

Insights from a Survey of the Wargaming Community



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7 September 2017



Overview

- Context: What am I trying to do, and how am I going about doing it?
- Findings: What did I learn?
- Discussion: What am I missing or misinterpreting?

Background on the Overall Project

- Part of dissertation research at the Pardee RAND Graduate School
- Overall project intent is to build a framework that explicitly lays out types of game design and what purposes they are appropriate for
 - “There is no recipe for translating a game’s objectives into its mechanics. The principles described in the remainder of this chapter give some hints about the process, but ultimately the designer’s talent dictates how and how well the translations from objectives to mechanisms works.” (Perla 2012)
- Aim is to create logics, not a cookbook (ex. structured comparison vs. synthesizing mental models, rather than Axis and Allies vs Dominion)
- Much of this work is in converting “tacit” knowledge of expert practitioners into more explicit knowledge that can be shared with others

Where this survey fits in

- Early step to better understand tacit “rules” or heuristics used by game designers
- Supports the development of an initial framework, which will also incorporate:
 - Gaming literature
 - Allied field literature
 - My own experience/knowledge
- Later stages of research will bring in other types of evidence
 - Game design reports and interviews
 - Expert validation
 - Application
- Also informing internal RAND work on technology in game design

Survey Research Questions

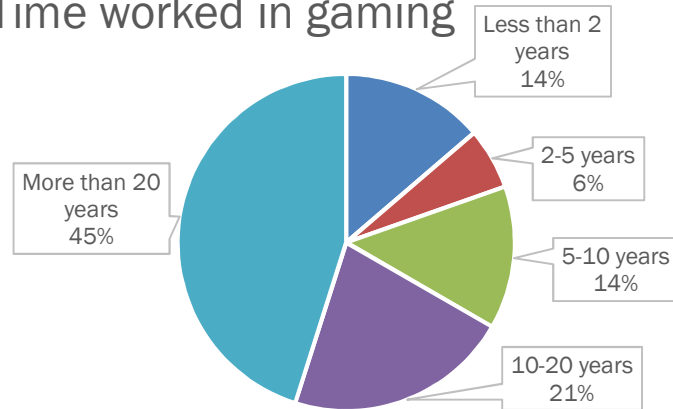
1. What is the background of respondents?
2. How do respondents define core elements of games?
3. How do respondents assess games at different stages of the process?
4. What are concerns with the incorporation of technology to support policy gaming?

Survey Specifics

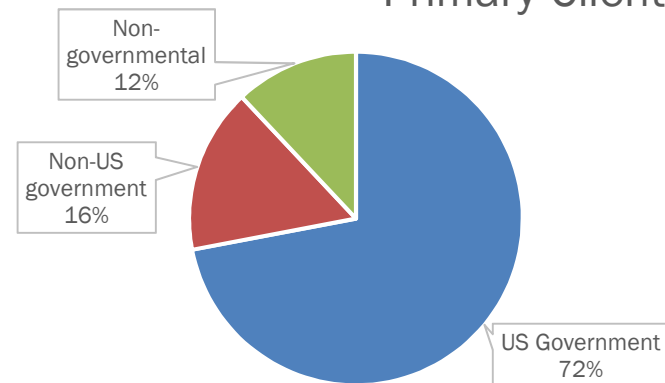
- Fielded May-June 2017 via Google form survey
- 30 questions, largely open ended response
- Goal was a broad, but not representative sample of practitioners
 - Survey distributed via professional organization email lists (MORS and Connections), online discussion boards, blogs, and Twitter
 - ~50 fairly complete responses

Demographics of Respondents

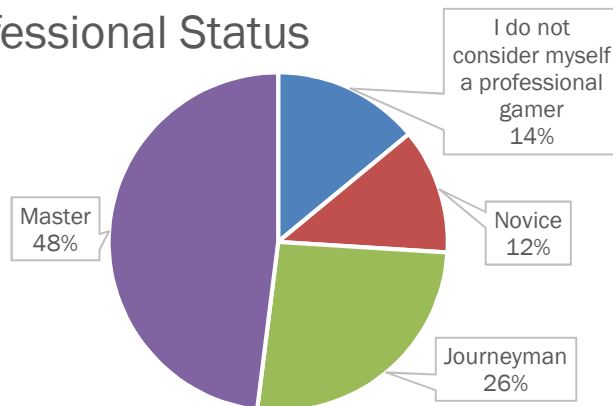
Time worked in gaming



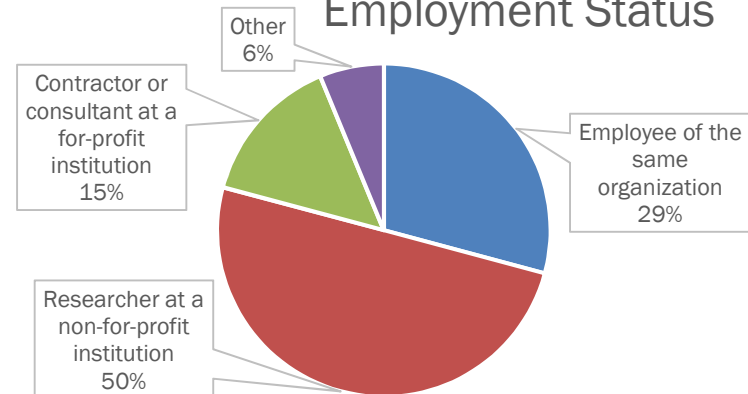
Primary Client



Professional Status



Employment Status



Performed Two Types of Analysis

- Closed response questions
 - Present the proportion of participants who listed each option, including responses to “other” to create new categories
- Open response questions
 - Thematic analysis to identify clusters of related ideas
 - Ex “Limited objectives, identification of game limitations” coded “limited objects”=sensible objectives, “identification of game limitation”=limitations
 - Present proportion of participants who included each cluster of ideas in their response
- Limitations of methods
 - No a representative of the field
 - Single coder subject to biases – I could be putting words in your mouth!

BLUF: Gaming shows indicators of immaturity as a field

- Little specialization among practitioners
- Unrecognized consensus in some key areas and wild divergence in others
- Assessment, particularly of design and analysis currently depends on tacit knowledge
- Mixed feelings about the potential of technology

Questions on Practice Area and Training

- What is the purpose of the games you design, execute, and/or analyze?
(please check all that apply)
- What time horizons do your games focus on? (please check all that apply)
- My games are at the _____ level. (please check all that apply)
- My work focuses on game _____. (please check all that apply)
- In my game design, execution, and/or analysis work, in addition to experience working on national security games, I use my training in _____.
(please check all that apply)

Relatively Little Specialization Among Practitioners

- Purpose: At least 45% of respondents conducted games in each of 5 categories
 - senior leader policy discussions, force planning, future capabilities, COA analysis, and training & education
- Time Frame: 78% Present-5 years, 65% 5-15 years, 37% 15-30 years (small practice of historical gaming)
- Level of Conflict: 86% Operational, 64% Strategic, and 44% Tactical gaming
- Past Training: 60% Military Service, 58% Hobby, 50% Qualitative SocSci, 42% Operations Research, 32% Quant SocSci

Questions on Definitions and Core Elements

- Please offer your preferred definition of a policy game/wargame/war game.
- What are the core elements of a useful game?

Games Defined by Core Elements

- Strong overlap between themes from question on definition of a game and core elements of a game...
- ... but ordering of popularity not the same

Definition:

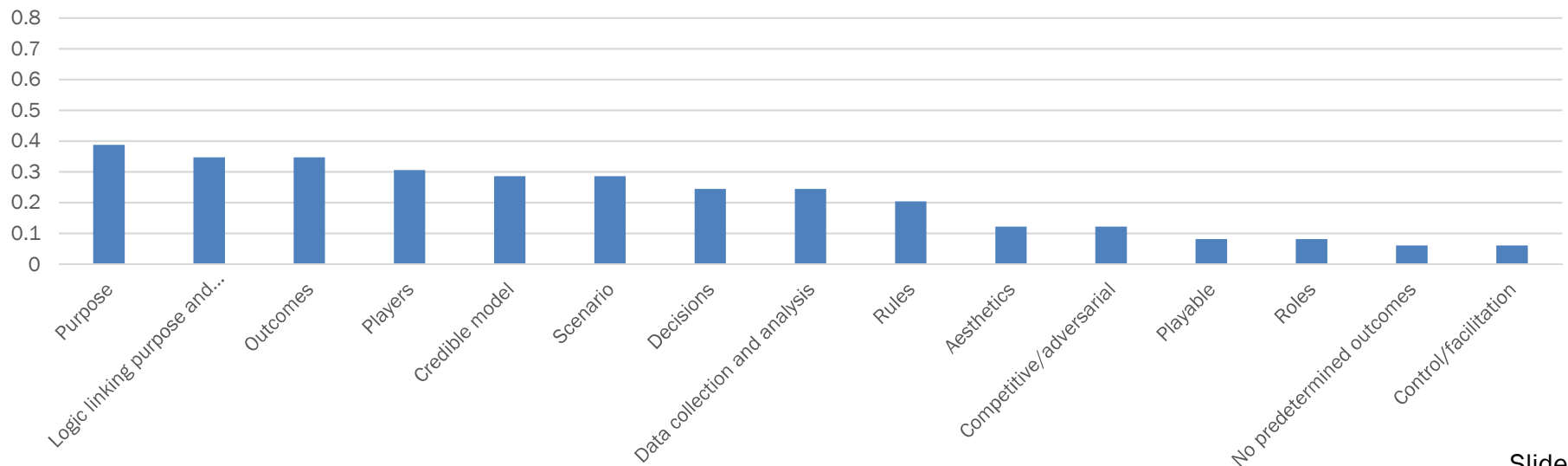
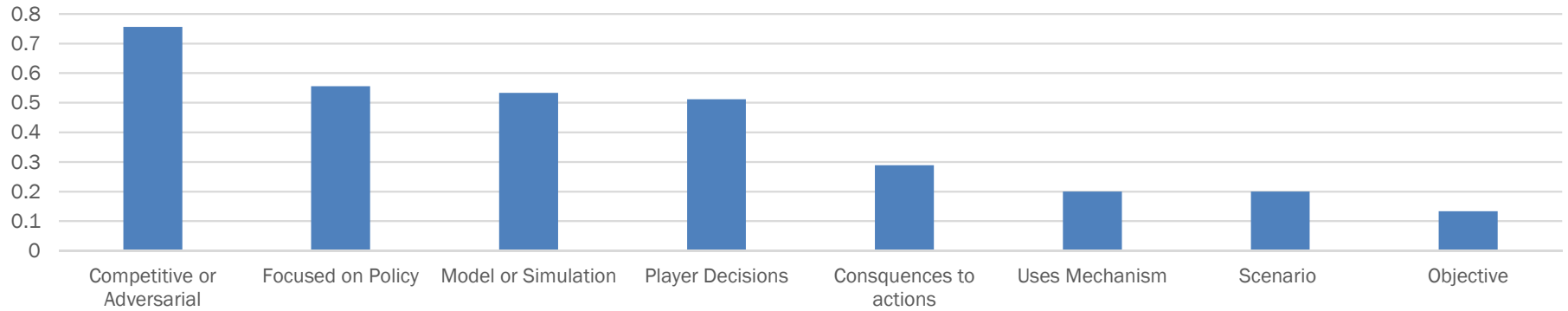
1. Competitive
2. Policy
3. Model
4. Decisions

Core Elements:

1. Purpose
2. Logic
3. Outcomes
4. Players

- Strong consensus on definition, less alignment on core elements

Definition vs Core Elements



Questions on Assessment

- When advising a colleague about his or her game design...
 - ... I think a game's purpose is sufficiently clear when _____.
 - ... I think a game design is appropriate for the game's purpose when ____.
- When executing a game...
 - ... I know a game is running smoothly when I see _____.
 - ...I believe the players are engaged and immersed in the world of the game when I observe _____.
- When writing up analysis of a game...
 - ... to help the reader understand my design choices and how they could impact the interpretation of findings, it is important that I include _____.
- When reading another analyst's game report...
 - ... I believe their results are credible when I see _____.
 - ...I do not trust the results of a game that _____.

Two Sides of Assessment

- Assessments of execution tend to be based on clear heuristics that can be communicated to outsiders
 - Language indicating ownership use by players
 - Energy level and engagement
 - The classic “help! I must adjudicate and my players won’t leave” syndrome
- Assessment of design and analysis depends far more on tacit knowledge
 - Interest in “match” between purpose and design
 - “Understandable,” “logical,” and “sensible” choices
 - Documentation of limits and trade-offs
- Assessment of game play far more concrete, and thus easier than design or analysis. Problematic because design and analysis easier to access

Assessment Standards Reveal Problems in the Field

- Equal or more emphasis on enjoyability and engagement over data collection and results
- Concern with intellectual integrity
 - Hold our own games to higher standards than when we review others
 - Predetermined results
 - No report
 - Reliance on ID of individuals involved for quality control
- Assessment of design and analysis depends on game execution

Questions on Technology

- What types of technology do you use in your games? (please select all that apply)
- What do you think are the advantages of using technology in games?
- What are the disadvantages?
- When advising a colleague about his or her game design...
 - ...for a distributed computer-based game, I am particularly concerned with _____.
- When writing up analysis of a game...
 - ...when the game is distributed via a computer system, I am sure to flag _____.

Views on Technology to Support Games

- Gamers by in large don't use, and often don't like technology in games
- Pros:
 1. More complex/accurate modes
 2. Faster/easier for staff
 3. Better situational awareness
 4. Data capture
 5. Immersion/Realism
 6. Asynchronous/Remote play
- Cons:
 1. Opaque
 2. Rigid model limits play
 3. Technical problems
 4. Prevents engagement/immersion
 5. Cost/Development time
 6. Slows game play
 7. False Accuracy
 8. Less enjoyable format
 9. Control learns less
- Concern over immersion/engagement seems particularly key

Validation Discussion

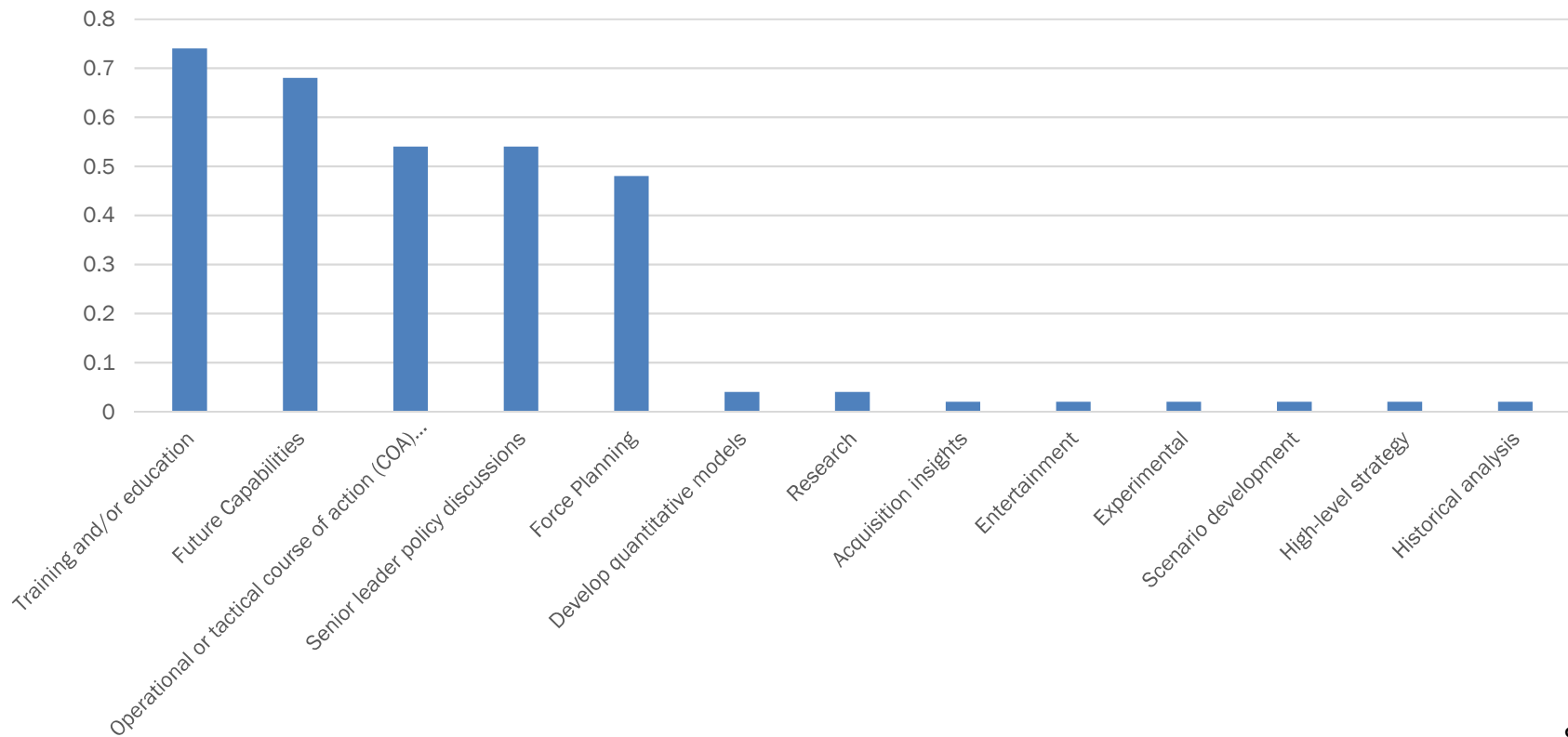
- Do these results “feel” right to you? If not, what is wrong or missing?
- What results surprised you?
- What additional evidence would you need to see to think the findings were credible?



