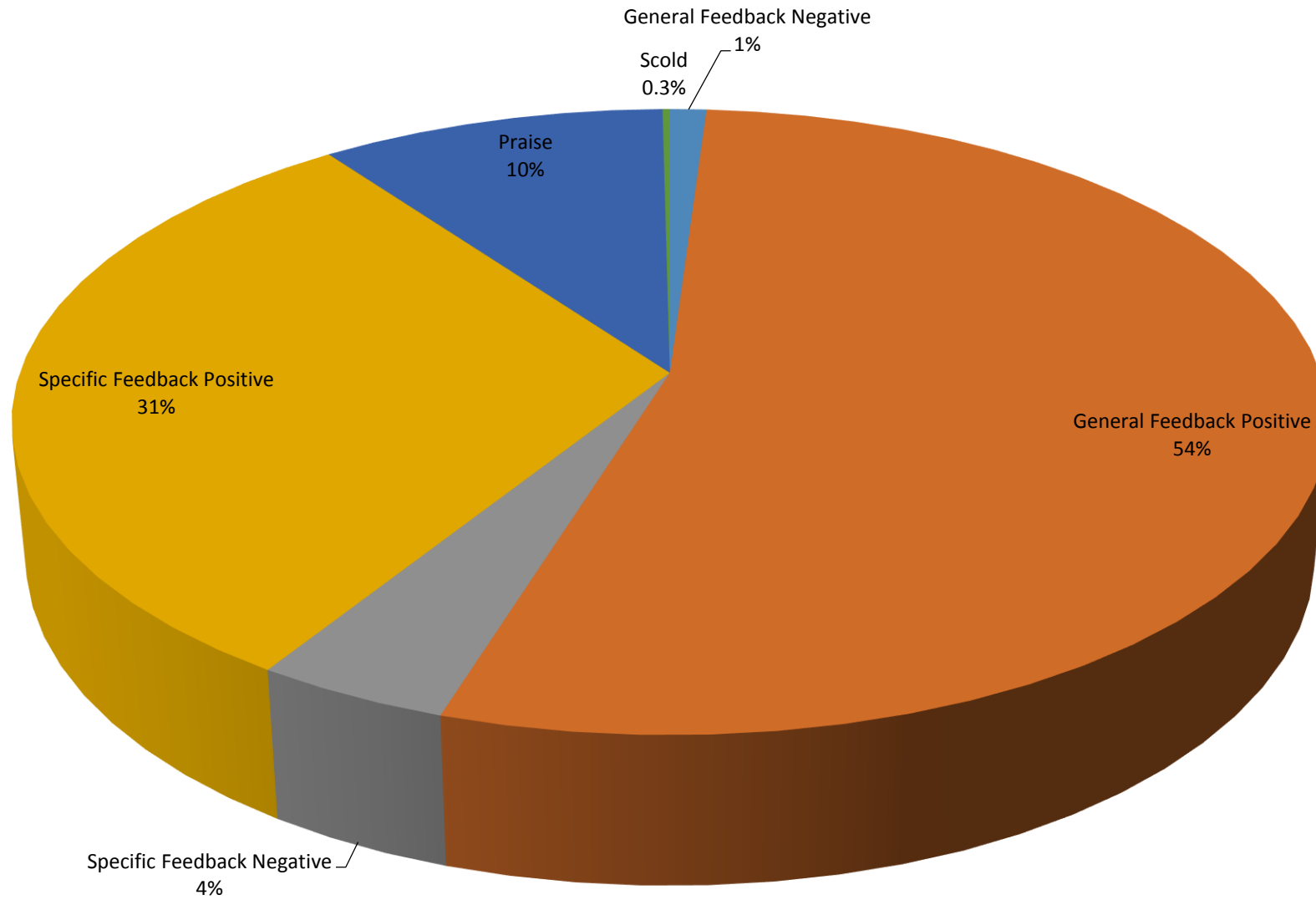
Questioning by Practice Type



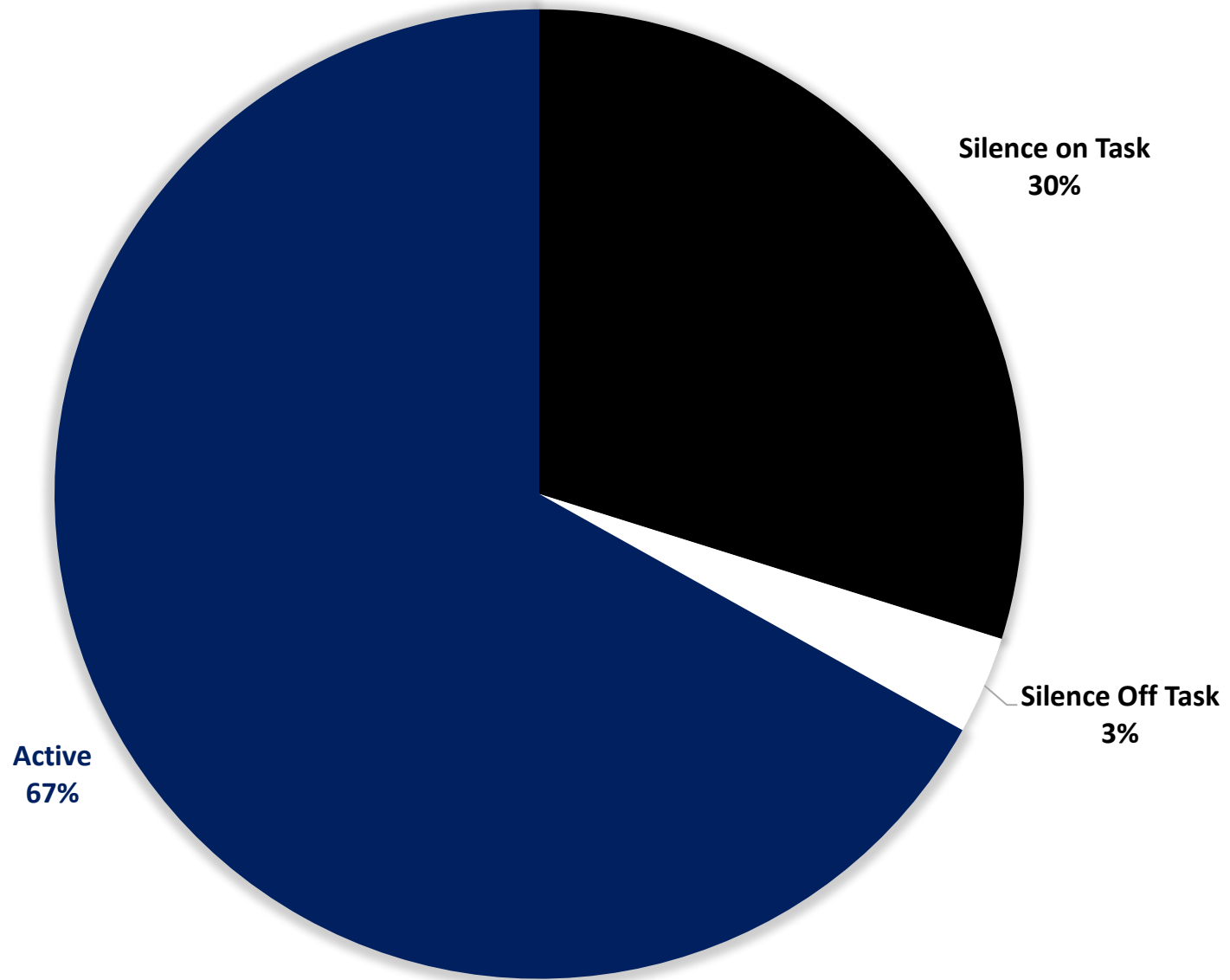
QUESTION CONTENT



Positive/Negative Feedback



SILENCE

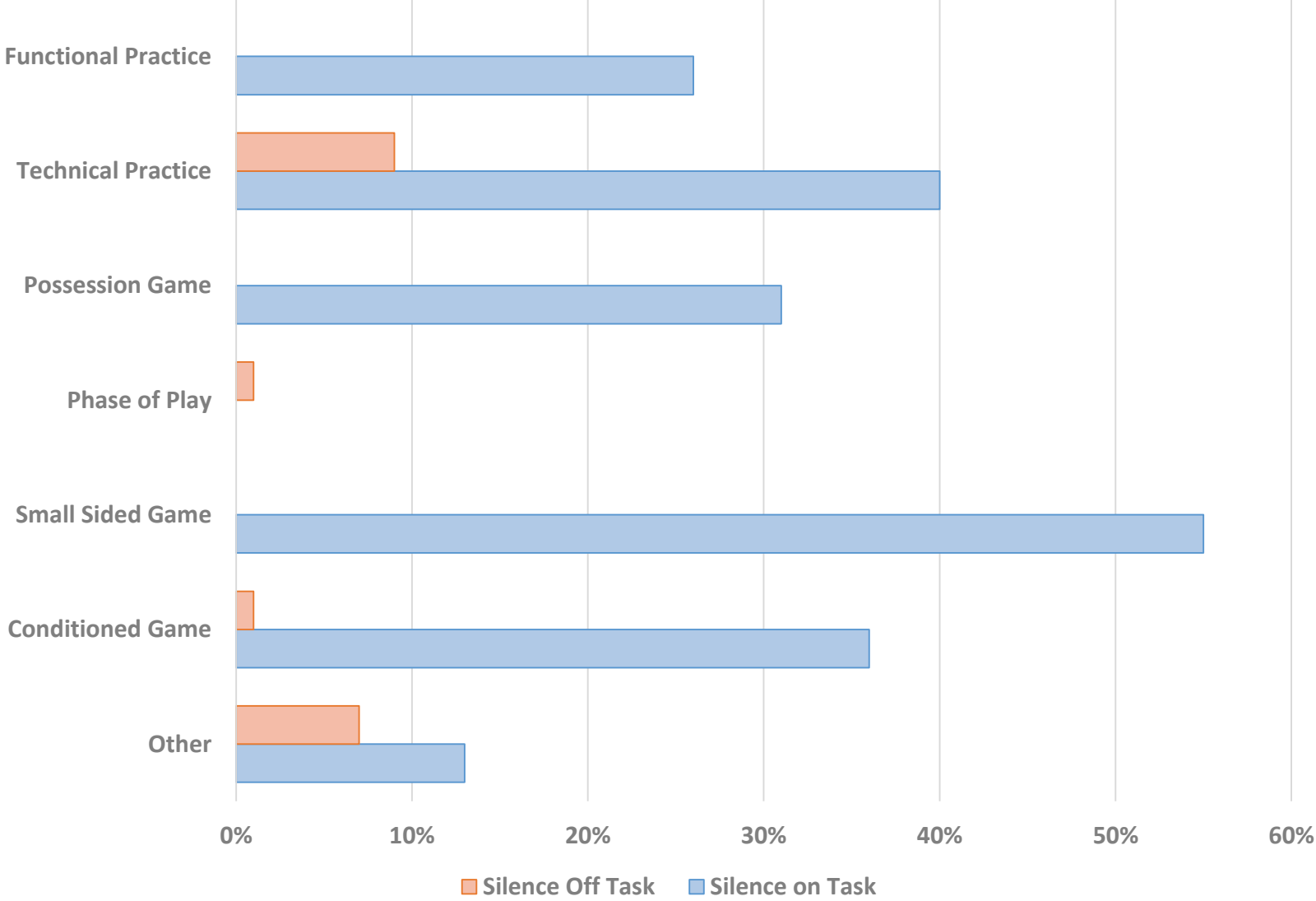


