

Self-efficacy, Anxiety, Perceived Intelligence, and Perceived Diligence in a High-Achieving Hungarian Adolescent Sample

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ABSTRACT: The study explores self-efficacy, anxiety, perceived intelligence, and diligence, analyzes the relationships between the variables above, and identifies the role of gender and year group in a sample of high-achieving high school students. Data gathered using a modified combined version of the State-Trait Anxiety Index (STAI) and Generalized Self-efficacy Scale (GSS) indicate a strong relationship between the following variables: self-efficacy and anxiety, perceived intelligence and anxiety, perceived intelligence and self-efficacy, perceived intelligence, and perceived diligence. Furthermore, a higher-year group is a predictive factor for higher self-efficacy and higher perceived diligence, and gender is a predictive factor for higher-scored perceived intelligence. Self-efficacy is valuable for mitigating anxiety and improving academic performance and well-being. The current study aims to target an underrepresented area in research: the mental well-being of adolescents in Hungary.

KEYWORDS: Behavioral and Social Sciences; Clinical and Developmental Psychology; Self-Efficacy; Anxiety; High-achieving Students.

■ Introduction

Self-efficacy and Anxiety:

The concepts of self-esteem and self-confidence are often encountered and acknowledged in everyday life and are empirically studied in psychology. In addition, a similar self-related concept that is less referenced in common parlance, despite many studies supporting its correlation with various behavioral and performance variables – is self-efficacy. Self-efficacy is the belief in one's capabilities, accomplishments, and actions.¹ It negatively correlates with various psychological factors such as anxiety arousal,² depressive symptoms,³ avoidance of social settings, and reluctance to seek help;⁴ positive self-efficacy predicts better academic performance^{5,6} as well as writing performance.⁷

Self-efficacy is a concept developed by Albert Bandura.¹ Since it is based on belief in capabilities and actions, rather than worth and self-perception, in contrast to the more popular terms self-confidence and self-esteem, this trait's extraordinarily high and dysfunctional level is often recalibrated naturally to productive levels through self-regulatory mechanisms.⁸ As such, if self-efficacy were imagined on a scale, the opposite ends of the spectrum would be deficiency vs. efficiency instead of going from deficient to substantially elevated. This is not to say abundant self-efficacy is impossible; it is simply less likely.

Overt self-efficacy is also less evident in someone's everyday behavior than its sister concepts because self-efficacy usually applies to a specific field. At the same time, "*self-esteem is an emotion-based assessment about one's self-worth or value*".⁹ While low self-esteem is experienced regardless of context because it applies to the individual, self-efficacy is heavily tied to context. Regarding age, evidence suggests that self-efficacy increases specifically during young adulthood and adolescence.^{10,11}

Women have lower self-efficacy than men.¹² Self-efficacy is also related to academic performance¹³ and other education-related skills; diligence, self-efficacy, and the locus of control account for 44% of academic achievement,¹⁴ therefore, these variables and their outcomes are strongly related.

In relation to self-efficacy, the main focus of the current research is anxiety. "*Anxiety is an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure*".¹⁵ According to a 2017 statistic, 8-12% of students experience some anxiety disorder in the United States, and 3.7% is the percentage of people who struggle with an anxiety disorder globally.¹⁶ Anxiety detrimentally affects familial relationships,¹⁷ impairs friendships and romantic relationships¹⁸. It can play a role in the development or presence of depression – unsurprisingly, the diagnosis of Generalized Anxiety Disorder and unipolar depressive disorders are often comorbid.¹⁵ In fact, whether depression and anxiety can be conceptually separated can be drawn into question,¹⁹ as the State-trait Anxiety Inventory²⁰ itself is also sensitive to depression, and "*anxiety is a general symptom of a variety of mental disorders*".²¹

Anxiety is less prevalent in older adults than in younger adults. However, this is not indicative of a decrease **around** adolescence.²² Symptoms of anxiety²³ and anxiety disorders^{15,24,25} are also more prevalent in women and non-binary individuals.⁶³

