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Higher Education Professors Adapting to Online Teaching

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Higher Education Professors Adapting to Online Teaching

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This thesis is submitted in partial fulfillment of the requirements for Honors in Discipline in

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Abstract

Adaptation factors such as experience, personality and social support may be predictive in professors' self-perceived adaptability scores to online teaching. Data from forty-four Elizabethtown College professors and forty-six Lebanon Valley College professors, collected using an online forum, was analyzed in a correlational analysis, regression analysis and t-tests. When combining the results from Elizabethtown College professors and Lebanon Valley College professors, significant relationships were detected between self-perceived adaptability scores and three personality types (proactive, extroversion, agreeableness) and workplace support. The regression analyses showed workplace and school to be predictive of self-perceived adaptability scores to online teaching. These findings represent the importance of inspiring and promoting certain personalities and workplace support to decrease the negative impact that uncertain situations can elicit.

Higher Education Professors Adapting to Online Teaching

The COVID pandemic induced many changes in systems throughout the world with one of the largest changes being in education. Social distancing and other guidelines enacted to help decrease the spread of COVID- 19 have forced many higher education facilities to shift to either fully online learning or a more blended style of education (mix of in-person and online facilitation; Um et al., 2021). This study looked at factors, specifically, experience, personality and social support, that can influence how professors felt they adapted to the quick shift to online teaching.

Online forms of learning and other programs (healthcare, teletherapy, etc.) have shown to be as effective as in person with benefits such as individualized attention, time flexibility, inexpensiveness, and ease of accessibility when facilitators are able to prepare (Gayman et al., 2018; Lin et al., 2021; Scagnoli et al., 2019; Um et al., 2021; Winship et al., 2020). Although there are many benefits to prepared online instruction, the COVID pandemic has made professors unable to thoroughly prepare for online teaching.

Online Education

Switching to online teaching has its own challenges, even when it is prepared, which can lead to more difficulties in students learning. Online teaching has forced professors to change their assessment strategies (Eman, 2021). Even though going online has made it easier for professors to administer exams, however, it has made it difficult for professors to monitor students' knowledge prior to assessment and monitor progress during an assessment. Some professors have chosen to change exams to open book due to these issues. The change to open book has changed assessments to be more critical thinking based which has shown to be more difficult for most students (Eman, 2021).

This increase in difficulty of mastering content among other aspects of online learning can lead to higher stress levels of students and others involved in education (Besser et al., 2020). This online version of education has impacted the lives of not only students mentally and emotionally, but also professors who have had to adapt their teaching styles to fit into this new era (Besser et al., 2020).

Most psychological studies looking at the educational changes due to COVID have looked at the effects on students (Bao, 2020; Eman, 2021; Scagnoli et al., 2019). These studies have shown that the COVID pandemic has caused stress in students in many aspects of their lives such as personal mental, physical and emotional health, familial and peer well-being, and changes in daily routines. On top of all these new, or intensified, stressors, previous educational stressors still exist. Students still have the pressures of learning and doing well in classes. Due to changes in how and where classes are conducted, where students are living, and the novelty, ambiguity and confusion of the educational system, it is understandable why student stress is at an increased level (Bao, 2020, Eman, 2021; Scagnoli et al., 2019).

There have also been studies on students' feelings towards online education (Besser et al., 2020). Besser and colleagues (2020) compared students' opinions of online learning to in-person classes. The results showed that students felt more positively about in-person learning (Besser et al., 2020). Some possible explanations of this could be it is easier to concentrate in an in-person setting versus an online platform, or students feel more connected with their professors when in-person. Even though more students may feel more comfortable and successful in an in-person style class, during this unfortunate time, all in-person classes and meetings at most higher education facilities were not feasible.

Overall, student health and education has been affected negatively by the pandemic, but students are not the only population involved in education. Professors play a vital role in the education of students, so looking at the impact the pandemic has had on them, personally and professionally, is very important when considering education. Studies have shown that professors' stress levels have increased in ways similar to students such as personal, familial, and peer well-being as well as the ambiguity of the pandemic and the pressure to continue to succeed and perform well at their job (Besser et al., 2020). Studies have also shown that the uncertainty related to COVID and school closings, lack of support, preparedness and training for online education and increased difficulty in effective job performance have increased educators' stress levels (Herman et al., 2021).

In addition to teaching students, professors may also have other responsibilities such as supporting a family which adds even more stress to their already stressful lives. Considering the increased stress levels of professors, it is important to investigate how well professors were able to adapt to the novel coronavirus pandemic to ascertain that successful education is still being given to college/university students.

There have been some studies looking at how professors feel about online education (Bao, 2020). In 2020, Bao completed a study doing just that and found that professors felt successful in online teaching when able to prepare mentally and technologically. Similar to students, professors felt good about online education when able to prepare, however, due to the pandemic, being able to prepare was not an option (Bao, 2020; Besser et al., 2020). Adapting to online teaching became a necessity for professors so that they could continue doing their jobs well.