Silence

- What do you make of the use of silence?
- What are the positives/negatives of silence?
- Are there times or practice types when silence is particularly effective/ineffective?



Silence by Practice Type



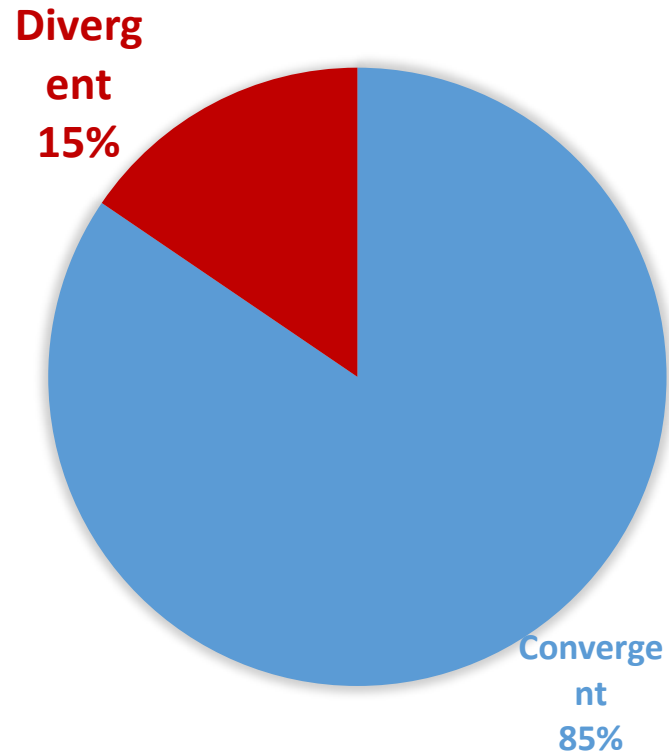
LCFC Coach Development Process

- Coach Profile (3 sessions)
- Brief interviews with 2 players and 1 peer
- Interview
- Coach given experimental period
- Video feedback
- Re-assess

