



Motivating Factors Influencing Teacher Educators to Choose Academe as a Career

Kelly M. Carrero¹ and Lyndal M. Bullock^{2*}

¹Special Education, College of Education, Texas A&M University - Commerce, 214-264-3069, USA.

²Special Education, University of North Texas, 1155 Union Circle # 311335, Denton, TX 76203; 940-367-3221, USA. (Professor Emeritus).

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All work on this manuscript was collaborative in nature and both authors contributed equally to the research and final product. Both authors approve the final product.

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ABSTRACT

The motivations that impelled individuals to pursue careers in Institutions of Higher Education as professors in personnel preparation are examined. Data were collected using Motivations for Choosing Academia as a Profession (MCAP) and a 10-item Big Five Inventory (BFI-10). Two hundred eighty-nine professors of education representing the four U.S. census regions participated in the present study. The MCAP is a 25-item instrument designed to measure retrospective motivation of faculty decisions to enter the professoriate. The development of the MCAP is described and an exploratory factor analysis was employed to examine the psychometric validity of the instrument.

Keywords: Motivation; institutions of higher education; special education faculty; general educators.

*Corresponding author: E-mail: Bullock.Lyndal@gmail.com;

1. INTRODUCTION

Currently, there is a shortage of highly qualified teachers in the high needs areas of special education, English as a Second Language (ESL), mathematics, and science. Moreover, the current and ever-increasing shortage of professors teaching in high-need areas at institutions of higher education (IHE) further exacerbates the issue of preparing highly qualified special and general educators for the classroom [1-2]. Capacity to attain goals and mandates, as outlined in federal education legislation (i.e., Individuals with Disabilities Education Improvement Act [IDEIA], [3] and No Child Left Behind [NCLB], [4]), appear to be insufficient at each stop in the educational pipeline [5-6]. Unfortunately, there is little information regarding what factors motivate individuals to enter the field of academia, specifically, in high-need areas.

2. SUPPLY AND DEMAND FOR TEACHER EDUCATORS

According to a report from the U.S. Department of Education's Office of Postsecondary Education [7], there have been consistent nationwide K-12 teacher shortages in the areas of special education, mathematics, and science since 1990. Personnel shortage in special education has been, continues to be, and is predicted to remain chronic in nature [5,1]. Although there is limited literature regarding the shortage of K-12 general education teacher educators [8-9], investigation into potential shortages is valid when considering the impending turnover in the professoriate.

2.1 Faculty Preparing General Educators for the Classroom

Literature regarding issues specific to shortages of general education teacher educators at IHEs is lacking [10-11]. According to Twombly and colleagues [9], severe shortages exist in the supply of IHE faculty in the areas of early childhood education, elementary education, mathematics, reading, science, and special education. One example of the shortage reported by Reys [11] indicated that in 2007, 40% of openings for IHE faculty positions in mathematics education remained unfilled.

2.2 Educators for English Language Learners

Preparing educators to work with children who are English as Second Language (ESL) learners

has been historically ignored [12]. However, with the ever-increasing heterogeneity of our child population paired with teacher-quality concerns, the preparation of teachers to educate children who are English Language Learners (ELL) is beginning to be addressed [13]. Although generations of immigrant youths have been expected to acquire the English language without any specific targeting, federal laws mandate (e.g., {4}) that all children must achieve at the state standard or be given targeted intervention to prepare for achievement of state-specified-standards. Such mandates necessitate attention to having qualified personnel to work children who are ELL. Illustrating the personnel preparation needs in ESL, Gandara and Maxwell-Jolly [14] indicate that only 18% of teachers working with ELL children have a certification in ESL.

2.3 Special Education Faculty in IHEs

As far back as 1995, Smith and Pierce, in a review of the state of IHE special education faculty, cautioned the field about impending faculty shortages. As a response to the growing concern with the special education professoriate, leading researchers from the field of special education were commissioned to complete a large nationwide study to investigate the alleged special education IHE faculty shortage [15]. Findings from the study revealed that (a) a shortage of special education faculty does exist; (b) the number of special education doctorates decreased annually by 30%; (c) only about half of graduating doctorates chose to work with children in IHEs; (d) underrepresented groups of doctorates accepted only approximately 14% of faculty positions in an IHE; (e) more than one-third of all open faculty positions remained unfilled, and (f) the supply-demand issue would only be resolved if every graduating doctorate accepted a faculty position.

