



Perceptions of Hydrogen and Fuel Cell technology in the workplace

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An SCHFCA collaboration with the University of South Carolina School of Journalism and Mass Communications.



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I/U Cooperative Center
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Hydrogen and Fuel Cells at Work in SC



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- A growing number of people in South Carolina are working with hydrogen and fuel cell technology in the workplace.
- These workers did not choose to make working with hydrogen and fuel cell technologies part of their job requirement.





Our Goal

To determine if people:

1. Are talking to their friends, family members or colleagues about hydrogen and fuel cell technology.
2. Feel that future investment should be made in hydrogen and fuel cell technology.
3. Feel safe at their job when they work around hydrogen and fuel cell technology.



Target Audience

We identified South Carolinians who work with hydrogen and fuel cell technology on a daily basis through the use of:

- Forklifts
- Portable Power Generators
- Telecommunications
- Fueling Stations



Excluded Audiences

People who work in hydrogen and fuel cell industries or in support thereof were not asked to participate in the survey.

- Researchers and support staff
- SCHFCA employees and partner organizations
- Government officials



Process

The surveys were hand delivered to each participant, who then had the option to mail the completed survey directly to John Besley, or return it to the courier in a sealed and confidential envelop, who then delivered it to John Besley.

John Besley's team at USC analyzed the data



The Survey

The 50 question survey polled respondents in six key categories.

- Demographics
- Interpersonal Discussion Amount/Nature
- Issue-specific Opinion Leadership
- Risk Perceptions
- Technological Potential (Investment, Environmental, Security)

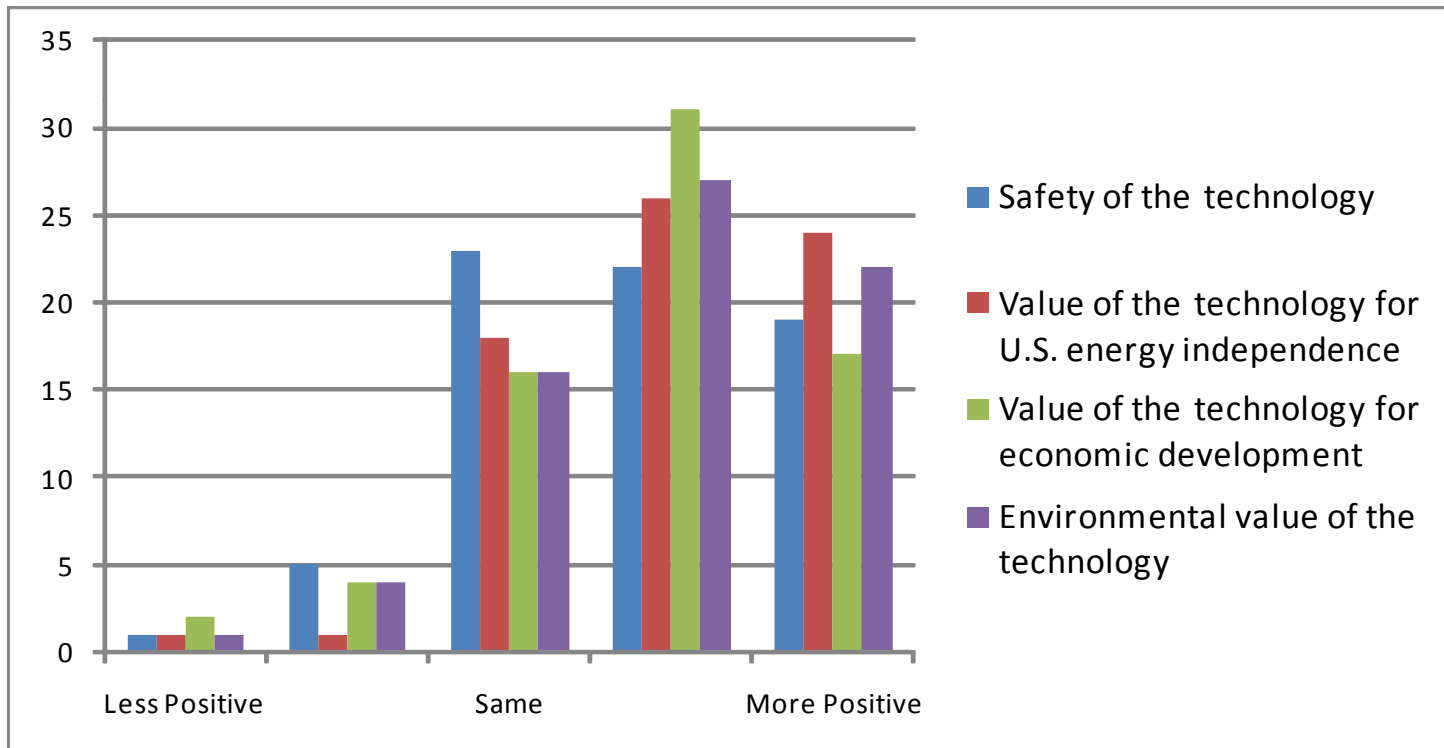


Overall Results

When most people start working with hydrogen and fuel cell technology they:

- Become more positive about the safety of the technology
- Become more positive about the value of the technology for U.S. energy independence.
- Become more positive about the value of the technology for economic development
- Become more positive about the environmental value of the technology

“Since I started working with the technology I have become...”



