Personality and Ideological Factors of Alternative Learning Favorability

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Abstract

This paper investigates an original data set (n=2175) to understand public and employer disposition toward alternative postsecondary learning. This study builds on the literatures of alternative learning and personality to solve an apparent contradiction where conservatives reject alternative learning. This paper specifically tests whether personality is a solving mechanism.

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1. Introduction

Education economics has sought to explain favorability to alternative education. One paradoxical result is that conservatives favor accredited education[1]. The result holds after correcting for a variety factors including status quo bias, religiosity, and standard controls. This paper hypothesizes that the paradox is a case of non-logical survey response and omitted variable bias. This paper seeks to resolve the paradox by introducing new controls. Specifically, this paper hypothesizes that after correcting for personality and mental effort, conservatism will not be negatively related to support for alternative education. [ONE LINER ON RESULTS]

This paper follows prior survey method closely, then adds new controls. Controls are added for personality and mental effort. Grit and Big Five personality traits are captured as measures of personality. Survey completion time is used as a proxy of mental effort and intelligence.

In a behavioral approach, constraints to mental effort are associated with classically inefficient results. With respect to such results, this paper prefers the label of non-logical to irrational. This amounts to a boundedly rational explanation[2].

Risk aversion is a key theoretical reason to control for personality and mental effort. Conservatism is an aggregate symbol reflecting many factors[3]. High levels of risk aversion among conservatives is one such concern of economic importance[4]. Personality relates directly conservative identification[5] and also to risk tolerance.

Conservatives oppose regulation as a matter of ideological principle [6]. Decisioning on ideological principle, however, may tend to occur with high mental effort. Under conditions of low mental effort, risk aversion may dominate in conservative thought process. These hypothetical conditions explain the response in favor of accreditation on the part of a conservative. This paper seeks to test whether such hypothetical conditions exist in the real world.

2. Description of Data

This paper uses a combination of existing and original survey data. The survey for this paper is based on the Attitudinal Survey on Alternative Credentials[7] Original observations were obtained through a new administration of that survey with two new questions. Respondents were instructed to take online versions of the Big Five personality assessment and the Short Grit Scale and report their results. See Appendix A for survey question wording. [ADD APPENDIX A]

Survey data is investigated using multiple regression. The dataset includes 2175 observations, but 201 samples are relevant in the preferred model. Personality effects turn out to be important, and only 201 samples include such information.

The dependent variable is favorability to alternative credentials. This study defines alternative credentials as those issued by a non-governmental body. Respondents are primed with the definition of alternative credentials. Appendix A contains the wording of the priming message.

The first independent variable of interest is favorability to regulation. The inverse of this variable is taken as a measure of conservative economic preference. Favorability questions are rated from 1 to 10. The second independent variable of interest is survey completion time in minutes.

Other variables include standard controls for age, gender, ethnicity, income, and level of education. Employment status including whether an employed respondent is a manager is reported. If employed, the industry of employment is recorded for the respondent.

Favorability to artificial intelligence technology is observed. This is interpreted as a measure of innovation bias. Innovation bias is interpreted as isomorphic to inverse status quo bias.

Two other important right-hand variables exist. Respondents are asked whether they have heard of five popular alternative learning providers. Familiarity is the count of confirmed known providers. Expectation is a response from 1 to 10 to the question "It will soon become fairly conventional for high school

graduates to obtain alternative credentials instead of going to college."

3. Results

The paper replicates prior findings that manager preferences are insignificantly different from the population at large. Ideological effects appear robust to inclusion of personality. This indicates the popular correlation between regulation an alternative education is not rooted in personality, and therefore appears to be ideological, if incoherently so.

how does this relate to hiring and firing or industry growth trends? answer: personality answer: managers tend to have certain personality traits do they also tend to have a certain ideology...? idk industry growth isn't really effected be personality is taken as socially stable, this info could be relevant for product marketing; some personalities being more friendly to alt education however, preliminary analysis indicates these effects are small

ai favorability is lower among low regulation supporters highly significant and positive relation found, but total r2 is low this is counterintuitive because intellectual conservatives should embrace technological advancement and the free market potential solution: as a matter of personality, or Kahneman's System 1 response, conservatives may exhibit anti-innovation bias raising more regulation and ai (eg techno-liberal or scientistic progressive) is associated with a reduction in alt ed cred support reducing ai and reducing regulation (eg anti-innovation conservative) is associated with more support for alt ed cred (indicates ideological dominance over personality at survey time) but, both of these effects are weak. ideological dominance over personality is consistent with results in this paper: weak personality effects relative to ideology (2:1, without multiple regression).

85 4. Conclusions

We assume independence of personality and ideology, along with stability of both over time. These assumptions are necessary because multiple regression of

Table 1: Table of Multiple Regression on Enrollment, Selected Variables

	M-2018	M-2019	M-2019-2	M-2020
AI	0.700*			-0.730*
${ m AI}^2$	-0.065*			0.062**
$Expectation^2$		0.113**	0.106***	0.038***
$Expectation^3$	0.003***	-0.007*	-0.007*	
$Familiarity^3$				0.018*
Familiarity-Grit				-0.002**
$\rm Income^3$				-0.002*
Is College Graduate		0.933	0.493	1.060**
Is Male		-2.458*	-1.579*	0.405
Is Manager		-0.475	-0.424	0.288
Is STEM	-1.212*			
IT Industry	1.830**			0.853*
$Nationalism^2$	0.011*			
Pro Regulation	1.161*	0.268***	0.244***	0.622*
Religiosity	0.120*			
R-sqr	0.5971	0.5257	0.4182	0.4480
Adj. R-sqr	0.5016	0.4373	0.3528	0.3655
N	168	192	298	201

^{*} p < 0.10, ** p < .01, *** p < .001

both sets of effects cannot be accomplished with the present data set.

We have ideological effects, which I am distinguishing from cultural effects.

Cultural effects include regional and ethnic effects.

Non-cultural ideological effects include religiosity, christianity, favorability to regulation, favorability to AI (conservatism and anti-innovation bias proxy), STEM employment measure (scientism proxy), and whether American education is important (nationalist / anti-foreign prox)

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