Furthermore, heightened anxiety correlates with lower self-efficacy in many domains, including academics,⁴ and they can both have detrimental effects on academic performance. Vitasari *et al.*,²⁶ found that the "passive attitude" and lack of interest students with low self-efficacy display contribute to poor performance on various tasks. Brosnan²⁷ discovered that self-efficacy determined how a computer-based exercise was

self-efficacy determined how a computer-based exercise was carried out; this finding is especially prevalent in an age where digital teaching is gaining immense traction, and therefore, parallels might be drawn between academic performance and computer competence.

Perceived Intelligence and Perceived Diligence:

In addition to examining the relationship between self-efficacy and anxiety, the current study also analyzed perceived intelligence and diligence.

Upon self-reflection, people generally overlook their intellectual flaws^{28,29}. Therefore, they overestimate their intelligence. The “above-average effect,” “unrealistic self-enhancement,” or “superiority bias” also dictates that most people identify themselves as better than average (contradicting statistical probability)^{30,31} (in correlation with assigning their own collective superiority in an intergroup setting³²). In regards to gender, internal perception and external presumption tend to be more accurate for men than for women due to influence from socialization and experience.³³ Self-assessed intelligence can also predict academic performance.³⁴

Aside from variance in self-assessment in different intelligence domains,³⁵ in general, women habitually inaccurately underestimate their intelligence, while men overestimate it.³⁶ It has been disproven that this phenomenon, coined “*male hubris, female humility*”³⁷ is attributable to an overall difference in cognitive aptitude,⁴⁰ therefore, this dissonance is likely a result of socialization,³⁷ and can also be accounted for by the classification of particular activities as “male tasks”.⁴¹ This suggests the results of the current study might pertain to whether academic attainment carries gendered connotations.

But when assessing intelligence, it should be acknowledged that it is a multifaceted, multidimensional, and interdisciplinary construct with little consensus on its definition between leading experts,⁴² so measuring or self-professing intelligence as one singular quality can be an over-facilitated, counterproductive task. Specific literature suggests that anxiety and worry without diagnosed Generalized Anxiety Disorder contribute to actual lower externally assessed intelligence, but with GAD, to higher IQ.⁴³ However, since typically there is little to no significant correlation between actual and perceived intelligence,⁴⁴ (self-report scores also cannot substitute for assessing abilities⁴⁵), the effect of anxiety on this intelligence-related variable of this study could differ.

Self-perceived abilities and self-efficacy are both enhanced by previous academic achievement, even when controlling for cognitive abilities;⁴⁶ therefore, it can be presumed that self-perceived intelligence and self-efficacy will be in correlation with the sample of students at hand. Assuming self-perceived diligence is a similarly positive self-concept compared to self-perceived intelligence, this positive correlation with self-efficacy may also be extendable to self-perceived diligence.

This study defines perceived diligence as one’s (in this case, the student’s) self-assessment of one’s voluntarily expended effort to achieve an ideal in comparison with the assumed effort exerted by the rest of a collective (in this case, the entire student body) (a modification of how Bernard *et al.* defined

and spiritual ideals”). As the research on perceived diligence is incredibly sparse, there were few to no past studies on which to base the current. Possible reasons for this may be that there is often no distinction between subjective self-targeted observations and objective measurements since, often, perceived diligence is taken as authentic diligence using self-report questionnaires.

Moreover, diligence can be viewed as a facet of conscientiousness, which is heavily linked to higher self-efficacy beliefs.⁴⁸ Conscientiousness is “*the relatively stable pattern of individual differences in the tendencies to follow socially prescribed norms for impulse control, to be goal-directed, planful, to delay gratification, and to follow norms and rules*”.⁴⁹ Diligent tendencies serve and enhance conscientious character, consequently, perceived diligence might enhance self-efficacy as well.

