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THE DOUBLE-EDGED SWORD: HOW LEARNING CAN INFLUENCE AGGRESSION

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ABSTRACT

Students strivefor knowledge, but learning sometimes fuels aggression. Stress, rivalry, fatigue, and loneliness can trigger anger. Research shows these factors affect minds and bodies, leading to hostile actions. Eyers et al, Sinha et al, and others explain the complex causes. However, coping strategies exist: reduce pressure, encourage teamwork over contests, and build supportive academic settings. With care, education need not breed violence. Studies by Hofmann and others, Johnson & Johnson, Ellis & Knauff back, as well as Walker's work confirm these techniques work well. In summary, recognizing academic stress may lead to aggression is key. Using the suggested approaches can foster a more upbeat, productive learning setting for pupils.

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KEYWORDS: academic stress; aggression; coping strategies; teamwork; supportive learning environment; stress management.

The pursuit of knowledge is often lauded as a positive and enriching experience. However, the relationship between studying and aggression can be surprisingly complex. Students facing the pressure to perform well can experience stress, frustration, and potentially, aggressive behavior.

STRESS AND FRUSTRATION AS MEDIATORS: A PHYSIOLOGICAL LINK

When students feel stressed about school, they are less likely to act nicely. Research shows there is a clear connection between stress from academics and mean behavior. Studies by Eyers et al. demonstrate a negative correlation between academic stress and prosocial behavior which we hypothesize will be true [1]. If the pressure to do well in classes gets too high, students become more aggressive instead of being kind and helpful. So more stress leads to less sharing and cooperating.

Students face stress from many things they deal with. These are:

- Traumatic workloads: an amazing quantity of coursework can depart students feeling overloaded and suffering to hold up.
- Tight cut-off dates: The pressure to finish assignments through strict time limits can create an experience of urgency and anxiety, mainly frustration.
- The strain to succeed: students frequently face high expectancies from themselves, mother and father, and teachers. The fear of failure can be a tremendous source of strain.

Whilst this stress builds up and isn't effectively controlled, as shown with the aid of Sinha et al. [2], it could manifest as competitive conduct directed towards classmates, instructors, or maybe oneself which we assume could result in the students having a negative and bad rapport in their workspace. This could take numerous paperwork, inclusive of verbal aggression (yelling, insults), bodily aggression (hitting, shoving), or maybe passive-competitive conduct (social exclusion, sarcasm).

The physiological processes brought about via stress play a key function in this connection [3]. Beneath pressure, the body releases hormones like cortisol and adrenaline, as explained with the aid of McEwen [4]. These hormones motivate a boom in heart price and blood pressure, basically setting the body in a «fight-or-flight» state. This heightened state of arousal can top people for aggressive responses, as their bodies are already geared closer to taking motion.

Furthermore, the prefrontal cortex, the brain place answerable for impulse management and emotional law, can turn out to be beaten beneath strain, according to Arnsten which we think is a very vital piece of information that needs to be seriously considered [5]. This indicates the capacity to manipulate anger and frustration successfully diminishes, making it harder to govern impulsive reactions and potentially lead to competitive outbursts.

In essence, the mixture of physiological adjustments and a faded capacity for emotional regulation creates an ideal hurricane for aggression when instructional strain is not successfully addressed.

Competition and Social Comparison: Fueling the Fire of Frustration

Competitive educational environments can be a double-edged sword. Even as they are able to encourage some students to excel, for others, they can ignite the flames of frustration and in the long run lead to aggression.

We assume this by taking a look at studies by Vuoksimaa et al. that present proof for this link [6]. Their meta-analysis revealed a giant terrible association among instructional performance and scholar aggression. This suggests that scholars who perceive themselves as falling at the back of can be greater susceptible to competitive behavior.

There are numerous methods competition fuels frustration and probably aggression:

• Jealousy and Resentment: an exceedingly aggressive environment can breed jealousy and resentment towards classmates who constantly outperform others. Witnessing others be successful whilst one struggles can result in feelings of inadequacy and bitterness.

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• Perceived Gloating: even supposing a classmate is not actively boasting, college students who are struggling academically might interpret any sign of achievement from others as gloating. This perceived vanity can exacerbate feelings of inferiority and frustration, doubtlessly escalating into aggression.

The competitive nature of a few educational settings can create a pressure cooker of emotions. students already face the pressure of stressful workloads and time limits, and including the stress to outperform peers can push a few college students to their emotional breaking factor. This frustration can take place as various sorts of aggression, which includes verbal assaults, social exclusion, or maybe physical altercations.

