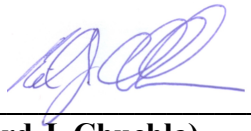
THE SOCIAL ACCEPTANCE OF SHALE GAS DEVELOPMENT: EVIDENCE FROM THE UNITED STATES

Dilge Güldehen Kânoğlu Özkan

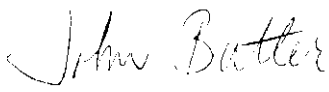
ABSTRACT

The recent upsurge in the development of unconventional oil and gas resources in the United States through hydraulic fracturing has been followed by controversy. Successfully engaging stakeholders and implementing effective interventions demands a better understanding of the social acceptance of this technology. Using data from the University of Texas at Austin Energy Poll (N=3,262), we estimate a partial least squares model that is based on psychological factors that influence attitudes. We find that knowledge, trust, perceived risks and benefits, and problem perception explain support/opposition towards the technology. Our analysis further suggests that the degree of concern about climate change is negatively associated with attitudes towards shale gas: where there is little concern about climate change attitudes toward shale gas are more positive and vice versa. Moreover, we discern that while oil and gas companies are not regarded as reliable in addressing energy issues; the United States Congress, state governments, engineers, scientists, the Environmental Protection Agency and the Environmental Defense Fund are considered trustworthy. Therefore, increased trust in these professional actors results in greater risk perception suggesting that including a sufficiently broad and diverse participation in decision making processes is critical to addressing the concerns of the public. Finally, we explore how sociodemographic, spatial and temporal factors may influence the inner relationships between latent factors in our model. In this respect, we demonstrate that living in a state where hydraulic fracturing occurs alters the relationships between our latent constructs such that trust has a lower impact on perceived risks and a higher impact on perceived benefits. Based on these findings, we discuss recommendations that could help to ensure that large energy business investments are hosted by cooperative communities.

Keywords: social acceptance, shale gas, hydraulic fracturing, partial least squares



(Richard J. Chuchla)



(Dr. John C. Butler)