Adapting to a new way of life, especially with new stressors, can be very difficult. There are many factors that can affect career adaptability of professors such as personality, social support, age and technology skills, etc. (Bao, 2020; Hou et al., 2014). Being organized and prepared physically and mentally for the struggles and changes that come with online teaching has shown to be very important in the success of online schooling (Bao, 2020). Due to the fast transition to online teaching, many professors did not have enough time to fully prepare for online teaching, so they had to rely on their previous skill and knowledge to assist them in their transition (Bao, 2020). Having a proactive, flexible personality, strong social support, and advanced technology skills has shown to be beneficial in adapting to fast and unexpected transitions such as the shift to online learning (Hou et al., 2014).

Adaptation Factors

Experience

A factor that contributes to professors adapting to online schooling is years of service in higher education (Mohta et al., 2020). Professors who have worked in higher education for many years are less likely than professors who have not been in higher education as long to change the way they teach. This is possibly due to the teaching habits that professors develop over time. The longer time in higher education, the stronger the habits and the harder it is to break those habits.

Many professors with strong teaching habits believe that it is easier to continue their same practices instead of adopting new ways of teaching (Mohta et al., 2020). They may also be nervous to change their teaching habits or not feel like their skills are good enough to transition to other types of teaching. Regarding online teaching, some professors may feel like their technology skills are not advanced enough and refuse to adapt. Some professors may not feel the

need to change their ways if it has worked for them in the past. Other professors may just not know how to adapt and would if they have enough time and support to learn new skills. Professors who are willing to change will better adapt to online learning, so professors who do not have hard- set habits (one's who have not been in the higher education system as long) have a better chance of adapting more smoothly to online learning (Mohta et al., 2020; Zimmerman, 2006).

Personality

Another factor that contributes to adaptability is personality which plays a major role in how individuals cope with stress and adapt to novel situations. A proactive personality has shown to be beneficial when managing career uncertainty and change (Hou et al., 2014). Proactive individuals will actively attempt to improve their current situations (Hou et al., 2014). They do not allow uncertainty and environmental obstacles prevent them from adapting to their situations (Hou et al., 2014). A proactive mindset motivates individuals to do their best and overcome all obstacles (Hou et al., 2014). Students with proactive personalities have shown to better adapt to online learning due to their motivated and willing attitudes to persevere to learn and grow (Zheng et al., 2020). Since proactive students have shown to better adapt to online learning, it was expected that proactive professors would as well.

Other personality factors play a role in adaptability to new situations (Zheng et al., 2020). People who have strong personality types that help them adapt to new situations are better able to cope with stress in difficult situations (Zheng et al., 2020). The Big- Five Personality factors include openness, extraversion, agreeableness, conscientiousness and neuroticism (Goldberg, 1990). Openness describes a person who is willing and desires to learn new information (Xu, 2020). Someone who is extraverted is friendly, approachable, and outgoing (Xu, 2020).

Agreeable people are convivial, adaptive, and helpful (Xu, 2020). People who are conscientious are diligent, thorough, effective, and careful (Xu, 2020). Neuroticism refers to the negative emotions and pessimistic feelings that people have (Xu, 2020). Individuals who are open, agreeable, extraverted and conscientious are more flexible and adaptable in new situations because of the skills associated with these personality types.

Other personality types, aside from proactiveness, not only plays a role in adaptability but also to job performance. Job performance has shown to have a positive relationship with personality types like extroversion, agreeableness, conscientiousness and openness (Deniz Günaydin, 2021). Possible explanations for these correlations include extraverted employees being productive, overall positive and adaptable and conscientious employees being overachievers and self-motivated. Also, agreeable employees place an importance on collaboration and congruency among colleagues and clients and open employees are willing to try new things to improves themselves (Deniz Günaydin, 2021).

Social Support

COVID has also shown to affect job performance in a variety of ways with one major aspect being working environment. Some results of COVID such as insecurity, uncertainty, stress, fear of death, and high levels of contagiousness of the disease have shown to have negative effects on working environment (Deniz Günaydin, 2021). Many of the negative outcomes of COVID can lead professors' and other professionals' job performance levels to decrease. Therefore, it is important for professors to have social support to increase their ability to perform their jobs and confidence in their abilities (Deniz Günaydin, 2021).

Since social support has shown to be important in job performance, the next adaptatation factor considered in the current study was social support (Deniz Günaydin, 2021). Professors have many different social support groups. Two of the main social support groups include workplace and out of the workplace or family and peers.

What was difficult about the atmosphere during the pandemic was that no one knows how to handle the situation. No one had all the right answers, however, if professors work together to discover new and effective ways of teaching online, some stress can be relieved. In a study on workplace support, researchers found evidence supporting that trust, recognition and mentorship are three beneficial ways to support colleagues (Arnau-Sabatés et al., 2020; Haines et al., 2020). With the support of colleagues, professors are more likely to ask for help and feel more confident in their abilities to overcome the new stressors that have arisen due to the coronavirus. Also, with colleagues and bosses trusting and recognizing the hard work of their peers and employees, professors develop higher self- confidence. With a higher self-confidence, professors feel more comfortable in their abilities to adapt to online learning and perceive themselves as adapting well (Arnau-Sabatés et al., 2020; Haines et al., 2020).