The *Special Education Faculty Needs Assessment (SEFNA)* was initiated in 2007 with funding from the U.S. Office of Special Education Programs (OSEP). The *SEFNA* project was designed to assess trends in special education leadership development and evaluate the capacity of the U.S. to supply an adequate number of special education teachers for the delivery of specialized services to children with disabilities [2]. Based on *SEFNA* data, Smith et al. [1] report an increase in doctorate graduates, as well as an increase in doctorates seeking careers in special education faculty

positions. Unfortunately, another major finding was that the demand for special education faculty still significantly outweighs the current and impending supply.

Smith and associates [1] forecast that retirements will increase by 21% per year between 2011 and 2017. Consequently, within the next five years, one-half to two-thirds of the doctoral granting IHEs will lose special education faculty to retirement [16]. At this point, it is critical to determine how to best recognize, recruit, and prepare the next generation of special education IHE faculty. The study reported here investigated motivational factors that may result in individuals entering the professoriate and teaching in high need areas.

3. THEORETICAL FRAMEWORK

According to Hardre, Beesley, Miller, and Pace [17], motivation is defined as *reasons for acting that predict valued outcomes across life stages and work contexts* (p 41). Ryan and Deci [18] present a motivated person as *someone who is energized or activated toward an end* (p54 appears). For many years, psychologists and philosophers have sought to understand motivations that propel a person to make choices. Vocational psychology has long debated as to whether vocational choices are made based on a person's personality, values, needs, interests, or environmental factors. In this concise review of vocational psychology's literature regarding an individual's motivation to make vocational choices, an attempt is made to (a) relate how occupational choice theory relates to the culture of higher education, and (b) present empirical evidence that led to the development of the present investigation.

3.1 Motivation

Motivational theorists accept that the orientation of motivation takes two forms: intrinsic and extrinsic [18]. Intrinsic motivation refers to when an individual engages in an activity because the activity is pleasurable or interesting [18,19-21]. In contrast, individuals are said to be extrinsically motivated when they exhibit a behavior in order to gain some result or reward that is distinguishable from the activity or behavior itself [18-19].

3.2 Personality

It is hardly possible to discuss motivation, much less occupational choice theory, without some

understanding of the personality theories in which the field of occupational choice was founded. According to Allport [22], personality is defined as the static qualities and characteristics that exist within a person and dictate the patterns of his or her behavior, thought, and feelings. The definition of personality provides the impetus for occupational theorists to investigate the role of personality in occupational choice.

3.2.1 Big five trait taxonomy

Following extensive research (e.g., [23-26]), the field of personality psychology arrived at an agreement of a general taxonomy of personality consisting of five dimensions (e.g., [27-28]), now known as the "Big Five" and includes (a) extraversion, (b) agreeableness, (c) conscientiousness, (d) emotional stability, and (e) openness. Costa and McCrae [29] define each of the dimensions: (a) extraversion describes someone who is gregarious, assertive, active, seeking adventure, enthusiastic, and outgoing; (b) agreeableness is a person exhibiting trust, straightforwardness, altruism, compliance, modesty, and sympathy; (c) conscientiousness is a person who is competent, organized, dutiful, thorough, self-disciplined, and deliberate; (d) neuroticism describes an anxious, irritable, depressed, self-conscious, impulsive, and vulnerable person, and (e) openness is characteristic of a person who is curious, imaginative, artistic, interested in a variety of pursuits, excitable, and holds unconventional values.

3.2.2 Personality and vocational choice

According to Bipp [30], the immense amount of evidence supporting the role of personality at work has led the field of vocational psychology to cease testing if personality affects work, but rather investigate how personality affects work. According to Holland [31-33], vocational choice and interests are a direct expression of an individual's personality. Holland [33] delineates six work personality types: (a) realistic, (b) investigative, (c) artistic, (d) social, (e) enterprising, and (f) conventional. Larson, Rottinghaus, and Borgen [34] describe vocational interest and personality as dual influencers in an individual's vocational choice. Furthermore, Larson and colleagues found substantial shared variance between Holland's six types and the Big Five personality traits; however, the two models are not perfectly compatible.

3.3 Theoretical Significance to the Present Study

Understanding the theoretical constructs contributing to factors influencing an individual's vocational choice has direct implications for the present study. Using the aforementioned concept of motivation coupled with what has been postulated as work personality, an attempt was made to ascertain how professors who prepare educators to work in high-need areas arrived at the ultimate decision to accept a faculty position at an IHE.

