

# Perceptions of Security and Risks on the Internet

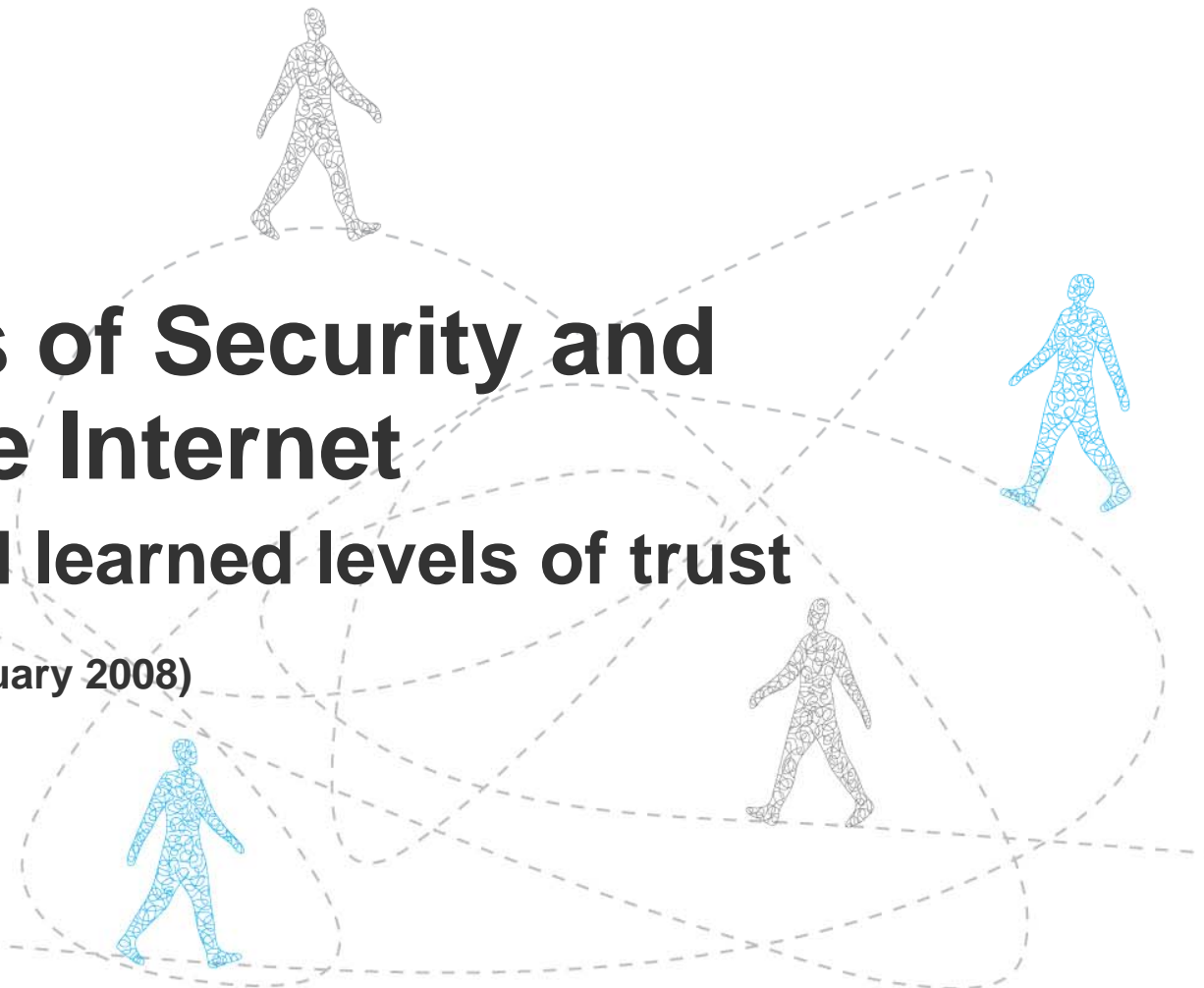
## Experience and learned levels of trust

Aarhus University (24 January 2008)

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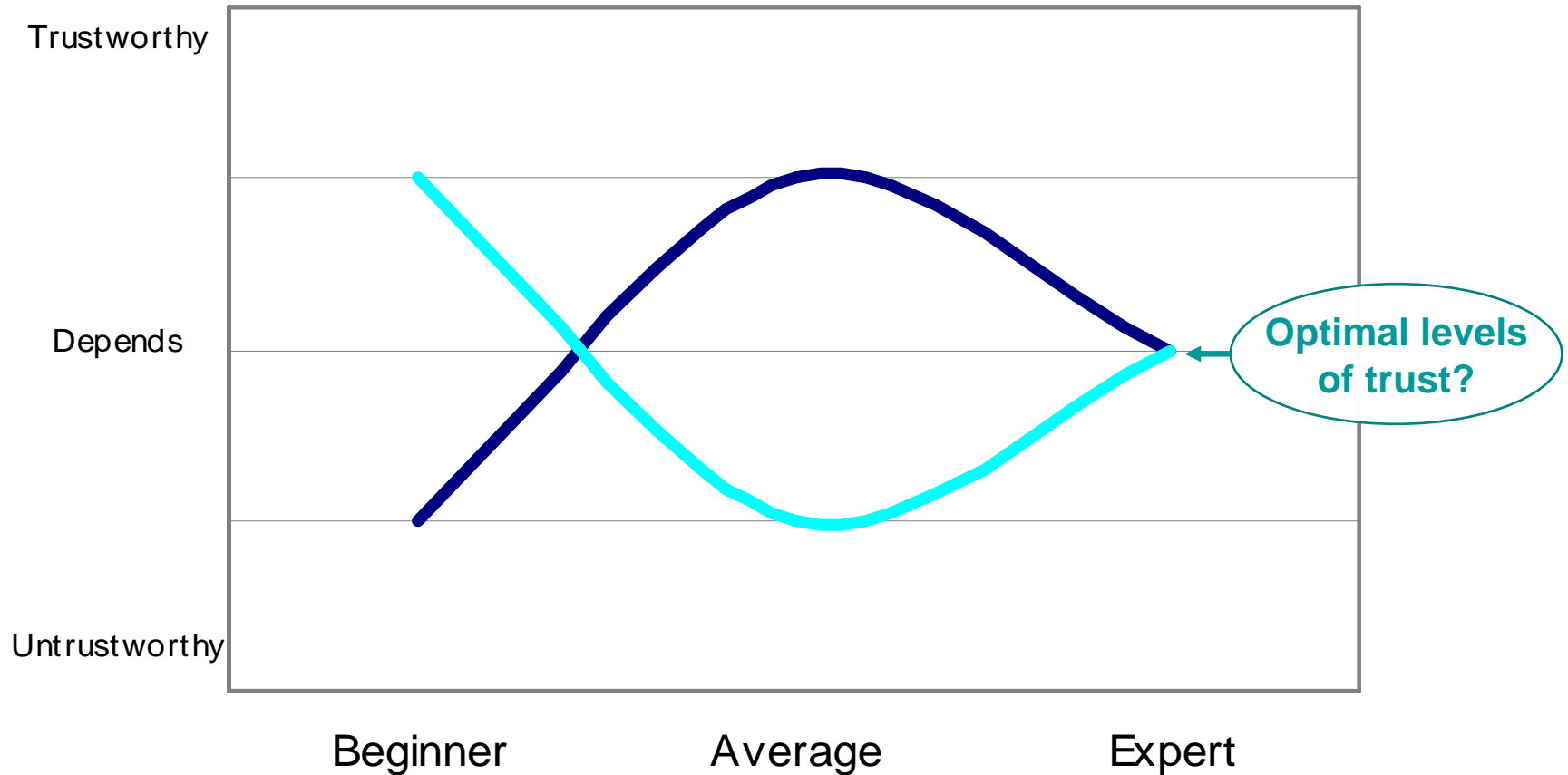