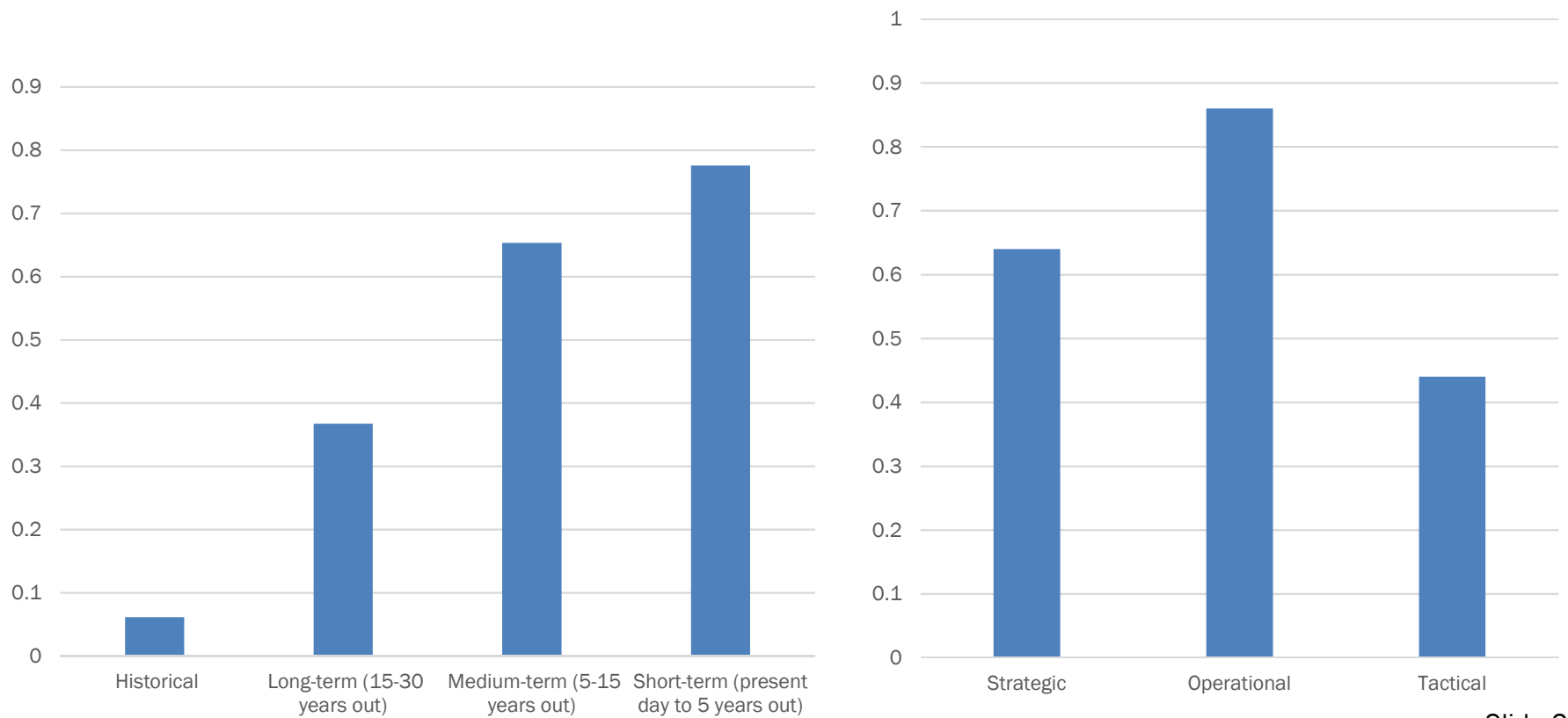
Demographics



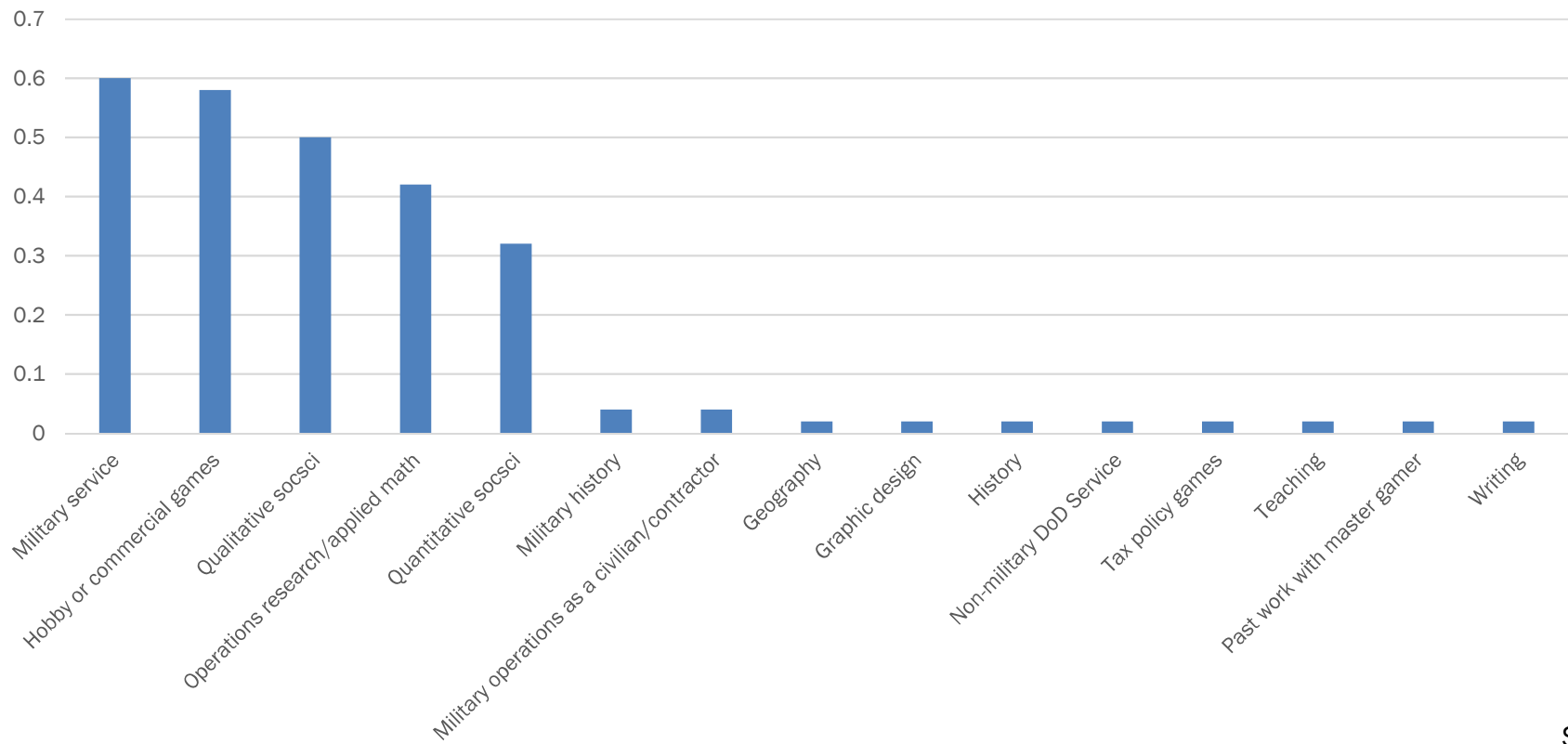
Purpose of Games



Time Frame and Level of Games



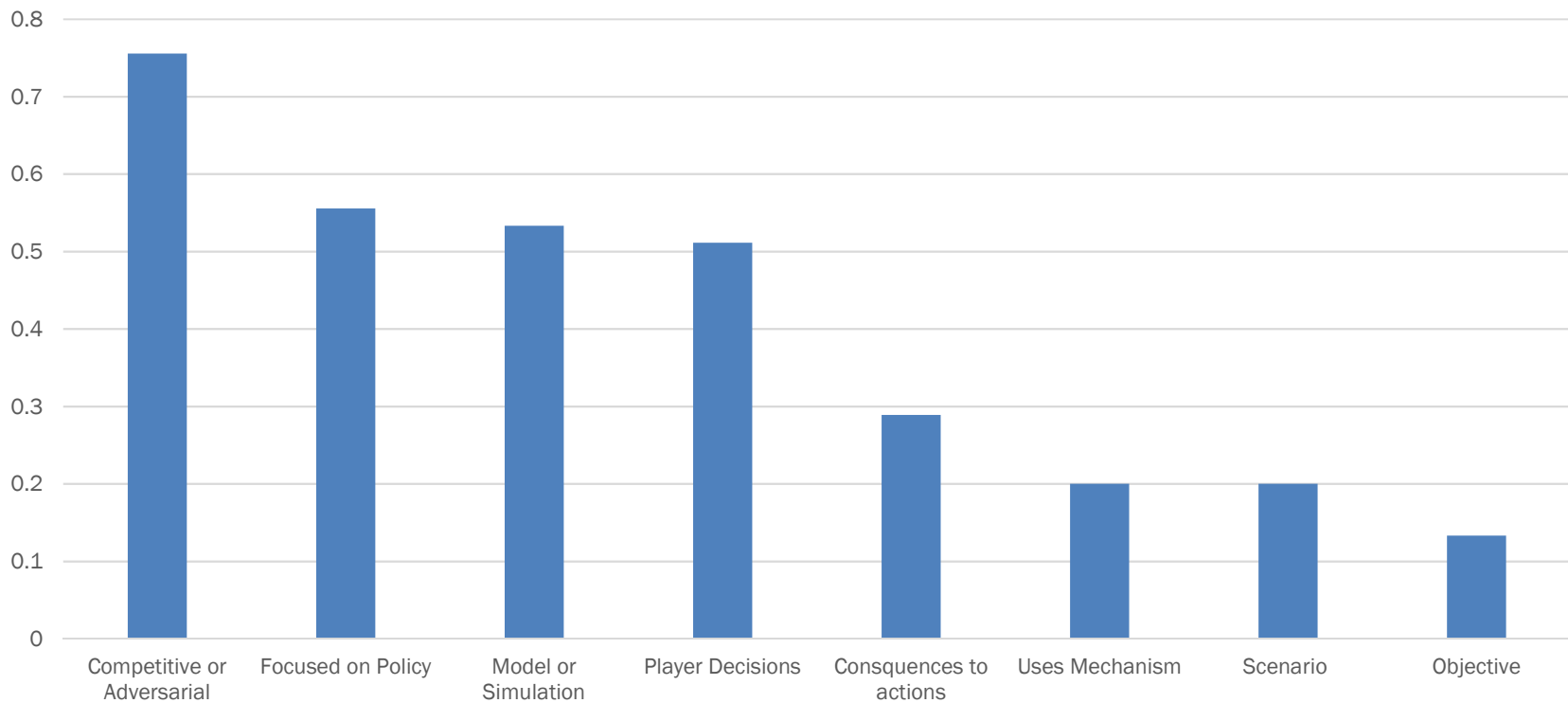