The present study had two primary goals. The first goal, examination of the psychometric properties of the *Motivations for Choosing Academia as a Profession (MCAP)*, was achieved through the utilization of an exploratory factor analysis. The second goal, identification of predictors that can be used as indicators of the probability of whether an individual would enter the professoriate and teach in the area of general education or special education, was achieved using logistic regression analysis.

4. METHODS

4.1 Participants

Leaders in personnel preparation at IHEs representing the four United States census regions [35] were identified utilizing databases from professional groups (e.g., Council for Exceptional Children [CEC]; Teacher Education Division/CEC; Higher Education Consortium in Special Education; historically black colleges and universities; developing and Hispanic serving institution programs; and personal contacts). An invitation to assist the researchers by disseminating a link accessing the web-based survey to teacher educators within their respective IHEs was sent via e-mail to the identified contact person.

Two screening criteria were used to identify qualified respondents for the present study: (a) respondents must have an earned doctorate in education or related field, and (b) respondents must have taught courses that prepare students to work in an educational setting. Two hundred ninety-two participants were initially included in the study. Three participants were then removed from the entire dataset due to missing data resulting in $N = 289$. Only participants classified as general and special education professors

($n = 112$ and $n = 137$, respectively), were included in the logistic regression analyses and participants identifying themselves as both general and special education professors ($n = 40$) were excluded from the logistic regression.

4.2 Instrumentation

Two instruments were used in the present study: the *MCAP* [36] and a 10-item *Big Five Inventory (BFI-44; [37])*. The two instruments were merged into a single web-based survey document. The development of the *MCAP* required an extensive review of literature in the areas of (a) personnel needs in IHEs, (b) motivational theory [18,21,38], (c) vocational choice theory [31-33,39-41]; and (d) personality theory [22-23,42-44].

The *MCAP* used a five-point Likert scale (e.g., *not at all important* = 1, *very important* = 5). Items were written to capture information specific to the career of academia, as purported in the literature (i.e., [39,45-47]).

The second instrument used was the *BFI-10* [37]. The *BFI-10* is an abbreviated version of the original 44-item *Big Five Inventory (BFI-44; [48])*. Rammstedt and John [37] carefully chose 10 items from the original *BFI-44* and tested the psychometric properties of the *BFI-10*. Results concluded that the *BFI-10* scales yielded effect sizes that were lower than the *BFI-44*, yet were nonetheless satisfactory for research considering participants' time constraints. Moreover, the *BFI-10* maintained satisfactory levels of reliability and validity.

5. RESULTS

5.1 *MCAP's* Psychometric Properties

The first research goal sought to determine the extent the *MCAP* exhibits psychometric validity; therefore, an exploratory factor analysis (EFA) was used to examine the psychometric properties. Although there are identified best practices [49], EFA is an extremely subjective analysis [50-51]. Many analytic choices were made and tried throughout the duration of completing the EFA; however, four major decisions were ultimately made: (a) how many factors to extract, (b) which extraction method should be used to extract the factors, (c) how the chosen factors should be rotated, and (d) how the quality of the variables measuring the factors should be determined?

5.1.1 How many factors to extract

Eigenvalues were computed and reported using a correlation matrix. Parallel analysis (PA; [52]) is considered the most precise method for determining the number of reliable factors existing in an instrument [53-54]. Specifically, PA acknowledges the use of the “eigenvalue greater than one” rule [55] for factor retention purposes is an oversimplification and prone to inaccurate decisions [52,56]. Results of the PA indicate that only the first three actual eigenvalues (i.e., 9.709, 2.123, and 1.568, respectively) are greater than those generated by PA, for both the average (i.e., 1.604, 1.506, and 1.435, respectively) and 95th percentile criteria (i.e., 1.707, 1.583, and 1.491, respectively), and thus, three factors were retained.

5.1.2 Extraction method

Due to the categorical nature of the outcome variables measured with the *MCAP*, the weighted least-squares with mean and variance adjustment (WLSMV) extraction method was used to extract the three factors [57]. Review of the test of model fit resulted in a significant chi-square ($p < .0000$); however, this test is sensitive to sample size and the sample size of this study is rather large ($N = 289$). Therefore, the standardized root mean square residual (SRMR), a test of model fit that is less sensitive to sample size, was investigated and corroborated with the root mean squared error of approximation (RMSEA). Hu and Bentler [58] suggest acceptable models, or models with lower Type II error rates, have a cutoff value close to .08 for SRMR and close to .06 for RMSEA. Analysis in the present study revealed a SRMR of .062 and RMSEA of .07, which is well within the acceptable model limits delineated by Hu and Bentler.