# A selection of ideas about risks and trust

- **Certainty Trough:**
  - Beginners and experts are more weary
  - Experts take more (measured) risks – Learned levels of trust
- **Experience technology**
  - With exposure comes trust
- **Optimal levels of trust?**

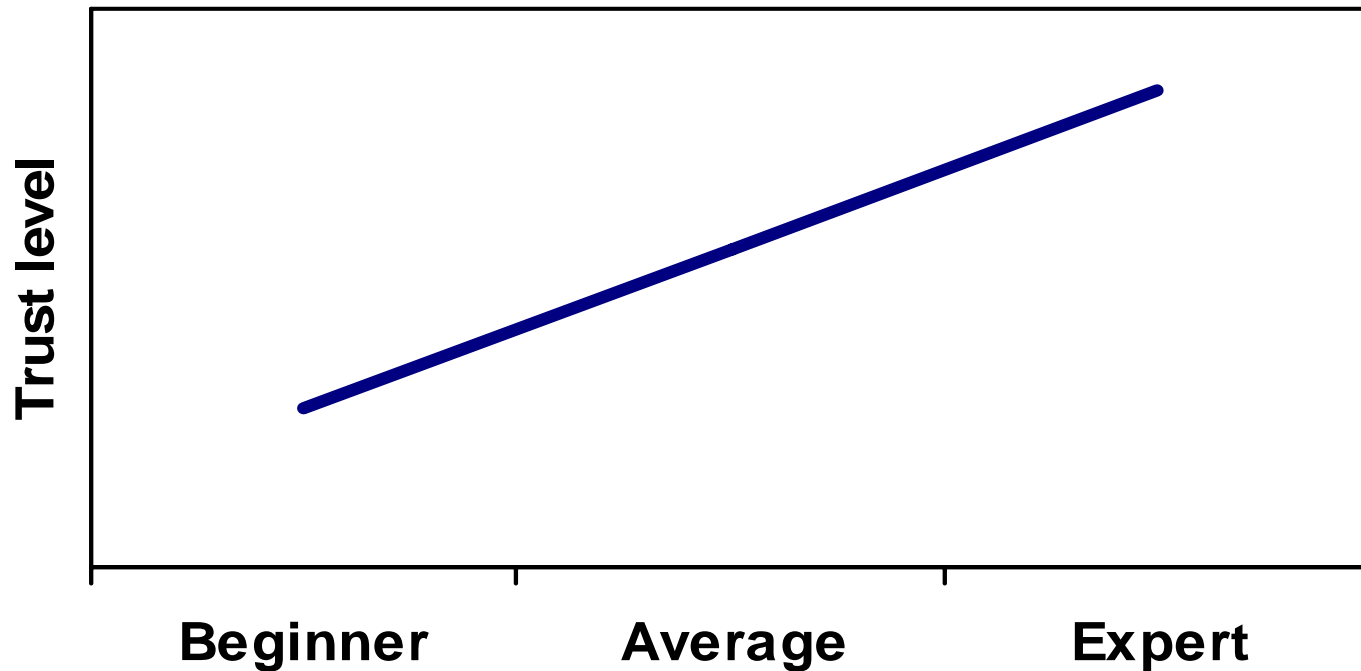
Too much and too little trust are counter productive
- **Trust online versus offline**
  - Lack of Face to Face contact
  - Lack of skill (control)

# Trust models: Certainty Trough



# Trust models: Experience

## Experience technology



# Questions

- Have levels of risk and trust changed since 2003?
- What explains trust?
- What does trust explain?

# Sample and design OxIS

- Fieldwork: 2003, 2005 and 2007
- Probability sample of England, Scotland & Wales
- Respondents: 14 year olds and older
- Face-to-face interviews
- Sponsorship: Hefce, British Library, Cisco, Ofcom, Talisma, AOL, BT, and Orange