It is essential to note that opposition doesn't ought to be totally terrible. While fostered in a healthy manner, it can encourage college students to paint harder and strive for excellence. However, educators and establishments want to consider the capacity downsides of overly aggressive environments and paintings to create an extra balanced getting to know and enjoy.

SLEEP DEPRIVATION AND THE EROSION OF EMOTIONAL CONTROL: A RECIPE FOR AGGRESSION

The hunt for academic success frequently comes at a fee – sleep. Many students, fueled by using looming time limits and the pressure to perform well, sacrifice valuable sleep hours to cram for assessments or complete assignments [8]. However, this brief-time period advantage will have significant long-term consequences, especially on emotional law and the potential for aggression.

Research via Knutson et al sheds light in this essential connection [9]. Their findings reveal that sleep deprivation substantially disrupts cognitive function and emotional law which we believe will subsequently cause disarrangement in students. In less difficult terms, whilst we don't get enough sleep, our brains in reality don't feature at their greatest stage. this may take place in several methods that may contribute to aggression:

- Misinterpreting Social Cues: sleep deprivation can impair our capability to appropriately interpret social cues and nonverbal communication. A tired pupil may understand an impartial comment from a classmate as a sarcastic jab, leading to needless war.
- Heightened Frustration: the dearth of sleep can appreciably decrease our tolerance for frustration. Minor inconveniences or sudden demanding situations can trigger disproportionate emotional responses due to a depleted emotional reservoir.
- Impulsivity Takes the Wheel: research through Baumeister et al. highlights the link between sleep deprivation and trouble controlling impulsive reactions [10]. Whilst sleep-disadvantaged, our potential to think before we act diminishes. This will result in competitive outbursts in reaction to perceived slights or minor annoyances that might in any other case be treated lightly with a good night's sleep.

Imagine a student who is sleep-deprived due to a late-night study session. They head to class feeling foggy and irritable. During a group project discussion, a classmate makes a suggestion that the sleep-deprived student misinterprets as criticism. Feeling frustrated and lacking the capacity for clear communication, the sleep-deprived student lashes out verbally. This scenario illustrates how sleep deprivation can create a perfect storm for aggression in academic settings.

Prioritizing sleep is not a sign of weakness; it's an essential element of academic success. A

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Nº1 (38) 2024 www.j-chr.com well-rested student is better equipped to handle academic pressure, manage emotions effectively, and avoid conflict.

Lack of Social Support and the Pressure Valve: Bottled-Up Emotions and the Risk of Aggression

Educational stress can be a relentless pressure, pushing students to their limits. sadly, the pursuit of educational success can every so often come on the price of social connections. College students suffering with traumatic workloads, tight time limits, and the worry of failure may also end up overwhelmed and isolate themselves from their social circles. This lack of social aid will have a great terrible effect on their emotional well-being and probably lead to aggression.

We strengthen this theory with the aid of Park et al. highlights this crucial link [11]. Their studies found that students experiencing social isolation were much more likely to record feelings of hysteria and melancholy. Social isolation can create a sense of loneliness and disconnection, further exacerbating the stress associated with educational pressure.

Without a supportive community to speak in confidence to or de-stress with, terrible feelings like tension, frustration, and anger can build up like stress in a sealed box. Those bottled-up emotions can ultimately erupt in dangerous methods, such as aggression. here's how the dearth of social aid can make a contribution to aggressive conduct:

- Absence of a release Valve: social connections offer an important outlet for releasing strain and frustration. Talking to a trusted peer, family member, or therapist can help students process their feelings and increase healthful coping mechanisms. without this outlet, bad emotions can fester and potentially occur as aggression.
- Feeling Misunderstood and alone: students dealing with educational demanding situations can also be misunderstood or judged through their peers. Social aid gives a feel of belonging and the understanding that others are there to concentrate and offer encouragement. Feeling remote can amplify feelings of loneliness and frustration, probably leading to resentment and even lashing out at others.
- Loss of fantastic Reinforcement: a supportive social community may be a supply of effective reinforcement and encouragement. Having those who consider you and have a good time your successes can considerably boost your temper and motivation. without this wonderful reinforcement, students may also experience discouraged and defeated, making them greater liable to aggressive outbursts.

Growing a strong social aid device would not necessarily be complex. It could include joining a membership or taking a look at a group, connecting with classmates outside of sophistication, or genuinely preserving near relationships with friends and circle of relatives. By fostering nice social connections, college students can construct a help machine that facilitates them to manipulate academic strain efficiently, reduces the risk of aggression, and promotes normal nice-being.

