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Survey Results

Privacy Concerns and the Sharing Economy

October, 2017

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Executive Summary

Users' Privacy Perceptions

Sharing Economy users report lower privacy concerns compared to non-users. Users also appear to be more concerned about platforms misusing their data, while non-users are instead more concerned about peers misusing their data.

Providers, Offline Risks, and Attachment

One third of our provider sample reports high concerns about offline boundary infringement, such as damages to their property or access to private belongings. One third of providers also reports high attachment to their shared goods. Providers with higher attachment are also more likely to be concerned about their privacy.

Consumers and Platform-Related concerns

Our consumer sample reported higher platform-related privacy concerns, such as third-party sale of data or data theft, than peer-related privacy concerns. Consumers who are more concerned about peer misuse of their data, such as hacking or stalking, are more likely to perceive platform data policies as fair.

Impression Management and Reputation Risks

Users of the Sharing Economy (both consumers and providers) are more likely to employ strategic self-presentation (Impression Management) if they have high privacy concerns. Receiving negative comments or reviews from other users represents a concern for over one third of our sample. Users with higher privacy concerns are more likely to fear reputation damages.

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1 Introduction: Privacy and the Sharing Economy

User perceptions and concerns

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Overview of the Report

Privacy Perceptions of **Users** and **Non-Users**	**Providers'** Privacy Perceptions and Concerns	**Consumers'** Privacy Perceptions and Concerns	Impression Management and Reputation Damage

Privacy is an important part of the sharing economy as it concerns the feelings users have towards data shared with both platforms and peers .

In the four sections of this presentation, we address users' perceptions of privacy concerns and the self-presentation practices they put in place to retain control over their data.

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2 Privacy Perceptions of Users and Non-Users

Online and offline concerns, Perceived Fairness, and Attachment

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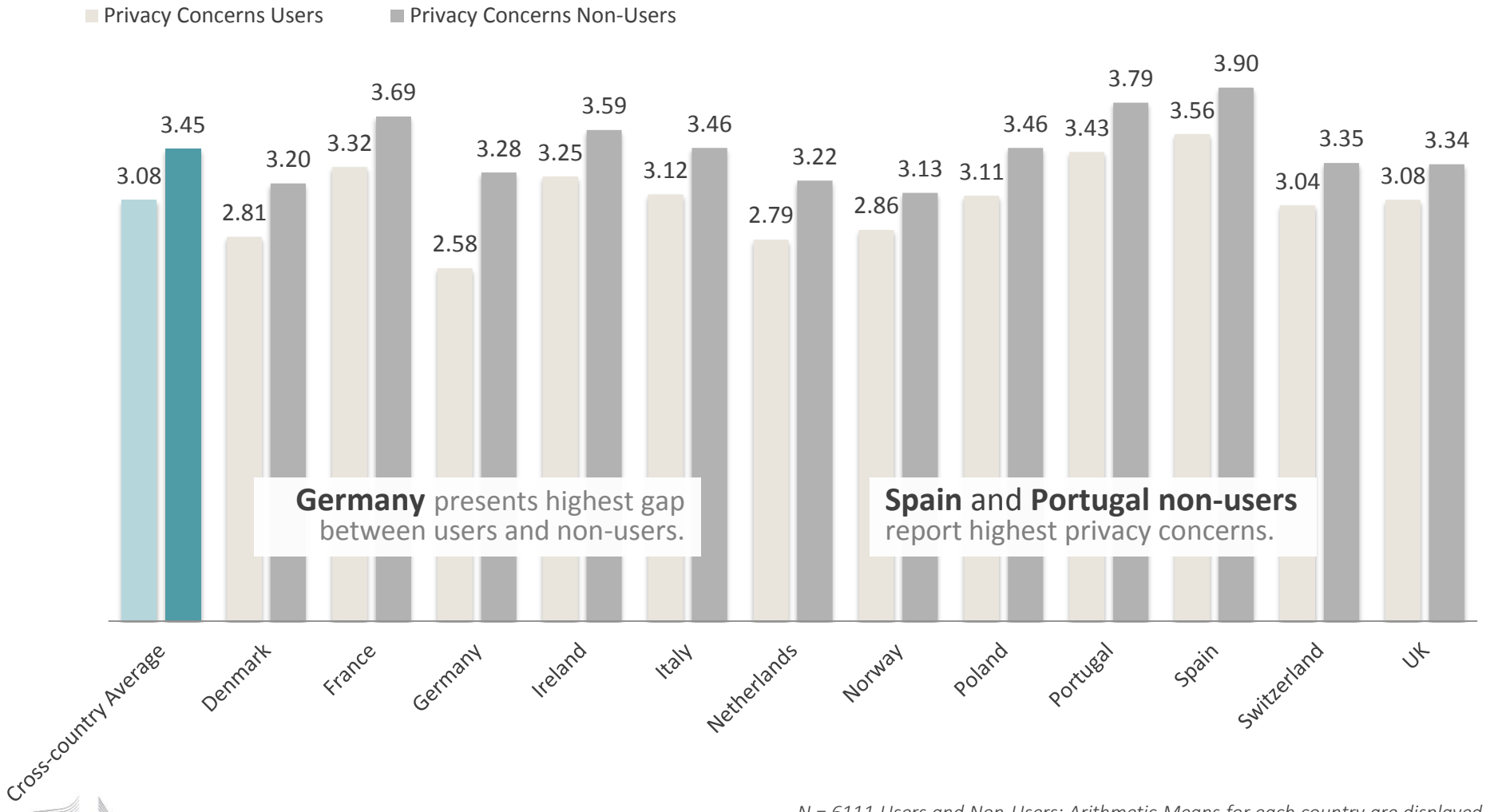
Sharing Economy Users' Perception of Privacy Risks

How concerned are users about their data, compared to non-users? How fair do they perceive their data disclosure to be? In this section, we explore the privacy concerns of users, their perception of data fairness, and the benefits they derive from participating in the sharing economy.

Users of the Sharing Economy report lower privacy concerns than non-users



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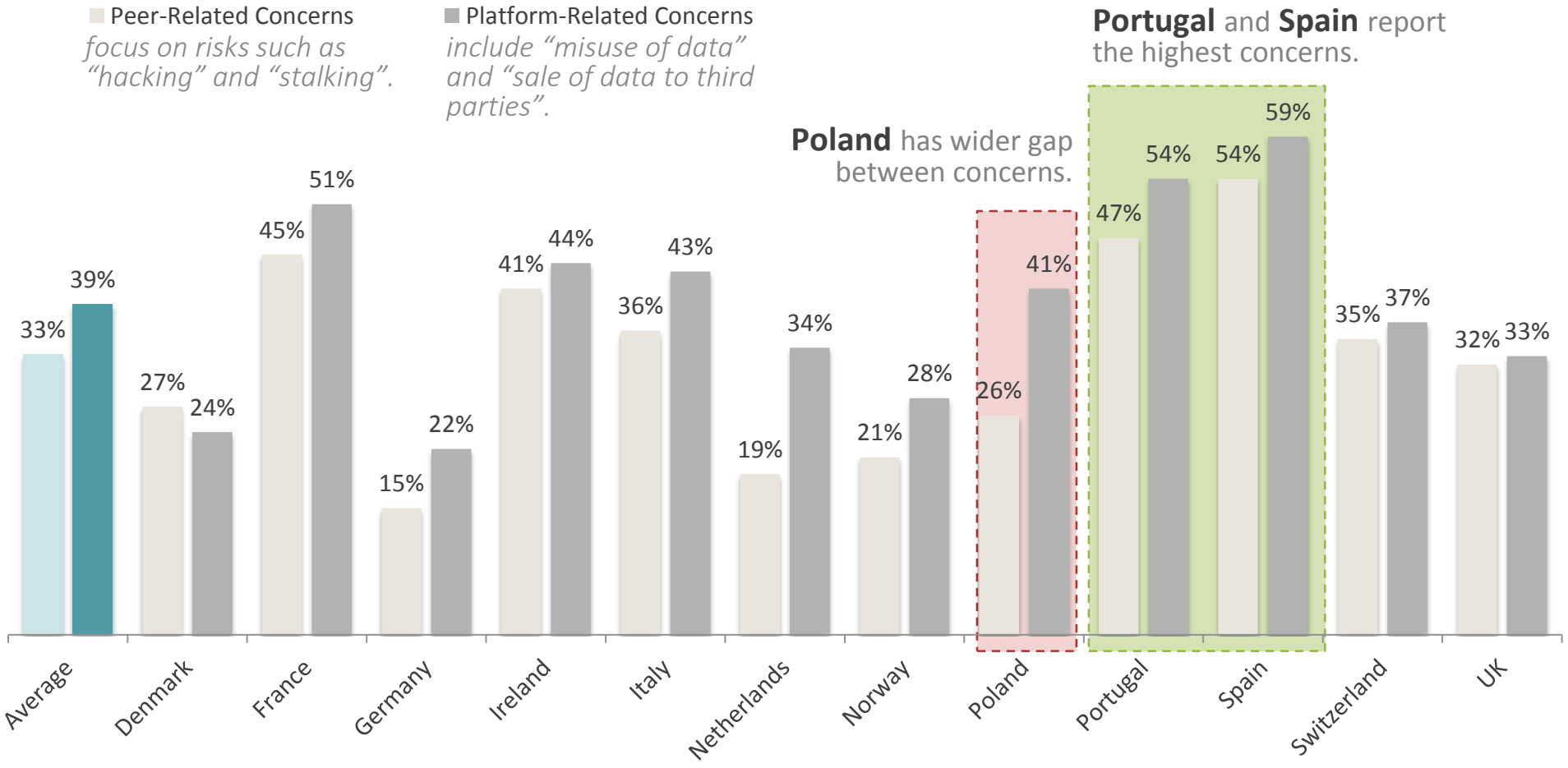
N = 6111 Users and Non-Users; Arithmetic Means for each country are displayed.
1-5 scale with 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree

Users of the Sharing Economy are most concerned about platform misuse of their data