TALISMA

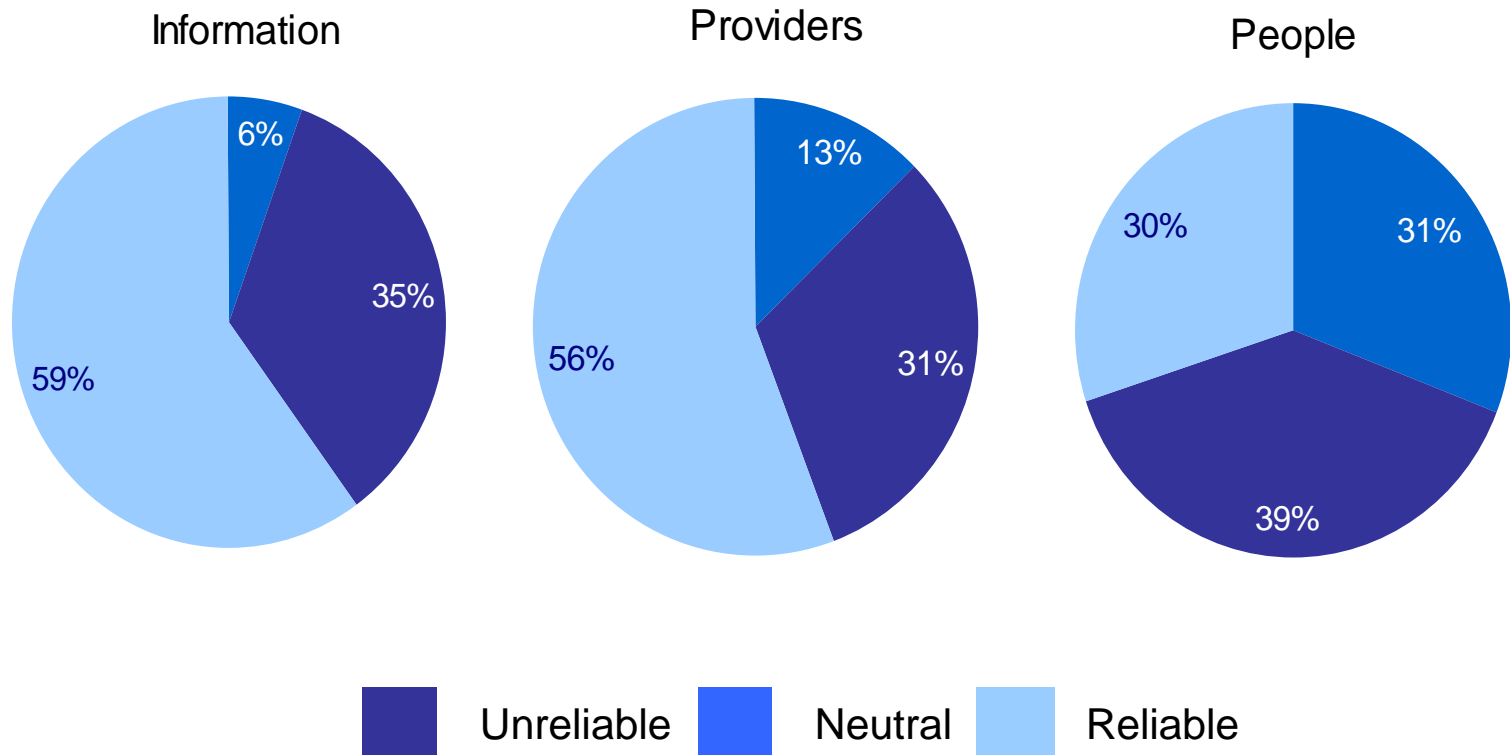


# Sample composition

	2003	2005	2007
Fielded in	June-July	February-March	March - April
Number of respondents	2,030	2,185	2,350
Response rate	66%	72%	77%

# Trust in the internet

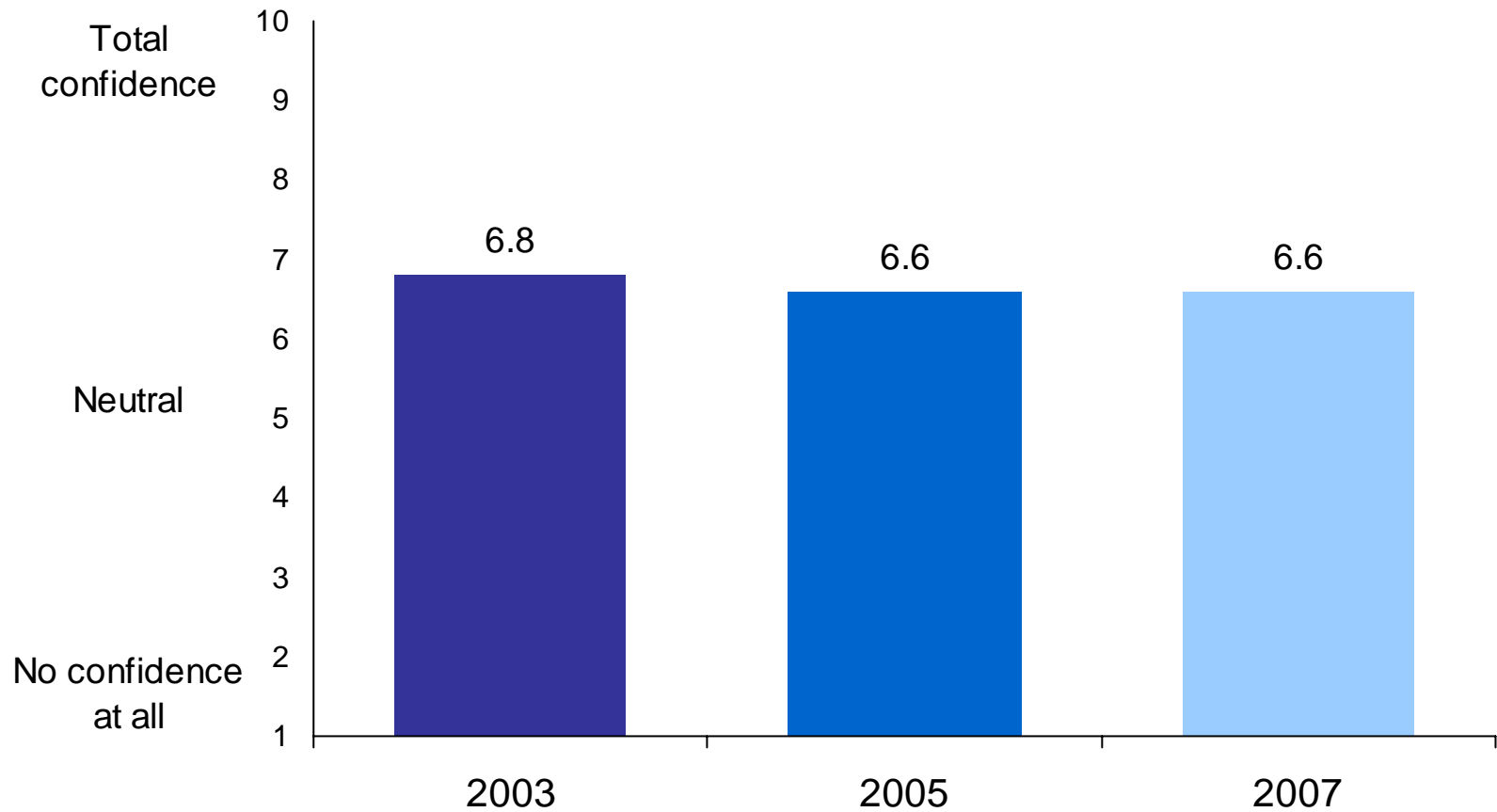
## Trust in Internet....