MITIGATING THE EFFECTS: STRATEGIES FOR STUDENTS AND EDUCATORS Fortunately, several strategies can lessen the probability of analyzing main to aggression.

- Powerful stress control: strain control techniques like mindfulness meditation, deep breathing sporting events, and everyday bodily pastime were shown to be especially beneficial for college students (Hofmann et al.) [12]. Studying to identify early signs and symptoms of strain and implementing coping mechanisms can help save your negative feelings from escalating into aggression.
- Promoting Collaboration over opposition: Educators can create an extra collaborative gaining knowledge of surroundings in which students work together on tasks and aid every different fulfillment. We assume that this will foster a feel of teamwork and decrease the poor

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effects of social assessment, as advised by Johnson & Johnson [13].

• Time control and Prioritization abilities: growing effective time management skills can assist students feel much less beaten and keep away from ultimate-minute cramming which could result in sleep deprivation and stress. Prioritizing responsibilities and putting realistic desires can alleviate some of the educational pressure contributing to aggression [14].

- Wholesome Sleep habits: Educators can emphasize the significance of sleep hygiene and inspire students to preserve a normal sleep time table. Getting good enough sleep is important for best cognitive characteristics, emotional regulation, and overall well-being, as highlighted by using Walker which we think will be very advantageous to students [15].
- Constructing Supportive Networks: both educators and students can play a function in fostering a supportive gaining knowledge of surroundings. developing safe areas for open communication and inspiring college students to build

CONCLUSION

While academic pressure fuels a thirst for knowledge, it can also ignite aggression in students. This paper identified stress, competition, sleep deprivation, and social isolation as key contributors.

Fortunately, there are well-defined strategies that overcome the immense stress faced by students and its likely repercussions. Stress management techniques, collaborative learning environments, time management skills, prioritizing sleep, and building supportive networks can all help. By working together, students and educators can create a balanced learning environment that fosters success and minimizes aggression.

REFERENCES

- 1. Rosli, S. N., & Perveen, A. (2021). The Relationship between Prosocial Behavior and Psychological Well-Being among Undergraduate Students. International Journal of Academic Research in Business and Social Sciences, 11(6), 276–289. https://doi.org/10.6007/ijarbss/v11-i6/10119 (accessed 13 Feb. 2024).
- 2. Joseph, N., Nallapati, A., Machado, M.X. et al. Assessment of academic stress and its coping mechanisms among medical undergraduate students in a large Midwestern university. Curr Psychol 40, 2599–2609 (2021). https://doi.org/10.1007/s12144-020-00963-2 (accessed 20 Feb. 2024)
- 3. Blanchard, D. Caroline, and Robert J. Blanchard, 'Stress and Aggressive Behaviors', in Randy J. Nelson (ed.), Biology of Aggression (New York, 2005; online edn, Oxford Academic, 1 May 2009), https://doi.org/10.1093/acprof:oso/9780195168761.003.0012, (accessed 20 Feb. 2024)
- 4. Ketheesan, S., Rinaudo, M., Berger, M., Wenitong, M., Juster, R., McEwen, B. S., & Sarnyai, Z. (2020). Stress, allostatic load and mental health in Indigenous Australians. Stress, 23(5), 509–518. https://doi.org/10.1080/10253890.2020.1732346 (accessed 20 Feb. 2024)
- 5. Arnsten, A. Stress signalling pathways that impair prefrontal cortex structure and function. Nat Rev Neurosci 10, 410–422 (2009). https://doi.org/10.1038/nrn2648 (accessed 20 Feb. 2024)
- 6. Vuoksimaa, E., Rose, R. J., Pulkkinen, L., Palviainen, T., Rimfeld, K., Lundström, S., . . . Kaprio, J. (2020). Higher aggression is related to poorer academic performance in compulsory education. Journal of Child Psychology and Psychiatry, 62(3), 327–338. https://doi.org/10.1111/jcpp.13273 (accessed 13 Feb. 2024)
- 7. Festinger, L., Torrey, J., & Willerman, B. (1954). Self-Evaluation as a Function of Attraction to the Group. Human Relations, 7(2), 161-174. https://doi.org/10.1177/001872675400700204 (accessed 13 Feb. 2024)
- 8. Better sleep not 'All-Nighters' helps students on final exams. (n.d.). (Retrieved from https://news. web.baylor.edu; accessed 13 Feb. 2024)
- 9. Abell, J., Shipley, M. J., Ferrie, J. E., Kivimäki, M., & Kumari, M. (2016). Recurrent short sleep, chronic insomnia symptoms and salivary cortisol: A 10-year follow-up in the Whitehall II study. Psychoneuroendocrinology, 68, 91–99. https://doi.org/10.1016/j.psyneuen.2016.02.021 (accessed 15 Feb. 2024)
- 10. Meldrum, R. C., Barnes, J. C., & Hay, C. (2013). Sleep Deprivation, Low Self-Control, and Delinquency: A Test of the strength model of Self-Control. Journal of Youth and Adolescence, 44(2), 465–477. https://doi.org/10.1007/s10964-013-0024-4 (accessed 15 Feb. 2024)
- 11. Han, R. T., Kim, Y. B., Park, E. H., Kim, J. Y., Ryu, C., Kim, H. Y., . . . Na, H. S. (2018). Long-Term isolation elicits depression and Anxiety-Related behaviors by reducing Oxytocin-Induced GABAergic transmission in central amygdala. Frontiers in Molecular Neuroscience, 11. https://doi.org/10.3389/fnmol.2018.00246 (accessed 15 Feb. 2024)