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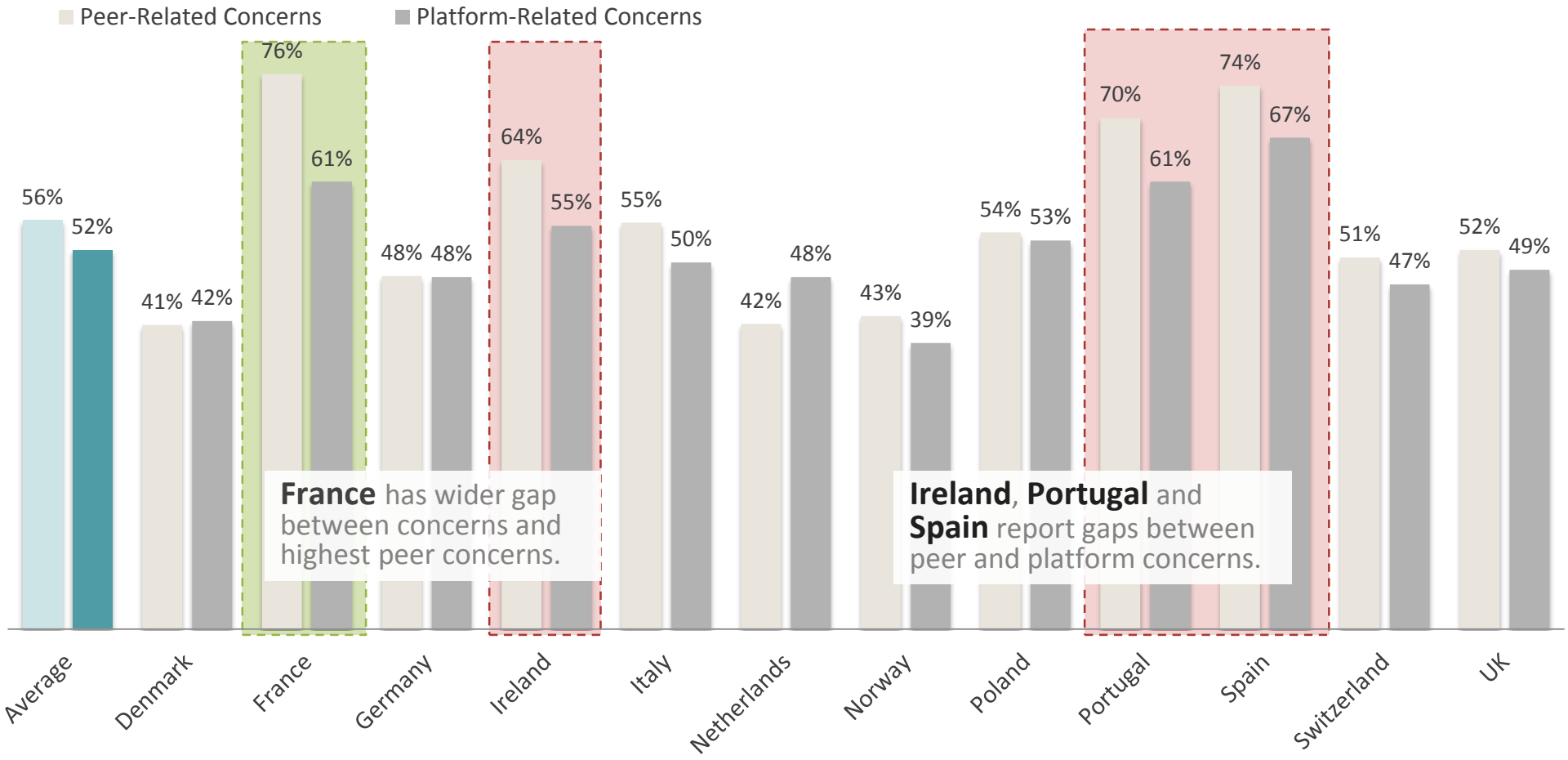
N = 1699 users; % of Users ranking their Privacy concerns as "high" or "very high" ("agree" or "strongly agree") are displayed
1-5 scale with 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree

Non-users of the Sharing Economy are mostly concerned about hacking, stalking, identity theft



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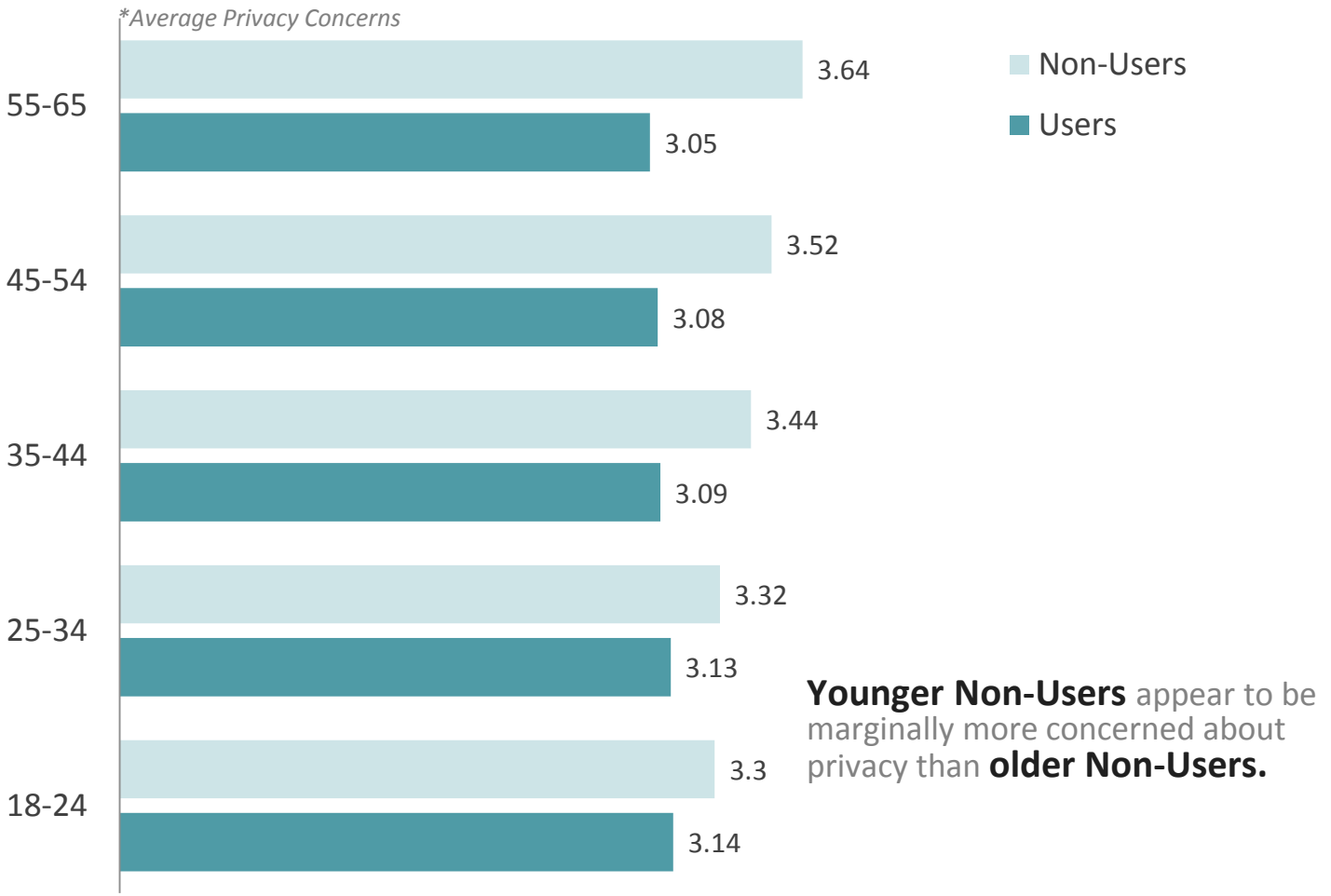
N = 4412 non-users; % of users ranking their Privacy concerns as "high" or "very high" ("agree" or "strongly agree") are displayed 1-5 scale with 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree

For non-users, privacy concerns increase with age



Younger Non-Users appear to be marginally more concerned about privacy than **older Non-Users.**

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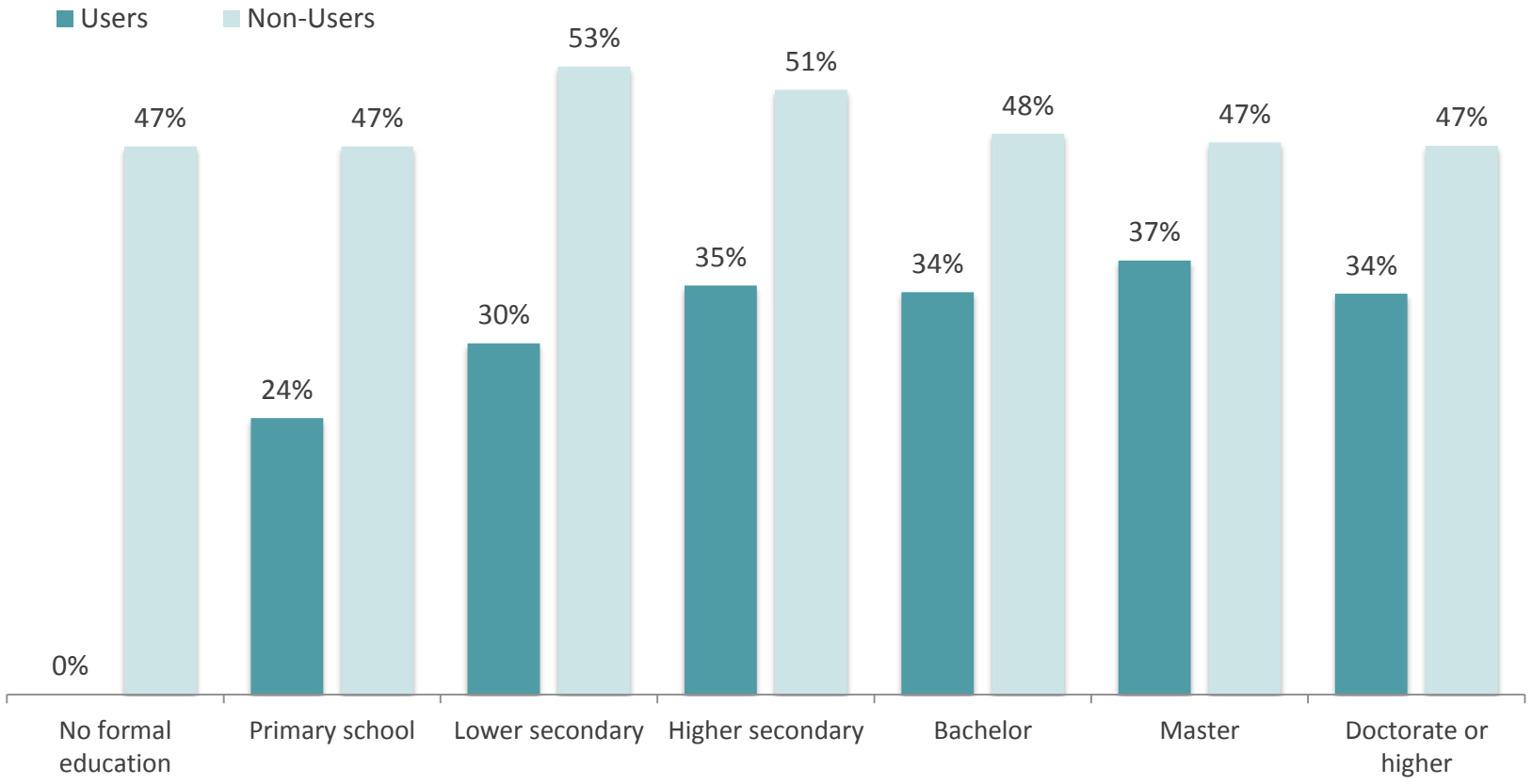
N = 6111 users and non-users; Arithmetic Means are displayed.
1-5 scale with 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree

Users and non-users of the Sharing Economy show similar patterns of education and privacy concerns



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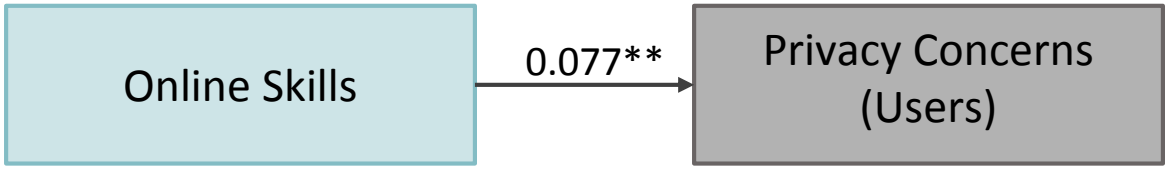
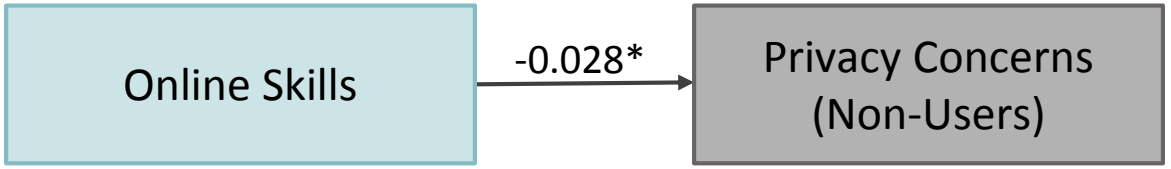
Higher online skills relate to higher privacy concerns for users; lower online skills relate to higher privacy concerns for non-users



Higher ability to operate online is related to higher concerns.