5.1.3 Factor rotation and factor scores

The three factors retained were correlated ($R^2 \geq .413$); therefore, factors were rotated using promax rotation method. Quality of the variables measuring the three factors was determined by examining the factor scores. The investigators used a factor score cut-off of $< .35$ as a rule for minimum factor loading [51]. All items in the *MCAP* loaded on one of the three factors with a loading of $\geq .333$. However, one item loaded on two factors with only .02 difference between the two loadings. Consequently, the item was removed and the EFA was re-run. Items identified even stronger

with one of the three factors (i.e., factor loadings ranging between .805 and .379; see Table 1).

Due to the infancy of the *MCAP* and its respective factor structure (see Table 1), the three emergent factors will be referred to as only Factor 1, Factor 2, and Factor 3. Cronbach's alphas for this sample ($N = 289$) were computed for (a) the entire *MCAP* (25 items; $\alpha = .864$), (b) Factor 1 (10 items; $\alpha = .820$), (c) Factor 2 (11 items; $\alpha = .770$), and (d) Factor 3 (four items; $\alpha = .531$).

5.2 Identification of Probable Predictors

The second research goal sought to ascertain whether various predictors contribute to an individual's decision to become a professor in general or special education. Logistic regression analysis was used with the binary outcome variables of general education professor or special education professor. Following a meta-analysis of logistic regression reporting, Peng, Lee, and Ingersoll [59] suggested *the effectiveness of the logistic model was shown to be supported by (a) significance tests of the model against the null model, (b) the significance test of each predictor, (c) descriptive and inferential goodness-of-fit indices, and (d) predicted probabilities* (p. 11).

5.2.1 Significance tests against the null

An evaluation of the overall logistic model that demonstrates an improvement over the null model suggests the logistic model is a better fit for the data [59]. In order to evaluate the overall model, researchers use the inferential statistics, likelihood ratio and score tests [59-60]. The -2LL of the null model for this study was 347.057. All three models (i.e., demographic, motivational, and personality predictors) compared against the null model yielded smaller -2LL scores when compared against the null model. The model using motivational predictors from the *MCAP* produced the most improvement over the null (-2LL = 179.263). Predictors of personality and demographics resulted in moderate change over the null (i.e., -2LL = 282.081 and -2LL = 314.509, respectively). All three models yielded better prediction of group assignment than the null models.

5.2.2 Significance test of each predictor

All predictors tested were categorical in nature, with the exception of years working in the

professoriate. Consequently, dummy variables were coded for each of the levels existing within each categorical variable (see Table 2). The statistical software used (i.e., SPSS) defaults to using the last category indicator as its comparative for the proceeding levels. For example, items in the *MCAP* are measured by level of importance using a Likert scale and responses were coded from 1 – 5 (i.e., 1 = *not at all important* and 5 = *very important*). The indicator in which all other levels will be compared is the last choice or *very important*.

Table 1. Factor loadings for motivations for choosing academia as a profession (MCAP)