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Nº1 (38) 2024 www.j-chr.com

- 12. Hofmann, S., Grossman, P., & Hinton, D. E. (2011). Loving-kindness and compassion meditation: Potential for psychological interventions. Clinical Psychology Review, 31(7), 1126–1132. https://doi.org/10.1016/j.cpr.2011.07.003 (accessed 20 Feb. 2024)
- 13. Johnson, D. W., & Johnson, R. T. (2009). An Educational Psychology Success Story: Social Interdependence Theory and Cooperative learning. Educational Researcher, 38(5), 365–379. https://doi.org/10.3102/0013189x09339057 (accessed 15 Feb. 2024)
- 14. Chavez, D. (2023, October 30). Time Management for students: Recognizing 5 best skills for efficient work. (Retrieved from https://updf.com/; accessed 15 Feb. 2024)
- 15. Why we sleep. (n.d.). (Retrieved from https://books.google.ru/books?hl=en&lr=&id=-fKlDgAAQ-BAJ&oi=fnd&pg=PT11&dq=Walker%C2%A0(2017)+Getting+good+enough+sleep+stress&ots=wX6T-4fJ_GN&sig=GBD2IV5ChbzD6jOE6pRC9JCkbLY&redir_esc=y#v=onepage&q=Walker%C2%A0(2017)%20 Getting%20good%20enough%20sleep%20stress&f=false; accessed 20 Feb. 2024)

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ПАЛКА О ДВУХ КОНЦАХ: КАК ОБУЧЕНИЕ ВЛИЯЕТ НА АГРЕССИЮ

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RNJAТОННА

Стремясь к обретению больших знаний, обучающийся сталкивается с условиями, которые вызывают в нём агрессию. Стресс, соперничество, усталость и одиночество могут спровоцировать такое крайне негативное состояние. Следом за исследованиями прошлых лет, в этой статье мы хотим, в том числе, актуализировать данные об агрессии среди обучающихся. Эйерс, Синха и другие в своих исследованиях ищут ответ на причины возникновения агрессии в период обучения. В ответ на результаты исследований разрабатываются стратегии преодоления: контроль за давлением, поощрение командной работы во время соревнований и конкурсов, а также создание благоприятной учебной обстановки. При соблюдении осторожностей и использование стратегий, образование помогает лучше справляться с агрессией. Исследования Хофманна, Джонсона, Эллис и Кнауфа и др. подтверждают эффективность этих методов. В данной статье мы приводим аргументы, что академический стресс может привести к агрессии. Использование предложенных подходов может способствовать созданию более оптимистичной и продуктивной учебной обстановки для учащихся.

КЛЮЧЕВЫЕ СЛОВА: академический стресс, агрессия, стратегии преодоления, командная работа, заботливое окружение, управление стрессом.