High-achieving high-school students:

In contrast to general student populations, “*students in academically challenging curricula likely face additional normative stressors related to school*”⁵² however, this stress is not always associated with poor functioning (unchanged academic performance could be the reason for said students remaining in high-achieving cohorts). High-achieving student populations in college preparatory courses are vulnerable; they suffer various stress-related symptoms and are predisposed to unhealthy behaviors.⁵³ Academic performance is not necessarily predictive of stress,⁵³ whereas anxiety is,⁶ suggesting that academic performance becomes subject to change as stressors manifest in anxious behavior and mentality, which is likely since stress buildup, in addition to other normative stress factors, can act as risk factors for onset anxiety disorders.⁵⁴

By analyzing whether this specific sample has unusually high anxiety levels or significantly low self-efficacy levels and identifying certain predictive factors, conclusions may reflect the characteristics of other high-achieving student samples at college preparatory programs, which have been receiving increased attention for their pressure-filled nature.⁵³

Hypothesis:

It is hypothesized that the sample average for anxiety is a significantly heightened range, based on comparison with other studies that assess and identify standards for anxiety. It is also hypothesized that average scores for (self-)perceived intelligence and (self-)perceived diligence placement percentiles surpass 50. It is hypothesized that self-efficacy and anxiety would be negatively correlated in that lower self-efficacy would correlate with higher anxiety. As self-efficacy scores are reverse coded in the current study (for higher scores to reflect increased distress in *both* main variables), they will be positively correlated. Regarding sample demographics, it is hypothesized that men will have the lowest self-efficacy and anxiety scores, followed by women, then non-binary individuals. Regarding age, individual year groups would have distinctive scores, both self-efficacy and anxiety increasing with time.

Higher perceived intelligence is hypothesized to be correlated with self-efficacy (and inversely correlated with self-efficacy scores, as these were reverse-scored) and inversely correlated with anxiety. Concerning perceived diligence, it is also hypothesized to be correlated with self-efficacy (and

inversely correlated with self-efficacy scores) and inversely correlated with anxiety. The previous hypotheses are based on the existing, albeit scarce, research in this specific area and following the general notion that distress negatively correlates with speaking highly of one's self or having an advantageous self-image of one's abilities.⁵⁰

■ Methods

The Sample:

All sample members are Hungarian adolescents and students of the Milestone Institute, an advanced college preparatory program that students complete in **addition** to their regular high-school-dictated curricula voluntarily.⁵¹ The sample, therefore, can be referred to as a high-achieving student sample, as these students plan to study abroad at prestigious universities, compete in academic competitions, and conduct research at a young age. The Institute prides itself on fostering an environment of ambition, and students are also encouraged to strive to be "high-achieving."

136 students completed and submitted the survey out of the 351 students at Milestone: 21 freshmen, 42 sophomores, 46 juniors, and 27 seniors. 80 were women, 55 were men, and 1 was non-binary. 70 participants requested feedback regarding their results, and 34 people commented on the survey; however, statistical analyses were not conducted on these two variables, as it is irrelevant to the purpose of the study.

The Questionnaire:

The questionnaire was assembled using excerpts from validated assessments. All questions about anxiety were compiled from the State-trait Anxiety Index (also referred to as STAI), the most universally accepted index of anxiety, while also using the description of the NHS of anxiety.⁵⁶ The questions about self-efficacy were selected from the general self-efficacy scale by Schwarzer, R., and Jerusalem, M.,⁵⁷ which is the most standard scale since its release. Questions were chosen depending on their variation in wording to achieve a wide diversity of questions while keeping the number of questions to a minimum (number 22) to reduce response fatigue.

The final version of the survey consisted of 20 questions. Questions 1 and 2 aimed to gather demographic information (about year/grade and gender, respectively). Questions 3 and 4 were part of the sub-topic of this study relating to accurate self-evaluation of intelligence and diligence. In the aforementioned, Questions 5-11 assessed Self-Efficacy and 12-20 Anxiety. Participants had to choose the answer most representative of their experience and traits on a Likert scale of 1-5. The higher the number was, the lower self-efficacy or higher anxiety level demonstrated, for the sake of concordance, to ease calculations later on.