Research has also shown that perceived good health conditions was correlated with employee productivity (Chen et al., 2015). With the uncertainty of the coronavirus pandemic and the fear of getting sick, it is understandable why professors productivity ratings would decrease. Therefore social support, especially in the workplace, is very important. This support and reassurance from employers allows employees to focus on continuing to do good work (Chen et al., 2015).

Workplace social support has shown to be influential improving self-efficacy (Hou et al., 2014). Self-efficacy has also shown to be influential in adaptability to novel circumstances

(Herman et al., 2021) Self- efficacy is the confidence that one's capabilities are sufficient to complete tasks (Zheng et al., 2020). With the pandemic, more teachers were reporting lower levels of self-efficacy due to the switch to online learning and decreasing student attendance, the increase difficulty of teaching, and lower engagement of students (Herman et al., 2021). With this increase in negative thinking, it is important to have positive social support in the workplace to inspire teachers to continue their work.

Research has shown that increasing self-efficacy, psychological ownership and positivity increased employee proactivity which was positively related to job performance (Wang et al., 2022). With a high self-efficacy, psychological ownership, a positive outlook and a proactive mindset, professors have a better chance of comfortably adapting to online teaching and continuing to do their jobs effectively (Hou et al., 2014).

Another aspect of social support that many professors have is outside of the workplace including friends and family (Arnau-Sabatés et al., 2020; Haines et al., 2020). Many professors have familial responsibilities as well as professional. With a supportive and present family being able to help with any task, professors are more able to focus on their work. It has been shown that increases in job stress and responsibilities positively correlate with strain in familial relationships. This is an intensely stressful time, so it would make sense why familial difficulties would increase; however, with a supportive and understanding family, professors would feel more comfortable doing their job effectively. This would lead to a higher self-efficacy in their abilities to adapt to online learning positively and effectively (Arnau-Sabatés et al., 2020; Haines et al., 2020).

In the current research, two studies were completed with the second study being a continuation of the first. The current studies focused on the adaptability to online teaching of

higher education professors. Considering the previous research, three hypotheses were studied. Professors with not as much experience in higher education, with more adaptive self-perceived personality types, such as proactiveness, openness, extraversion, agreeableness, and conscientiousness, and, with strong social support, in and out of the workplace, would have higher self-perceived adaptability scores to online teaching.

Methods

Participants

There were two collections of participants. The first collection included forty- four Elizabethtown College professors. The second collection included forty-six Lebanon Valley College professors. All participants began teaching in higher education prior to 2019 since the coronavirus pandemic started in 2020. The participants were recruited through an email from the researcher that included a link to the Microsoft forms questionnaire. Some participants' data was excluded from the study due to their start of teaching date being after 2019. Both studies followed the same procedure and measures.

Measures

Participants completed a questionnaire that contained four subsections. These subsections were labeled "Workplace Experience," "Personality," "Social Support," and "Adaptability to Online Teaching."

Workplace Experience

Participants were asked three free response questions about their workplace experience including when they started teaching in higher education, the college/ university they currently teach in, and the department they primarily teach in.

Personality

Participants were asked the extent to which they related to six personality types. The degree of agreeableness was on a 1 to 5 scale (1 being completely disagree and 5 being completely agree). The personality types were defined in multiple ways for participants to get a full understanding of what each personality type meant, then the participants were asked to rate their level of agreeableness to a final statement about each personality. The personality types included were proactiveness, openness, conscientiousness, extraversion, agreeableness and neuroticism. For example, openness was described as "A person who is willing to experience new things, desires to learn new information, and is vulnerable." Following the explanation, the participants rated their degree of agreeableness to the statement "I am an open person."

Social Support

Workplace Social Support

Participants were asked to rate their degree of agreeableness to four statements about workplace social support. The degree of agreeableness was on a 1 to 5 scale (1 being completely disagree and 5 being completely agree). An example of a statement was "I have a high level of social support in the workplace" ($\alpha = .85$).

Participants were asked to rate their degree of agreeableness to four statements about non-workplace social support. The degree of agreeableness was on a 1 to 5 scale (1 being completely disagree and 5 being completely agree). An example of a statement was “I have a strong familial support group” ($\alpha = .79$).

Self-perceived adaptability

Participants were asked to rate their degree of agreeableness to two statements about adapting to online teaching during the coronavirus pandemic. The degree of agreeableness was on a 1 to 5 scale (1 being completely disagree and 5 being completely agree). The two statements were if the participants felt they adapted well to online teaching and if they felt confident in their technology skills to be successful with online teaching ($\alpha = .65$).