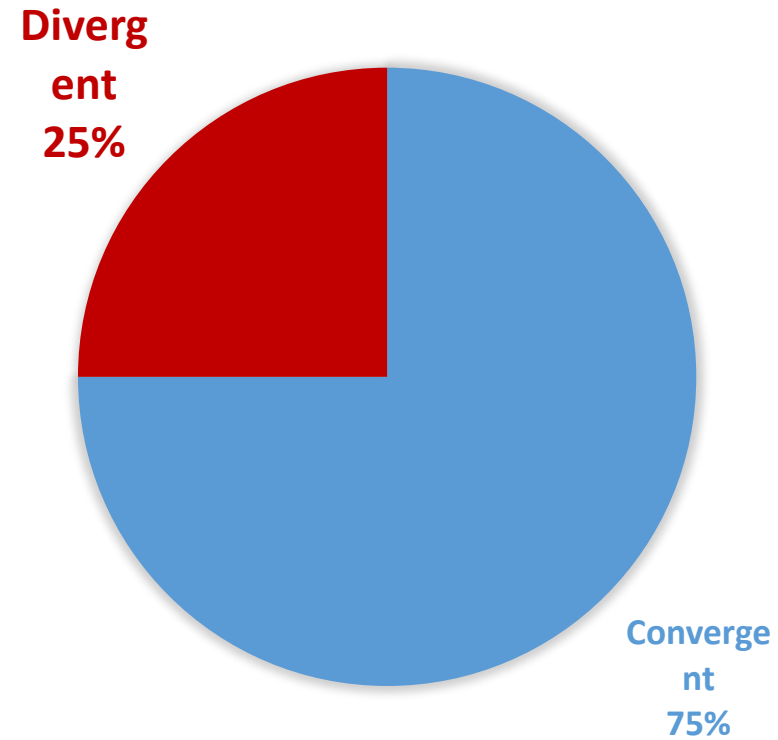


Question Type with Groups

Before

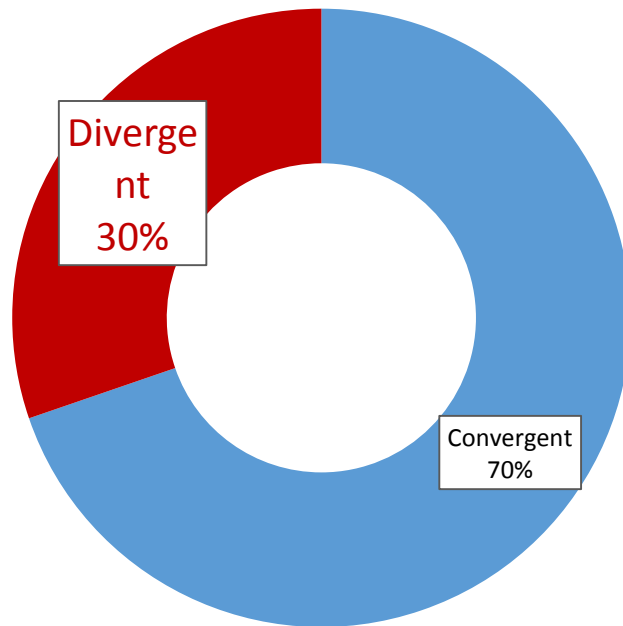


After

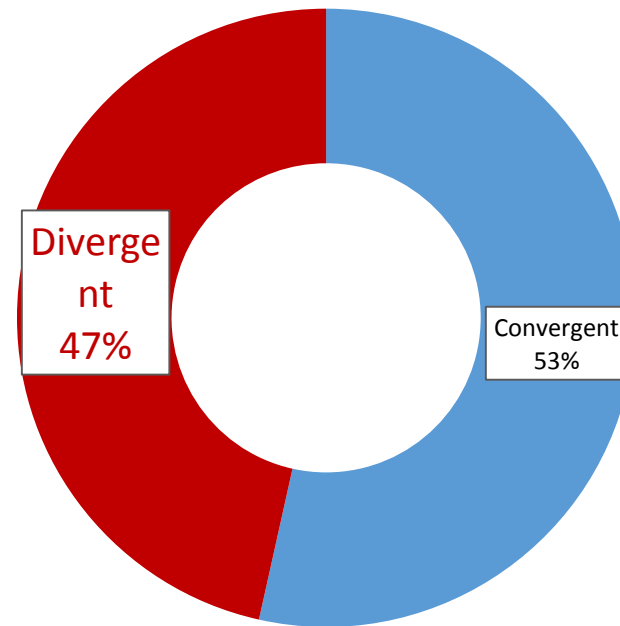