Items in the MCAP	Factor 1	Factor 2	Factor 3
How important was it to you to have a job that allowed for continual learning and professional development?	0.551	0.296	0.118
How important was it for you to enter a position that allows for a variety of work activities?	0.687	0.210	0.173
How important was it for you to enter a job that provided intellectual stimulation?	0.805	0.227	0.134
How important was it for you to enter a profession that permits you flexibility in your work schedule?	0.601	-0.245	-0.275
How important was it for you to have a job offering challenging work?	0.645	0.247	0.084
How important was it for you to be able to be independent and self-directing in your job?	0.739	-0.165	-0.202
How important was it for you to enter a profession that would allow you perform work that you find pleasurable and enjoyable?	0.577	0.092	-0.190
How important was it for you to enter a profession that gives you emotional satisfaction?	0.569	0.318	-0.055
How important was it for you to enter a prestigious profession?	0.470	0.266	-0.035
How important was it to you to have a job in which you could direct your talent(s) to a larger community?	0.327	0.615	0.201
How important was it for you to enter a profession which allows you to have influence.	0.233	-0.627	0.070
How important were your spiritual beliefs in your decision to enter the professoriate?	-0.161	0.566	-0.096
How important was it for you to enter a profession where age was not a limitation?	-0.037	0.423	-0.110
How important was it for you to be in a position that allows you to have contact with young people?	0.094	0.457	-0.034
How important was it for you to have a position that allowed you to collaborate with scholars?	0.268	0.386	-0.141
How important was it for you to enter a profession that allowed you to express yourself, your feelings, and your personal and professional values?	0.286	0.506	-0.026
How important was it for you to enter a profession which allows the potential to impact political and social issues, as applicable to your area of expertise?	-0.077	0.731	-0.094
How important was it for you to advance to the “next level” in your career?	0.432	0.637	-0.322
How important was it for you to be able to advance to the highest level within your field?	-0.005	0.129	-0.379
How important was it for you to enter a position that would provide the security that comes with working in an IHE?	-0.018	0.065	-0.682
How important was it for you to enter the professoriate for the monetary compensation or salary it provided?	-0.114	-0.084	-0.770
How important was it for you to have a position in which your work could be of service to or help others?	0.020	0.184	-0.428

Note: Bolded values represent salient factor loadings

Table 2. Significance tests of levels within individual predictors

Predictor	¹ Level	β	SE β	Wald's χ^2	df	p	e^β
² Constant Model 2	(MCAP)	-2.330	1.084	4.622	1	.032	0.097
Continual learning and professional development	3	5.430	2.292	5.610	1	.018	228.093
Sense of accomplishment	3	-2.993	1.426	4.404	1	.036	0.050
	4	1.639	0.767	4.562	1	.033	5.150
Participate in change or reform within the institution	2	4.042	1.949	4.303	1	.038	56.961
	3	2.305	0.843	7.475	1	.006	10.027
	4	1.740	0.673	6.681	1	.010	5.700
Independent; self-directing in your job	2	-2.849	1.496	3.624	1	.057	0.058
Pleasurable and enjoyable	3	-2.016	0.816	6.098	1	.014	0.133
Spiritual beliefs	1	1.756	.810	4.679	1	.031	5.769
	2	3.487	1.247	7.823	1	.005	32.700
	3	2.977	.937	10.094	1	.001	19.629
Age was not a limitation	4	1.890	.889	4.522	1	.033	6.622
Contact with young people	1	8.802	2.419	13.242	1	.000	6650.332
	2	6.265	2.140	8.574	1	.003	526.099
Express yourself (e.g., feelings, values)	2	6.893	3.452	3.988	1	.046	984.978
Security	3	2.393	.883	7.347	1	.007	10.949
To impact political and social issues	2	-3.968	2.052	3.740	1	.053	.019
To advance to the "next level" in your career	2	-3.378	1.303	6.723	1	.010	.034
	3	-3.613	.984	13.793	1	.000	.027
² Constant Model 3	(BFI-10)	6.214	2.481	6.271	1	.012	499.543
I see myself as someone who is reserved.	1	-2.453	.908	7.291	1	.007	.086
	2	-2.066	.894	5.339	1	.021	.127
	3	-1.921	.902	4.533	1	.033	.147
	4	-2.804	.844	11.047	1	.001	.061
I see myself as someone who has an active imagination.	4	1.203	.369	10.658	1	.001	3.332

¹Levels: MCAP item levels: (1) Not at all important, (2) Very unimportant, (3) Neutral, (4) Important, *All levels reference "Very important", BFI-10 item levels: (1) Disagree strongly, (2) Disagree a little, (3) Neither agree nor disagree, (4) Disagree a little, *All levels reference "Disagree strongly";

²Constant Model statistics are the results of the test on the intercept of the model