Procedure

Participants who agreed to complete the study clicked on the link included in the recruitment email. The questionnaire included the consent form, and participants were able to complete the questionnaire when they had time. All participants stayed anonymous. The questionnaire took approximately ten minutes to complete. Data was collected and used in statistical analyses.

A correlational analysis was used to analyze the relationships of number of years of experience and the ratings of agreeableness to the statements in the “Personality” section and the “Social Support” section to the ratings of agreeableness to the statements in the “Self-perceived adaptability” section. A regression analysis was used to consider the predictive factors of self-perceived adaptability scores. The multi model method was used to separate the different adaptation factors considered in this study as well as if what school the professor taught in

played a factor. To investigate further the difference in school, independent samples t-tests were used.

Results

Multiple correlation analyses were conducted to investigate the relationship between self-adaptability scores of professors to online teaching and the factors that may have contributed to these scores such as experience, personality, and social support.

The results of data from Elizabethtown College professors showed one significant relationship between self-adaptation scores and factors affecting adaptation. There was a significant positive relationship between proactive personality and self-adaptation scores, $r(42)=.34$, $p=.02$ (see Table 1). A proactive personality was the only adaptation factor that had a significant relationship, either positive or negative, with self-adaption scores. All other relationships were nonsignificant, including all other personality types, social support, and years of experience (see Table 1).

Some of the adaptation factors had significant relationships with other adaptation factors. A proactive personality had a positive relationship with an open personality, $r(41)=.46$, $p<.01$, and with non-workplace social support, $r(42)=.39$, $p<.01$. A proactive personality had a negative relationship with neuroticism, $r(42)=-.40$, $p<.01$. Openness had a positive relationship with extraversion, $r(42)= .44$, $p<.01$, and a negative relationship with neuroticism, $r(42)= -.36$, $p=.02$. An agreeable personality had a positive relationship with conscientiousness, $r(42)=.36$, $p=.02$. Also, non-workplace social support and workplace social support were positively correlated $r(42)=.33$, $p=.03$.

The results from data from Lebanon Valley College professors showed multiple positive relationships between self-adaptation scores to online teaching and adaptation factors. There was as significant relationship between extraversion and self-perceived adaptability to online teaching, $r(43)= 0.43$, $p< .01$, agreeableness and self-perceived adaptability to online teaching, $r(44)= 0.38$, $p< .01$, and workplace support and self-perceived adaptability to online teaching, $r(44)= 0.36$, $p=.02$. (See Table 2)

Table 1

Descriptive Statistics and Correlations for factors affecting adaptability and self-adaptation scores. (Elizabethtown College)

Variable	n	M	SD	1	2	3	4	5	6	7	8	9	10
1. Years teaching	44	17.7	8.17	--									
2. Proactive	44	4.41	0.69	-0.21	--								
3. Openness	43	4.21	0.71	-0.12	0.46**	--							
4. Extraversion	44	3.20	1.09	-0.30	0.23	0.44**	--						
5. Agreeableness	44	4.30	0.77	-0.13	0.16	0.23	0.18	--					
6. Conscientiousness	44	4.32	0.83	0.08	0.01	<0.01	-0.05	0.36*	--				
7. Neuroticism	44	2.07	1.11	0.08	-0.40**	-0.36*	-0.20	-0.11	<0.01	--			
8. Work Support[a]	44	3.75	0.88	0.03	0.06	-0.05	-0.20	0.03	<0.01	-0.11	--		
9. Non- work Support[b]	44	4.03	0.87	-0.09	0.39**	0.05	-0.08	0.27	0.02	-0.13	0.33*	--	
10. Self-adaptation	44	4.30	0.71	-0.15	0.34*	0.13	0.03	0.11	0.07	0.05	0.09	0.14	--

[a] In Work Support (Variable 8), all four items of in work social support were loaded onto one factor. [b]In Non-work Support (Variable 9), four items of out of work social support were loaded onto one factor of "non-work support."

*p<.05 **p<.01

Similar to the results of the Elizabethtown College professors' data, multiple adaptation factors had relationships with each other. A proactive personality had a significant positive relationship with openness, $r(43)=0.35$, $p=.02$, extraversion, $r(42)=0.43$, $p<.01$, conscientiousness, $r(43)=0.45$, $p<.01$, and non-workplace support, $r(43)=0.46$, $p<.01$. A

proactive personality also had a negative relationship with neuroticism, $r(44)=-0.47$, $p<.01$. Openness had significant positive relationships with extraversion, $r(43)=0.45$, $p<.01$, and agreeableness, $r(44)=0.41$, $p<.01$.Extraversion had significant positive correlations with agreeableness, $r(43)=0.32$, $p<.03$, and workplace support, $r(40)=0.46$, $p<.01$. Extraversion also had a significant negative relationship with neuroticism, $r(43)=-0.50$, $p<.001$. Agreeableness had significant positive correlations with conscientiousness, $r(44)=0.55$, $p<.001$, workplace support, $r(41)=0.35$, $p=.02$, and non- workplace support, $r(44)=0.52$, $p<.001$. Conscientiousness had a positive correlation with non-workplace support, $r(44)=0.48$, $p<.001$. Neuroticism had a significant negative relationship with workplace support, $r(41)=-0.34$, $p=.03$. (See Table 2)