Question Type

Before

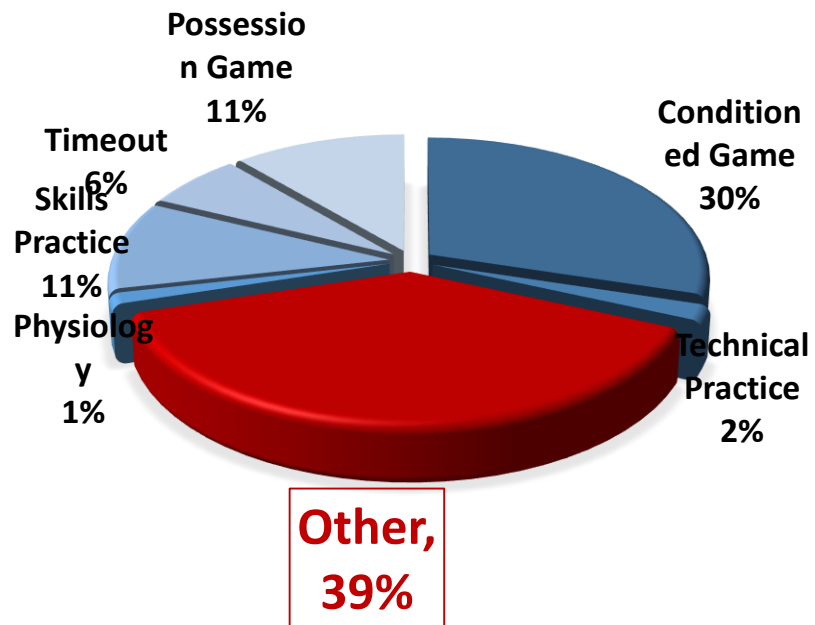


After

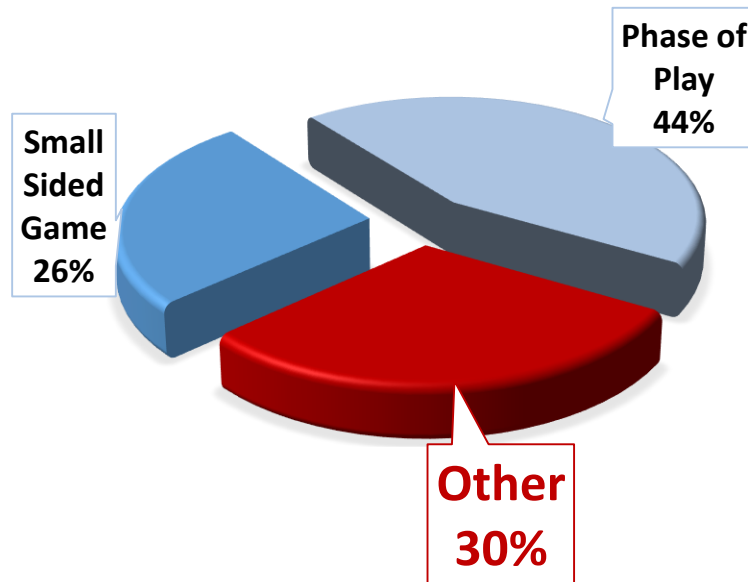


Amount of 'Other'