Past Training Used in Game Design



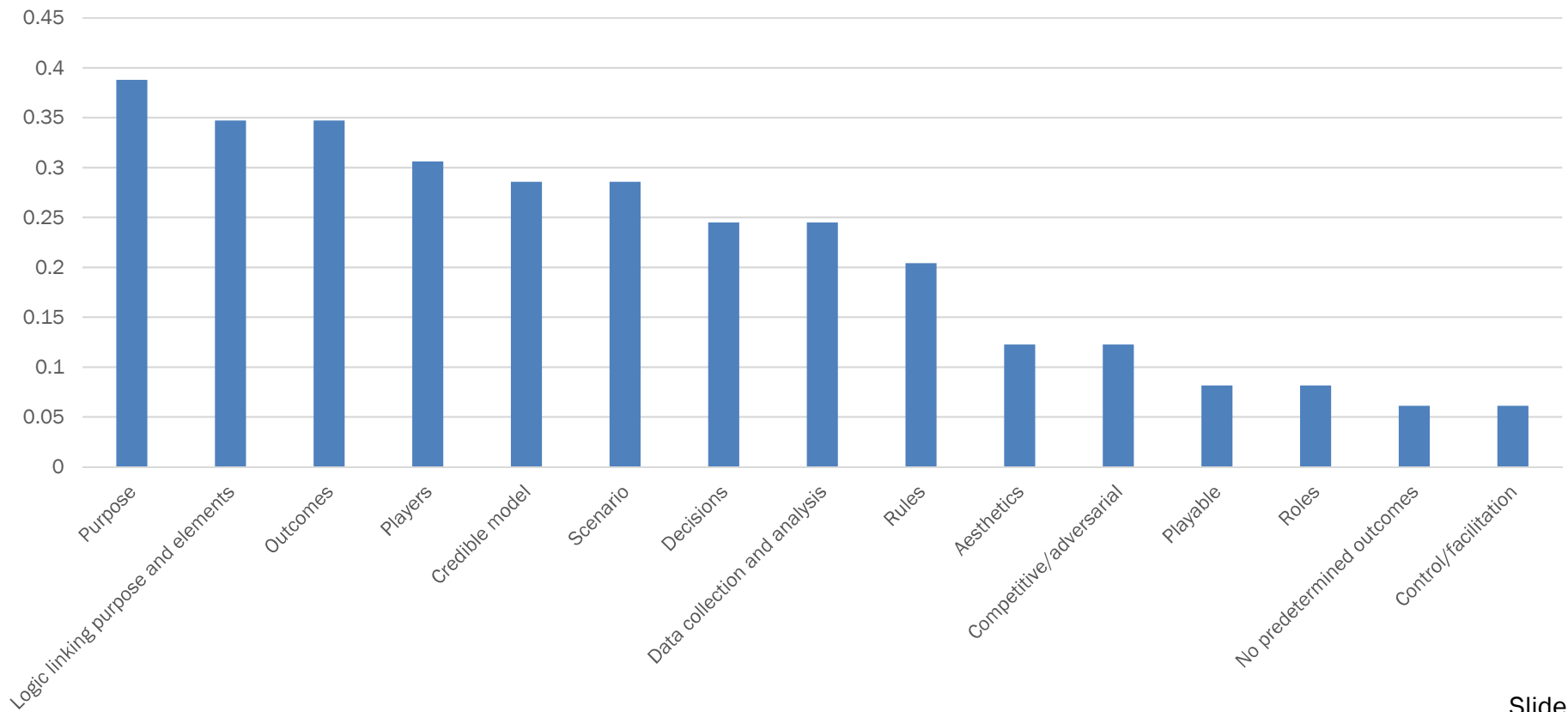
Core Elements



Definition of Policy Game or Wargame



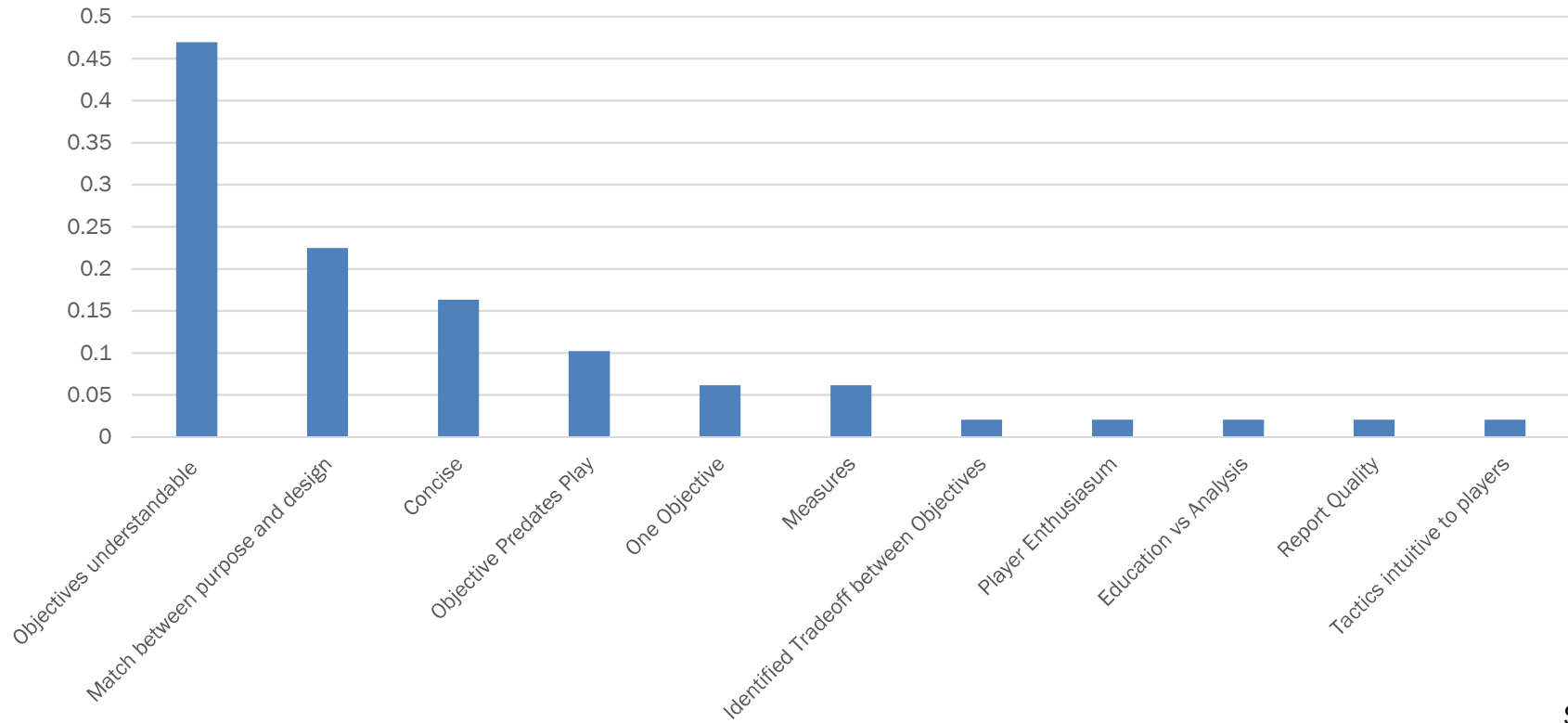
Core Elements of a Game