Table 2

Descriptive Statistics and Correlations for factors affecting adaptability and self-adaptation scores. (Lebanon Valley College)

Variable	n	M	SD	1	2	3	4	5	6	7	8	9	10
1.Years teaching	46	16.6	10.1	--									
2.Proactive	45	4.22	0.85	-0.02	--								
3.Openness	46	4.28	0.86	0.18	0.35*	--							
4.Extraversion	45	3.38	1.13	0.01	0.43**	0.45**	--						
5.Agreeableness	46	4.30	0.81	0.08	0.26	0.41**	0.32*	--					
6.Conscientiousness	46	4.46	0.78	0.14	0.45**	0.17	0.19	0.55***	--				
7.Neuroticism	46	2.30	1.21	-0.09	-0.47**	-0.15	-0.50***	-0.14	-0.20	--			
8.Work Support[a]	43	3.27	0.61	0.08	0.24	0.25	0.46**	0.35*	0.08	-0.34*	--		
9.Non- work Support[b]	46	4.30	0.84	-0.10	0.46**	0.15	0.26	0.52***	0.48***	-0.12	0.21	--	
10.Self-adaptation	46	3.87	0.92	-0.15	0.10	0.19	0.43**	0.38**	0.27	-0.21	0.36*	0.25	--

[a] In Work Support (Variable 8), all four items of in work social support were loaded onto one factor. [b]In Non-work Support (Variable 9), four items of out of work social support were loaded onto one factor of "non-work support."

*p<.05 **p<.01 ***p<.001

The final correlational analysis included data from both Elizabethtown College professors and Lebanon Valley College professors. There were multiple significant positive relationships between self-perceived adaptation scores to online teaching and adaptation factors. Self-perceived adaptation scores had significant positive relationships with proactiveness, $r(87)=0.22$, $p=.04$, extraversion, $r(87)=0.23$, $p=.03$, agreeableness, $r(88)=0.26$, $p=.01$, and workplace support, $r(85)=0.27$, $p=.01$. (See Table 3)

There were significant positive relationships between multiple adaptation factors. A proactive personality had a significant positive relationship with openness, $r(86)=0.39$, $p<.001$, extraversion, $r(86)=0.33$, $p<.01$, agreeableness, $r(87)=0.21$, $p=.04$, conscientiousness, $r(87)=0.24$, $p=.03$, and non-workplace support, $r(87)=0.40$, $p<.001$. A proactive personality also had a significant negative correlation with neuroticism, $r(87)=-0.45$, $p<.001$. Openness had significant positive relationships with extraversion, $r(86)=0.45$, $p<.001$, and agreeableness, $r(87)=0.34$, $p<.01$. Openness had a significant negative relationship with neuroticism, $r(87)=-0.45$, $p<.001$. Extraversion had a significant positive relationship with agreeableness, $r(87)=0.25$, $p=.02$, and a significant negative relationship with neuroticism, $r(87)=-0.35$, $p<.001$. Agreeableness had significant positive relationships with conscientiousness, $r(88)=0.45$, $p<.001$, and non- workplace support, $r(88)=0.39$, $p<.001$. Conscientiousness had a significant positive relationship with non-workplace support, $r(88)=0.25$, $p=.02$. Neuroticism had a significant negative relationship with workplace support, $r(85)=-0.23$, $p=.03$. Workplace support had a positive relationship with non-workplace support, $r(85)=0.22$, $p=.04$. (See Table 3)

Using data from both schools without considering which school professors teach at, a multiple regression analysis indicated that workplace support accounted for 20% of the variability in self-adaptation scores to online teaching, F (9,74) =2.03, p= .05. Workplace

support, β=.26, p=.02, was a significant individual predictor of self-perceived adaptability scores to online teaching (See Table 4). When school was including in the multiple regression analysis, the analysis indicated that school accounted for 25% of the variability in self-adaptation scores to online teaching, $F(10,73)=2.42$, p=.02. School, β=.25, p=.03, was a significant individual predictor of self-perceived adaptability scores to online teaching (See Table 5). Differences between schools are examined in the following t-tests.