Before

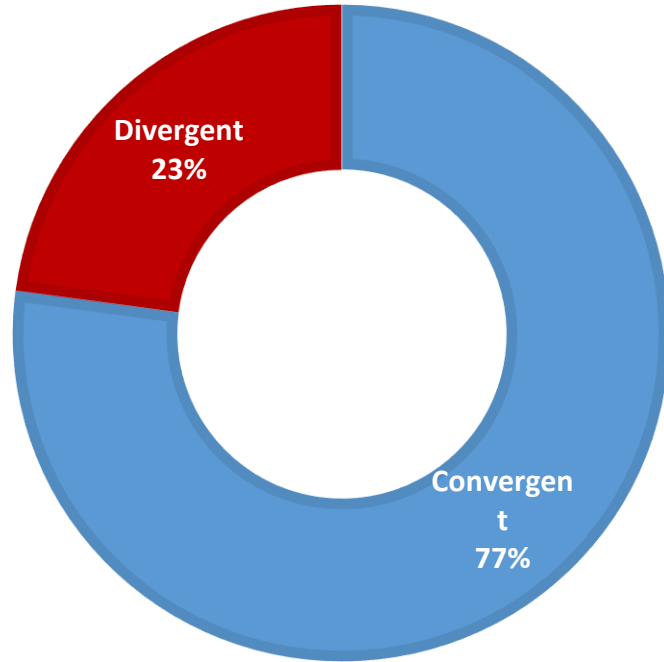


After



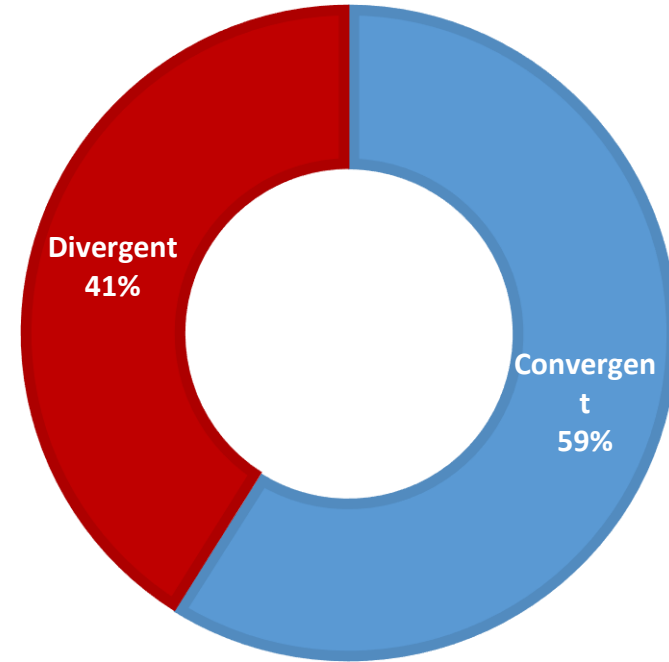
BEFORE

■ Convergent ■ Divergent



AFTER

■ Convergent ■ Divergent



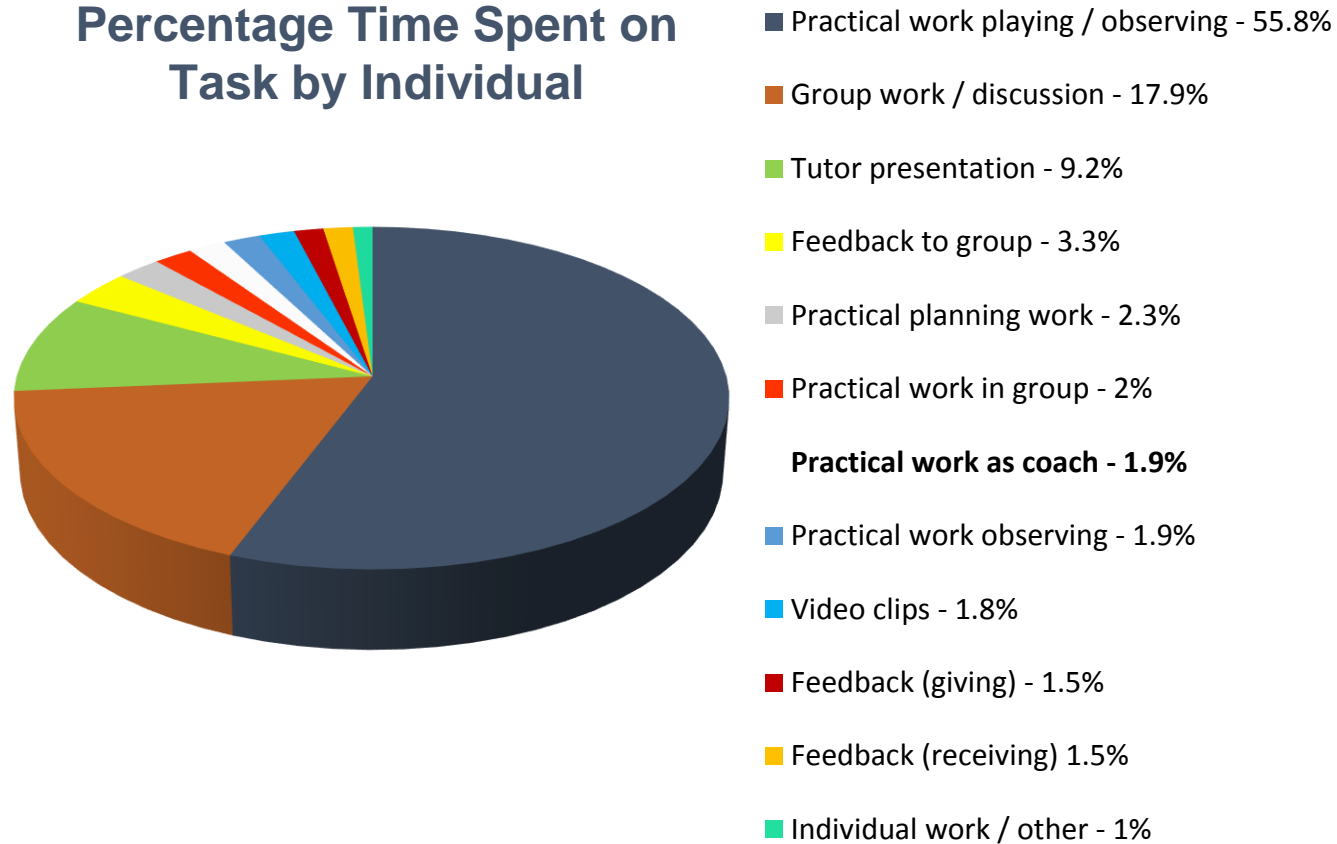
Coach Feedback

- "Ye that's the thing, I think I need it. I have had video analysis but I have never sat down with someone who's got me thinking, really got me thinking. And actually got stats to prove what we are talking about."