Statistical Analysis:

Google Forms was used to administer the questionnaire. JASP was utilized to analyze most of the results and determine their statistical significance. However, the then-current version (JASP 0.16.2) could not present answers for ANOVA calculations when only one data point was available for a particular group. Therefore, an alternative online calculator (<https://mathcracker.com/one-way-anova>) was used to determine if the results were statistically significant. Though, the

latter did not disclose a specific p-value or df. This will later be apparent when gender's role is analyzed as a variable. Refer to the Appendix for the questionnaire.

■ Results and Discussion

Anxiety in contrast with general cut-off scores:

As part of this research, general anxiety outcomes were examined to identify whether elevated levels were reached. As there was no singular universal standard system, three varying previously utilized standards were used to devise a threshold score for the current study in light of the resources at hand and the status of the study. Various thresholds were recognized, subsequently proportionally modified, and compared to the present study.

Two standards provide a threshold that distinguishes between healthy and at-risk/unhealthy groups. The more lenient standard,²¹ where leniency denotes what counts as healthy according to the guideline, pronounces this threshold to be 54-55, which is 67.5%-68.8% of the maximum score (80). In contrast, the threshold of the less lenient standard (which separates clinically significant anxiety)⁵⁹ is 39-40, which is 48.8%-50% of the maximum score. The average score resulting from the current study was 29.1, 72.9% of the total of 35. To avoid reducing accuracy, the range of scores was assimilated to only include an indication of real distinction (erasing the points scored "by default") in the case of all three scales. The more modified lenient guideline shows this border to be 34-35, which is 56.7%-58.3% of the maximum score (60), and the modified stricter system is 19-20, which is 31.7%-33.3%. The modified average resulting from this study was 22.1 which is 79.1% of the total of 28. Kayikcioglu *et al.*,⁶⁰ separate categorizations into three groups of STAI scores. Applying the previous calculations to these criteria, they are "no or low anxiety" (20-37), "moderate anxiety" (38-44), and "high anxiety" (45-80). When the relative ratio is calculated, 25-46.3%, 48-55%, and 56.3%-100% are identified as having high anxiety by the structure of the current questionnaire.

An amplified search of STAI²⁰ evaluations presents studies that utilize these scores to compare groups instead of proposing universal categories. One study of this type⁶¹ analyzed adults with sleep disorders and categorized a score of more than 65 as high trait-state anxiety and <35 as low trait-state anxiety. Modified (75% and 25%), this harsher criterion still places the average of Milestone students 79.1% in the distinguishably high ballpark. A second study,²³ conducted with Spanish, Portuguese, and Brazilian undergraduate students, created cutoff scores ± 1 SD based on group means. Unmodified, these cutoffs were <33, 33-49, and >49, and modified: <21%, 21-48%, and >48%. Still placing the result of this study into the high-anxiety fragment.

From the above-modified scores, it can be concluded that Milestone students have anxiety levels that are qualified as heightened (Figure 1). Moreover, a one-sample t-test demonstrates that the current study significantly surpasses the highest lower threshold of the above (75%) $p < .001$, $t(134) = 4.606$.

Lower cut-off scores for clinically significant/high anxiety by study, in percentages achieved on STAI

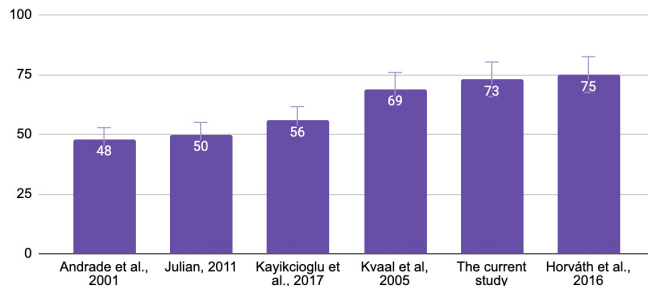


Figure 1: The Y-axis indicates the lower cut-off scores for clinically significant/high anxiety by study and the mean attained score of this study (in ascending order).