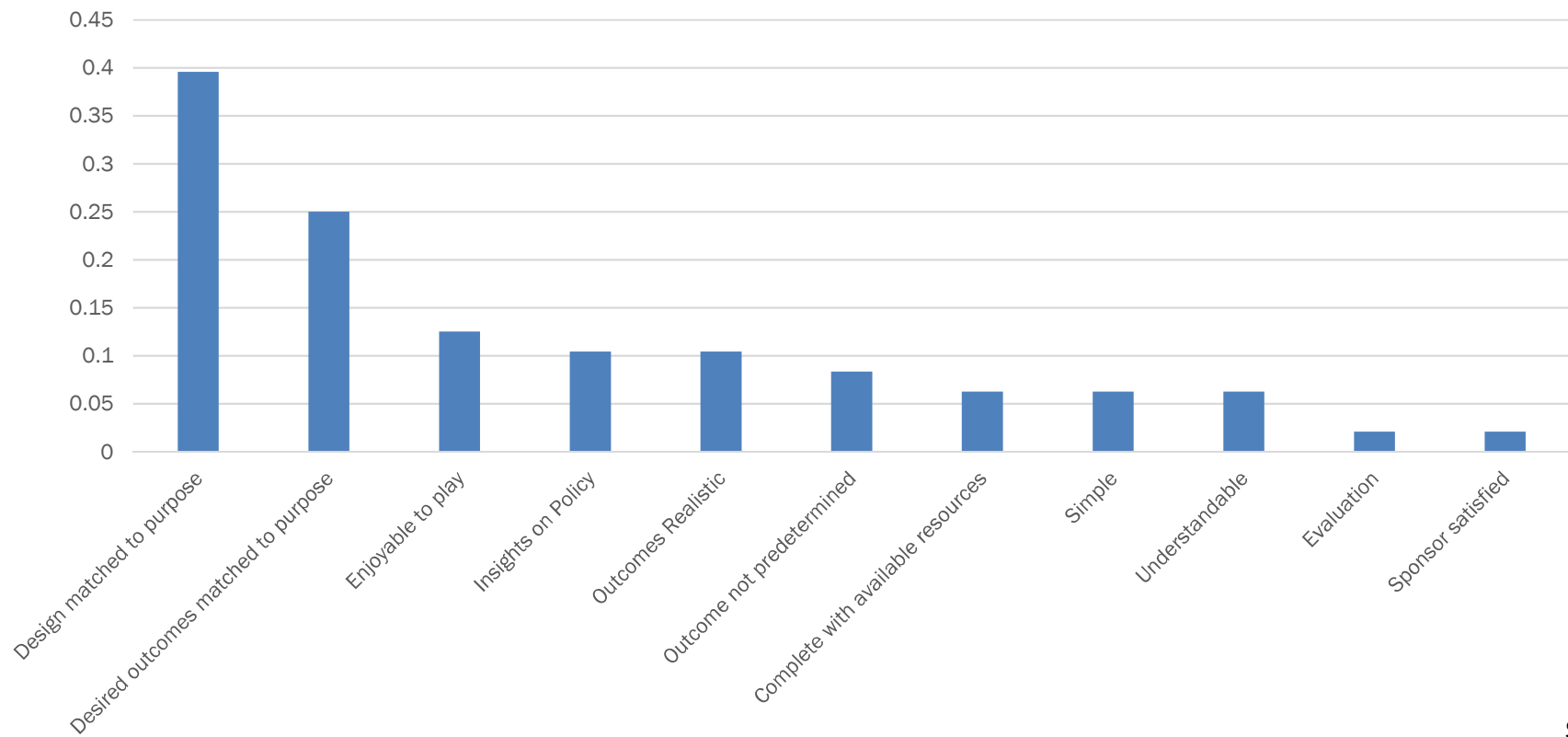
Appropriateness



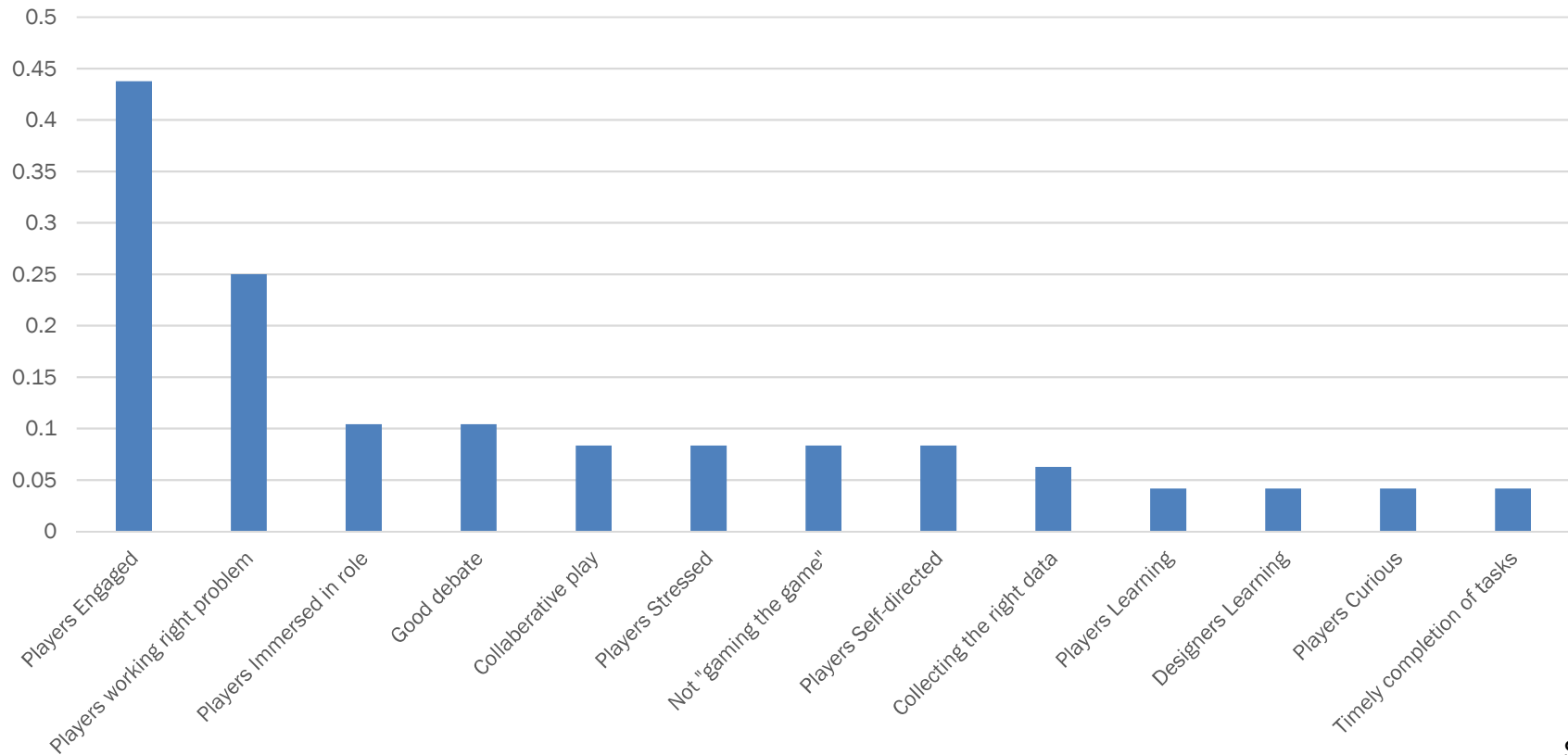
Purpose Sufficiently Clear



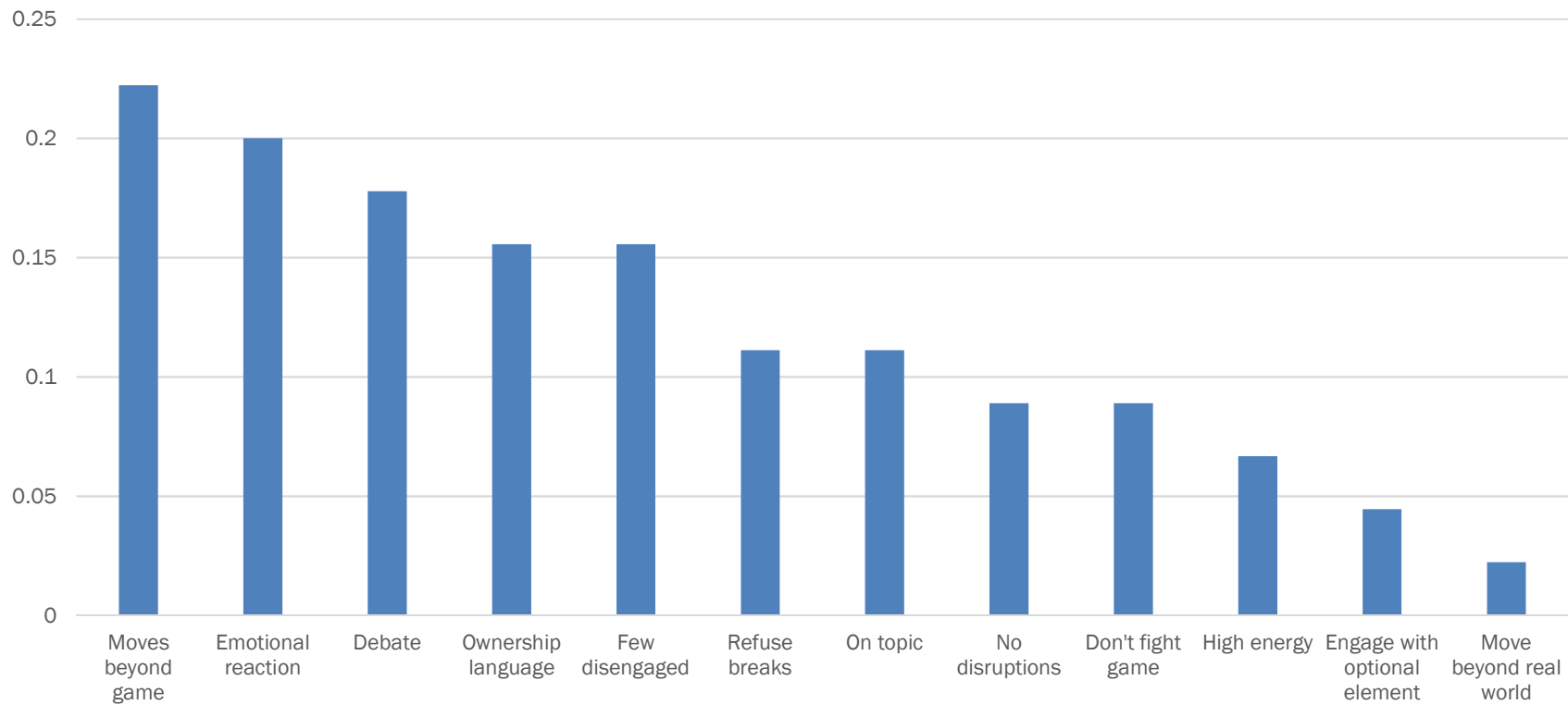
Game Design Appropriate