Table 3

Descriptive Statistics and Correlations for factors affecting adaptability and self-adaptation scores. (Elizabethtown College and Lebanon Valley College)

Variable	n	M	SD	1	2	3	4	5	6	7	8	9	10
1.Years teaching	90	17.1	9.20	--									
2.Proactive	89	4.31	0.78	-0.09	--								
3.Openness	89	4.25	0.79	0.06	0.39***	--							
4.Extraversion	89	3.29	1.11	-0.12	0.33**	0.45***	--						
5.Agreeableness	90	4.30	0.79	-0.01	0.21*	0.34**	0.25*	--					
6.Conscientiousness	90	4.39	0.80	0.10	0.24*	0.10	0.08	0.45***	--				
7.Neuroticism	90	2.19	1.16	-0.03	-0.45***	-0.23*	-0.35***	-0.12	-0.09	--			
8.Work Support[a]	87	3.51	0.79	0.07	0.17	0.06	0.05	0.15	<0.01	-0.23*	--		
9.Non- work Support[b]	90	4.17	0.86	-0.10	0.40***	0.11	0.10	0.39***	0.25*	-0.11	0.22*	--	
10.Self-adaptation	90	4.08	0.85	-0.13	0.22*	0.15	0.23*	0.26*	0.15	-0.13	0.27*	0.15	--

[a] In Work Support (Variable 8), all four items of in work social support were loaded onto one factor. [b]In Non-work Support (Variable 9), four items of out of work social support were loaded onto one factor of "non-work support."

*p<.05 **p<.01 ***p<.001

Table 4

Moderator Analysis: Personality and Social Support

Effect	Estimate	*SE*	95% CI		*p*
			LL	*UL*	
Intercept	1.4	.940			.14
Years in Higher Education	-.01	.01	-.33	.11	.32
Proactive	.14	.15	-.14	.41	.34
Openness	-.01	.13	-.27	.25	.95
Extraversion	.12	.09	-.09	.39	.22
Agreeableness	.19	.14	-.08	.46	.18
Conscientiousness	.10	.13	-.14	.34	.42
Neuroticism	.04	.09	-.18	.31	.60
Workplace Support	.27	.12	.04	.48	.02
Non-Workplace Support	-.11	.13	-.37	.14	.38

Note. CI= confidence interval; *LL*= lower limit; *UL*=upper limit.

Table 5

Moderator Analysis: Personality, Social Support, and School

Effect	Estimate	*SE*	95% CI		*p*
			LL	*UL*	
Intercept	1.3	.91			.15
Years in Higher Education	-.01	.01	-.33	.09	.27
Proactive	.07	.15	-.20	.35	.59
Openness	.01	.13	-.24	.27	.89
Extraversion	.13	.09	-.06	.42	.14

Agreeableness	.16	.14	-.11	.42	.25
Conscientiousness	.13	.12	-.11	.36	.29
Neuroticism	.05	.09	-.17	.30	.59
Workplace Support	.19	.12	-.05	.40	.13
Non-Workplace Support	-.03	.01	-.29	.22	.79
School	.42	.19	.03	.48	.03

Note. CI= confidence interval; *LL*= lower limit; *UL*=upper limit.

When comparing Elizabethtown College professors to Lebanon Valley College professors the independent samples t-test showed that Elizabethtown College professors scores of workplace support (M=3.75, SD=.88) were significantly larger than Lebanon Valley College professors (M=3.27, SD=.61), $t(85)$=-2.9, p<.01 (See Figure 1). Also, Elizabethtown College professors scores of self-perceived adaptability to online teaching (M=4.3,SD=.71) were significantly larger than Lebanon Valley College professors (M=3.87, SD=.92), $t(88)$=-2.5, p=.02 (See Figure 2) All other comparisons of adaptation factors between Elizabethtown College professors and Lebanon Vally College professors were not significantly different.

Figure 1

Workplace Support

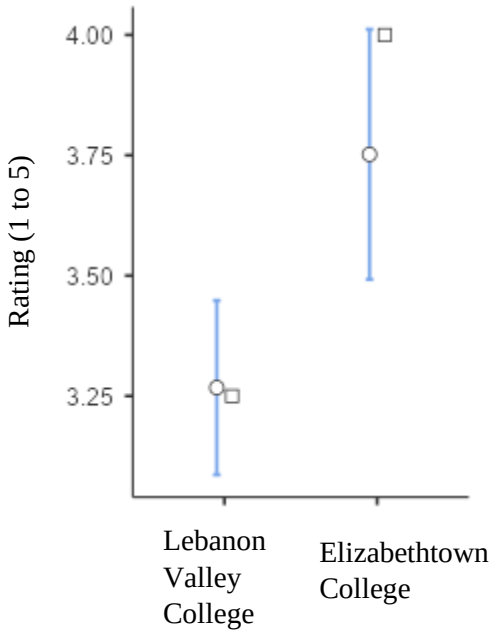
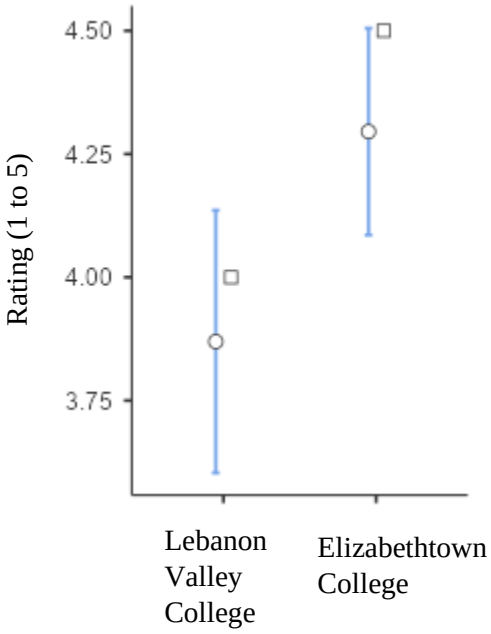


Figure 2

Self- perceived Adaptation to Online Teaching



Discussion

Three hypotheses were investigated in this study. The first hypothesis was professors with less experience in higher education would have higher self-perceived adaptability scores to online teaching. The results of both correlational analyses did not support this hypothesis. Years of experience did not have a significant relationship with self-perceived adaptability scores to online teaching.