Most existing research on student is done on young adults, limiting the generalizability of the findings. Additionally, we utilized a validated and reliable survey to collect sleep quantity and quality data. This increases our confidence in the reliability of the data collected and the accuracy of the self-report data included.

Perceived Diligence and Perceived Intelligence:

A one-sample t-test demonstrated that the average perceived diligence ($M = 56.000$; $SD = 20.944$) was significantly above the score of 50, $t(133) = 5.036$, $p < 0.010$. The average perceived intelligence ($M = 58.300$) ($SD = 19.788$) was also significantly above the score of 50, $t(132) = 4.920$, $p < 0.010$, in line with the hypothesis. The average ($M = 58.31$) indicates an inflated view/overestimation of one's intelligence and diligence since a tendency of accurate estimation of percentile ranking would result in a mean of 50. The results coincide with previous research, for example, the "unrealistic self-enhancement" mentioned earlier.³⁰ Though the prior is less likely an aftereffect of a unique characteristic of the sample and more likely general human tendency.

Further research could be conducted to conclude whether this translates to perceived collective superiority (the collective at hand being Milestone students) since interpersonal and intergroup superiority biases correlate.³²

Self-Efficacy & Anxiety:

The inverse score for self-efficacy and score for anxiety was positively correlated (Figure 2) in that as self-efficacy decreased, anxiety increased (positive correlation because self-efficacy was inversely scored), $r(136) = 0.633$, $p < 0.001$. This is consistent with previous empirical findings and confirms the current first hypothesis. Furthermore, these results imply that increasing self-efficacy might decrease anxiety, or vice versa; both outcomes would benefit academic productivity and achievements.

Notably, self-efficacy can be increased by adopting the social cognitive model developed by Albert Bandura.¹ The social cognitive model was developed with improving self-efficacy in mind. Some important pillars of the social cognitive theory are positive experiences, social models, and social persuasion. These mediums can mediate negative self-efficacy and positively affect well-being and performance in an educational setting, possibly leading to decreased anxiety and increased academic performance and mental well-being.

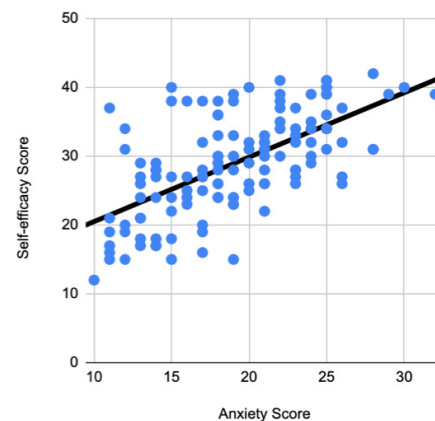


Figure 2: A Scatter plot of anxiety (A) and Selfefficacy (SE) scores when a point's y-coordinate represents a student's (invertedly measured) SE score and the same point's x-coordinate represents that same student's A score. The line of best fit demonstrates a clear, positively correlational relationship in scores.

Self-efficacy and year group:

There was also a significant disparity between Self-efficacy levels of different years/grades, $F(3,131) = 3.206$, $p = 0.025$ (Figure 3). A Tukey post-hoc test revealed a significant difference between the self-efficacy of Freshmen and Seniors (Mean deviation = 4.095), $p = 0.016$, as self-efficacy scores seemed to decrease with age. This confirms the alternative hypothesis that self-efficacy increases with age in this sample spanning four-year groups and is congruent with previous research (Figure 3).