Higher Online Skills are positively and significantly correlated with higher Privacy Concerns for European Users.



Higher ability to operate online is related to lower concerns.

Higher Online Skills are negatively and moderately correlated with lower privacy concerns of European Non-Users.

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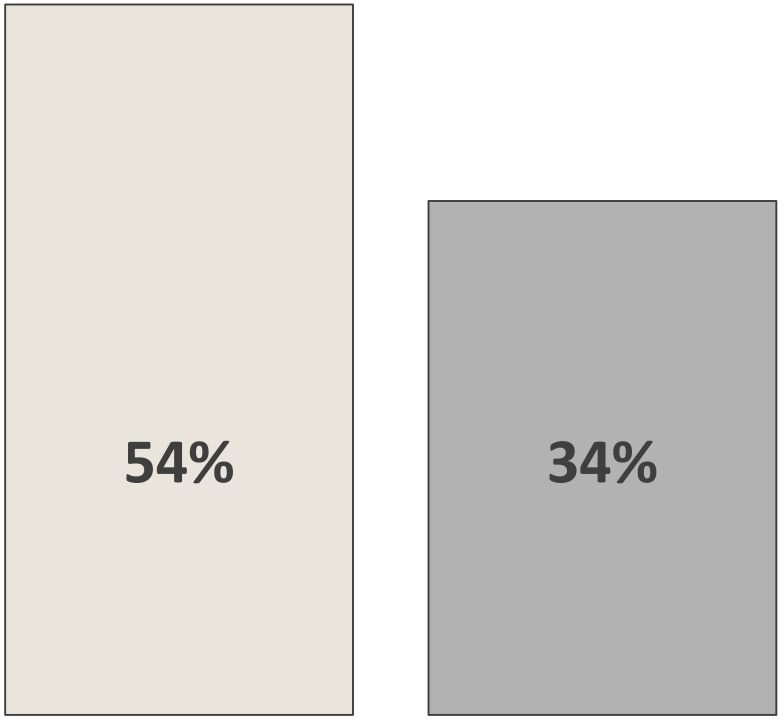
* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Most users perceive that platforms use their data fairly

Users reporting "high" or "very high" perception of fairness in data practices from their interaction with sharing economy



Users ranking their privacy concerns from participating in the sharing economy as "high" or "very high".

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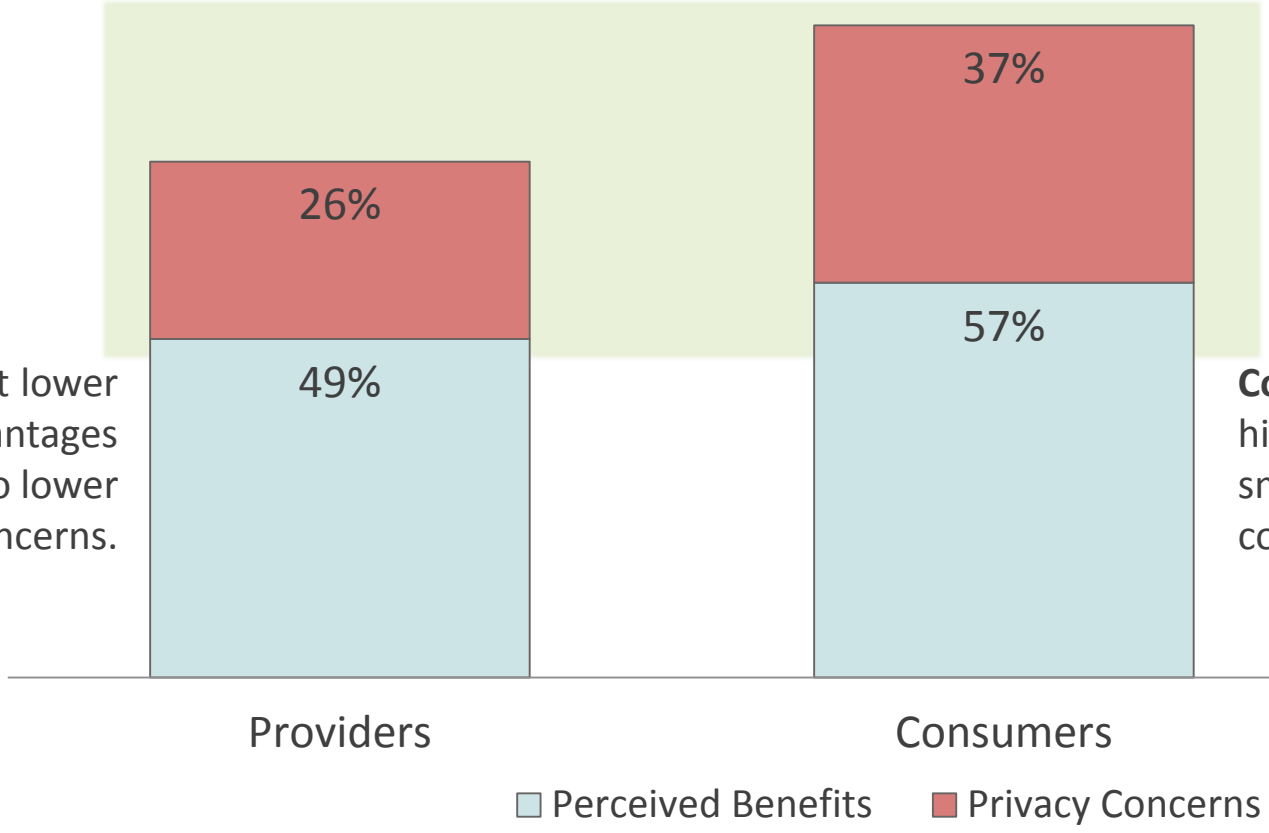
N = 1699 users; % of users ranking concerns and perceived fairness as "high" or "very high" ("agree" or "strongly agree") are displayed 1-5 scale with 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree

Users of the sharing economy report higher benefits than concerns

Providers report lower perceived advantages but also lower concerns.



Consumers report higher advantages but a smaller gap between concerns and benefits.

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N = 1699 Providers and Consumers; % of users ranking concerns and perceived benefits as "high" or "very high" ("agree" or "strongly agree") are displayed. 1-5 scale with 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree

Key Insights on Privacy Perceptions and (Non-)Usage

- Sharing Economy **users are on average less concerned about privacy than non-users**. Users from Spain and Portugal report the highest privacy concerns, while respondents from Germany report the widest gap in concerns between users and non-users.
- Sharing Economy **users are more concerned about *platform-related risks* (e.g., third-party sale of data) than *peer-related* risks**. For non-users, the opposite trend applies.
- **Users with higher online skills are more likely to be more privacy concerned.** Age and education do not appear to have a linear relationship with users' privacy concerns.
- Despite privacy concerns, **a majority of the user sample perceives that platforms handle data fairly.** Similarly, more users perceive high benefits in participating in the sharing economy than those who perceive high concerns.

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3 Providers' Privacy Perceptions and Concerns

Online and offline concerns, Reciprocity, and Attachment

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Focus on Providers

Sharing goods and spaces with consumers brings about specific risks and concerns.
How do Sharing Economy providers feel about the risks surrounding the goods they share?
How do they feel about the data they disclose?

Offline Concerns: One third of providers are concerned about the integrity of their belongings.

34.8%

of providers are concerned that consumers might **damage their personal belongings.**

30.2%

of providers are concerned that consumers might **snoop through their personal belongings.**

31.3%

of providers are concerned that consumers might **use what they provide inappropriately**.

**Percentage of Providers ranking their Privacy concerns as "high" or "very high" ("agree" to "strongly agree")*

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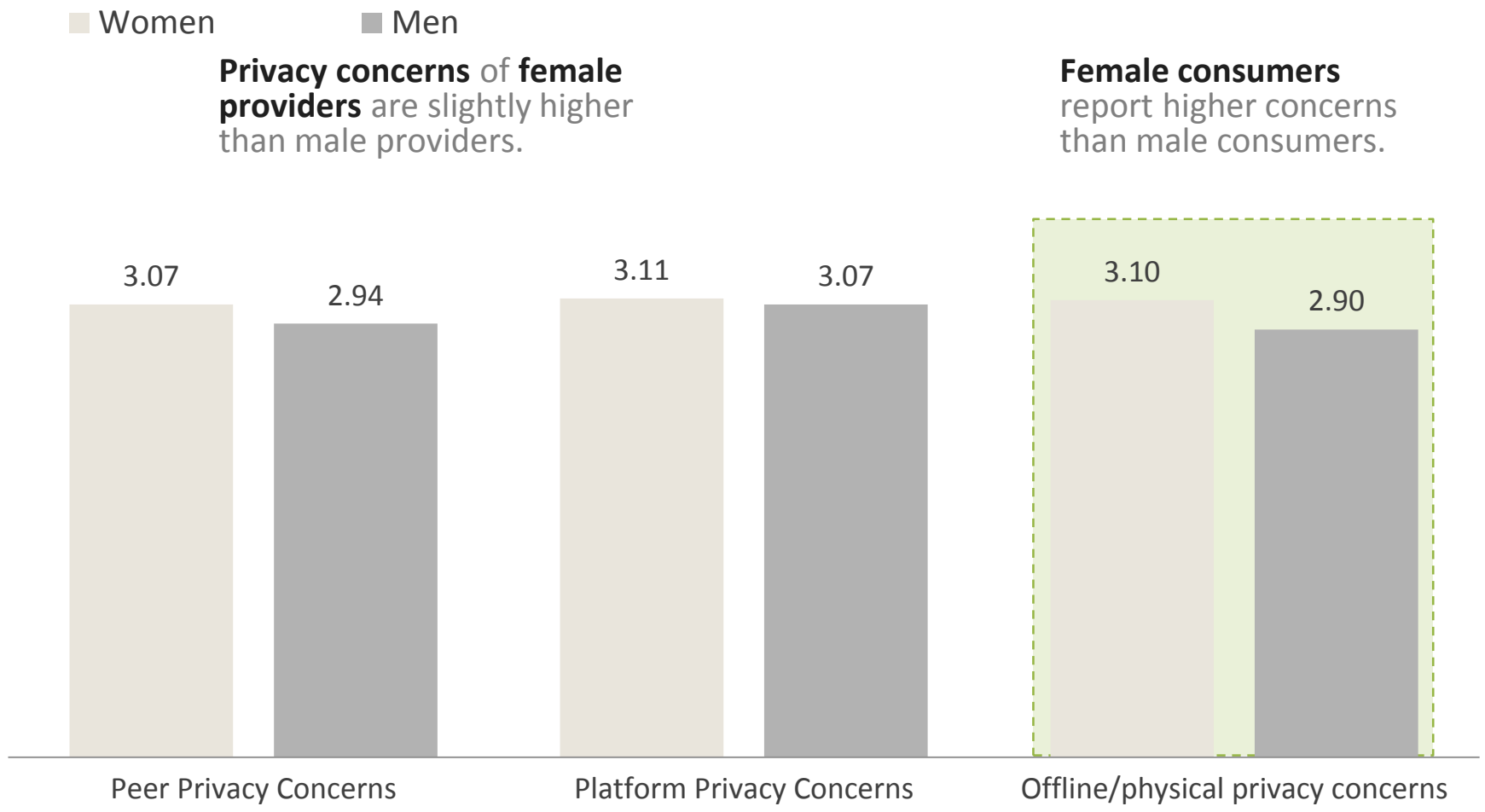
Female providers report slightly stronger privacy concerns than men



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Higher educated providers have stronger privacy concerns

	Peer Privacy	Platform Privacy	Offline Privacy
Education	Not sign.	0.099*	0.085*
Income	Not sign.	Not sign.	Not sign.
Age	-0.097*	Not sign.	Not sign.
Peer Privacy	1	0.792**	0.699**
Platform Privacy	-	1	0.640**

Marginal negative correlation of age to peer privacy: younger providers slightly more likely to be concerned.

