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Mental health assessment of young adults belonging to various college of GBPUAT, Pantnagar, Uttarakhand

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Abstract
Many students find college to be a challenging experience. Aside from academic strain, some students must cope with the daunting tasks of separation and individuation from their families of origin, while others must balance multiple job and family obligations. Many college students experience the onset of mental health and drug use issues, or an exacerbation of their symptoms, in this setting (Pedrelli *et al.* 2015). As a result, the proposed research aimed to evaluate the mental health status of students of G.B. Pant University of Agriculture and Technology, Uttarakhand. Through the use of a simple random sampling process, 240 students from three colleges at G.B. Pant University of Agriculture and Technology were chosen as the research sample. The MHB-Mental Health Battery (Physiological Health, Daily Routine Activity, Emotional Status, Emotional Management, and Intelligence) was designed to achieve the research goal, and the tool's reliability and validity were measured before it was used. Because of the Covid-19 pandemic, the data was collected via the internet. The study results were derived using appropriate statistical methods such as frequency, percentage, p value, and correlation on the collected data. After analyzing and comparing the results, the researchers discovered that the majority of young adults had poor mental wellbeing. When comparing young adults from the Agriculture College to those from the College of Home Science and Technology, the percentage of young adults with poor mental health was higher. A significant association was discovered between young adults' mental health and a specific causative factor, namely education. It is concluded that practitioners would be better able to support college students if they become familiar with the particular issues associated with their developmental stage and environment (Pedrelli *et al.* 2015).

Keywords: Experience, academic strain, daunting tasks, physiological health, daily routine activity, emotional status, emotional management and intelligence

Introduction

Adolescents' brains have heightened reward systems that are active for several years after they turn eighteen. This increased sensitivity is what drives adolescents to be highly emotional and incredibly sensitive to peer pressure (Resources to Recover: A website for family). Throughout their twenties, they continue to seek out new, potentially pleasurable experiences without regard for the risks. For more people, the ages 18 to 30 are a period of transition from the dependency of adolescence to the responsibilities and independence of young adulthood. Mental health problems are very common among college students (Blanco *et al.* 2008) [5]. This may be due to the fact that attending college corresponds to a challenging time for many traditional and non-traditional undergraduate students. Traditional college students begin their college after completing high school, are typically younger, depend on parents for financial support, and do not work or work part-time (Pedrelli *et al.* 2015) [19]. Thus, in addition to stress related to academic load, these students may have to face the task of taking on more adult-like responsibilities without having yet mastered the skills and cognitive maturity of adulthood. For example, many traditional college students may face potentially stressful experiences for the first time including working, being in a significant relationship that may lead to marriage, or having housemates with cultures and belief systems different from their own (Arnett, 2000) [3]. Non-traditional college students are often employed full-time, older, and may have dependents on other (Arnett, 2000) [3]. Thus, this group of students may have to cope with meeting work and family demands in addition to academic requirements. In these contexts, many college students may experience the persistence, exacerbation, or first onset of mental health and substance use problems while possibly receiving no or inadequate treatment.

With the increasing recognition of child mental health issues and the use of more psychotropic medications, the number of young adults with mental health problems entering college has significantly increased. For example, in a survey of 274 institutions, 88% of counseling center

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directors reported an increase in "severe" psychological problems over the previous 5 years including learning disabilities, self-injury incidents, eating disorders, substance use, and sexual assaults (Gallagher *et al*. 2000) [12]. According to a study by Professional Risk Management Services, emotional health issues have become more common among new college freshmen. In 2014, the proportion of students who said they felt frequently depressed rose to 9.5%. These students reported missing class more often than their classmates and also expressed feelings of disengagement (Learn Psychology, 2020) [15]. For students reporting emotional trouble, the transition to college life can be especially challenging. From newfound freedom to the rigors of college-level coursework, the pressure and stress of a postsecondary education can take its toll.

Therefore, this research aimed at mental health assessment of young adults belonging to various college of GBPUAT, Pantnagar because a good mental health is imperative for one to attain and enjoy total health and it also ensures germination of healthy ideas and action which guide personal and social functioning. Therefore, there is dire need of identification and addressed through comprehensive strategies for promotion, prevention, treatment approach. By conducting this research, it is hoped to bring attention towards ways to assess new trends and issues in mental health of young adults and factors affecting good mental health of young adults.

Methodology:
The suggested study's goal was to analyze the mental health of students at Uttarakhand's G.B. Pant University of Agriculture and Technology. 240 students from three colleges at G.B. Pant University of Agriculture and Technology were chosen as the research sample using a simple random sampling procedure. The MHB-Mental Health Battery (Physiological Health, Daily Routine Activity, Emotional Status, Emotional Management, and Intelligence) was created

with the research purpose, and its reliability and validity were tested prior to its usage. The data was acquired via the internet due to the Covid-19 pandemic. On the acquired data, relevant statistical procedures such as frequency, percentage, p value, and correlation were used to collect the study results.