Previous research has shown that professors who are set in their habits find it harder to change their ways of teaching (Mohta et al., 2020). The hypothesis was based on the idea that professors with more experience would have an unwillingness to change because they have created teaching strategies that they know work (Mohta et al., 2020). By there not being a significant relationship between years of experience and self-perceived adaptability scores to online teaching, we see that professors of all experience levels felt they adapted well to online teaching. For professors with more experience, they may have felt their experience helped them better to adapt to online teaching because of their experience. With their experience comes many different strategies and habits that instead of making them unwilling to adapt could make them feel more equipped to adapt to novel situations. Their experience could be a helpful adaptation tool. On the opposing side, professors who have less experience felt similarly about their adaptation to online teaching. For professors with less experience, they may have felt they were able to adapt to online teaching because they were willing to try new things because they don't have as many firm teaching habits. Newer professors may feel more open and willing to trying new things.

The second hypothesis was professors with more adaptive self-perceived personality types, such as proactiveness, openness, extraversion and conscientiousness, will have higher self-

perceived adaptability scores to online teaching. The results of the Elizabethtown College professors showed that only one personality type, proactiveness, had a significant relationship with the self-perceived adaptability scores to online teaching. This positive relationship means that professors who considered themselves to be more proactive also considered their adaptation skills to online learning were also quite good. Proactive people are more inclined and motivated to work through issues and uncertainty to reach a goal or finish a task (Hou et al., 2014; Zheng et al., 2020). This is a helpful skill to have considering the fast onset of online teaching due to the pandemic. Considering previous research where proactiveness was helpful in managing career uncertainty and helpful to students adapting to online learning, the findings of this study are in line with previous research (Hou et al., 2014; Zheng et al., 2020).

The results from the Lebanon Valley College professors showed different results when referring to personality. Unlike Elizabethtown College professors, extraversion and agreeableness were the two personality types that showed positive relationships with self-perceived adaptability scores to online teaching. This positive relationship showed in the results using just the Lebanon Valley College professors and the combined analysis of Elizabethtown College professors and the Lebanon Valley College professors.

This is consistent with previous research showing how important extraversion is in adapting to novel situations. Research by Huang and colleagues (2014) showed that extraverted employees were more likely to approach difficult and ambiguous situations. Extraversion showed to lead to ambition which helped employees prepare for change and improve with the change instead of avoiding it (Huang et al., 2014). Wilmot and colleagues (2019) present some advantages of being extraverted in a workplace setting, but also provide some cautions against being too extraverted, and not enough introverted, in the workplace. Some of the advantages

include interpersonal relationships, positive emotions, motivated outlook and productive performance. Some disadvantages that can come from being too extraverted include not being able to work alone, sensation- seeking and boundaries (Wilmot et al., 2019). Although being extraverted all the time may have some disadvantages, the benefits of being extraverted in adapting to novel situations is supported in the results of the current study.

Also consistent with previous research was the importance of agreeableness. Previous research has shown agreeableness to be beneficial in adapting to new situations by building and maintaining interpersonal relationships and encouraging group work (Huang et al., 2014; Wilson et al., 2017). Wilson and colleagues (2017) also found that people rated lower in agreeableness are more task-oriented, which can be beneficial in certain situations, but can cause a lack of relationship building.

Self-perceived adaptability scores in were not related to any other personality traits. These personality traits included openness, conscientiousness, and neuroticism. Not seeing significant relationships between these personality types and the professors' self-adaptability scores could be due to how the questions about personality were asked on the questionnaire. If this study were to be repeated, I would suggest either changing the format of the questionnaire, or better describing each of the personality types.

The final hypothesis was professors with strong social support, in and out of the workplace, will have higher self-perceived adaptability scores to online teaching. The results from the Elizabethtown College professors' data did not support this hypothesis, however, a correlational analysis of the Lebanon Valley College professors alone and combined with the Elizabethtown College professors showed a positive relationship between workplace support and self-perceived adaptability scores to online teaching. None of the correlational analyses showed a

positive relationship between non-workplace support and self-perceived adaptability scores to online teaching.