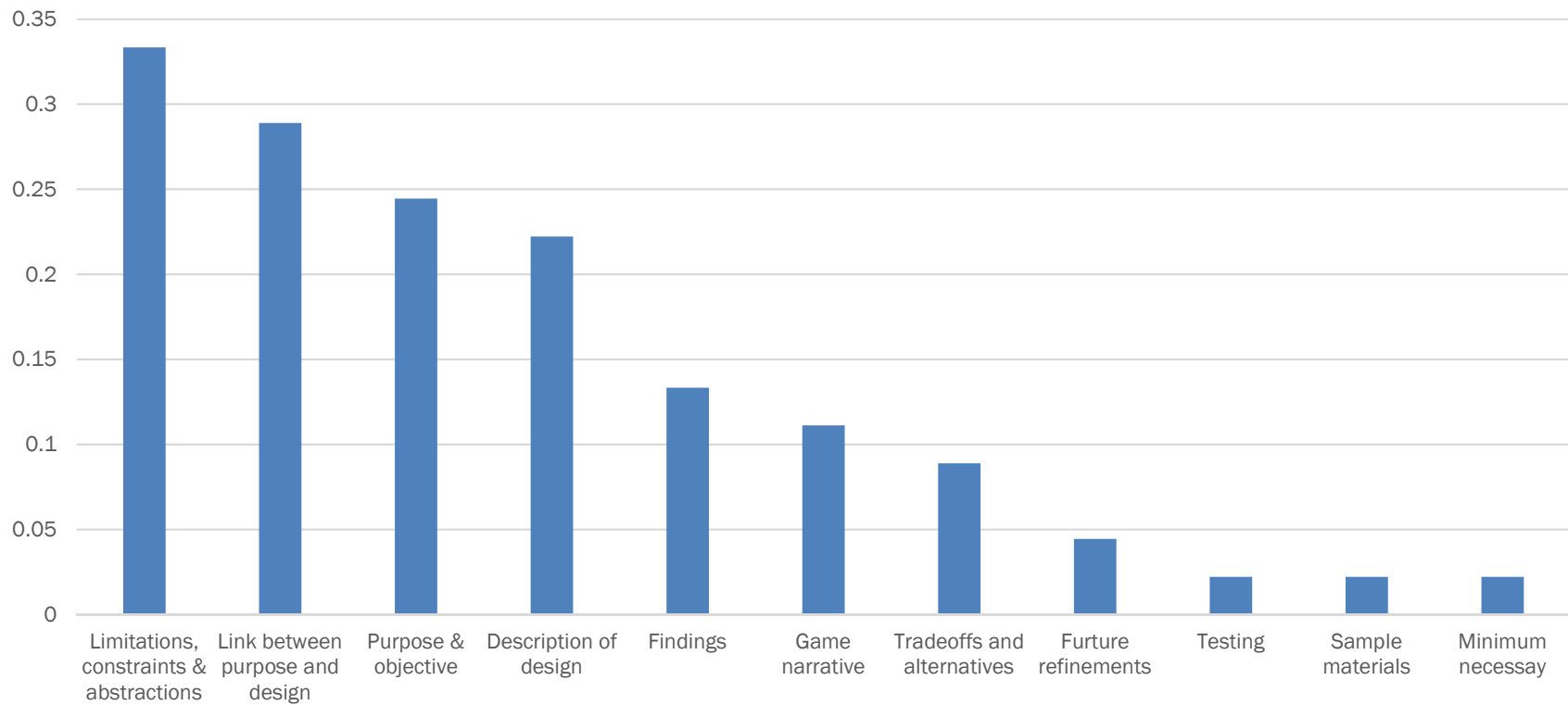
Game Running Smoothly



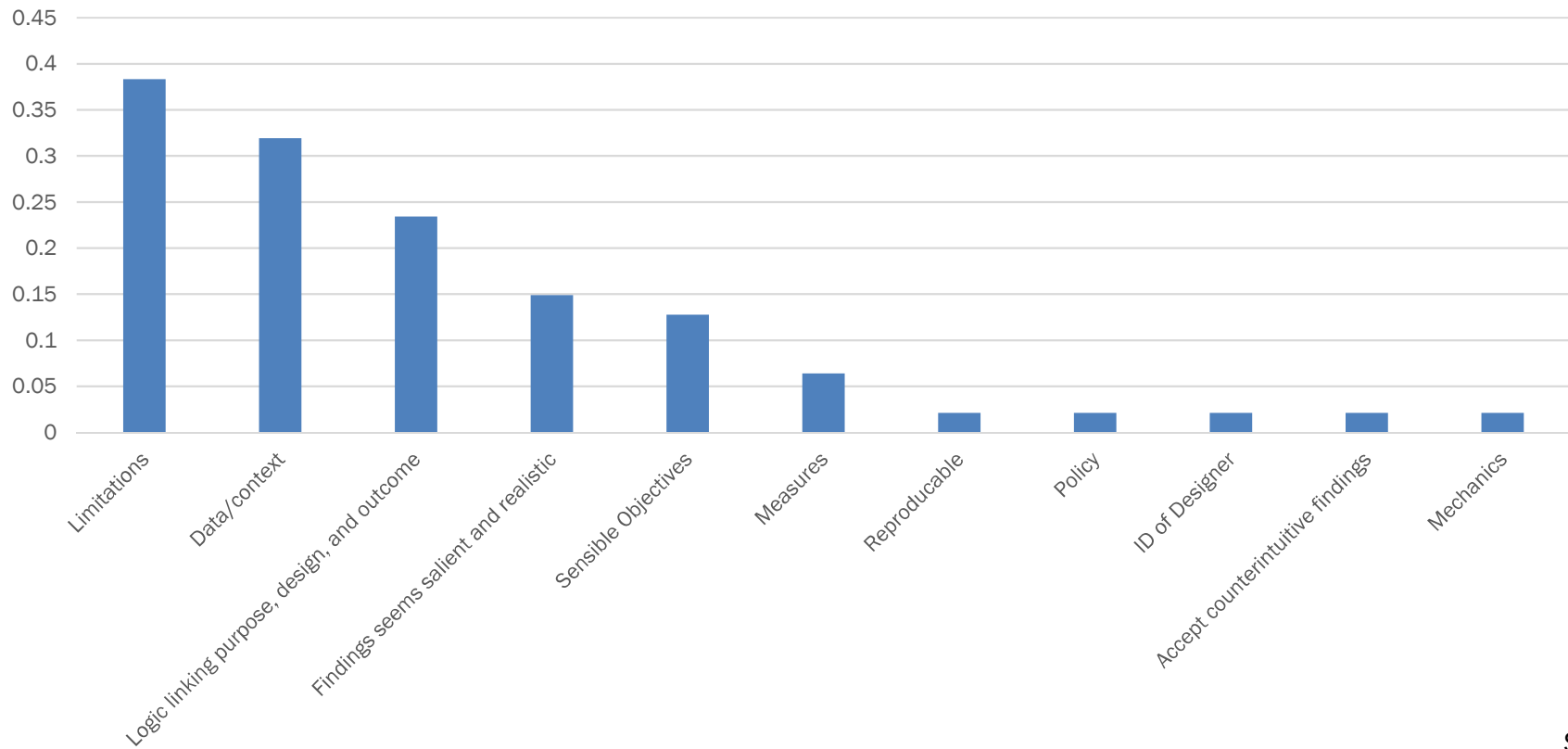
Players Engaged and Immersed



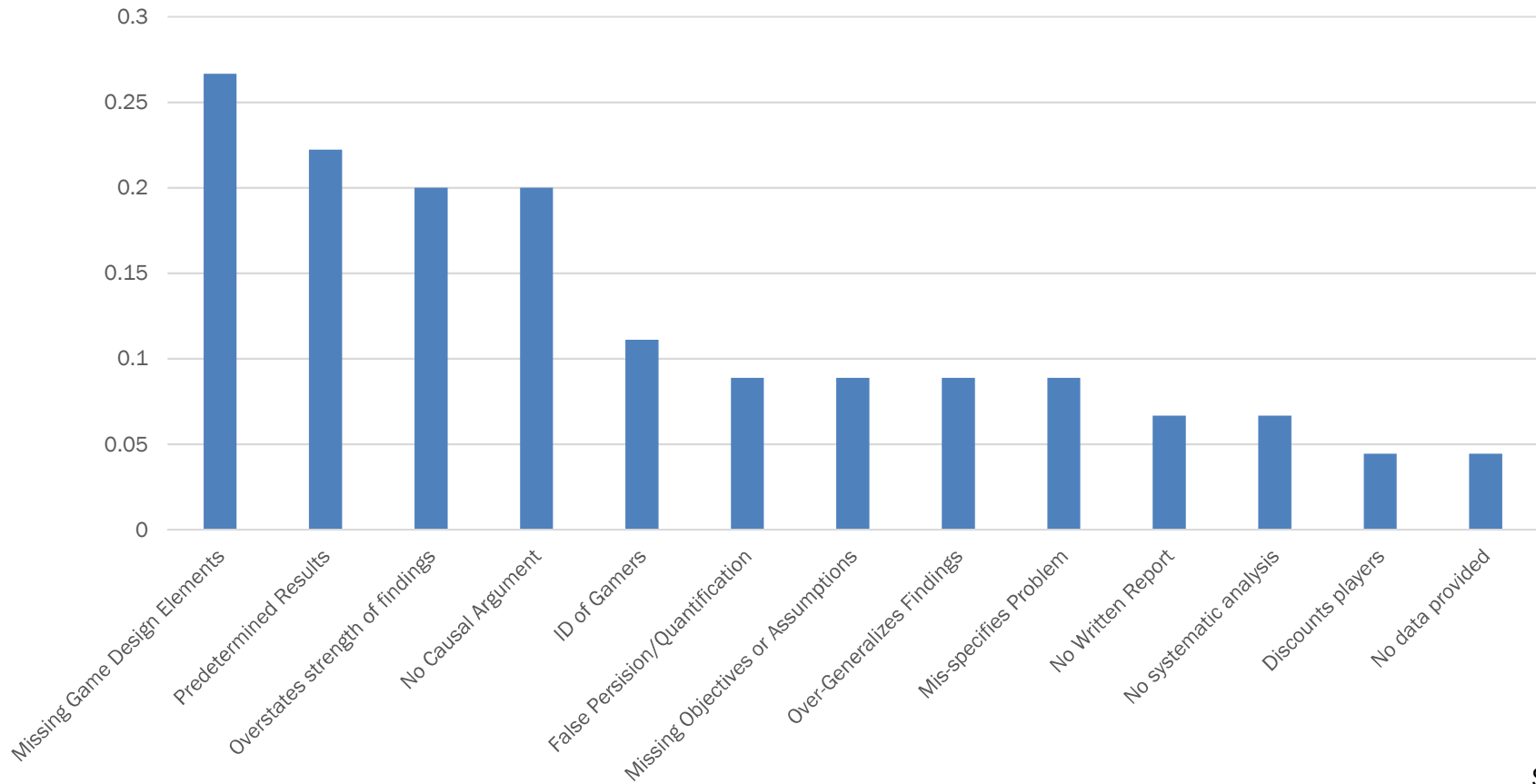
Include to Explain Design