OxIS N=2,350 (users and non-users)

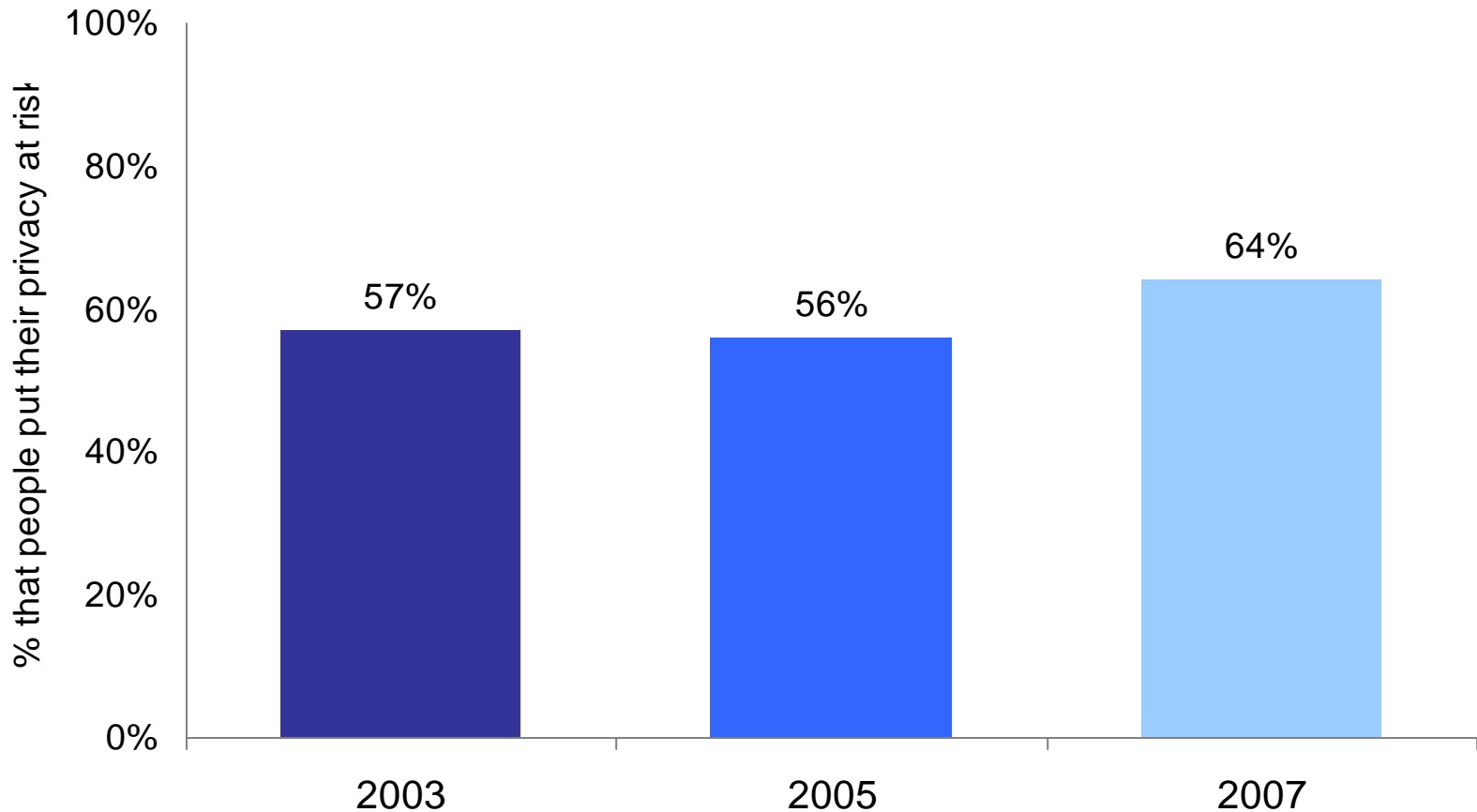


# Trust trends



All: OxIS 2003 N=2,029 ; Oxis 2005 N=2,185 ; OxIS 2007 N=2,350

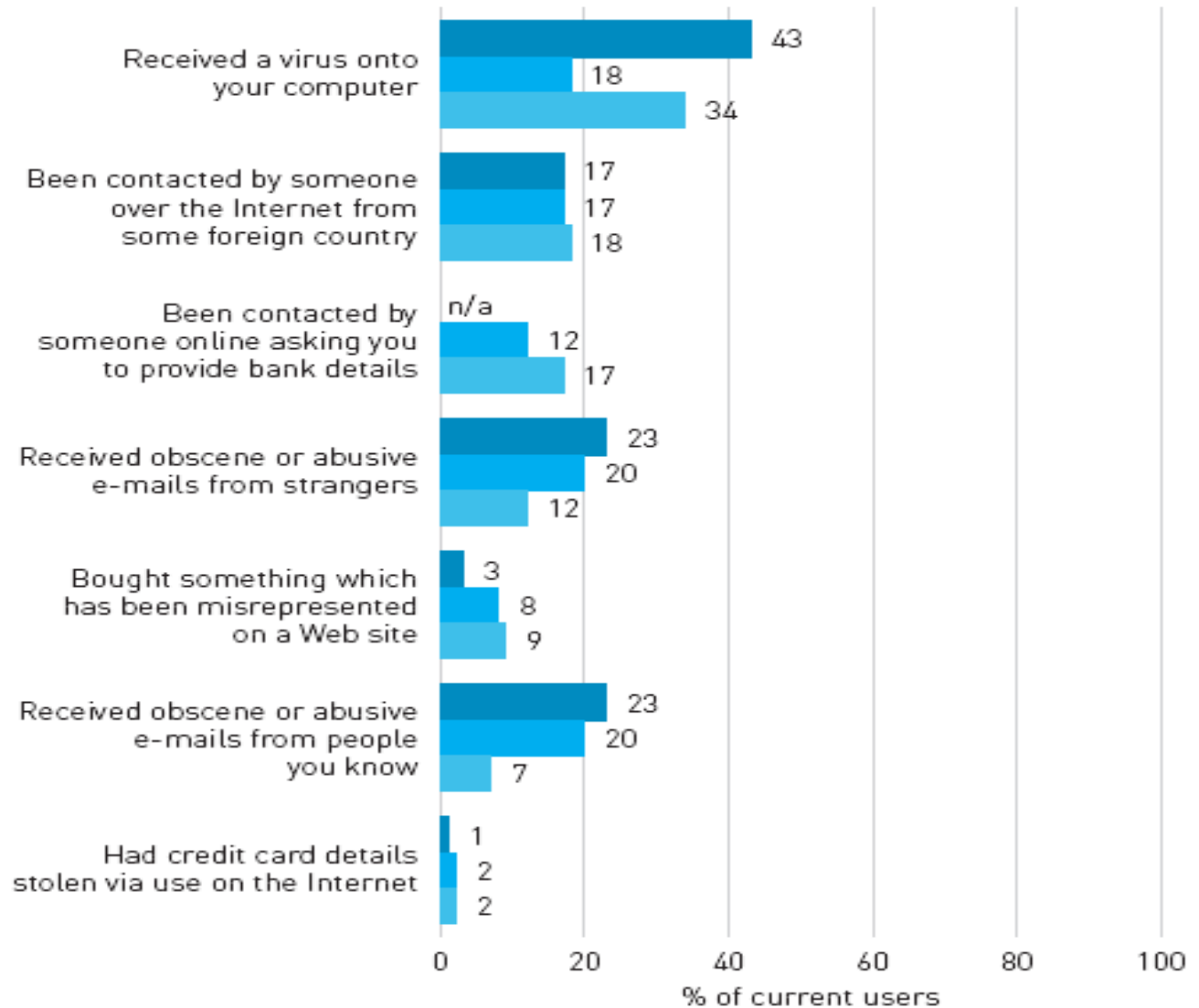
# Risk perception: Privacy at risk?



