

Can Understanding Worldviews Help Promote a More Positive Culture of Science in Kuwait?

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Kuwait Towers, Kuwait City, June 2017. Source: Anton Rogozin, Flickr.

Formulating policy in any science-related field – health, clean energy, the environment – is not without its challenges. This is particularly true for Kuwait where, despite the abundance of policy papers written by competent bodies, very little implementation and impact is felt on the ground. Social psychology could perhaps provide solutions from its massive body of theories and concepts, and guide more effective policy formulation that

would see better uptake by populations and impact on the ground. Specifically, social psychology could offer some insights into the receptivity of various individuals to different types of themes that may be present in the discourse of a given policy area.

There is a growing interest in social psychology, particularly in the ways in which different people experience and make sense of the world. Based on this interest, several typologies have emerged to classify people into categories of sensemaking and experience, and most of these approaches seem to converge on five types that are described similarly across these approaches (we call them [worldviews](#)). Our research explores whether there is a mismatch between the worldviews represented in science-related policy and the distribution of worldviews in Kuwait, in relation to attitudes towards science in Kuwait.

Table 1: Worldview Types and Their Representative Statements

Type	Representative Statement
Localised	The future depends on us and the choices we make. Every problem has a solution. Each of us can work to fix the laws and institutions so that they are fair and equal for all. In this way, we can better address the needs of people and society.
Pragmatist	In life, we must adapt to our circumstances and sometimes we have to go with the flow to avoid trouble. The rich and powerful protect their own interests, whereas the kind-hearted suffer. Sometimes, you have to bend the rules to help your loved ones.
Orthodox	To succeed in life, we must follow the rules and local customs to maintain social order. We also need to show respect to each other and carry out our duties. This is how we can help others in our community.
Reward	In life, we get what we deserve. Life's challenges are overcome by our efforts, and these can provide new opportunities. We must cooperate with others, respect authority, and fulfil our duties. Our efforts will eventually lead to success.
Survivor	In life, things rarely end up well. People are what they are, and good people usually suffer and are exploited. It is best for one to keep our head down and move on.

Policy papers, documents and the media frame the issues they aim to influence in ways that are sometimes bound by the policy domain itself, or to the types of discourse that traditionally frame that policy. For example, environmental policy traditionally tends to

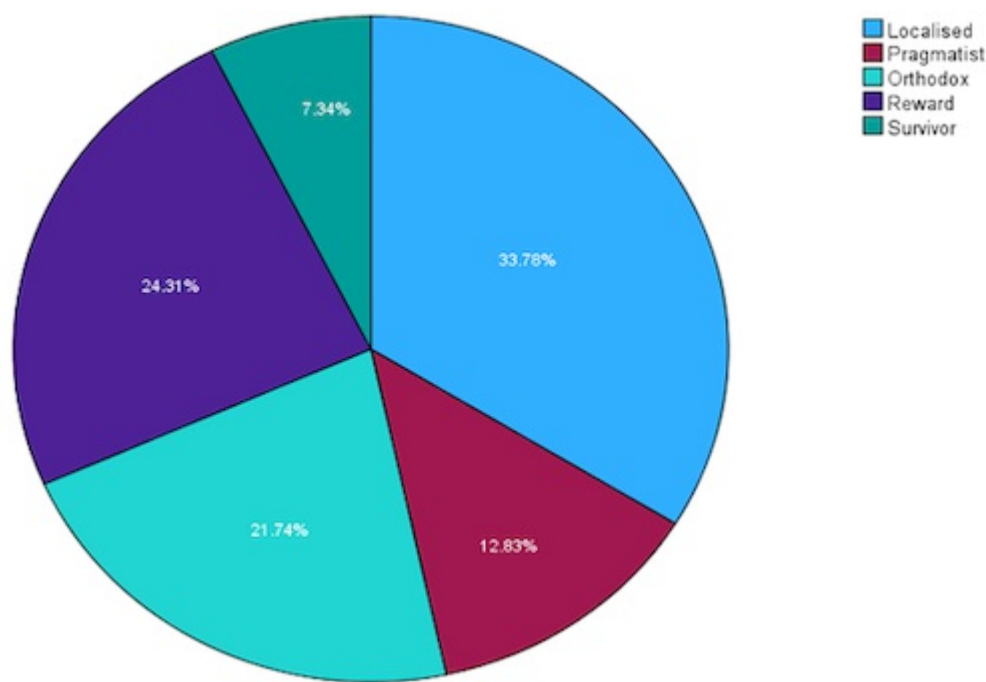
highlight the negative consequences of human behavior on the environment and the potential disasters that result if something is done quickly (reflecting a *pragmatist* outlook), whereas health policy tends to highlight the responsibility of each individual to improve the overall situation for everyone (reflecting a *localised* outlook). An analysis of policy documents and media articles in policy domains highlighted by the government of Kuwait in its [2035 Vision](#) revealed that some worldviews are overrepresented in different policy domain discourses.

Table 2: Distribution of Worldviews Across Policy Documents

Worldview	Environment Policy	Health Policy	All data
Localised	13.92%	56.36%	31.82%
Reward	27.85%	20.00%	25.00%
Survivor	3.80%	16.36%	9.09%
Orthodox	16.46%	5.45%	12.12%
Pragmatist	35.44%	1.82%	20.45%

The receptivity of science-related policy by any populace will also depend on the prevalent attitudes towards science in a given society. These lie within a wider [science culture](#) that includes science education, general knowledge of science, feelings towards science (whether it is it promising or whether people have reservations towards it), and the willingness to defer to science and scientists as authorities who dictate what is and is not in the interest of the public. It also includes the extent to which people's behavior is informed by or oriented towards science (engagement with science).

Figure 1: Distribution of Worldviews in the Kuwaiti Population



A survey of the Kuwaiti population showed that the most prevalent worldview in Kuwait is localised (33.8%), followed by reward (24.3%), and followed by orthodox (21.7%). These three worldviews encapsulate the majority of Kuwait's population, therefore any attempts to promote policy should consider representing these three worldviews. Our findings also indicate that people in Kuwait with masters or PhD degrees, as well as those who describe themselves as very religious, are much more likely to hold localised worldviews than those with lower levels of education. Those subscribing to a localised worldview express more reservation towards science than individuals with an orthodox worldview, who, surprisingly are more numerous among those who describe themselves as not religious. However, differences in science culture indicators emerge only among individuals who are more interested and engaged in science, and although interest in science is relatively high in Kuwait according to our data, engagement with science is relatively low. Therefore, any attempts to influence science culture or guide policy design in line with the worldviews of the majority would need to, as a first step, generate more interest and engagement in science.

Our data show that interest in science is highest among the most educated, older Kuwaitis and residents, private sector employees, and among those who describe themselves as very religious. Engagement with science is also relatively higher among residents of the Capital governorate and lowest among Jahra residents. Therefore,

higher socioeconomic status – income and education – is associated with more interest and engagement in Kuwait. Any efforts to encourage interest and engagement in science need to consider how to reach those with lower income and education, and targeted towards areas that show lower engagement (e.g. [Jahra](#)). In addition, it is necessary to explore qualitatively what participants are indicating when they express high interest in science, whether this interest reflects a predisposition to engage with science, and if not, how to promote a more action-oriented and engaging interest in science.

This blog post is part of the Kuwait Programme research project '[Surveying Kuwaiti Worldviews to Promote Science Culture in Kuwait](#)'. Martin W. Bauer is the principal investigator on this project with Mohammad Sartawi and Gordon Sammut.