

Importance of noncognitive factors on an academic mindset



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This essay examines the importance of noncognitive factors on an academic mindset. Han, Farrugia and Moss determined that non-cognitive factors, such as academic self-efficacy, motivation, and a sense of belonging, predict college students' academic performance and retention. Self-efficacy was more closely associated with academic performance, whereas belonging was more closely associated with retention (Han, Farruggia & Moss, 2017, 1119). This essay argues that students who foster noncognitive skills will have more success academically rather than the individuals who solely depend on their cognitive attributes. Therefore, noncognitive factors play a significant role in the development of the academic mindset and success.

For many years, the emphasis was on cognitive variables like attention, memory, and reasoning. These cognitive factors can be measured using academic tests, where the answers given can be correct or incorrect. While these cognitive factors stay imperative, recently there has been interest in noncognitive factors that affect learning such as; self-efficacy, sense of belonging and motivation (Stankov, 2010). In fact, it has emerged over the years that these factors can be as influential as their cognitive skills influencing a students' academic achievement and educational aspirations. Damon Jones and his colleges found that “ students noncognitive skills measured in kindergarten could predict positive outcomes in adulthood related to education employment, criminality, substance use, and mental health, even when controlling for students' cognitive ability, home environment, and behaviour” (Davidson, 2015). Noncognitive skills matter greatly and can be nurtured in schools, developing them should be an explicit goal of educational institutions García, 2014). Research has identified

the interdependence between cognitive and noncognitive skills and the importance of paying close attention to noncognitive in order to boost students' cognitive skills (García, 2014).

Sense of belonging is considered to be a human need, where sense of belonging is defined as a psychological sense of identification and affiliation with a community. It has been found to have great influence on academic performance with retention and success. When a student feels included in a community within their school they will actively engage in academic activities and are more motivated (“ Belonging, Student Success, and Persistence: the Simple Power of Names – NameCoach Blog”, 2018). In “ How worries about belonging can inhibit achievement”, Natalie Orenstein examines recent studies on belonging and academic achievement. “... Feeling excluded inhibits college success when individuals are repeatedly asking themselves whether they belong or not, can make inevitable setbacks and challenges feel like a sign they can never succeed. This diminishes motivation to engage and persist in school. Students ask fewer questions in class, study less often with others, and avoid office hours. As a result, their grades suffer.” (Orenstein, 2015). Not only does sense of belonging effect motivation of a student but it also has a strong impact on enrolment. Even though school completion rates have increased, dropping out of school interferes with educational systems goals for young people. Rendón, Jalomo, and Nora (2000) advocates the importance of sense of belonging as it determines the rate of successful integration in colleges reducing the number of withdrawals.

Self-efficacy is a student's beliefs in their innate abilities. Academic self-efficacy is important in the comprehension of an individual's mindset as it is the cognitive function which can encourage positive behaviours, thereby improving performance and retention. Students who more strongly endorse these beliefs of self-efficacy are better able to monitor their activities, create goals, select well-tuned strategies, and motivate themselves (Bandura, 1977, 1986, 1997 & Uchida, Michael & Mori, 2018). Han, Farrugia and Moss found students' self-efficacy is important for their academic performance during their first year of college. This is because students are in the self-efficacy-oriented group, sharing the belief of being academically able. Students with high levels of self-efficacy exert more effort and persist longer in the face of difficulties, they are more likely to surpass insurmountable barriers that occur in the way of their desired goals. Robbins et al. (2004) conducted a meta-analysis of the relationships between self-efficacy beliefs, academic performance and retention which indicated moderate relationships between retention and academic goals, self-efficacy, and academically related skills.

Motivation and success go hand in hand and amplify each other. Motivation is a psychological process which is invisible and internal, but there is also dichotomy of motivation called intrinsic and extrinsic motivation (Porter and Lawler 1968). Intrinsic motivation is the motivation to engage in a behaviour which arises from within the individuals own inherent interests. Researchers have found a positive effect on a person's motivation increases the intrinsic motivation. Kraiger, Billings, & Isen (1989) argue that a positive affect increases people's enjoyment and interest in interesting activities. Intrinsic motivation not only increases the enjoyment and interest, but also the

satisfaction and performance while working (Erez & Isen, 2002; Isen, Daubman, & Nowicki, 1987; Staw & Barsade, 1993). Many experimental and field studies have found intrinsic motivation to be associated with enhanced learning, performance, creativity and emotional experience. SDT has been used to analyse the situational factors (e. g., types of rewards, feedback, communication styles) that undermine or facilitate the expression of intrinsic motivation (Ryan and Deci, 2017). These studies have made it clear that intrinsic motivation is a lifelong psychological noncognitive function.

In summary, a sense of belonging, self-efficacy and motivation have proven to have great positive effects on a student's academic performance.

Noncognitive skills reinforce cognitive skills, however they are measured differently. Students with a stronger noncognitive skills demonstrate higher academic achievement throughout the schooling process (Gabrieli, Ansel, & Krachman, 2015). Regular school attendance, completing homework and participating in class, are academic behaviours which are strongly related to measures of academic achievement, such as grades (Farrington et al., 2012). Studies across the fields of education, economics and psychology have shown that noncognitive factors can predict the outcome of adults, including academic achievement, criminal behaviour, financial stability and health (Gabrieli, Ansel & Krachman, 2015).

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