Internet Users: OxIS 2003 N=1,201 ; OxIS 2005 N=1,309 ; OxIS 2007 N=1,578

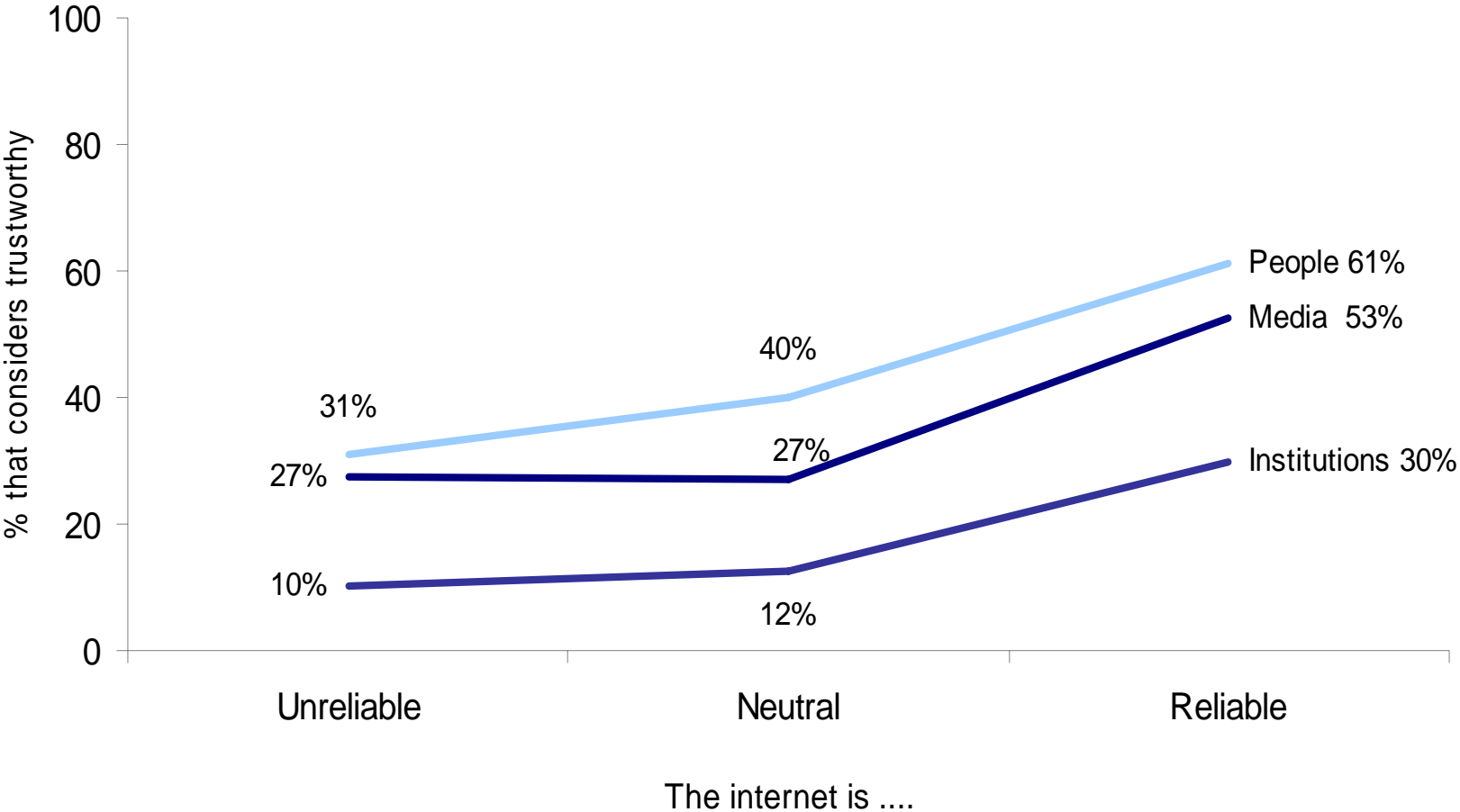
## Unpleasant Experiences Person Has Had on the Internet (QC13)

■ 2003 ■ 2005 ■ 2007



# Negative Experiences

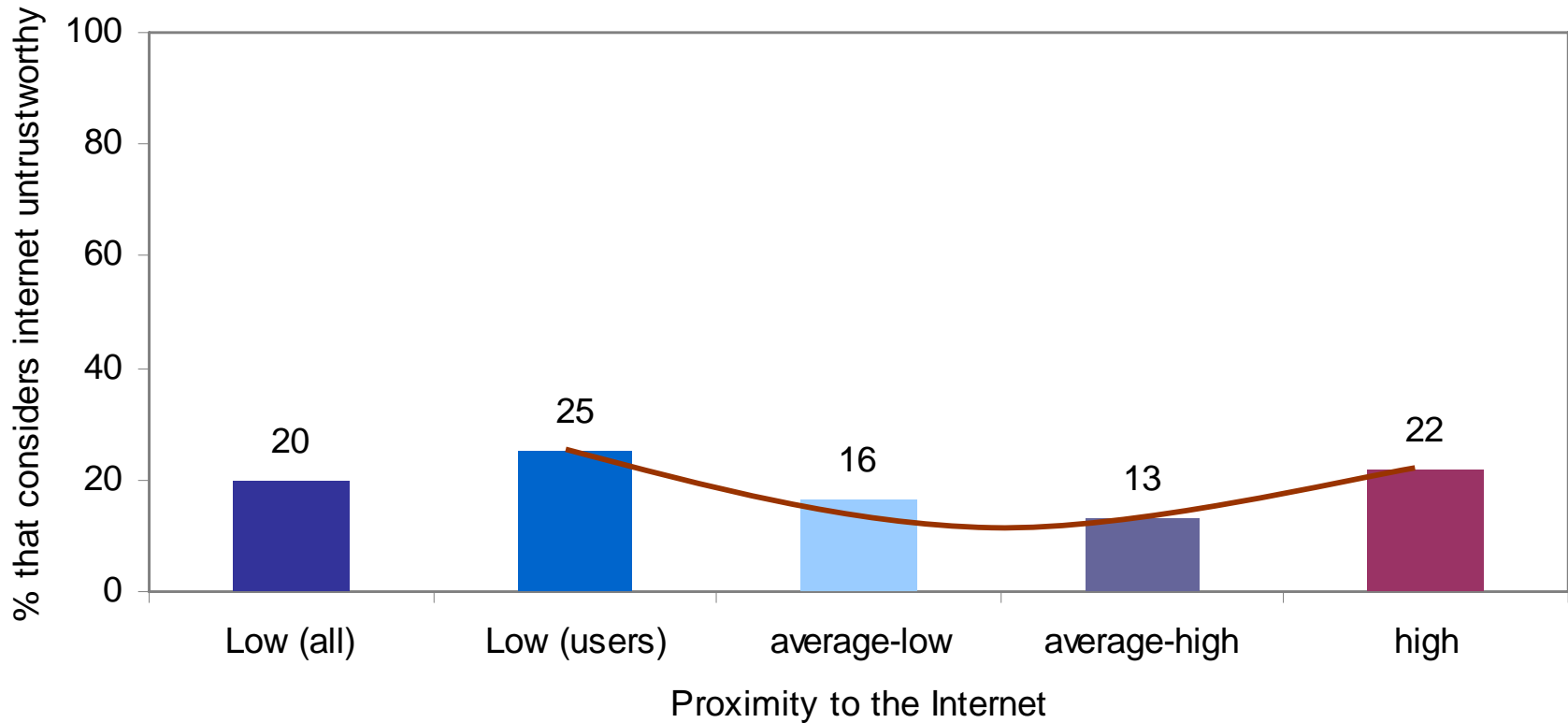
# Internet trust in comparison to other sources