Strong correlation: providers concerned about platform use or data likely to also be worried about peers.

Strong correlation: providers concerned about peers online likely to also be worried about offline interaction.

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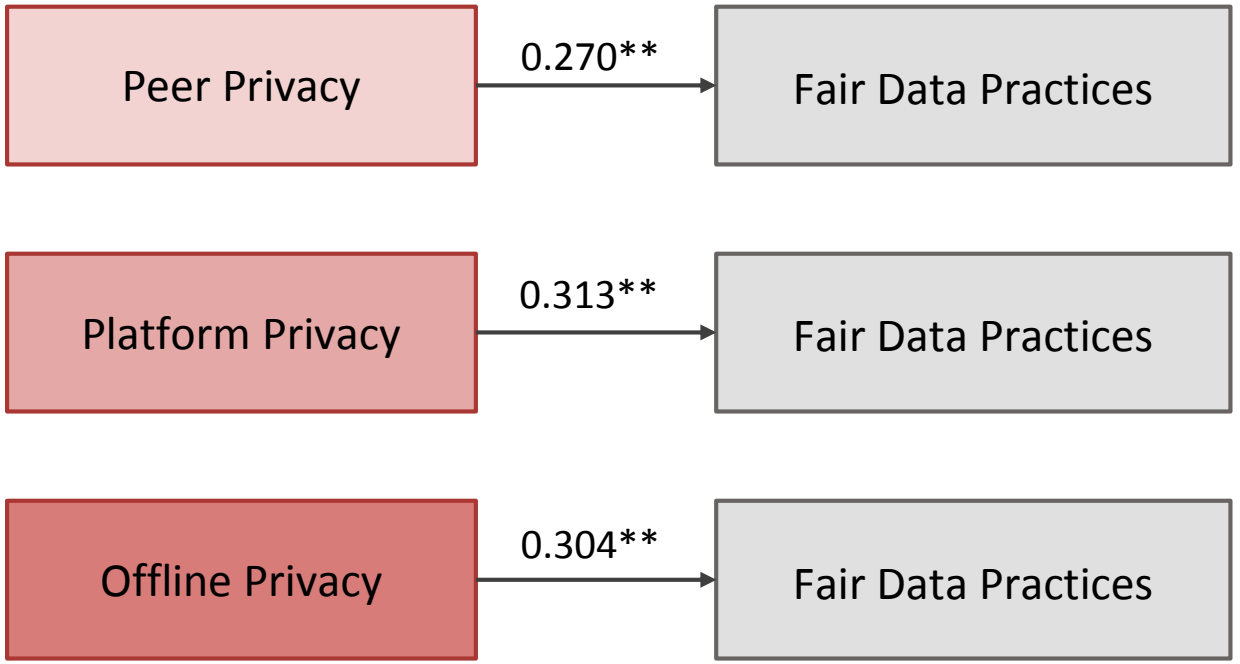
* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Privacy sensitive providers perceive the data handling practices of sharing platforms as fair



Strongest correlation with concerns relating to the platforms use of data.

Providers with higher privacy concerns are more likely to perceive that platforms only request data necessary to conduct services, and that platforms explain why they need the personal data.

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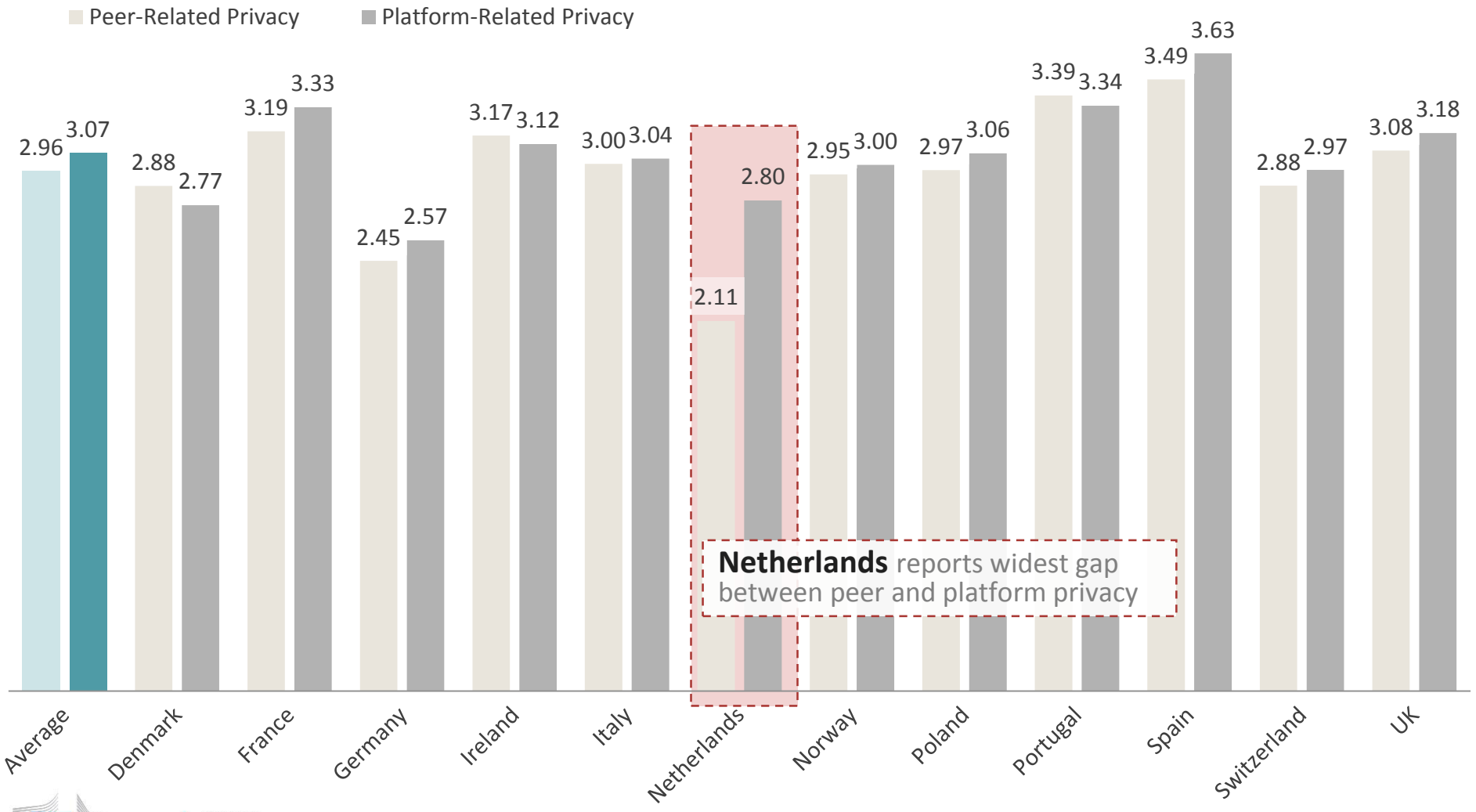
* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Providers from most countries report stronger platform-related privacy concerns



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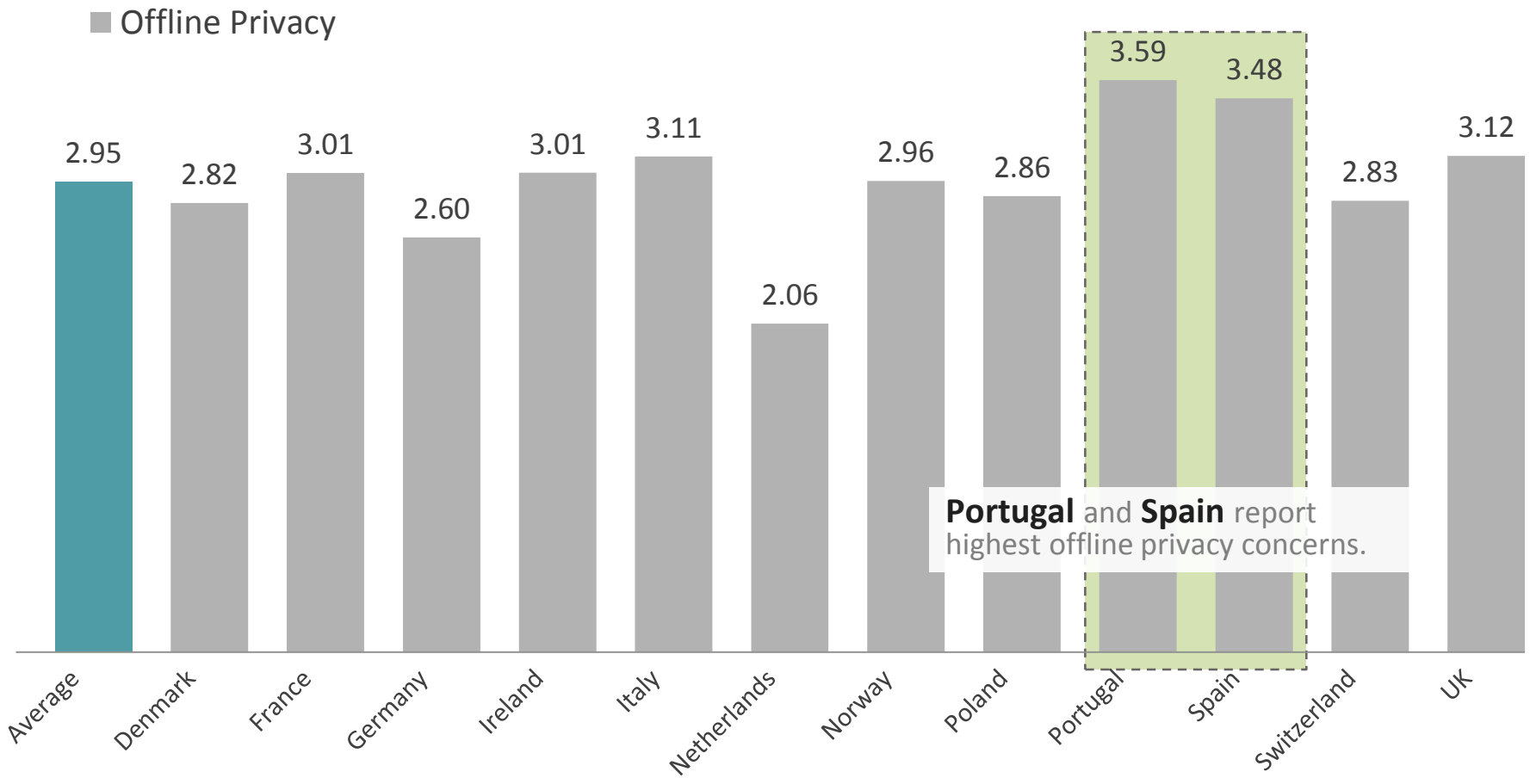
N = 556 users; Arithmetic Means are displayed.
1-5 scale with 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree

Providers from Southern Europe have the strongest concerns regarding offline privacy



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N = 556 users; Arithmetic Means are displayed.
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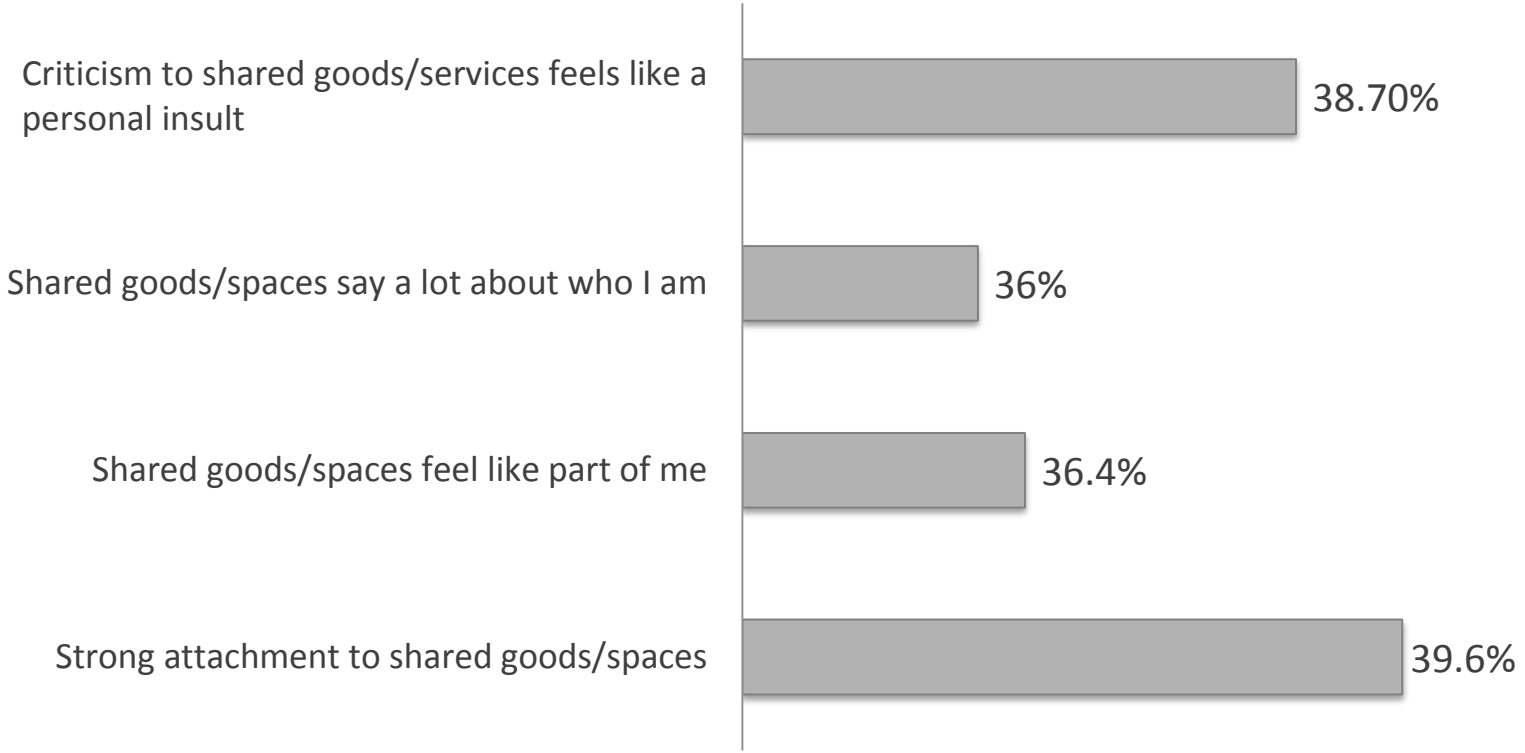
Attachment: More than one third of Providers perceive a strong bond to the goods/services they share.



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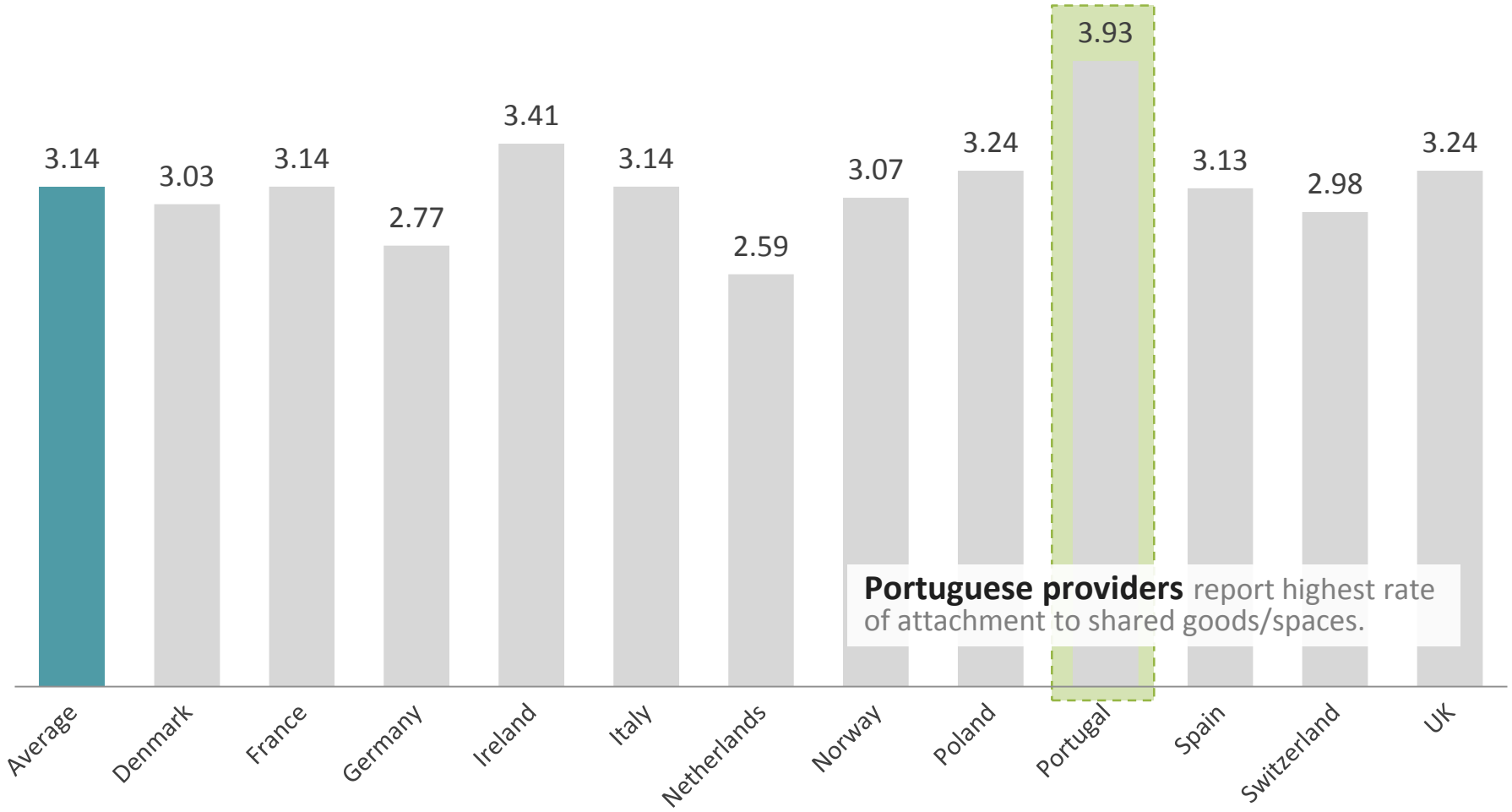
**Percentage of Providers ranking their attachment as "high" or "very high" ("agree" to "strongly agree")*

Providers from Portugal report highest attachment to their belongings



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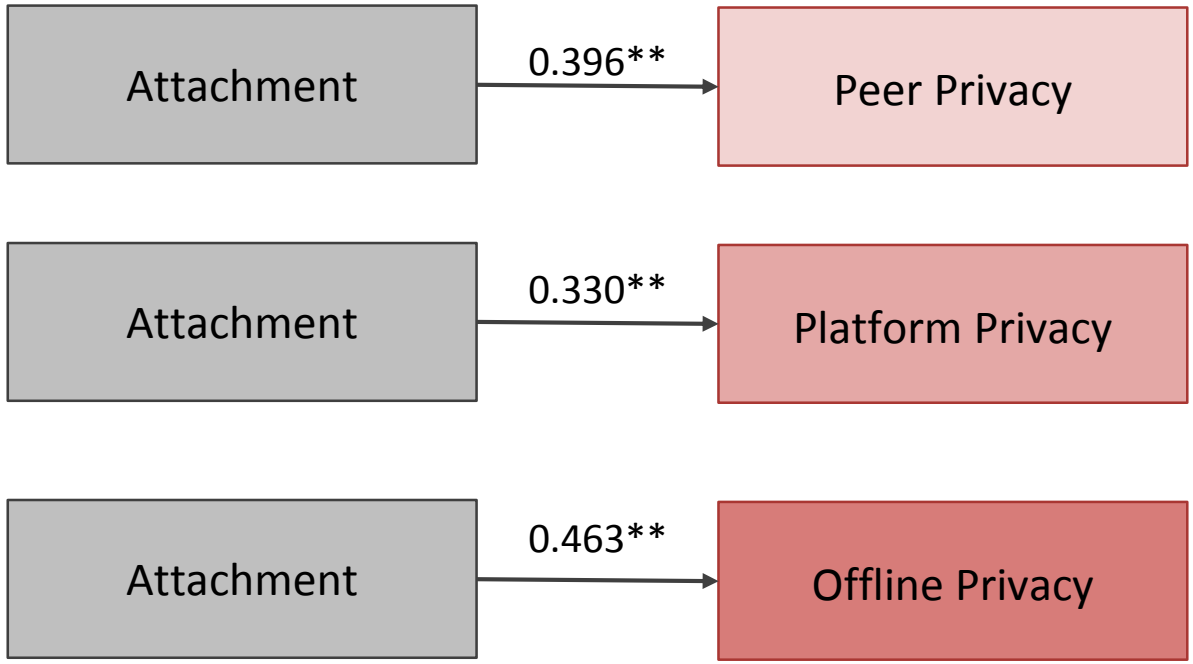
Strong attachment leads to stronger privacy concerns among providers



Providers with higher offline privacy concerns also likely to feel more attached to their shared goods/services.