Demographics

Gender:

- 84% - Male
- 14% - Female

Level of Education:

- High School – 61%
- BA or Associate's – 28%
- Graduate – 7%

Age Groups:

- 6% - 20's
- 38% - 30's
- 38% - 40's
- 14% - 50's
- 1% - 60's and over

Interpersonal Discussion Amount/Nature

- It was important to measure how much discussion was occurring among the participants. This information would then assist us in identifying if any of the participants are becoming “opinion leaders”
- We broke up possible venues for discussion into four groups
 - Colleagues at work (specifically those who do not use hydrogen tech)
 - Family Members
 - Friends and neighbors
 - Others in the community (church members, fellow local organization members, etc.)

Interpersonal Discussion Amount/Nature

- Based on the results from the survey:
 - Between 56% and 66% of the respondents indicated that they had spoken to only one or two people in their work place, family , or circle of friends about hydrogen and fuel cell technology.
 - Nearly half of all the respondents indicated that they had spoken to three or more members of their “friends and family” category.

“I told them how clean it was.”

“Hydrogen cell vehicles are the future.”

“Need to educate the public on the advantages of this technology.”

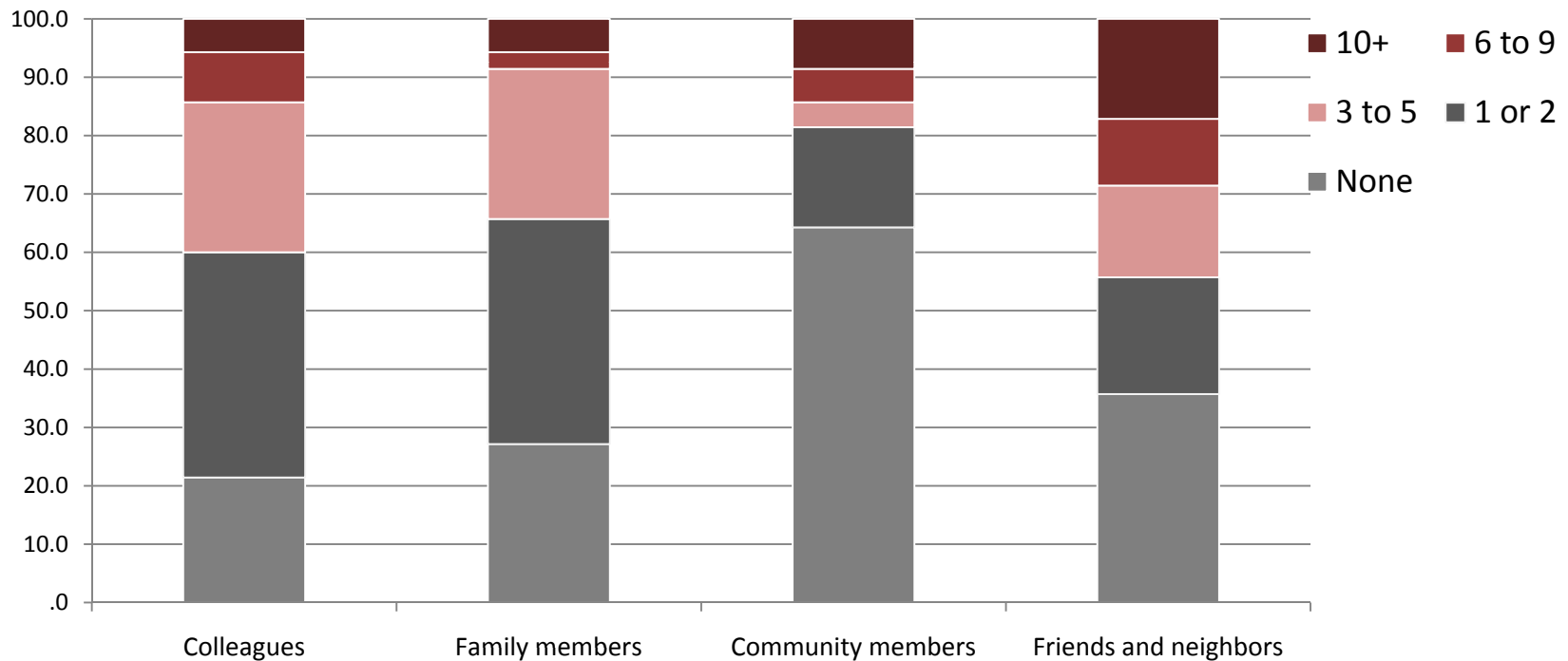
“I have great hope for our future. We need to dream bigger and keep working.”

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During the past six months, about how many of each of the following groups have you talked to about H2/FC technology?