# Explaining Trust: Risks, Experience & Skill

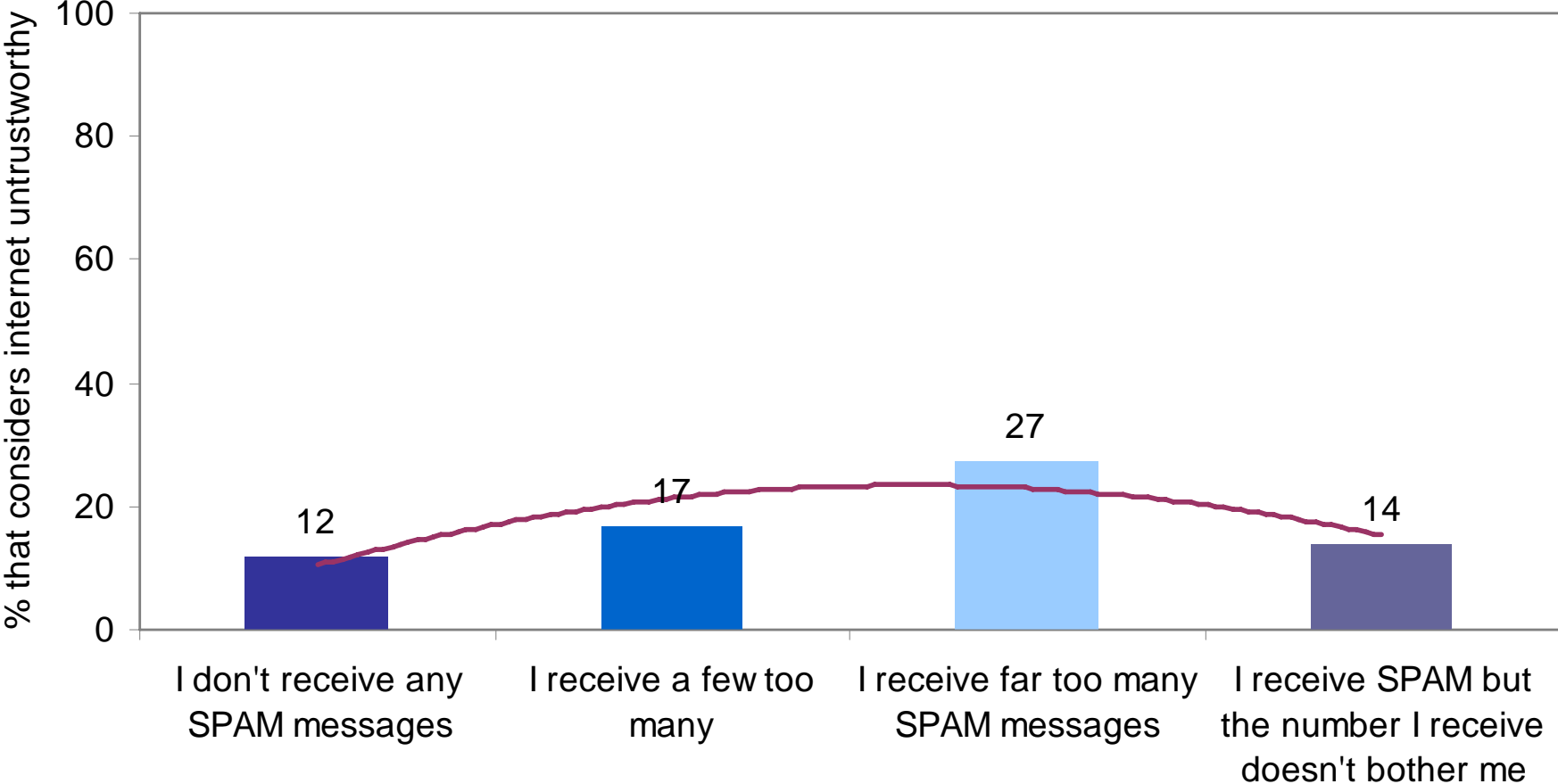
- Demographics
- Access (Broadband)
- Proximity (years, confidence and breadth of use)
- Negative experiences
- Risk perception
- Skill