Believe Results are Credible



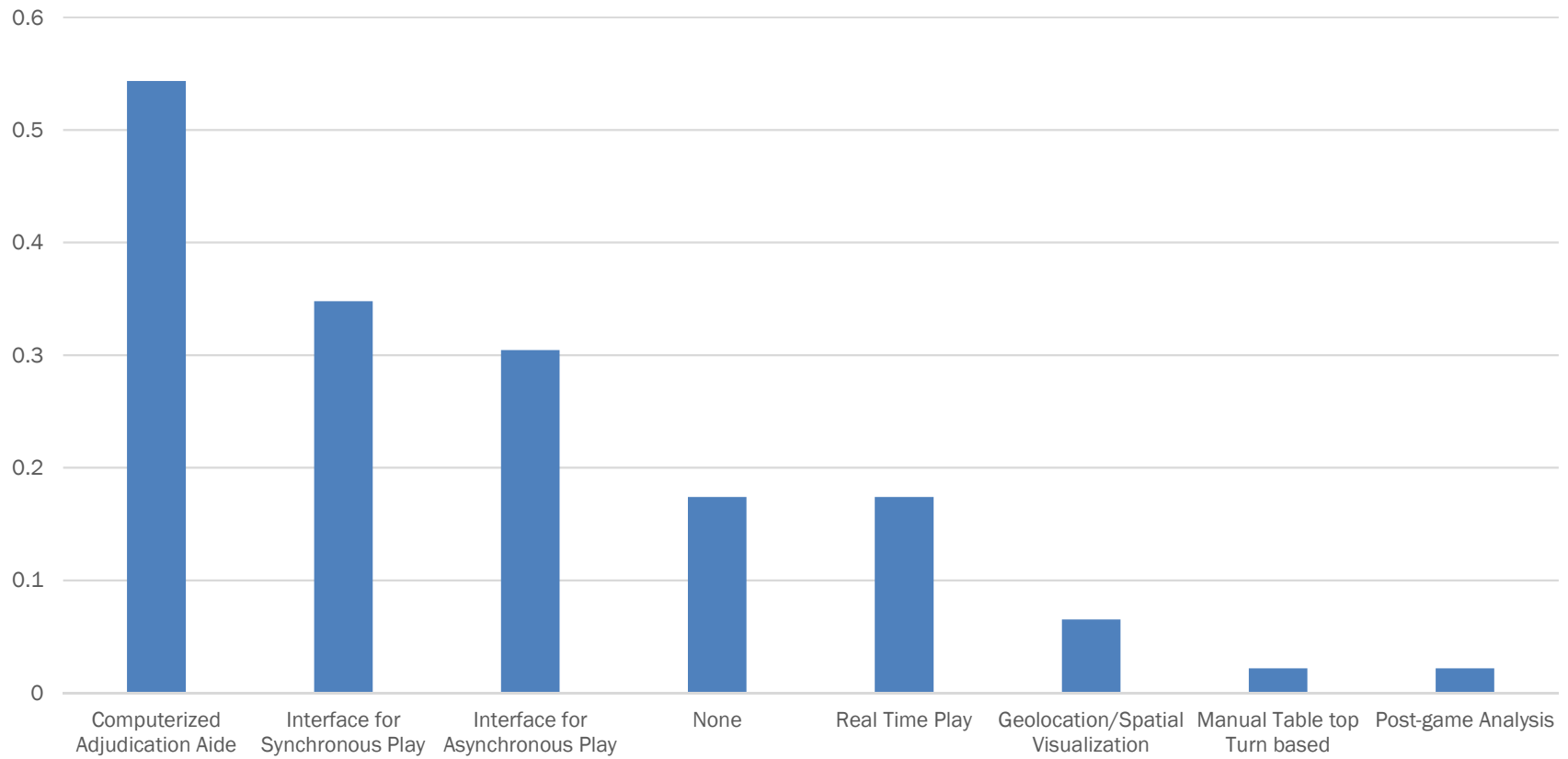
Mistrust Game Results



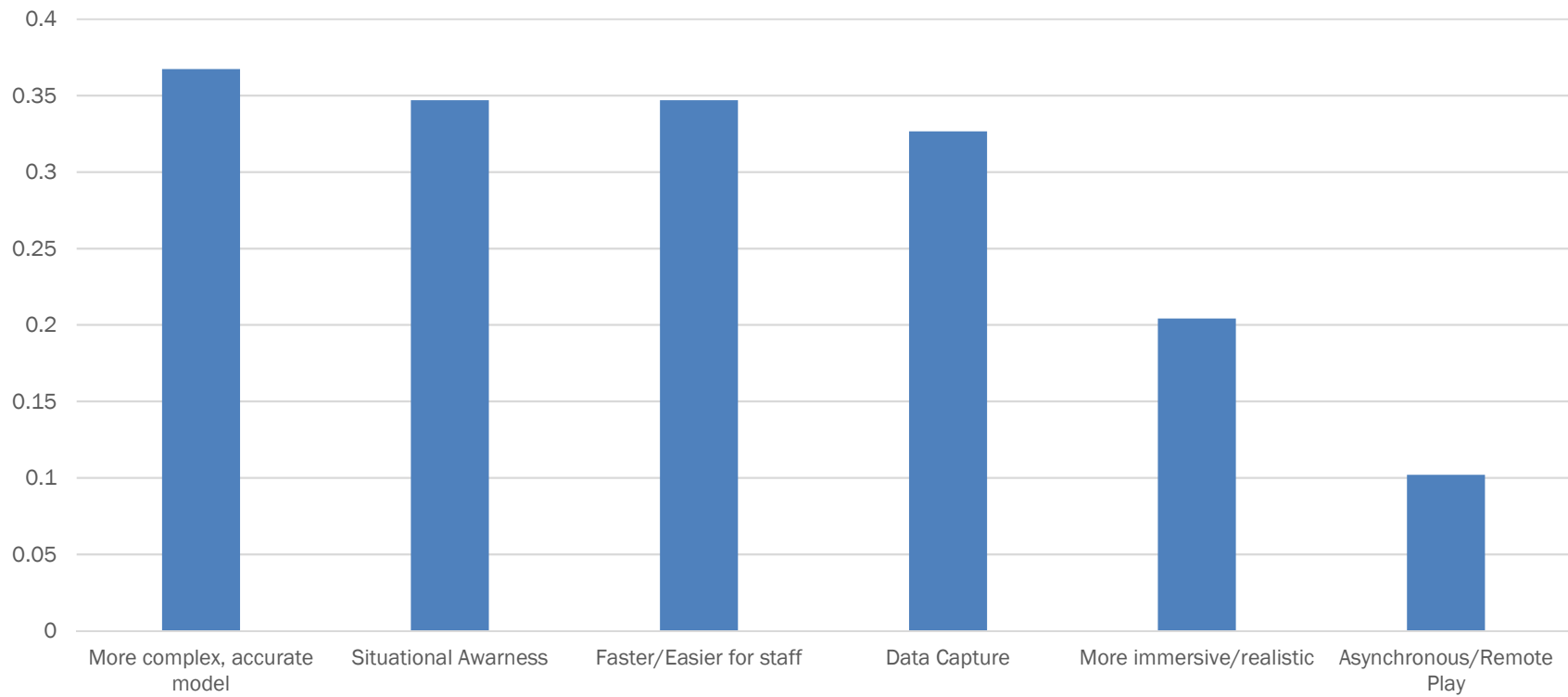
Role of Technology



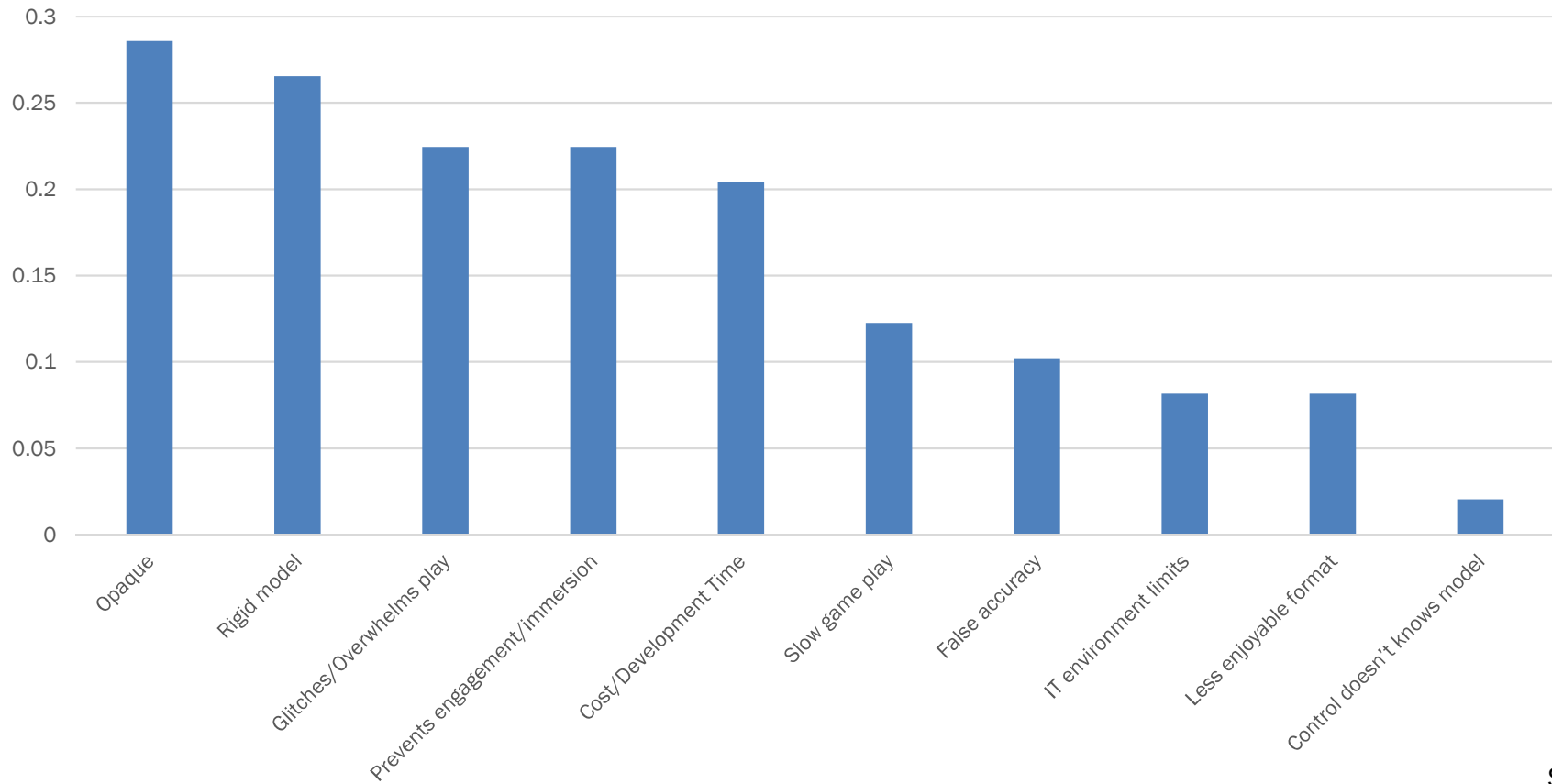
