

**Table 3: Significant Student Variables by Professional Certification**

<b>Professional Certification</b>	<b>Citation</b>	<b>Variables with Positive Relationship</b>	<b>Variables with Negative Relationship</b>
Athletic Trainers	Farroll (2016).	+ Sex; + Grit	– Age; – Ethnicity; – Deliberate practice; – Board certification exam (prior)
Athletic Trainers	Krieger, Thomas, Banaszak & Schlabach (2014).	+ Cumulative GPA;	– Cognitive development; – Motivation
Athletic Trainer	Middlemas, Manning, Gazzillo & Young (2001).	+ GPA	
Athletic Trainer	Esparza (2012).		– Taking remedial course; – Race
Health Information Human Movement	Dolezel & McLeod (2017). Cripps, Stiltner, Walters, Fullenkamp & Laurent. (2018).	+ Course grades + Overall GPA + When BOC (prior exam) taken (best results last semester of coursework)	– Gender; – Ethnicity; – Level of parent education; – GPA; – Degree earned; – Clinical and immersive experience
Master Athletic Trainer	Bruce (2014).	+ 2 of 3 factors combined (undergraduate GPA, GRE qualitative score greater than or equal to 141.5 or taking calculus as an undergraduate	
National Asthma Education National Asthma Education	Kain (2010).	+ Passing one section of exam predicts passing another + Having another credential; + Testing at 1 PM during day; + More education or advanced degree	
Nurse Anesthetist	Hoversten (2011).	+ Age (young is better);	– Care setting type

		+ Number years of critical care experience (less is better)	
Nursing RN Associate Degree	Briscoe & Anema (1999).	+ NLN/exam; + Age; + Race	– GPA; – Failing one nursing course
Nursing RN Bachelor's Degree	Beeman & Waterhouse (2001).	+ C+ or lower grades in nursing theory courses; + C or lower grades in other nursing courses	
Occupational Therapy	Novalis, Cyranowski & Dolhi (2017).	+ Writing sample; + Letters of recommendation	– Preadmission GPA; – Interview score
Physical Therapy Assistant	Desmarais, Woble-Valenski & Oestmann (2011); Schengel (2014).	+ Overall GPA in college	
Physician	Bedno, Soltis, Mancuso, Burnett & Mallon (2011).	+ GPA; + Inservice exam score	
Physician	West, Kurz, Smith & Graham (2014).	+ Concentration during study	
Physician-Anesthesiology Project Management	Schmitz & Bailey (2013). Farashah & Blomquist. (2019).	+ Self-efficacy	– Gender – Professionalism
Prosthetics	Es (2014). Miro (2014).	+ Having another credential	– Gender
Virtual Study Groups	Kayne Chaplock, Schweizer, O'Neill & Pink (2011).	+ Trust of others; + Trust of information	

Notes. + or - indicates a statistically significant relationship, positive or negative. Athletic program directors studied more than 47 variables. RN nursing bachelor's degree program has studied more than 21 variables.