**SurveyMonkey 1-Off Study 2-Pager**

This 2-pager summarily describes what was done, why it was done, and what I found. What was found takes the form of 5+ talking points.

**I. What Was Done**

A survey[[1]](#footnote-1) with 141 responses was taken in February of 2018. 103 responses were purchased through SurveyMonkey, while 38 were achieved otherwise through such means as word-of-mouth, posting to the researcher’s network on Facebook, and posting on a subreddit dedicated to posting and taking surveys for research and recreation.

**II. Why it Was Done**

I mainly wanted to determine whether people who make hiring and firing decisions are significantly more opposed to hiring based on alternative credentials. I also wanted to do a general scan for factors of favorability of alternative credentials. I wanted to check about favorability of online education in general, and also on the favorability of the specific idea of hiring a junior candidate who lacks a traditional education but has alternative credentialing. I wanted to compare online learning to another cutting-edge technology, which is cryptocurrency.

**III. What I Found**

See more discussion on results and motivation at the following web locations:

1. analysis.docx at <https://github.com/Vandivier/data-science-practice/tree/master/stata/udacity-exploratory-analysis>
2. <http://www.afterecon.com/economics-and-finance/results-survey-education/>
3. <http://www.afterecon.com/economics-and-finance/collecting-thoughts-on-education-research/>

Key results:

1. The public is generally positive on alternative education. The public sees alternative credentials as a substitute to traditional degrees when applying for an entry level position.
2. The public generally does not see cryptocurrency as a good thing, but people who favor cryptocurrency also favor alternative credentials even more strongly than average. This identifies an innovation bias.
3. Employers and the unemployed are more positive about alternative credentials than individuals who fall into neither category. This means the most pessimistic group is professionals who are currently employed but have no ability to make hiring and firing decisions.
4. Gender, income group, familiarity with online learning platforms, and industry were the most significant and important factors when explaining alternative education favorability.
5. A standard reduction pattern was developed in order to exhaust and normalize model and factor analysis. This involved identifying strong factors using the classic p-value threshold at p = .1 and additional tests.
6. The standard reduction pattern allows for systematic identification of important factors even when the correlation is statistically insignificant under the classic p-value test.
7. Concepts of horizontal and vertical robustness were described, and these metrics aided identification of important factors even when a factor was statistically insignificant under the class p-value test.
8. Among strong factors, standard reduction was able to identify 3 super-strong factors, 2 of which were industry effects. Both industry effects were positive. One industry was the information technology industry and the other was the military industry. It’s plausible that individuals selecting the military industry are employed under the DoD in information technology roles.
9. Education and transportation industries were most opposed to alternative credentials (see model `d1qmaxar`) and law was almost as pessimistic (see model ` d1qweak`). Regulation in certain industries may require certain credentials such that alternative credentials become non-substitutable for traditional education. Medical doctors would be hypothetically pessimistic under this theory. In other cases, it may be an entrenched industry norm rather than a legal requirement.
10. Additional measure of model complexity are developed over and above the usual adjusted r2 measure.

1. Aggregate results and questions asked are publicly viewable at <https://www.surveymonkey.com/results/SM-FBQL8F5H8/> [↑](#footnote-ref-1)