Our analysis shows that providers with a high attachment to the personal belongings they share report stronger concerns about privacy violations.

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* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Key Insights into Providers' Privacy Concerns

- More than **one third of providers report high privacy concerns relating to offline interaction with consumers**. The most common fears are about the potential damages of shared property and the surpassing of personal boundaries.
- Providers from Southern Europe report the highest privacy concerns. Providers from Germany and the Netherlands, instead, score the lowest when it comes to both online and offline privacy concerns.
- Providers who report higher attachment to the goods they share are also more likely to have higher privacy concerns, especially about offline interactions.
- Providers with **higher privacy concerns** are more likely to also perceive that **platforms provide them with fair data protection**.

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4 Consumers' Privacy Perceptions and Concerns

Online and offline concerns, perceptions of fairness

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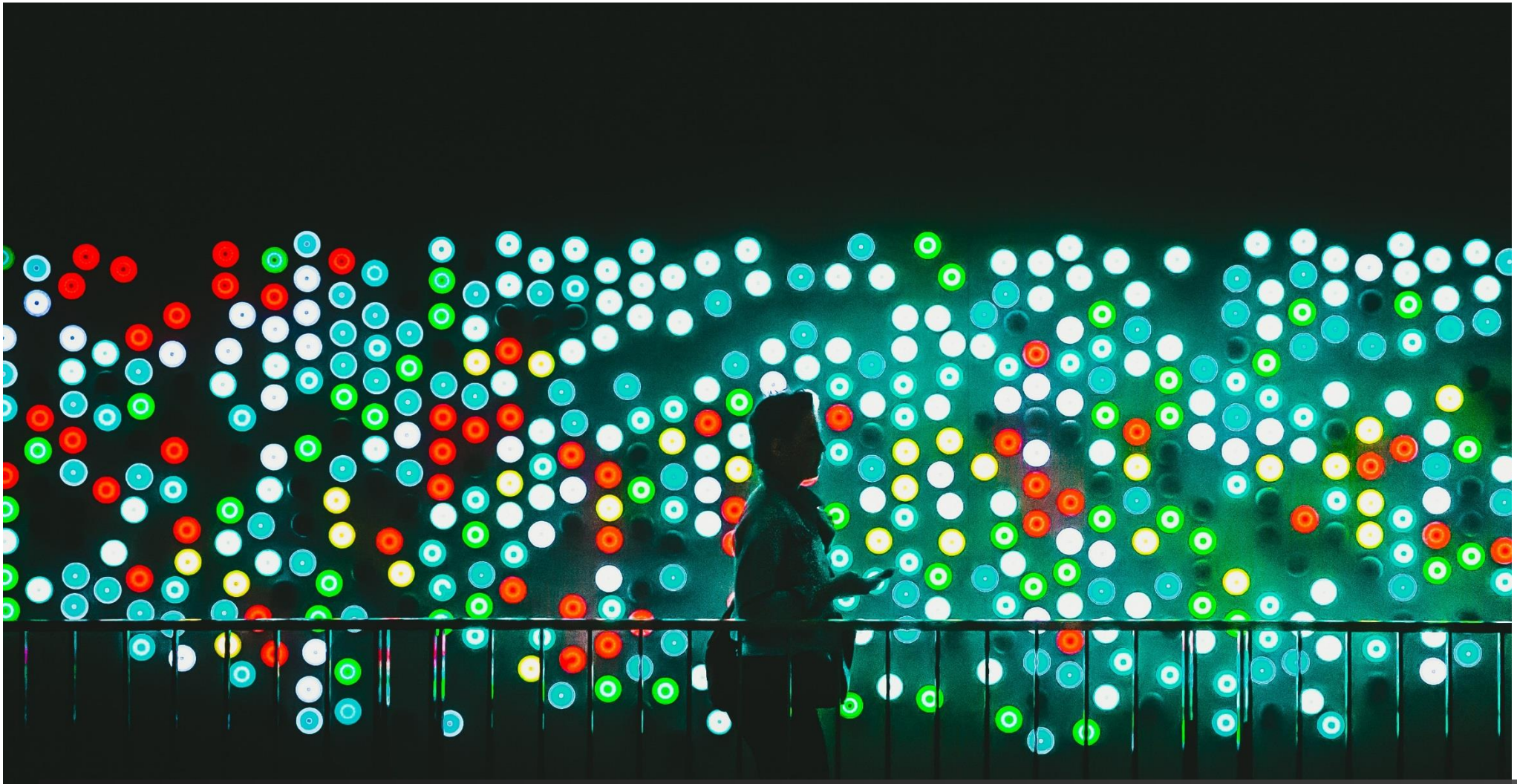
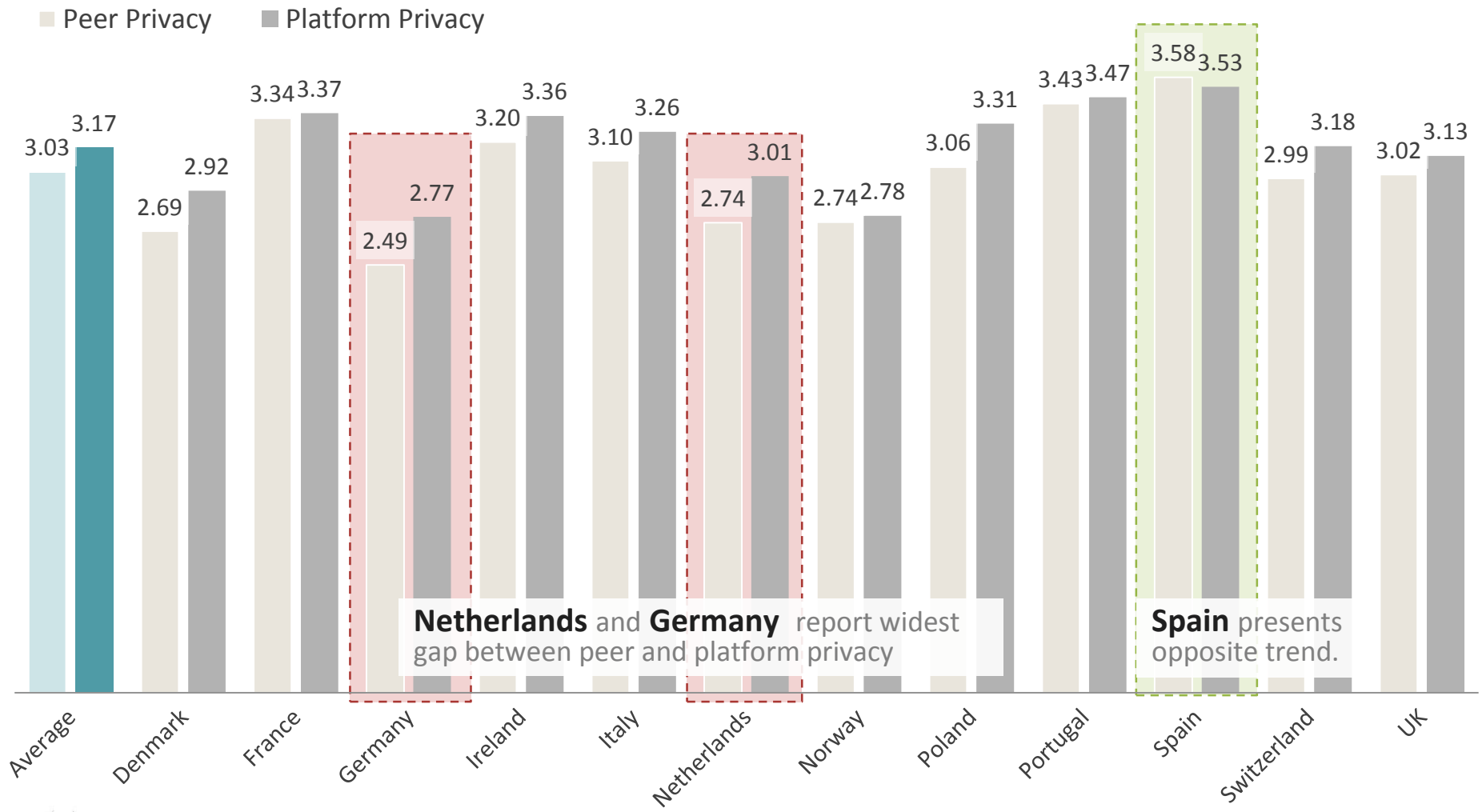


Focus on Consumers

Consumers also have privacy concerns relating to their disclosure of data. Do they feel like platforms are reliable when it comes to protecting their privacy?

Across Europe, consumers are mostly concerned about platforms' misuse of data



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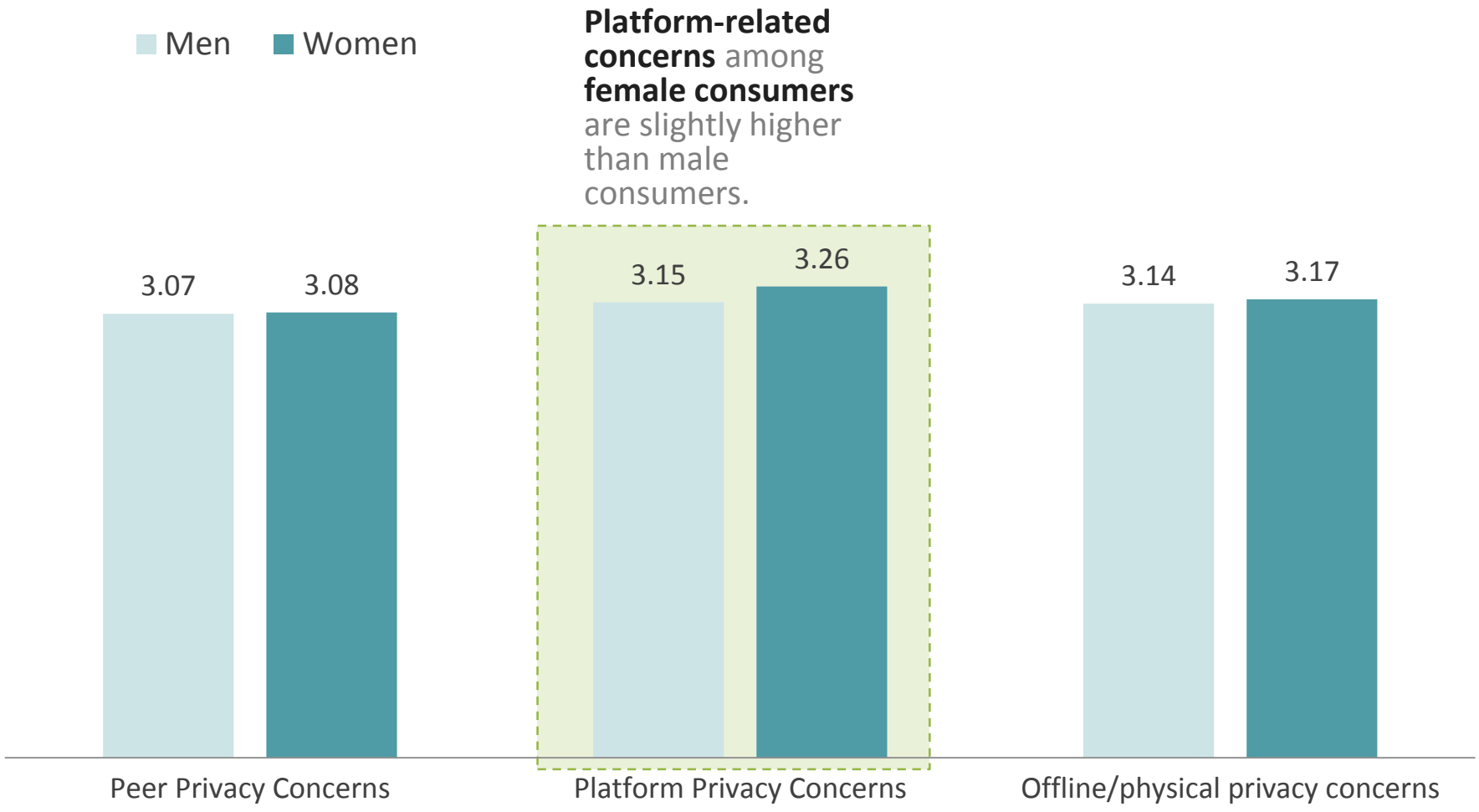
N = 1143 users; Arithmetic Means are displayed.
1-5 scale with 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree

Almost no gender differences for consumers' privacy concerns



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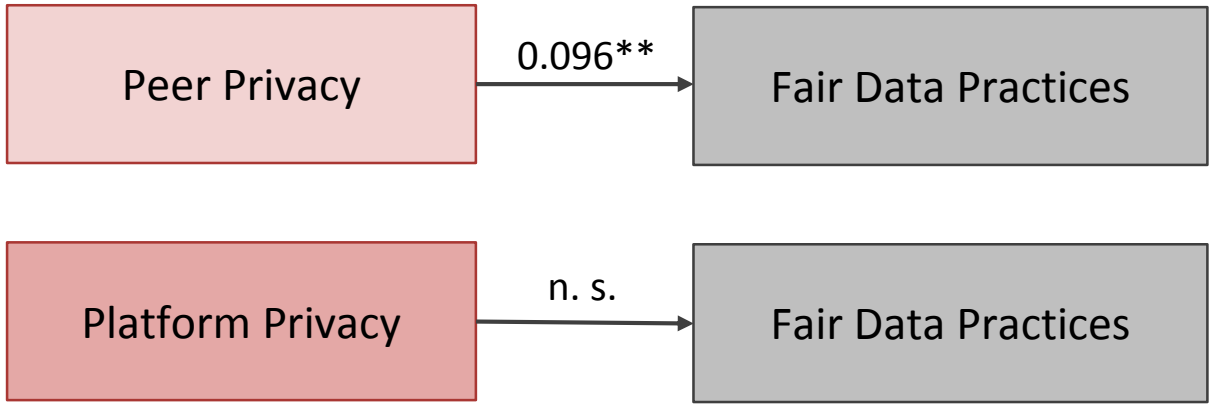
Consumers who are concerned about peer privacy are likely to perceive platforms' data use as fair



The analysis suggests that users who feel more at risk of dangers such as identity theft might find the existing data protection of platforms more reassuring. No relation is found between platform privacy and perception of fair data practices.

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* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Consumers concerned about peer-related privacy are also likely to be concerned about platforms

	Peer Privacy	Platform Privacy	Offline Privacy
Education	Not sign.	Not sign.	Not sign.
Income	Not sign.	Not sign.	Not sign.
Age	Not sign.	Not sign.	Not sign.
Peer Privacy	1	0.787**	0.696**
Platform Privacy	-	1	0.635**

No significant relation of any demographic variable to consumers' privacy concerns.

Strong correlation: consumers concerned about platform use or data are likely to also be worried about peer use.

Strong correlation: consumers concerned about peers online likely to also be worried about offline interaction.

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

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Offline Concerns: only a minority of Sharing Economy consumers are concerned about privacy issues arising from their interactions with providers.

7.5%

concerned* that providers might **damage or dirty their personal belongings.**

7.6%

concerned* that consumers might **use their personal belongings inappropriately.**

7%

concerned* that consumers might **use items they shouldn't use or enter areas out of their access**.

**Percentage of consumers ranking their Privacy concerns as "high" or "very high"*

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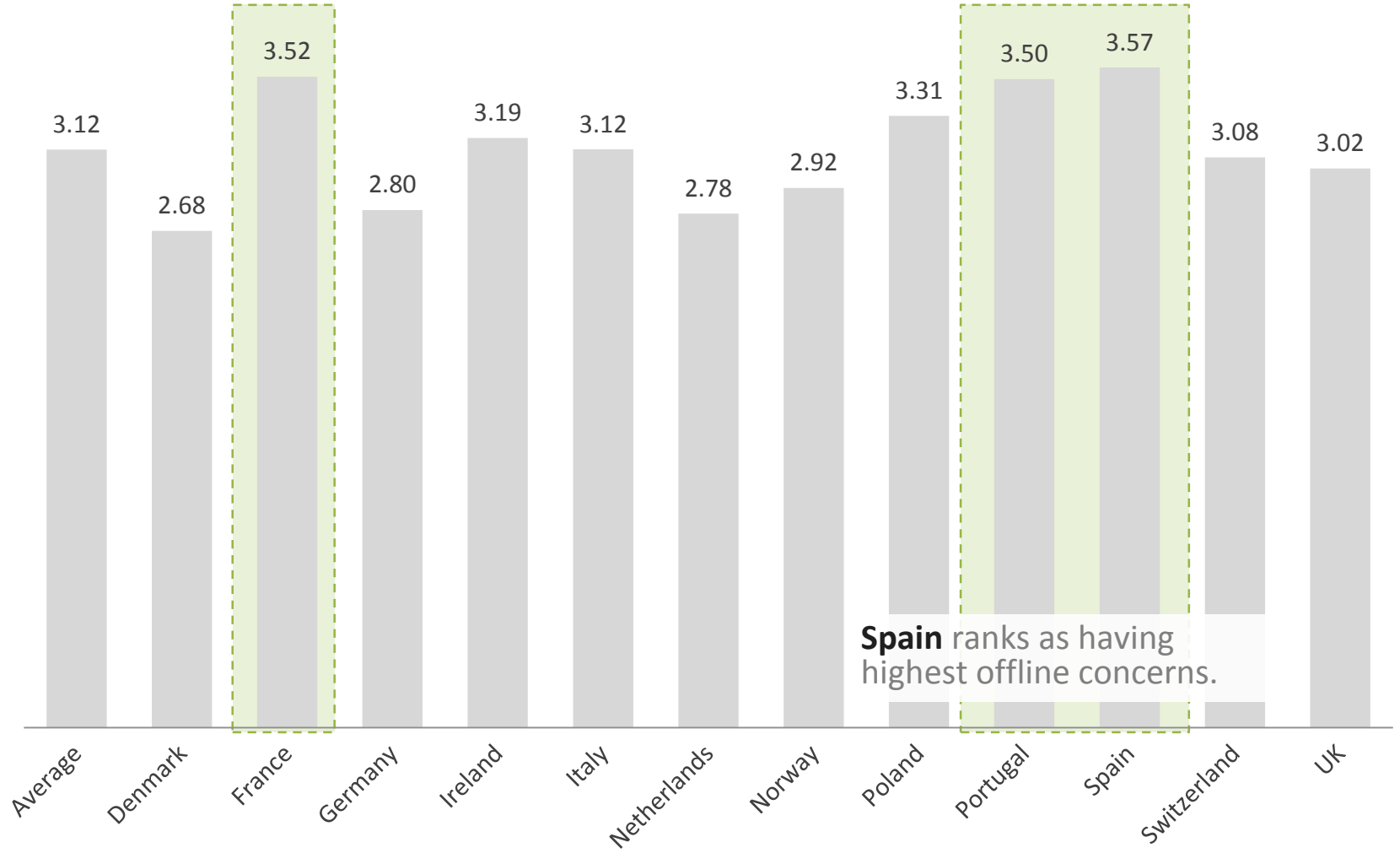
Spain, Portugal, and France report highest offline privacy concerns



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N = 1143 users; Arithmetic Means are displayed.
1-5 scale with 1-strongly disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, 5-strongly agree

Key Insights into Consumers‘ Privacy Concerns

- Consumers from most European countries report **stronger privacy concerns relating to platforms** than those related to peer interaction. Consumers from Spain report the highest privacy concerns and also present an opposite trend.
- **Demographic variables** (age, education, income) do **not appear to affect** consumers’ privacy concerns.
- Consumers who have higher privacy concerns about their peers (e.g., Hacking or Stalking) are also more likely to find that platforms treat their data fairly.

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5 Impression Management and Risks of Reputation Damage

Strategic Self-Presentation and potential Third-Party damages

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The Role of Impression Management and Reputation

By strategizing their self-presentation, users can retain some control over the data they share. What happens when they receive a negative review, or a mean comment from another user?

Impression Management: Sharing Economy users present higher levels of strategized self-presentation online.

40.6%

of providers report high or very high levels of **impression management.**

43.6%

of consumers report high or very high levels of **impression management.**

34.2%

of non-users report high or very high levels of **impression management.**

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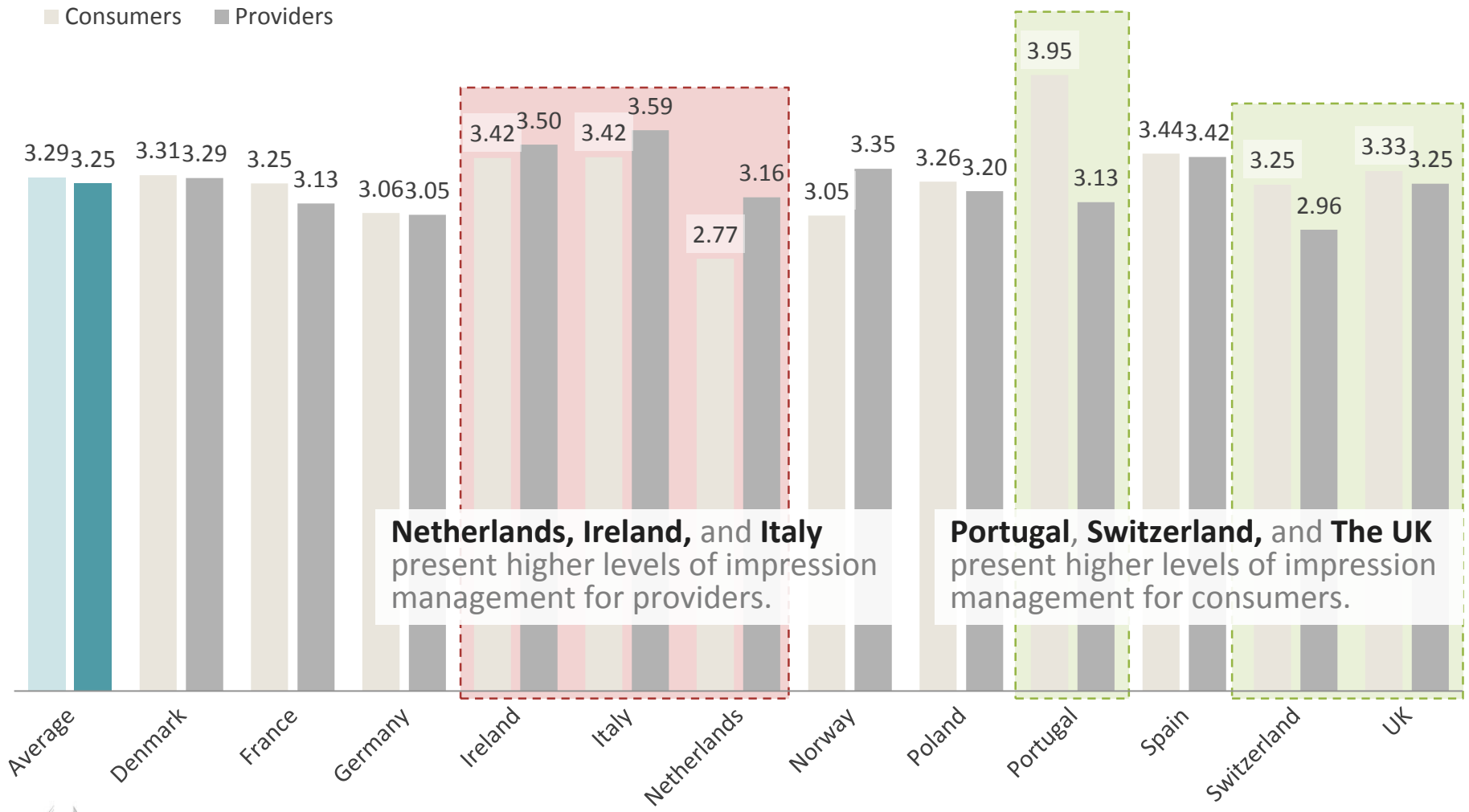
Consumers from Portugal and providers from Italy employ most impression management