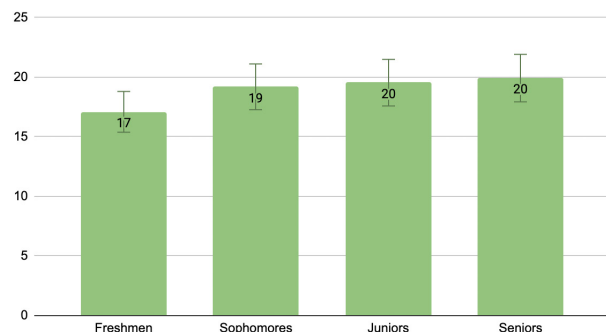


Figure 3: A bar graph of mean self-efficacy scores by year group.

Perceived intelligence and diligence:

The results of the survey also showed a moderately significant correlation between perceived intelligence and perceived diligence, $r(131) = 0.337$, $p < 0.010$, (Mean deviation = 1.7) implying that as one's perceived intelligence increases, there is a tendency for one's perceived diligence also to increase (Figure 4). This confirms the alternative hypothesis that perceived intelligence and diligence are positively correlated and suggests either a correlation between the authentic qualities themselves or one's perception of the qualities. As there is little to no significant correlation between actual and perceived intelligence,⁴⁴ it can be presumed that the latter is more probable.

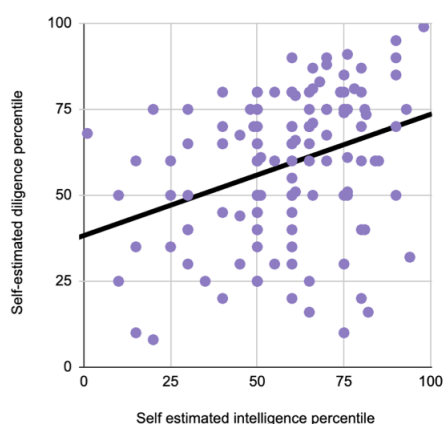


Figure 4: A bar graph of mean self-efficacy scores by year group.

Figure 4 - A scatter plot of perceived diligence and perceived intelligence percentiles, where one point's y coordinate represents the self-estimated diligence percentile of a student and the x coordinate of the same point represents the self-estimated intelligence percentile of the same student. The line best fit represents a moderate positive correlational relationship.

Gender and anxiety:

No significant differences were present between genders regarding anxiety ($p < 0.001$). This refutes the hypothesis and goes against the general prevalence of Generalized Anxiety Disorder according to the DSM-V.¹⁵ This might be caused by men, especially younger men, easily underreporting their anxiety.⁶²

According to a 2022 study,⁶³ women and non-binary individuals have levels of anxiety symptoms that are similar to each other and distinctly higher than men, which might delimit the opportunity of discovering overall significance when testing for gender using ANOVA calculations.

Year and anxiety:

No significant differences were present between year groups regarding anxiety. Even though anxiety disorders are more common in adolescents than older adults, this does not guarantee a decrease in anxiety during adolescence. Furthermore, higher prevalence among youth can indicate cohort effects without comprehensive longitudinal studies claiming otherwise.

Gender and self-efficacy:

No significant difference was present between genders in self-efficacy. This denies the alternative hypothesis that gender is a predictive factor in self-efficacy. Bausch *et al.* hypothesized that high education attainment (in an adult sample) could compensate for and, therefore, erase lower self-efficacy in women.⁴¹ A viable theory is that at the Milestone Institute, high educational ambition substitutes for readily achieved high educational attainment and mitigates gendered differences in self-efficacy.

Perceived intelligence and gender:

There was a statistically significant distinction between the mean scores of perceived intelligence for genders. The non-binary student category had the highest average score ($M_{\text{non-binary}}=75$), with women having moderate ($M_{\text{wom-}}$

$M_{\text{an}}=56.24$) and men having the highest ($M_{\text{man}}=61.34$) (Figure 5). All means were rounded to the nearest 0.01. Unfortunately, the method of calculation method did not yield exact F or p values (please refer back to the methods section for further explanation of these phenomena).