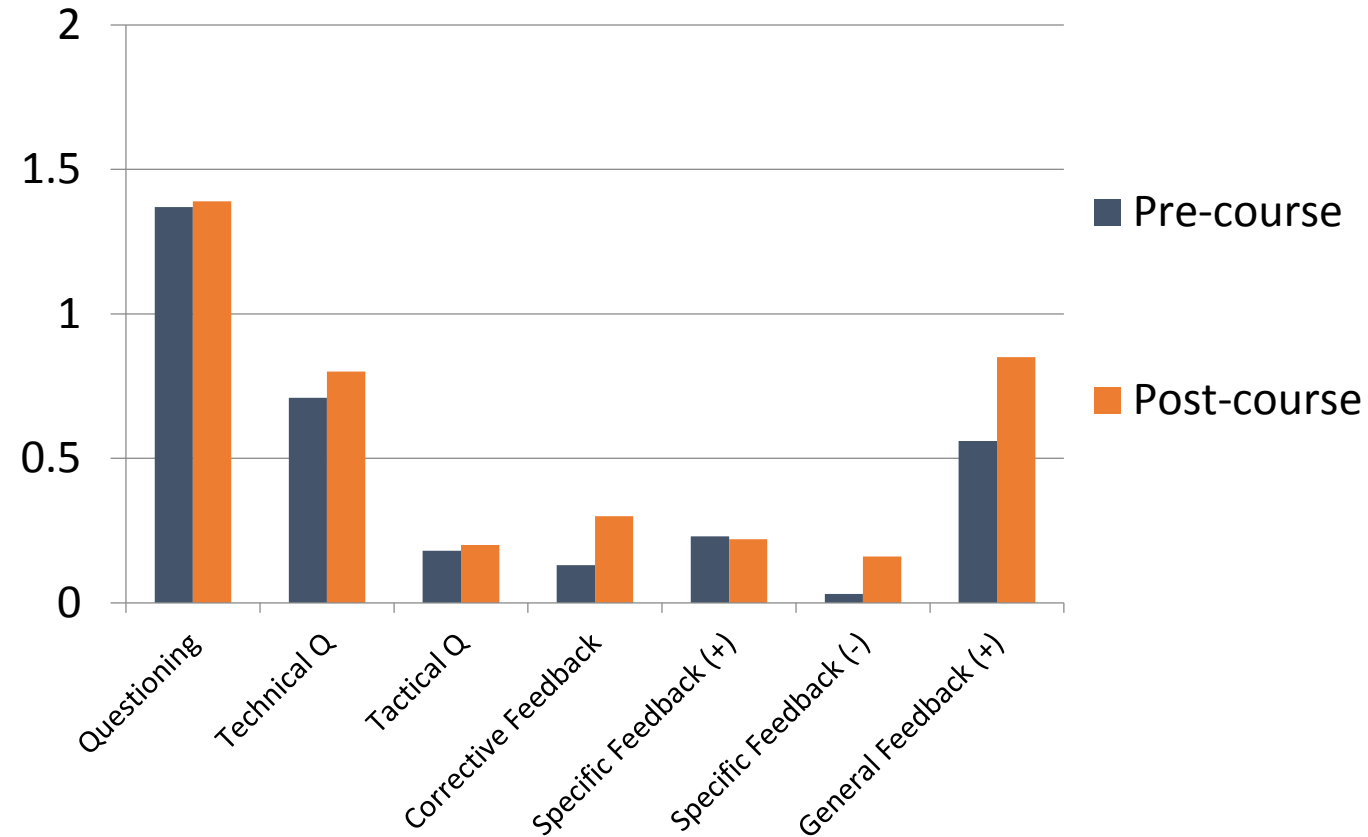


FA Youth Module Impact (Course Content)

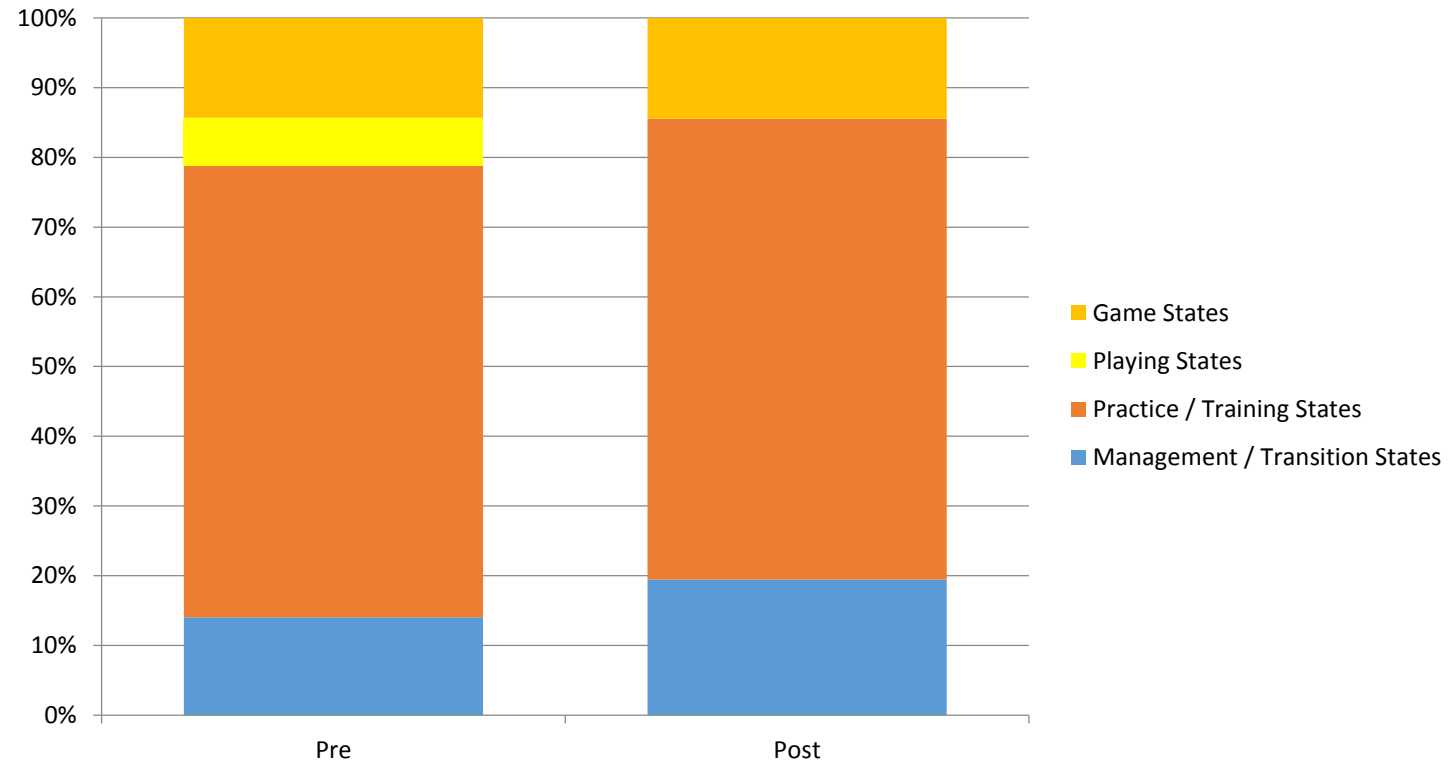
Percentage Time Spent on Task by Individual