Result and Discussion
Mental health of young adults with respect to College
Entering college is, for many young people, a major step in the journey into adulthood. The college experience itself represents an intensive preparatory socialization process, where many stakeholders have related but distinct goals: the business community wants eager employees with human capital skills; civil society needs an informed and committed citizenry; parents hope college will enhance their offspring's happiness and self-sufficiency; and college students themselves aspire to improve their professional and personal prospects. Physical setup, environment, curriculum and mode of instruction varies from college to college which may affects the mental condition of young adults. Therefore, this part focuses on relationship between colleges as place of educational attainment and mental health of young adults.

Eisenberg *et al.* (2013) conducted a study in the United States, association of mental health concerns among college students and found living on university campus and mental health were significantly correlated with each other. In reference to the said research, the table 1 reflects that majority of young adults belonging to college of agriculture portrayed poor (63.80%) and average (36.20%) mental health. Similar results were also found in case of college of home science and college of technology, portraying poor (62.50% and 52.50%) and average (37.50% and 47.50%) scores on overall mental health computations respectively. No young adults belonging to college of agriculture, home science and technology fell in the good category of mental health.

Table 1: Mental Health of young adults with respect to their college

(N=240)

Variable		Level of Mental Health	Agriculture (n=80)		Home Science (n=80)		Technology (n=80)		Chi²	p-value
			f	%	*f*	%	F	%		
Physiological Health		Poor	50	62.50	52	65	61	76.20	03.93	0.14
		Average	30	37.50	28	35	17	21.30		
		Good	00	00.00	00	00.00	02	02.50		
Daily Routine Activity		Poor	38	47.50	41	51.20	35	43.80	0.90	0.63
		Average	42	52.50	39	48.80	45	56.20		
		Good	00	00.00	00	00.00	00	00.00		
Emotional Status	Emotional Stress	Poor	16	20	24	30	22	27.50	02.26	0.32
		Average	48	60	50	62.50	56	70		
		Good	16	20	06	07.50	02	02.50		
	Sense of Self	Poor	14	17.50	16	20	20	25	01.41	0.49
		Average	66	82.50	64	80	60	75		
		Good	00	00.00	00	00.00	00	00.00		
	Sense of Conflictlessness	Poor	32	40	46	57.50	04	05	50.83	0.001*
		Average	46	57.50	33	41.20	76	95		
		Good	02	02.50	01	01.30	00	00.00		
	Overall Emotional Status	Poor	15	18.70	26	32.50	18	22.50	04.36	0.113
		Average	58	72.50	50	67.50	60	75		
		Good	07	08.80	04	05.00	02	02.50		
Emotional Management	Interpersonal Awareness	Poor	59	73.70	56	70.00	40	50.00	11.40	0.003*
		Average	21	26.30	24	30.00	40	50.00		
		Good	00	00.00	00	00.00	00	00.00		
	Intrapersonal Awareness	Poor	41	51.30	56	70.00	41	51.30	07.67	0.02*

	Average	39	48.70	23	28.80	39	48.70		
	Good	00	00.00	01	01.20	00	00.00		
Overall Emotional Management	Poor	49	61.20	57	71.20	35	43.70	12.7	0.002*
	Average	31	38.80	23	28.80	45	56.30		
	Good	00	00.00	00	00.00	00	00.00		
Intelligence	Poor	41	51.30	40	50.00	31	38.70	03.04	0.21
	Average	17	21.20	11	13.70	26	32.50		
	Good	22	27.50	29	36.30	23	28.80		
Overall Mental Health	Poor	51	63.80	50	62.50	42	52.50	02.52	0.28
	Average	29	36.20	30	37.50	38	47.50		
	Good	00	00.00	00	00.00	00	00.00		

Note: * Stands for significant at *p*<0.05% level of significance.

It is evident in table 1, that a small percentage (2.50%) of young adults from college of technology and none from college of agriculture and college of Home Science were portrayed good physiological health. Majority (62.50%; 65% and 76.20%) of young adults from college of agriculture, home science and technology respectively portrayed poor physiological health followed by average physiological health with 37.50 per cent, 35 per cent and 21.30 per cent respectively.