In conclusion, there is no evidence to suggest either accuracy or inaccuracy regarding this study's perceived intelligence scores. Still, in general, women tend to underestimate, and men tend to overestimate their brightness, and the current study's numbers have aligned with this common pattern. But when it comes to precision, further research is required because of cultural determinants.⁶⁴

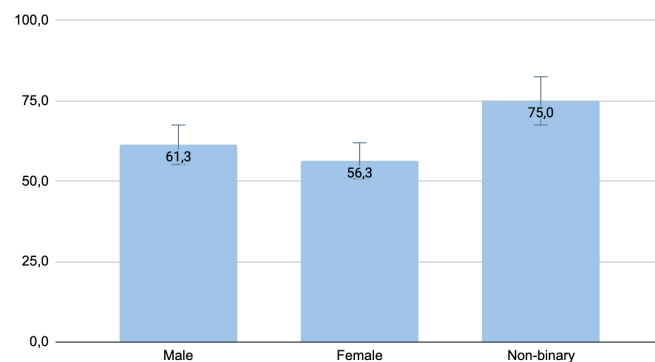


Figure 5: A bar graph depicting the mean perceived intelligence percentiles by gender.

Perceived Diligence and Year Group:

A one-way ANOVA demonstrated that the effect of the year group was significant for Perceived diligence, $p=.009$, $F(3,132)=4.025$, potentially due to the same factors presented for self-efficacy. A Tukey post-hoc test revealed that the most defining difference was between freshmen and seniors (Mean deviation= -18.146). (Figure 6), Perhaps this is because the largest difference in experience (at Milestone, in academics) can be observed between these two-year groups.

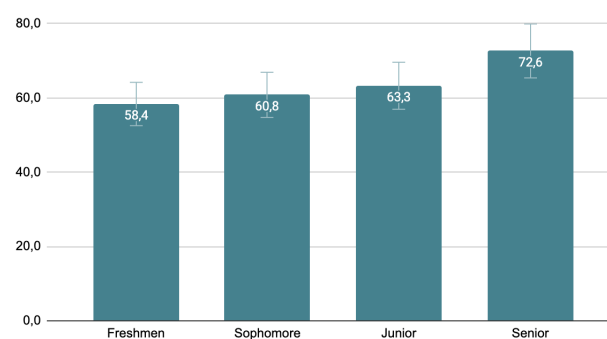


Figure 6: A bar graph showing perceived diligence percentiles by year group.

Perceived intelligence and self-efficacy:

A significant correlation existed between perceived intelligence and self-efficacy scores (Figure 7). This means that participants had lower levels of self-efficacy: they perceived themselves to be more intelligent since self-efficacy was scored inversely, $r(131) = -0.534, p < 0.001$. This confirms the hypoth

esis and concurs with the idea that self-perceived abilities and self-efficacy align.⁴⁶

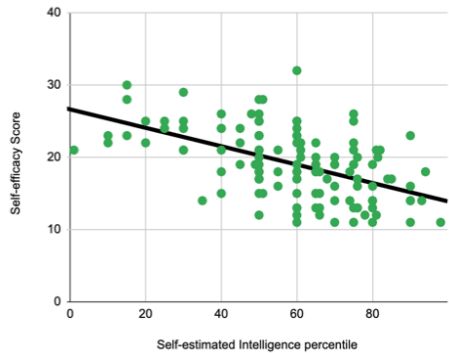


Figure 7: A scatter plot showing perceived intelligence and self-efficacy, where one point's y coordinate represents a student's self-estimated intelligence percentiles, and that same point represents the student's self efficacy score. The line of best fit demonstrates a moderate negative correlational relationship.

Anxiety and perceived intelligence:

There was a significant correlation between anxiety and perceived intelligence ($r(131) = -0.356, p < 0.001$), meaning that there is a negative association between stronger degrees or more frequent anxiety and intelligence (Figure 8). This refutes the hypothesis that higher perceived intelligence correlates with lower anxiety levels. Since typically there is little to no significant correlation between actual and perceived intelligence⁴⁴ the prior is likely a result of perception and not authentic intelligence.