In the model predicting probable outcomes using demographic variables, the only predictors providing statistically significant contribution to the correct classification of participants in each of the outcome variables is previous experience in non-educational agencies ($p = .001$) and years in the professoriate ($p = .057$). Odds ratios for each of the significant predictors indicate that individuals who previously worked at public or private agencies outside of education are about six times more likely to become special education professors, as opposed to general education professors. The odds ratio for years in the professoriate is 1.025, indicating there is no real relationship between the years in the professoriate and correct classification in the area of education in which the individual will teach at the post-secondary level. Model two

used items from the MCAP to predict group assignment. MCAP items showing a statistically significant main effect are (a) accomplishment, $\chi^2(4) = 11.809$, $p = .019$; (b) spiritual, $\chi^2(4) = 14.275$, $p = .006$; (c) contact with youth, $\chi^2(4) = 17.978$, $p = .001$; (d) security, $\chi^2(4) = 14.495$, $p = .006$; and (e) "next" level, $\chi^2(4) = 16.442$, $p = .002$. The third model used items from the BFI-10. Main effects yielding statistical significance were shown for two items: reserved $\chi^2(4) = 13.189$, $p = .010$ and active imagination $\chi^2(4) = 12.751$, $p = .013$.

Significance of levels within individual predictors (see Table 2 above) is to be interpreted based on the p value and the odds ratio (i.e., e^β). An odds ratio value between 0 and 1 represents an inverse relationship between the predictor

variable and the outcome variable. Odds ratio values that are more than one represent a positive relationship between the predictor variable and the outcome variable. Finally, odds ratios that are equal to one indicate there is no real relationship between the predictor variable and the outcome variable. For example, individuals who find it important to have a job in the professoriate in order to provide a sense of accomplishment are five times more likely to be special education professors than general education professors (see Table 2). In contrast, individuals who find it very unimportant to be in a job where they are able to be autonomous are more likely to be a general education professor than a special education professor.

5.2.3 Descriptive and inferential goodness-of-fit indices

Goodness-of-fit statistics for logistic regression include the Hosmer-Lemeshow (H-L) test, Cox and Snell, and the Nagelkerke R^2 . An H-L test yielding results that are not statistically significant, indicate a good fit (i.e., the model predicts values that are not significantly different from the observed values). All three of the models were not statistically significant (i.e., demographic predictors = 5.746 (8), $p = .676$, motivational predictors = 4.010 (8), $p = .856$, and personality predictors = 10.935 (8), $p = .205$). Demographic, motivational, and personality predictors models each receive estimates indicating good model fit with Cox and Snell test results of .107, .481, and .209, respectively. Nagelkerke R^2 tests also indicate good model fit for all three models (i.e., .143, .644, and .279, respectively).

5.2.4 Predicted probabilities

Finally, after running a logistic regression, the overall percentage of predicted probabilities can be evaluated by examining the classification table. Using the cut-off value of .05, it can be concluded that for the demographic predictors model, special education professors are more likely to be accurately classified by demographic predictors than general education professors (sensitivity = 38.4%; specificity = 78.8%). False positive and false negative rates using predictors in model one were around 40%.

6. DISCUSSION

6.1 Factor Structure of the MCAP

In the present study, the *MCAP* was subjected to multiple EFA decisions. However, a researcher

utilizing the same data could arrive at different conclusions if making different analytic decisions during the EFA. In accordance with the current investigators' decisions, the EFA reveal the *MCAP* consists of three factors. Factors 1 and 2 contain a comparable amount of items; 10 and 11 items, respectively. Factor 3 only absorbed four items. Whether or not to retain a factor with four or fewer items is another subjective decision to be made by the researcher. The factor was retained due to the infancy of the *MCAP*.

6.2 Influential Factors to Choosing Academia

Demographic, motivational, and personality predictors were investigated using logistic regression [59]. Of the three predictors examined, the data resulted in its best fit with the model utilizing motivational factors. Personality factors were moderately well-suited to the data. Demographic variables produced no substantial overall indicators. The only demographic variable that significantly distinguishes the probability of predicting the classification of a general education professor and a special education professor is previous work experience in a non-educational position. Special education professors overwhelmingly worked outside of education prior to entering the professoriate.

Several motivational variables that may be useful in predicting the probability of an individual choosing to enter the professoriate and enter teaching in either general or special education were identified. General education professors are more likely to consider autonomy, opportunities to impact social issues and policy, and advancing to the "next level" as less important when considering entrance into a career in the professoriate.

Individuals who do not find contact with young people, self-expression, and spiritual reasons as important motivators for choosing a career in the professoriate are more likely to be special education professors. In contrast, special education professors considered it important to attain a position in the professoriate in order to enjoy a sense of accomplishment. Moreover, entering a position in which age is not a limitation was also an important factor to consider for professors of special education. This same group is divided when considering entrance into the professoriate in order to serve as a change agent within higher education.