Use of Technology



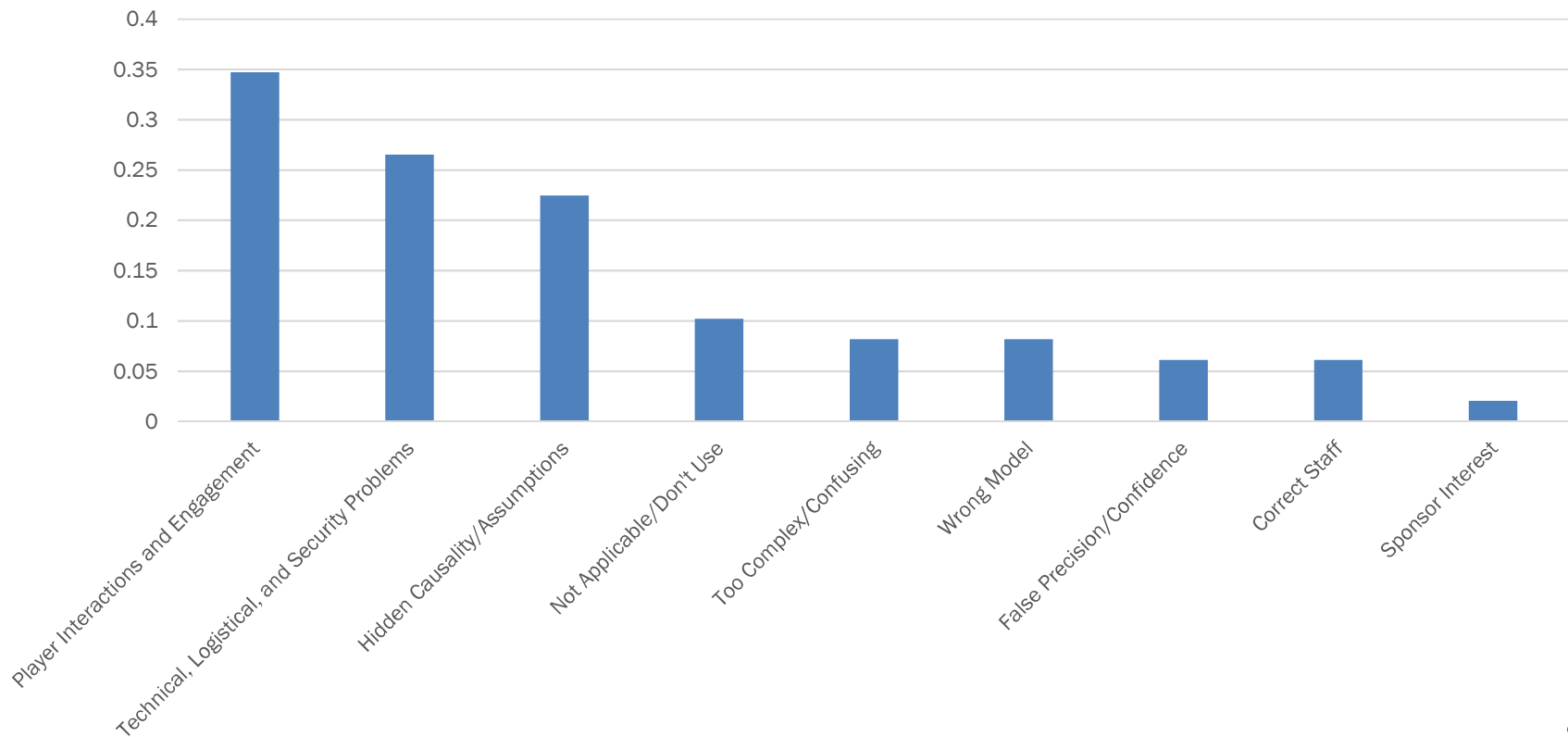
Pros of Technology



Cons of Technology



Concerns for Computer-based Distributed Game



Flag When Using Computer System for Distributed Play

