Organisational Security: From expert knowledge construct to a body of knowledge

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Overview

- Understanding security
- Study objectives
- Study design
- Existing Security bodies of knowledge
- Analysis & initial results
- Final outcomes - framework of Organisational Security
- Conclusion & Questions
Understanding Security

• What is security?
  - Assured freedom from poverty or want
  - Stable & predictable environment to pursue an end without disruption or harm (Fischer & Green 2004)
  - Provision of private services in the protection of people, information & assets (Craighead, 2003)

\[ S = f(A, P, T) Si \] (Manunta, 1999)

where asset (A), protection (P), threat (T) & situation (Si)

- Value???
Defining Security Industry?

• Security industry is broad and multi-disciplined
• Recent international politics has further broadened security
• Public v private debate

“every time we think we’ve got the definition of the security field nailed, somebody ... starts taking some of the nails away”

(ASIS International, 2003, p. 10)
Study Objectives

For the practising domain of Organisational Security:

- What knowledge categories are most relevant?
- Can a singular body of knowledge framework be developed?
Phase One: Body of Knowledge

Critique existing body of knowledge studies to develop and present an Integrated Framework of Organisational Security.

Result: Integrated Framework of Organisational Security

Phase Two: Psychometric MDS Review

Using psychometric multidimensional scaling, test the integrated framework using domain experts.

Result: Revised Integrated Framework of Organisational Security
Phase One - Security BoKs

- Introductory course to Security (Nalla, 2001):
  - Explored nine core concepts of security
  - Protective, people, physical, info, ICT
- ASIS International Practitioner/academic symposia (1998-2009)
- Integrated framework of Organisational Security (Brooks, 2008; 2009)
Integrated Framework of Security

- 104 International tertiary security courses critiqued
- 9 Courses selected for content analysis & 7 received
- Most common concepts identified using Linguistic Inquiry & Word Count (Pennebaker, Francis & Booth, 2001)
- 2001 concepts extraction
- Expert validation (N=5)
Phase One Study Methodology

- $n$ Knowledge categories
- ASIS International common knowledge categories
- 15 Knowledge categories from the pilot study
- Expert validation ($n=5$)
- Knowledge categories of security ($n=13$)
Extracted Security Categories

- Criminology
- Business contingency
- Facility management
- Fire science
- Industrial security
- Information & computer security
- Investigations
- Physical security
- Risk management
- Security law
- Security management
- Technology
- Personnel

Phase Two - MDS

- Multidimensional Scaling
  - Multivariate analysis
  - Reduces complex data
  - Provides dimensional spatial representation
  - Elicits underlying dimensions
  - Analysis of judgements (Cox & Cox, 2000)

- Applied with 27 security experts

\[ \delta_{re} = \left\{ \sum_i (x_{ri} - x_{si}) \right\}^{\frac{1}{2}} \]

Dave Brooks
Psychometric MDS mapping of Security Framework

MDS Stress1=0.222
\(\alpha=0.992\)
Concluding Remarks

- Framework of Organisational Security presented, indicating breadth of knowledge
- Overlap between domains/disciplines
- Greater validation of framework
- Further research in understanding security domains

“security cannot be considered singular in concept definition, as definition is dependant on applied context”

(Brooks, 2009, Security Journal)
Thank you
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Questions?