Salient personality predictors were most prevalent with general education professors. Specifically, general education professors in this sample do not typically consider themselves to be lazy, outgoing, and thorough. General education professors were divided when asked to rate how reserved they considered themselves to be. Special education professors in this sample consider themselves to have active imaginations.

7. CONCLUSION

7.1 Psychometric Validity of the MCAP

The psychometric validity analyses completed on the *MCAP* provides some confidence into the integrity of the scale. Three factors were retained from the *MCAP* and each factor, as well as the instrument in its entirety, purports to be psychometrically sound (e.g., factor scores are reasonable; reasonable reliabilities were met). The first factor retained contained items measuring the importance of a position that allows (a) continual learning, (b) diversity in work activities, (c) intellectual stimulation, (d) flexibility in schedule, (e) challenging work, (f) autonomy, (g) work that is enjoyable, (h) emotionally satisfying work, (i) prestige, and (j) a sense of accomplishment as motivation to enter a career in academia. While it is too early to name this factor, one can review the constructs being measured and propose a theory as to what these constructs mean when grouped together. The same exercise can be done when examining Factors 2 and 3.

Factor 2 retained items reflecting an individual's motivation to enter academia by how he rates the importance of entering a profession in which he (a) is able to contribute his talents to a larger community, (b) has influence, (c) is not limited by his age, (d) has contact with young people, (e) is able to collaborate with other scholars, (f) is able to express his feelings and values, (g) has the opportunity to impact political and social issues, (h) is advancing to the "next level" in his career, (i) is able to participate in change or reform within the institution, and (j) is able to think creatively. Spiritual reasons as motivators are also retained on Factor 2. Again, it is too early to draw conclusions as to what overarching construct is being measured with Factor 2.

Only four items were retained on Factor 3. However, Factor 3 was still considered and retained because the *MCAP* is in its infancy and

this was the first attempt to test the psychometric validity. The four items retained measured the importance of choosing a position that (a) advances the individual to the highest level within his field, (b) provides security (e.g., tenure, health benefits), (c) offers monetary compensation, and (d) allows his work to be of service or help to others. At face value, it appears as though the fourth item retained (i.e., allows his work to be of service or help to others) does not fit well with the other three items on this scale. Further psychometric validity tests would have to be conducted to begin making conclusive statements about the items retained within each scale.

In future studies, it is recommended that a confirmatory factor analysis (Thompson 2004) be completed for the *MCAP*. In addition, it may be important to administer the *MCAP* to professors in other disciplines within academia in order to ascertain whether the *MCAP* is a sound measure for academia or if it is limited to faculty who prepare personnel in education.

7.2 Recruitment of Faculty

The present study was conducted with the hope of providing insights to IHEs about the recruitment of students and faculty to meet capacity needs for quality personnel preparation programs [6,12]. Results of the present study implies that for IHEs seeking to recruit general education faculty should seek out individuals in the field of general education who do not consider themselves reserved, lazy, or very thorough. These personality factors do not predict that a person will choose academia over other professions; rather, it is possible that a potential general education professor will score higher on the extraversion dimension in the Big Five and potentially lower on the conscientiousness dimension [29].

The present study provides more insight into the recruitment of special education faculty than general education faculty [2,61]. IHEs seeking to identify potential future special education professors may seek individuals who have recently or are currently working in a non-educational position. In addition, potential future special education professoriate will consider it important to attain a position in the professoriate in order to enjoy a sense of accomplishment. The individuals may be older or at least concerned about the role of age in the ability to access the position. A potential special education professor

may consider him- or herself to have an active imagination and, therefore, may also score consistent with the openness dimension on the Big Five taxonomy [27-29]. Motivational factors IHEs may want to implement or highlight when looking to recruit faculty was another goal of the present study. Significant predictors for general education professors were all on level three or “neutral” for the response provided. Therefore, the present study does not provide salient motivational factors, per se, for potential general education professors. In contrast, IHEs may want to highlight the sense of accomplishment a potential special education professor will enjoy upon entering a position in academia. In addition, IHEs may target non-traditional or older doctoral students in special education programs because our sample reported it was important to have a position in which age was not a limitation.

In conclusion, as long as the shortage of highly qualified teachers remains, capacity issues in high-need areas of education need to be investigated and aggressively addressed [5-6]. More information regarding what factors motivate individuals to enter the field of academia, specifically, in high-need areas, is needed to inform recruitment of potential faculty.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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