Previous research has emphasized the importance of workplace support in job performance of employees. Research completed by Barrow (1976) showed how employee and leader dynamics effects efficacy of work. The way a leader acts towards their employees affects their work performance and vise versa, the way employees act and perform tasks affects how their leader, whether it be a leader of a project, supervisor or boss, treats them (Barrow, 1976). This is consistent with the findings using the Lebanon Valley College professors alone and with the Elizabethtown College professors. The higher professors rated their level of workplace social support, the higher they rated their self-perceived adaptability to online teaching.

Employees receiving support and trust from their bosses has also shown to increase self-confidence of the employees (Arnau- Sabatés et al., 2020; Haines et al., 2020). Also, Aranu-Sabatés and colleagues' (2020) research explains the connection between workplace support and efficiency through inspiring work resilience. Resiliency is the ability to adapt to stressful situations (Tavel et al., 2022). Specifically, workplace resiliency is resiliency to work/ career stress and requirements such as teaching online in a pandemic (Arnau- Sabatés et al., 2020; Tavel et al., 2022). Support from an individual in a higher ranked position or a colleague has shown to increase workplace resiliency which could explain why participants who rated high levels of workplace support also rated their levels of self-perceived adaptability to online teaching highly.

Studies have also shown that increased work stress has led to increased familial strains, thus I hypothesized that a supportive family/at home support would allow professors to focus more on their job (Arnau-Sabatés et al., 2020; Haines et al., 2020). This was not supported by the

findings of the analysis of the data. The average scores of non-workplace social support and self-perceived adaptability scores were all above average (3), however, there were just not a significant relationship between the scores. One possible explanation for not seeing a significant relationship would be that many professors shifted their workplace from being separate to their home, to being at their home, thus their workplace and non-workplace support combined.

Although non-workplace support did not have significant relationship with self-perceived adaptability scores to online teaching, it did have significant relationships with other adaptation factors. In all of the data sets, non- workplace support had a significant relationship with proactiveness. A possible explanation could be that professors with more non-workplace support were able to focus more on their work and the transition to online teaching which in turn made them more proactive and felt better about adapting.

The results of the regression analysis, without including school, showed that workplace was a significant predictor of self-perceived adaptability to online teaching. This supports further the importance of workplace support in career success, performance and satisfaction (Cullen et al., 2014). Workplace support has shown to increase self-confidence of the employees which leads professors to feeling better equip to handle the changes caused by the pandemic (Haines et al., 2020).

When including school, school showed to be a significant predictor of self-perceived adaptability to online teaching. Elizabethtown College professors reported their self-perceived adaptability to online teaching higher than Lebanon College professors. Elizabethtown College professors also reported higher levels of workplace support than Lebanon Valley College professors. This could be due to the differences in how Elizabethtown College and Lebanon Valley College handled the COVID-19 pandemic and how upper faculty and staff treated their

employees throughout the pandemic. Lebanon Valley College offered online and hybrid classes, however, they begun fully in-person instruction earlier than Elizabethtown College did. This could have increased stress levels in Lebanon Valley College professors thus influencing their responses to the questionnaire.

One of the main limitations of the current study was the number of participants. With a small sample size, it is unknown whether some of the nonsignificant results could be due to not enough participation. Some of the trends may have filled out if there were more participants. Also, some participants were unable to be included in the study due to not teaching prior to the pandemic. If this study were to be replicated, more participants would be needed.

Another factor that has some benefits and negatives was the online format. The online format was beneficial in spreading the questionnaire; however, it was difficult to control for outside factors that may contribute to how the participants answered the questions.

Implications of this research could be that workplaces should encourage and teach their employees how to be more proactive. Proactiveness showed to be positively correlated with how professors adapted to online teaching which was a new experience for all of them. Being ambitious and motivated to do well was beneficial in how professors changed their ways to fit with the times. Encouraging this proactive behavior can be beneficial in how professors feel about themselves and effort they put in their work.

Previous research has also shown the role proactive behavior has in influencing positive outcomes in the workplace (Bajaba et al., 2021). Bajaba and colleagues discovered that not only did leaders' proactive behavior inspire similar behaviors of their workers, but the same impact was seen vice versa (2021). The current research implicated the relationship between

proactiveness and adaptability of workers. It would be interesting to see if this relationship would also be significant with the leaders at Elizabethtown College such as the president, members of the Senior Leadership Team, etc.

Another implication of the current research is the importance of workplace support in predicting the adaptability of employees. Krause and colleagues (2021) stressed the importance of career adaptability in promoting career success. Workplace support can amplify this relationship and inspire greater performance and adaptability of employees (Krause et al., 2021). People in higher ranked positions in all careers should support and encourage their workers if they would like their employees' best efforts.

Future research could continue investigating the differences between working at Elizabethtown College and Lebanon Valley College. Researchers could look more closely at the differences between these colleges and others in the surrounding area to learn more about what works and what doesn't. This could influence how higher education facilities treat their employees and make more efficient and healthy working environments.

Something that the coronavirus pandemic has taught everyone is that change is inevitable, and we must always be prepared for it. Since change is not going anywhere, we should be ensuring that professors and teachers have what they need to continue doing their work well even in uncertain times.

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