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Issue-specific Opinion Leadership

- Despite the levels of discussion among the participants, we find that many of the people aren't becoming "opinion leaders" in their community for their relationship to hydrogen and fuel cell technology.
- Nearly 70% of the respondents were either neutral or in disagreement regarding the degree to which they provide information and advice to their friends, family, colleagues, or other community members about hydrogen and fuel cell technology.

Risk Perception

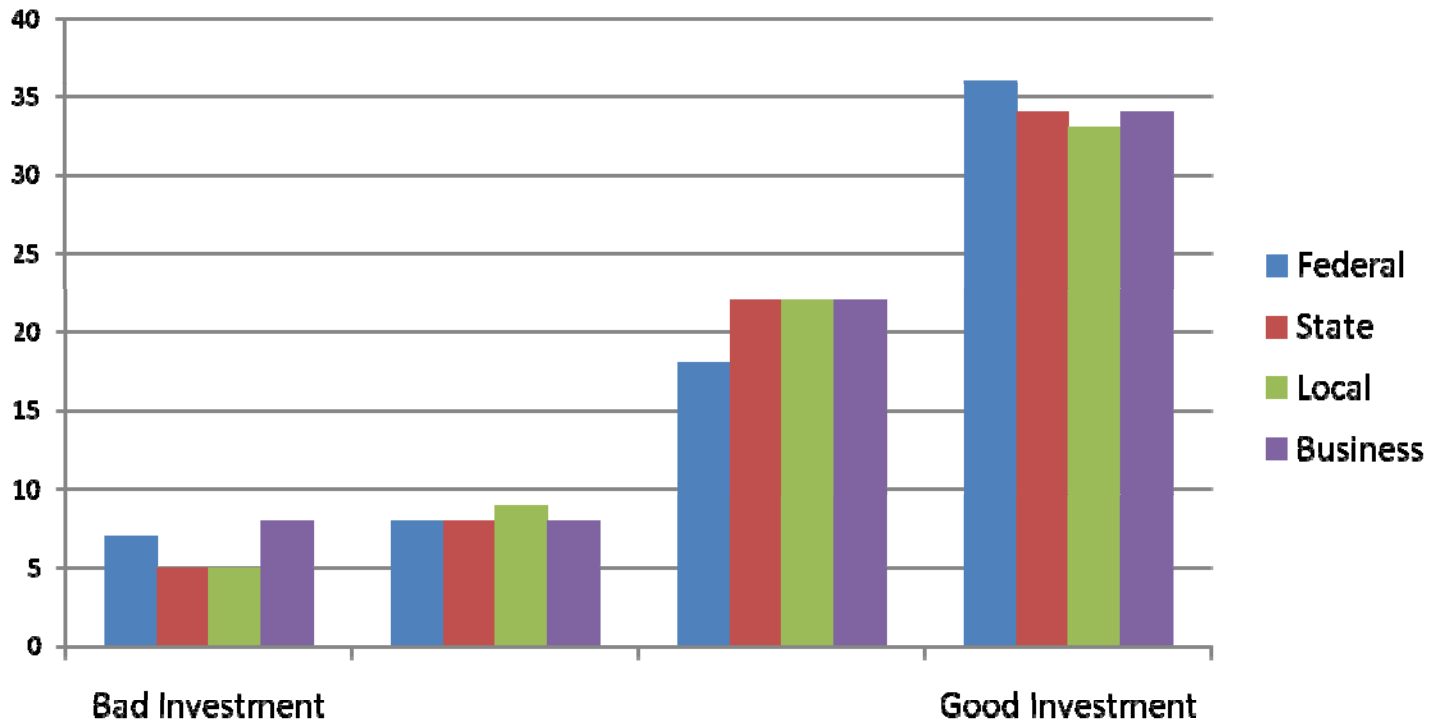
- When asked if the respondents feel safe working with hydrogen and fuel cell technology:
 - 44% do not perceive hydrogen and fuel cell tech as a danger, while 24% slightly worry.
- When asked if the respondents feel that the risks for hydrogen and fuel cell tech is different or the same as for other technology:
 - Roughly 50% felt that the risks are different, and the other half felt that the risks associate with hydrogen applications are the same as their conventional counterparts

Technological Potential

Most respondents realize that investing in hydrogen and fuel cell technology is a great investment and should be done by:

- Federal Governments
- State Governments
- Local/Municipal Governments
- Private Business

Hydrogen and Fuel Cell Technology is a good investment for...



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Interpretation

The results from this survey may indicate that:

- The technology is invisible to users' daily duties
- The technology was easily integrated into existing responsibilities and did not result in a long ramp up experience for the employees or the employers
- The everyday users of the hydrogen and fuel cell technologies are not well educated on the technology enough to become champions.



Conclusions

While most people aren't vocal about the hydrogen and fuel cell technology that they work with on a regular basis, they support the technology and its development as an alternative energy source.

Additionally, most respondents feel safe working with hydrogen and fuel cell technology.



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