



The Psychology of Positive Unknowns



Introduction

- Psychology treats uncertainty as negative. This is a discipline-wide blind-spot.
- However, there are such things as positive unknowns.
- Not wanting to know something is neither irrational nor pathological. Unknowns and uncertainties fulfil important psychosocial functions.
- They also underpin important forms of social capital such as privacy, politeness, civility, division of labour, and trust.

We report four studies.

Study 1 elicited episodes involving positive unknowns from a UK adult sample.

Study 2 developed a 7-factor structure from a collection of attitude statement ratings by a UK sample, and examined their relationships with intolerance of uncertainty, need for closure, need for structure, and optimism.

Study 3 tested measurement invariance of the factor structure on a second UK sample, and investigated its relationships with measures of anxiety, depression, and the five-factor personality inventory.

Study 4 tested measurement invariance on a USA sample, and replicated several covariates from Studies 2 & 3.

Study 1: Elicitation of Positive Unknowns

Our survey asked participants to recall one example of four types of episodes that recently happened to them:

- When not knowing something had positive consequences for them
- When knowing something had negative consequences for them
- Things they would rather not have known
- Things that were pleasant or good surprises

What did we find?

Functions of positive unknowns mentioned by participants:

- Curiosity, interest, and discovery
- Avoidance of forbidden or bad-consequence knowns
- Constructing and maintaining privacy
- Decreasing the burden of obtaining knowledge
- Sense of personal freedom (retrospective and future)
- Maintaining positive emotions of surprise and suspense
- Constructing and maintaining trust
- Virtue-signaling
- Constructing and maintaining polite/civil discourse
- Avoiding liability or culpability (but not deliberately)
- Eschewing responsibility (but not deliberately)

Structure of Attitudes

Study 2: Factor Structure

EFA on positive-unknowns attitude items based on Study 1 yielded a 7-factor structure for 33 items:

Curiosity, e.g., “I enjoy investigation and research activities.”

Bad knowns, e.g. “Some kinds of knowledge can be dangerous to possess.”

Privacy, e.g., “I prefer not to know things about other people that they regard as private information.”

Expertise reliance, e.g., “I am generally comfortable with relying on legal experts rather than taking the time and effort to learn about the law.”

Positive future, e.g., “I find a sense of freedom from not knowing what my future holds.”

Surprises, e.g., “I prefer not to know the ending of a movie before I see it.”

Trust, e.g., “The more I trust someone the less closely I have to watch what they do.”

Studies 3 & 4: Measurement Invariance

A case can be argued for scalar invariance in the second UK sample and USA sample.

		UK sample					
		DWLS			WLSMV		
Invar.	Metric	CFI	TLI	RMSEA	CFI	TLI	RMSEA
	Metric	0.962	0.963	0.053	0.921	0.924	0.052
	Scalar	0.959	0.962	0.054	0.919	0.925	0.051
		USA sample					
		DWLS			WLSMV		
Invar.	Metric	CFI	TLI	RMSEA	CFI	TLI	RMSEA
	Metric	0.960	0.964	0.055	0.915	0.923	0.053
	Scalar	0.955	0.960	0.054	0.909	0.920	0.054

People endorse positive unknowns!

Study 2	disagree	neutral	agree
curiosity	7.9%	9.2%	82.9%
bad knowns	33.6%	17.9%	48.6%
privacy	26.9%	16.8%	56.2%
expertise reliance	29.2%	14.6%	56.2%
positive future	24.8%	22.0%	53.2%
surprises	8.2%	5.8%	86.1%
trust	8.3%	14.9%	76.8%

Study 3	disagree	neutral	agree
curiosity	7.5%	10.9%	81.5%
bad knowns	37.3%	20.4%	42.3%
privacy	26.3%	18.7%	55.0%
expertise reliance	25.4%	14.2%	60.5%
positive future	26.5%	24.5%	49.1%
surprises	9.8%	5.4%	84.9%
trust	6.8%	11.4%	81.7%

Personality

Studies 3 & 4: Personality

Due to space limitations, only brief summaries of the relationships between covariates and endorsement of positive unknowns are presented.

Agreeableness scores positively predict endorsement of all types of positive unknowns except bad knowns.

Conscientiousness scores positively predict endorsement of curiosity, bad knowns, privacy, and surprises, while negatively predicting endorsement of positive future.

Negative Emotion scores positively predict endorsement of bad knowns and surprises, and negatively predict endorsement of curiosity, positive future, and trust.

Extraversion scores positively predict endorsement of expertise reliance and surprises, while negatively predicting endorsement of privacy.

Openness scores positively predict endorsement of curiosity and surprises and negatively predict endorsement of bad unknowns and reliance on experts.

Uncertainty Orientations

Studies 2 & 4: Uncertainty Orientations

Intolerance of uncertainty scores negatively predict endorsement of curiosity and positive future items but positively predict endorsement of bad knowns.

Optimism scores positively predict endorsement of curiosity, privacy, positive future, and trust.

Personal Need for Structure scores positively predict endorsement of privacy and surprises, but negatively predict endorsement of reliance on experts and positive future.

Need for Closure effects are moderated by sample and gender. However, they generally positively predict endorsement of bad knowns and reliance on experts. In the UK sample NFC negatively predicts endorsement of privacy. For men in both samples, NFC positively predict endorsement of trust.

Interim Conclusion

Both personality and uncertainty orientation covariates are related to endorsement of positive unknowns in different directions. Intolerance of uncertainty, for instance, is positively related to bad knowns but negatively related to curiosity and positive future. **Therefore, attitudes to positive unknowns are not simply the opposite of attitudes toward negative unknowns.**

Mental Health

Studies 3 & 4: Mental Health Variables

Worry scores negatively predict endorsement of curiosity and positive future, but positively predict endorsement of bad knowns and surprises.

Depression scores negatively predict endorsement of curiosity, reliance on experts, positive future, and trust.

Fear of Negative Evaluation scores positively predict endorsement of reliance on experts and trust.

Conclusions

Interpretations

- Curiosity and positive future unknowns may be fulfilling psychological functions affiliated with emotional regulation involving those positive emotions that require unknowns, such as excitement, hope, aspiration, and interest.
- Avoiding bad knowns and relying on experts may be in the service of avoiding negative emotions and enhancing a sense of security.
- Privacy and trust are endorsed most strongly by optimistic conscientious people, and trust ratings also positively related to need for structure and need for closure. These unknowns enhance sociability and civil relations (Smithson, 2008).
- Pleasant surprises are endorsed most by people scoring high on conscientiousness, need for structure, and worry. These findings are somewhat puzzling, but may be due to pleasant surprises also being safe surprises.

Future Directions

- Measures and models of attitudes towards uncertainty** must be refashioned to incorporate positive as well as negative unknowns.
- Decision making models** should incorporate the possibility that positive or negative utility may be assigned to uncertainty itself.
- Our understanding of the **relationships between uncertainty and affect** needs to be recast, possibly along the lines of Fredrickson’s “broaden-and-build” approach. There is no account of how uncertainty can generate positive emotions.
- Clinical applications** may emerge from this line of research: Enabling people to distinguish “good” from “bad” unknowns may enhance their ability to deal with uncertainty generally.