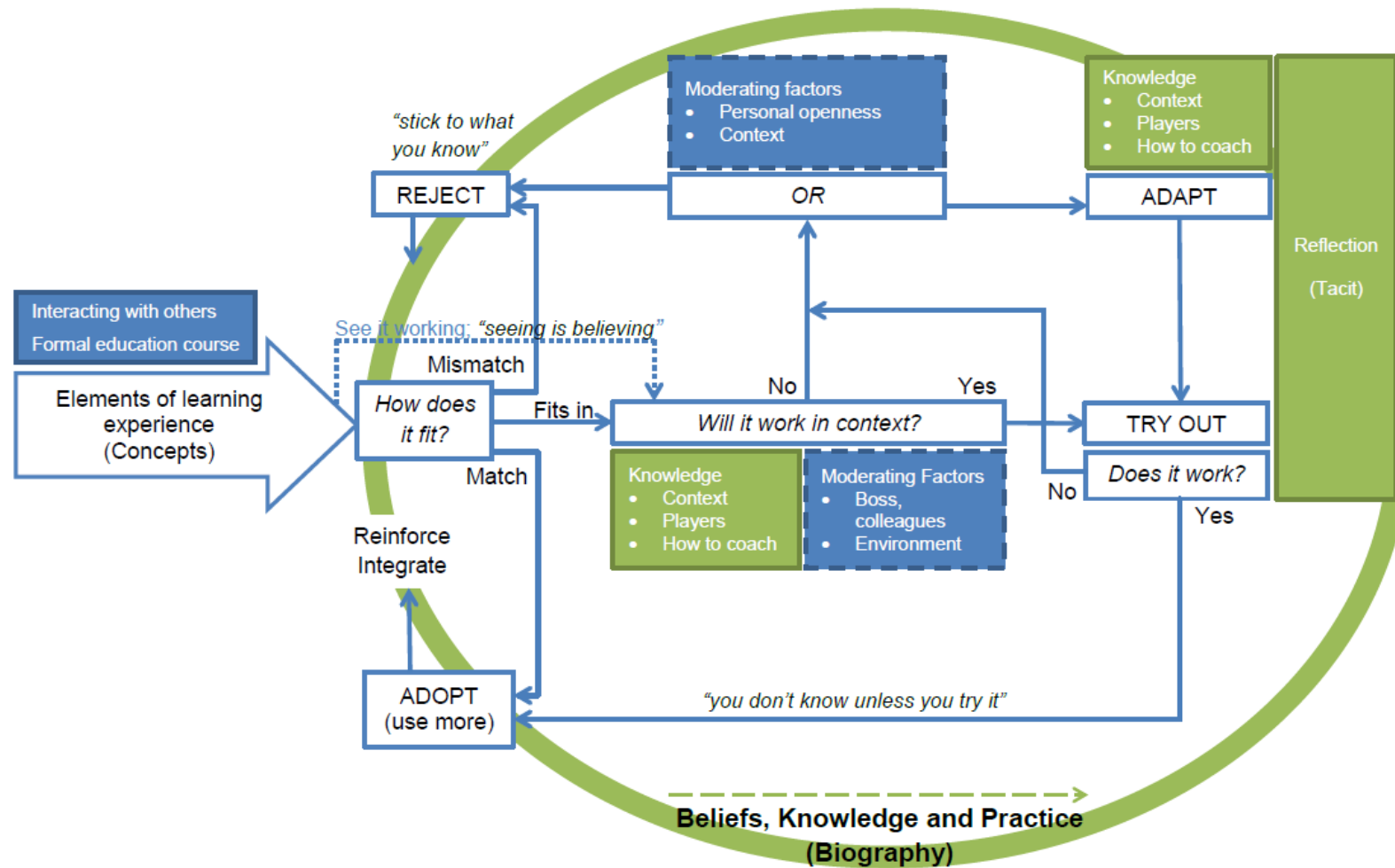
FA Youth Module Impact (Behaviour)



FA Youth Module Impact (Practice Type)



Coach Learning (Stodter & Cushion, 2014, 2015)



Reflections on Data

- Actual versus planned behaviour
 - Session objectives
- Awareness?
- Why that behaviour/practice?
 - Links to athlete learning/performance?
 - Rationale/justification
 - How do you know that it works?
 - What if you're wrong?
- Drawn (guide to) to 'critical incidents/issues'?

Some Conclusions

- Coach behaviour a controllable
- Raise self-awareness- knowledge & understanding
- Possible to change coach behaviour
 - Time!
- Practice/research link-
- Underpinned by analysis of behaviour and links to practice & learning