# Trust and proximity to the internet



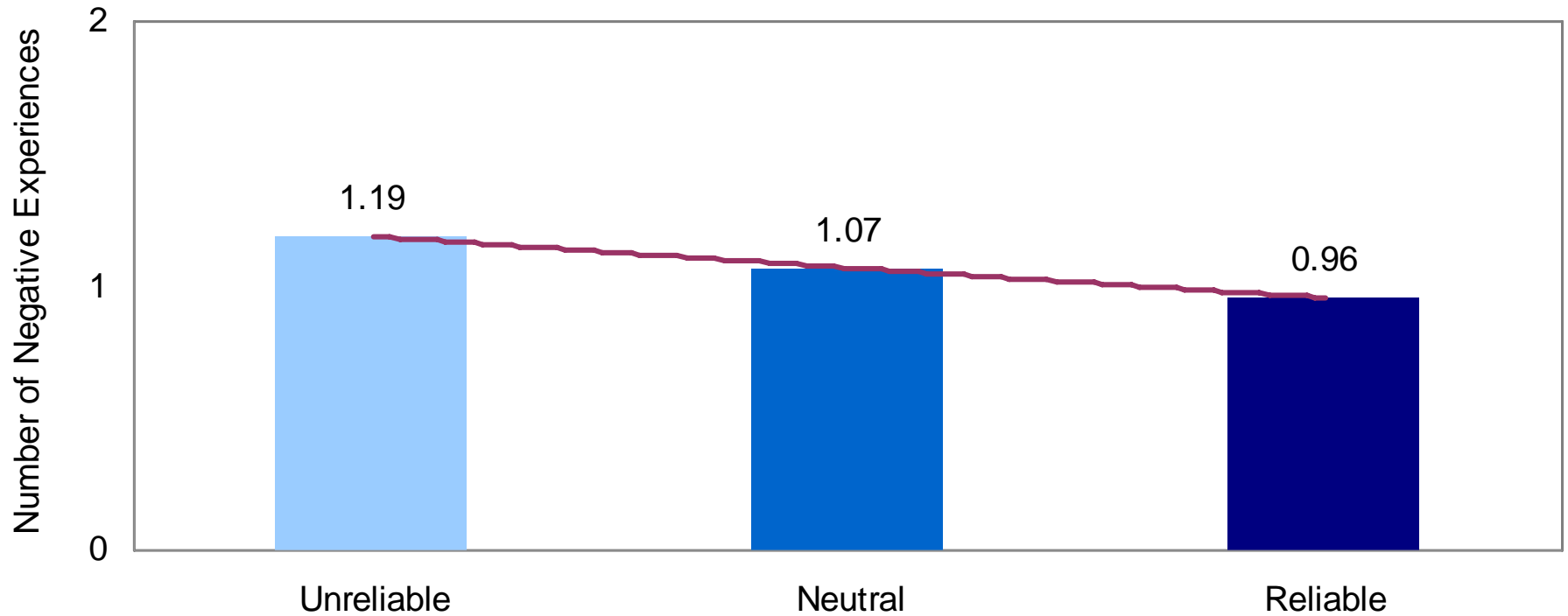
OxIS 2007 All N=2,350; Internet Users: N=1,578

# Skill and Trust



OxIS 2007 Internet Users: N=1,578

# Trust and negative experiences



OxIS 2007 Internet Users: N=1,578



# Modelling trust

- Trends
- Non-Linearity (certainty trough model)
- Trusting 'types'

# Trends

## Trust since 2003 (for internet users)

	Trust 2003	Trust 2007
Gender	NS	NS
Social grade	NS	NS
<b>Area characteristics</b>		<b>+</b>
Age	NS	NS
<b>Education</b>	<b>-</b>	<b>-</b>
Broadband	NS	NS
<b>Proximity</b>	<b>-</b>	NS
<b>Prox*SES</b>	<b>+</b>	NS
Non Linear Proximity		
<b>Negative experiences</b>	<b>-</b>	<b>-</b>

In contrast to 2003 proximity no longer determines trust in the internet for internet users

Negative experiences diminish people's trust in the internet

# Certainty trough

## Trust (for internet users)

	Trust 2003	Trust 2007	Trust 2007
Gender	NS	NS	NS
Social grade	NS	NS	NS
<b>Area characteristics</b>		+	+
Age	NS	NS	NS
<b>Education</b>	-	-	
Broadband	NS	NS	
<b>Proximity</b>	-	NS	
<b>Prox*SES</b>	+	NS	
<b>Non Linear Proximity</b>			-
<b>Negative experiences</b>	-	-	-

A non-linear model of proximity is significant  
 → certainty trough?

# Modelling Trust (Internet Users)

	Trust
Proximity	NS
<b>Area characteristics</b>	<b>+</b>
Social grade	NS
Gender	NS
Age	NS
<b>Education</b>	<b>-</b>
Broadband	NS
Negative experiences	NS
<b>Risk perception</b>	<b>-</b>
<b>Trust in Media</b>	<b>+</b>
<b>Trust in Institutions</b>	<b>+</b>
<b>Trust in People</b>	<b>+</b>

Users in 2007 (N=1,587)