However, if the presumption that Milestone students, on average, have critical levels of anxiety (as stated earlier) remains in effect, following the logic that worries and anxiety with General Anxiety Disorder constitute higher IQ, which could yield the explanation that self-assessed intelligence positively correlates with authentic intelligence, as it does with constructs associated with intelligence.⁶⁵

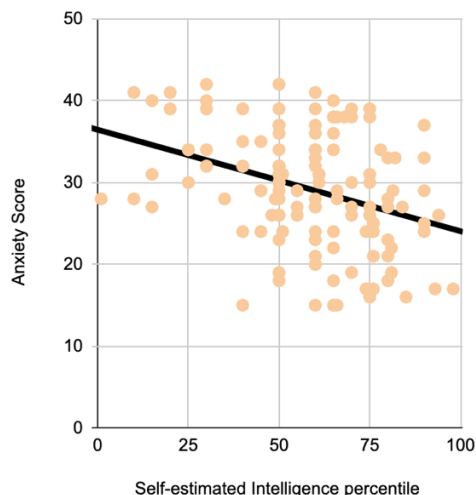


Figure 8: A scatter plot showing anxiety scores and perceived intelligence percentiles, where one point's y coordinate represents one student's achieved anxiety score, and that same point's x coordinate represents that same student's self-assessed intelligence percentile. The line best fit demonstrates a moderate negative correlational relationship.

Year groups and perceived intelligence:

There were no significant differences between the year groups in perceived intelligence $p > 0.050$. $df=129$, $F(3,131)=1.672$, $p=.176$

Conclusion

Results:

Low self-efficacy and high anxiety levels affect academic performance negatively and can translate to distressing mental health and mental disorders. Therefore, improving self-efficacy and mitigating anxiety is crucial, especially in academics. Low self-efficacy and high anxiety can be preemptively recognized or treated by considering predictive and correlating factors. This study's findings indicate a strong relationship between the following variables: self-efficacy and anxiety, perceived intelligence and anxiety, perceived intelligence and self-efficacy, perceived intelligence, and perceived diligence. Furthermore, a higher-year group is a predictive factor for higher self-efficacy and higher perceived diligence, and gender is a predictive factor for higher-scored perceived intelligence. This study hopes to target a gap in research, the well-being of high-school students in Hungary and take steps towards impacting the conversation about mental health in an academic context.

Limitations

There were certain limitations in the research methods, either observed by the participants, later on, noticed by the researcher, or already acknowledged at the start, but with no straightforward replacement or solution.

A typical disadvantage of voluntary survey-based study methods is the risk of invalidity imposed by anonymity, the possibility of deliberate falsification and multiple submissions, and indeliberate subjection to confirmation bias.⁶⁶ These should be acknowledged when handling the results at hand.

In addition, the questionnaire constructed for the study carries some limitations. As stated earlier, this is the first occasion this tool with the abridged versions of two official questionnaires is being used. Even though it was assembled from validated sources, only portions used of both the STAI²⁰ and the General Self-Efficacy Scale. These sections were chosen based on the researcher's intention to encompass as many aspects of the construct as possible while still adhering to an "attractive" questionnaire and reducing response fatigue.

It would also be imperative to note that this study was conducted during a pandemic, and research indicates that exposure to media about COVID is positively correlated with increased state anxiety.⁶⁷ Although this variable was not measured explicitly in the study, this poses another potential reason for the increased levels of anxiety observed in the sample; a threat is not present during other periods under "average" circumstances.

Implications:

At present, in Hungary, there is a noticeable increase in pathological distress in the adult population.⁶⁸ A potential means for combating this contemporary epidemic of distress, in addition to time-appropriate treatment, is through preventative measures during early adolescence. Specifically, targeting self-efficacy and anxiety, key indicators of academic perform-

ance and well-being, might counter the rise in pathological distress in the country.

The current study concludes that the conditions of the high-achieving student sample at hand, coupled with the status of mental health treatment status in Hungary, call for additional attention and resources turned toward academically high-achieving youth's mental health.

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