REFERENCES

- 1. Rosli, S. N., & Perveen, A. (2021). The Relationship between Prosocial Behavior and Psychological Well-Being among Undergraduate Students. International Journal of Academic Research in Business and Social Sciences, 11(6), 276–289. https://doi.org/10.6007/ijarbss/v11-i6/10119 (accessed 13 Feb. 2024).
- 2. Joseph, N., Nallapati, A., Machado, M.X. et al. Assessment of academic stress and its coping mechanisms among medical undergraduate students in a large Midwestern university. Curr Psychol 40, 2599–2609 (2021). https://doi.org/10.1007/s12144-020-00963-2 (accessed 20 Feb. 2024)
- 3. Blanchard, D. Caroline, and Robert J. Blanchard, 'Stress and Aggressive Behaviors', in Randy J. Nelson (ed.), Biology of Aggression (New York, 2005; online edn, Oxford Academic, 1 May 2009), https://doi.org/10.1093/acprof:oso/9780195168761.003.0012, (accessed 20 Feb. 2024)
- 4. Ketheesan, S., Rinaudo, M., Berger, M., Wenitong, M., Juster, R., McEwen, B. S., & Sarnyai, Z. (2020). Stress, allostatic load and mental health in Indigenous Australians. Stress, 23(5), 509–518. https://doi.org/10.1080/10253890.2020.1732346 (accessed 20 Feb. 2024)
- 5. Arnsten, A. Stress signalling pathways that impair prefrontal cortex structure and function. Nat Rev Neurosci 10, 410–422 (2009). https://doi.org/10.1038/nrn2648 (accessed 20 Feb. 2024)
- 6. Vuoksimaa, E., Rose, R. J., Pulkkinen, L., Palviainen, T., Rimfeld, K., Lundström, S., . . . Kaprio, J. (2020). Higher aggression is related to poorer academic performance in compulsory education. Journal of Child Psychology and Psychiatry, 62(3), 327–338. https://doi.org/10.1111/jcpp.13273 (accessed 13 Feb. 2024)
- 7. Festinger, L., Torrey, J., & Willerman, B. (1954). Self-Evaluation as a Function of Attraction to the Group. Human Relations, 7(2), 161-174. https://doi.org/10.1177/001872675400700204 (accessed 13 Feb. 2024)
- 8. Better sleep not 'All-Nighters' helps students on final exams. (n.d.). (Retrieved from https://news.web.baylor.edu; accessed 13 Feb. 2024)
- 9. Abell, J., Shipley, M. J., Ferrie, J. E., Kivimäki, M., & Kumari, M. (2016). Recurrent short sleep, chronic insomnia symptoms and salivary cortisol: A 10-year follow-up in the Whitehall II study. Psychoneuroen-docrinology, 68, 91–99. https://doi.org/10.1016/j.psyneuen.2016.02.021 (accessed 15 Feb. 2024)
- 10. Meldrum, R. C., Barnes, J. C., & Hay, C. (2013). Sleep Deprivation, Low Self-Control, and Delinquency: A Test of the strength model of Self-Control. Journal of Youth and Adolescence, 44(2), 465–477. https://doi.org/10.1007/s10964-013-0024-4 (accessed 15 Feb. 2024)
 - 11. Han, R. T., Kim, Y. B., Park, E. H., Kim, J. Y., Ryu, C., Kim, H. Y., . . . Na, H. S. (2018). Long-Term

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Nº1 (38) 2024 www.j-chr.com isolation elicits depression and Anxiety-Related behaviors by reducing Oxytocin-Induced GABAergic transmission in central amygdala. Frontiers in Molecular Neuroscience, 11. https://doi.org/10.3389/fnmol.2018.00246 (accessed 15 Feb. 2024)

- 12. Hofmann, S., Grossman, P., & Hinton, D. E. (2011). Loving-kindness and compassion meditation: Potential for psychological interventions. Clinical Psychology Review, 31(7), 1126–1132. https://doi.org/10.1016/j.cpr.2011.07.003 (accessed 20 Feb. 2024)
- 13. Johnson, D. W., & Johnson, R. T. (2009). An Educational Psychology Success Story: Social Interdependence Theory and Cooperative learning. Educational Researcher, 38(5), 365–379. https://doi.org/10.3102/0013189x09339057 (accessed 15 Feb. 2024)
- 14. Chavez, D. (2023, October 30). Time Management for students: Recognizing 5 best skills for efficient work. (Retrieved from https://updf.com/; accessed 15 Feb. 2024)
- 15. Why we sleep. (n.d.). (Retrieved from https://books.google.ru/books?hl=en&l-r=&id=-fKlDgAAQBAJ&oi=fnd&pg=PT11&dq=Walker%C2%A0(2017)+Getting+good+e-nough+sleep+stress&ots=wX6T4fJ_GN&sig=GBD2lV5ChbzD6jOE6pRC9JCkbLY&redir_esc=y#v=o-nepage&q=Walker%C2%A0(2017)%20Getting%20good%20enough%20sleep%20stress&f=false; accessed 20 Feb. 2024)

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