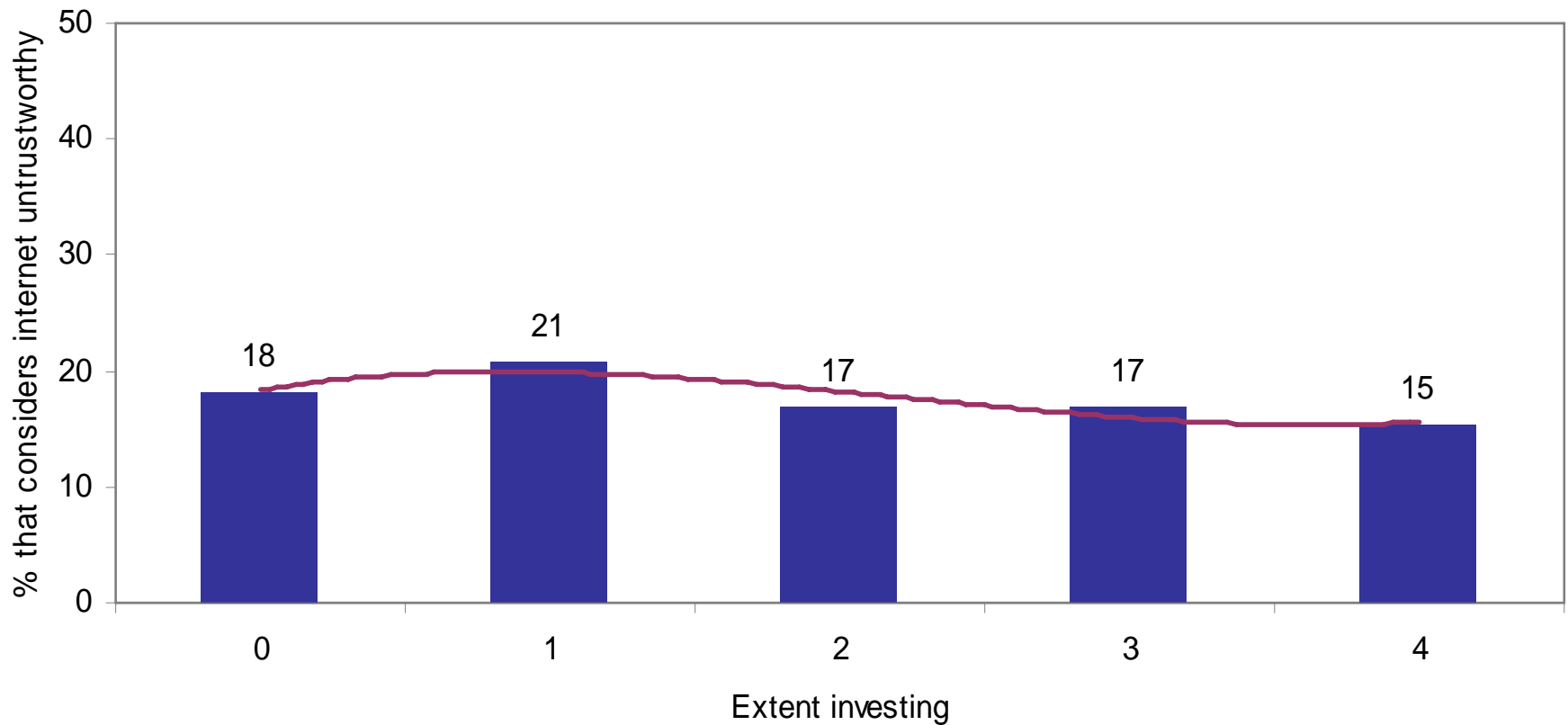
Trusting people trust the internet

# Modelling trust and activities

Explaining activities (eCommerce & Communication)

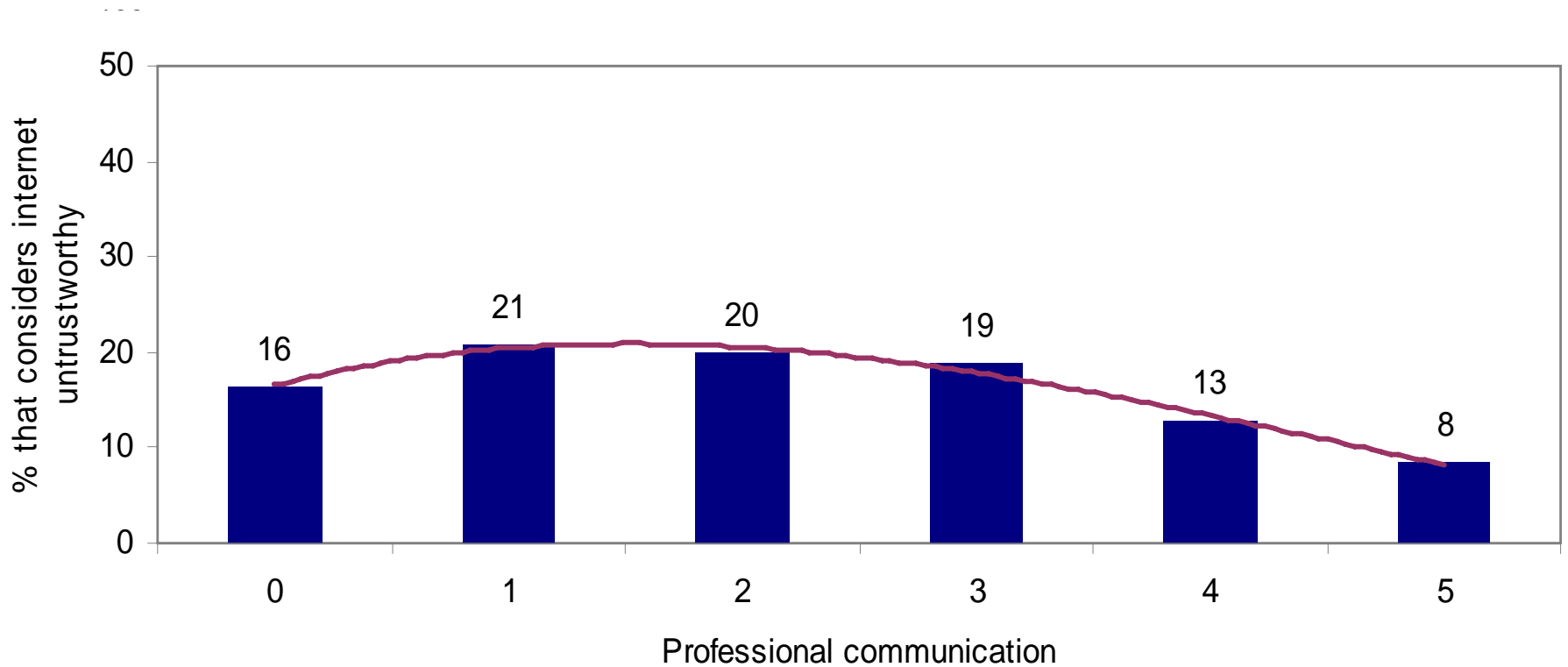
- Demographics
- Trust
- Proximity
- Broadband access
- Negative experiences

# Trust and commercial transactions



OxIS 2007 Internet Users: N=1,578

# Trust and communication



OxIS 2007 Internet Users: N=1,578

# Modelling eCommerce

	Buying 2003	Buying 2007
Trust Internet	NS	NS
<b>Proximity</b>	<b>+</b>	<b>+</b>
Area characteristics		NS
<b>Social grade</b>	NS	<b>+</b>
Gender	NS	NS
Age	NS	NS
<b>Education</b>	NS	<b>+</b>
<b>Broadband</b>	NS	<b>+</b>
<b>Negative experiences</b>		<b>+</b>
<b>Privacy risks</b>	<b>-</b>	NS

Proximity increases buying activities

Negative experiences increase with activity



# Modelling eCommerce and Communication

	Buying	Communicating
Area characteristics	NS	NS
<b>Social grade</b>	+	NS
Gender	NS	NS
<b>Age</b>	NS	-
<b>Education</b>	+	NS
<b>Proximity</b>	+	+
<b>Broadband access</b>	+	+
<b>Negative experiences</b>	+	+
Privacy risks	NS	NS
<b>Trust Internet</b>	NS	+
Trust in Media	NS	NS
<b>Trust in institutions</b>	+	NS
Trust in people	NS	NS

Proximity strongly related to online activity

Different types of trust related to different activities

# Trends in trust (since 2003)

## Trust

Proximity is no longer sufficient to explain trust.

- Exposure model functional in 2003 but not in 2007.
- 'Certainty trough' models more appropriate in 2007.

## Activities

- Proximity explains activities
- Trust in the internet DOES NOT explain eCommerce
- Trust in the internet DOES explain Communication

## Tentative Conclusions: Ideal levels of trust?

- Negative experiences diminish trust and are related to higher online activity.
- Internet trust is strongly related to a general disposition towards media, institutions and people.
- Experts learn how to deal with online risks > Skills will diminish level of importance of risks.
- Internet literacy and exposure to the Internet will increase people's levels of trust
- Users need to feel that they can control the risks

# Thank you.



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