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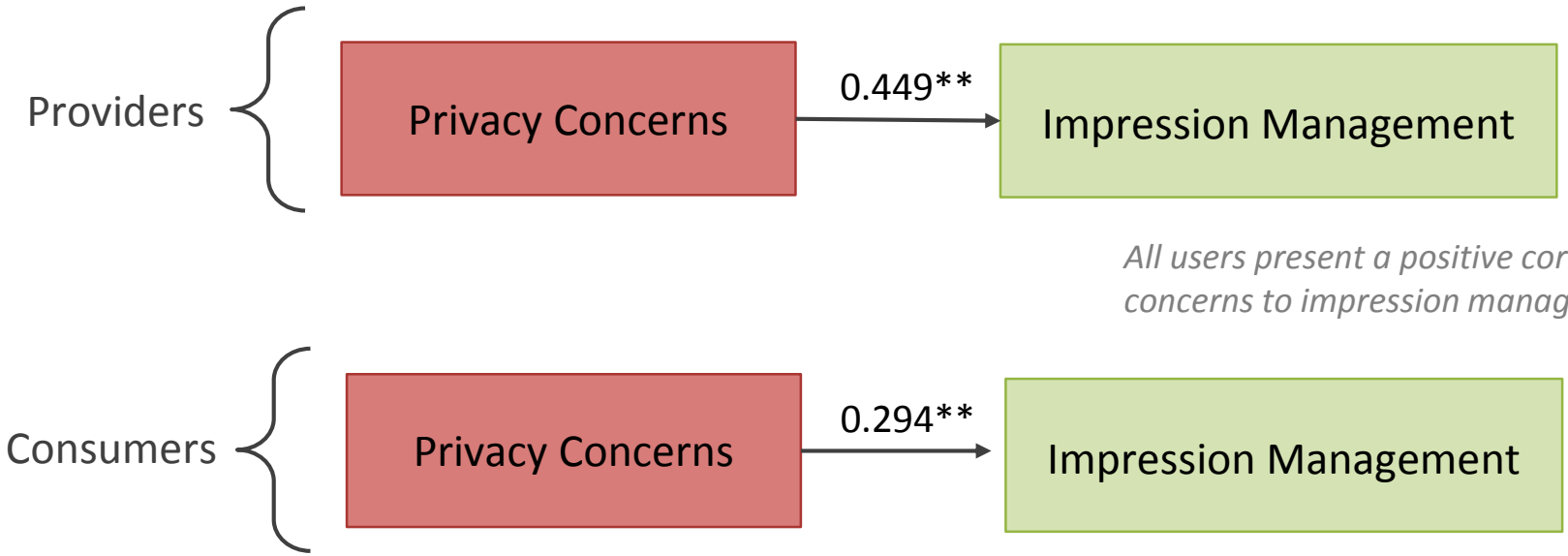
Providers who are more privacy sensitive are more likely to employ impression management



All users present a positive correlation of concerns to impression management.

For users of the sharing economy, a positive and significant correlation between privacy concerns and impression management exists. This means that **users who are more sensitive to privacy risks are also more conscious about self-presenting online**.

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* p < 0.05 ** p < 0.01 *** p < 0.001

Providers who are more concerned about offline privacy will employ more impression management

		Consumers	Providers
		Impression Management	
Consumers	Peer Privacy	0.247**	-
	Platform Privacy	0.267**	-
Providers	Peer Privacy	-	0.553**
	Platform Privacy	-	0.599**
	Offline Privacy	-	0.627**

Providers present stronger correlations, especially involving offline privacy.

* p < 0.05 ** p < 0.01 *** p < 0.001

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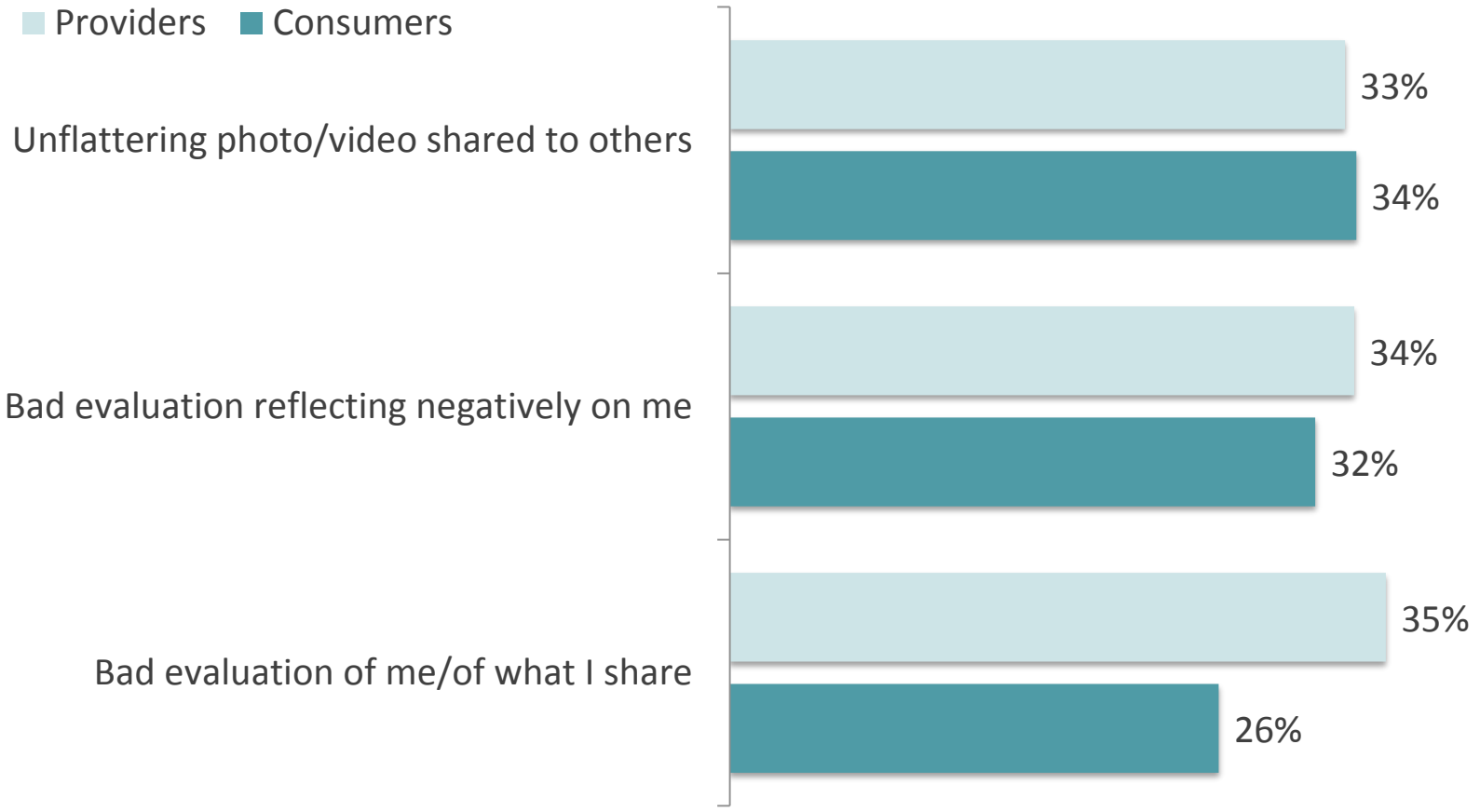
Risk of Reputation Damage: One third of users are highly concerned about possible reputation damage.



Privacy concerned consumers more likely to care about their reviews and evaluations.

		Consumers	Providers
		Risk of Reputation Damage	
Consumers	Peer Privacy	0.435**	-
	Platform Privacy	0.500**	-
Providers	Peer Privacy	-	0.452**
	Platform Privacy	-	0.427**
	Offline Privacy	-	0.424**

Risk of Reputation Damage correlates strongly and positively with all privacy concerns

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* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Key Insights into Impression Management Strategies

- More than 40% of users employ **impression management strategies** while operating on a sharing economy platform.
- In most countries covered by our sample, **consumers employ more impression management than providers**. In countries such as Italy, Ireland, and the Netherlands the trend is the opposite.
- **Higher privacy concerns,** especially for providers, **relate to more substantial use of impression management**. In particular for providers, a more strategized self-presentation is connected to stronger concerns related to offline privacy.
- **More than one third of users report high concerns about potential reputation damages**. Users who are more concerned about their privacy, and in particular risks such as hacking or identity theft, are also more concerned about potential negative reviews and their consequences.

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6 Conclusions

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Summary of Results

Users and Non-Users report very different privacy concerns

Considering an aggregated measure for privacy concerns, **non-users report higher privacy concerns than users**, which might be one of the main explanations for why non-users do not participate in the sharing economy.

When using distinct measures for platform-related concerns and peer-related concerns, **users** report higher concerns about **platform misuse of their data**, **non-users**' concerns are mainly situated with **peers**.

Spain and Portugal report higher privacy concerns.

Respondents from the South of Europe, and especially from Portugal and Spain, report significantly **higher privacy concerns** than the rest of the sample, both for the group of consumers and for that of providers.

Conversely, respondents from Germany and the Netherlands report the **lowest privacy concerns** across the sample, both in the consumers and in the providers' group. Further research could help clarify this apparent divide.

Reputation Damages are an important concern for users of the sharing economy.

Respondents' **perceived risks of reputation damages**, mainly relating to negative reviews or comments by other peers, also **correlate highly** with **their privacy concerns**. This stresses once more how self-presentation on a sharing platform might be only partially in control of individual users, and how that could generate discomforts and concerns.

thank you for your consideration

Ps2Share – Power, Privacy and Participation in the Sharing Economy Consortium
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