As illustrated in table 1, the Daily Routine Activity aspect shows that majority of young adults from college of agriculture and college of technology (52.50% and 56.20%) falls in average score category while young adults from college of home science falls in the category of poor score (51.20%) in their daily routine activity. 47.50 per cent of young adults from college of agriculture and 43.80 per cent from college of technology falls in the category of poor scores. About 48.80 per cent from college of home science falls in the category of average score which reflects young adults of that college of agriculture, home science and technology were found with highly/ moderately affected daily routine activity due to self or others. No young adults from college of agriculture, home science and technology fall in the good category of having daily routine life. Researches explain that facts that stress and depressive symptoms are associated with maladaptive health behavior practices such as unhealthy eating, sedentary behavior, insufficient sleep, and substance use. The effect of stress on health behaviors was not moderated by depressive symptoms. These results bear implications for intervention during a crucial period in the development of mental and physical health (Dalton and Hammen, 2018) [8]. Study examined whether depressive symptoms and health-promoting lifestyle behaviors mediate the association between perceived stress and quality of life (QoL). Researchers suggest effective strategies primarily focusing on improving depressive symptoms along with health behaviors are needed to decrease the negative effect of perceived stress on QoL (Seo *et al.* 2018) [21]. The researches indicate that daily physical activity decreases the influence of changes in the symptoms of depressive mood, anxiety and OCD (Obsessive-compulsive disorder) symptoms (Abrantes *et al.* 2009) [1]. High ST (screen time) was significantly positively associated with anxiety (Wu *et al.* 2015). Cluster analysis of daily sleep, affective mood, and stress revealed three distinctive types of first-year students emphasizing the role of sleep during the transition to college. The two major types, the Well Adjusted and Maladjusted differed in sleep quantity and quality as well as in indices of stress and mood. The third type, the Re-adjusted, were characterized by a decreased number of sleep hours and higher sleep variability (Lev Ari and Shulman, 2012) [17].

For overall emotional status, it was observed in table 4.2.5 that majority (72.50%, 67.50% and 75%) of young adults belonging to college of agriculture, home science and technology were having average poor emotional status followed by young adults with poor (18.70%, 32.50% and 22.50%) and good (8.80%, 5% and 2.50%) emotional status among college of agriculture, home science and technology respectively. Under the domain of emotional stress, 60 per cent of young adults from college of agriculture, 62.50 per cent from college of home science and 70 per cent belonging to college of technology were found with average emotional health followed by young adults poor (20%, 30% and 27.50%) and good (20%, 7.50% and 2.50%) level of emotional stress with respect to their colleges. When the sub-aspect, sense of self was measured, majority of young adults from college of agriculture, home science and technology (82.50%, 80% and 75%) were demonstrated average level of sense of self followed by respondents with poor sense of self (17.50%, 20% and 25%). It was also evident in table that no young adults from college of agriculture, home science and technology were having good sense of self. In another sub-aspect of emotional status- the sense of conflictlessness, it was found that 57.50 per cent of the respondents from college of agriculture and 95 per cent from college of technology falls in the average category of sense of self while 57.50 per cent from college of home science falls in poor category of sense of self. It was also evident that young adults from college of agriculture and college of technology scored poor (40% and 5%) while young adults of college of home science scored average (41.20%) in their sense of conflictlessness. Only 2.50 per cent and 1.30 per cent of young adults from college of agriculture and college of home science and no respondents from college of technology falls in the category of having good sense of conflictlessness. Similar to current research Obradovic *et al.* (2013) [18] explained that stress is only one mental health issue. There is also the severe anxiety due to the pressure to deliver. Engineering students are almost always expected to be on top, but this is challenging to do when they have problems to juggle not only in academics but also in personal life. The performance in college often ends up to just passing which leads to frustration and there is depression. It's a serious mental problem that erodes the well-being of engineering students, characterized by low self-esteem, loss of interest in almost all things, and feeling of hopelessness. The course somehow forces this kind of problem to the students because of the difficult circumstances. This is the ultimate case of mental health issues in engineering that sometimes leads to the students committing suicide.

Researches showed that family and friend relationships uniquely contributed to all students' mental health. Students who experienced less family conflict had lower levels of depressive symptoms. Stress-related conditions in college students are common and largely preventable. Students do not

have the prevention skills needed to handle stress in their lives. Students may turn to alcohol and drugs to relieve the stresses they encounter because of their inability to cope. Findings showed that health habits such as recreational use of drugs and consuming alcohol played an associative role with general wellbeing (Lanier *et al.* 2001) [14].

In case of Emotional Management, table 1 reflects that majority of young adults from college of agriculture and college of home science (61.20% and 71.20%) demonstrated poor emotional management while young adults from college of technology (56.30%) portrayed average emotional management capabilities in dealing with their emotions. Table also reflects that no respondents were highly capable in managing their emotions. The data of sub aspects interpersonal awareness reflects that majority of young adults from college of agriculture, home science and technology (73.70%, 70% and 50%) fell in the category of poor interpersonal management followed by young adults with average interpersonal awareness from college of agriculture, home science and technology (26.30%, 30% and 50%) which means that majority of respondents are unable to manage their social relationship, communication between family, peer etc. The second sub aspect of emotional management reflects that majority of young adults from college of agriculture, home science and technology (51.30%, 70% and 51.30%) were lacking in intrapersonal awareness with poor scores followed by young adults who had average capable of managing their intrapersonal emotions intrapersonal awareness selected from college of agriculture, home science and technology respectively (48.70%, 28.80% and 48.70%). No young adults from college of agriculture and college of technology and only 1.20 per cent of college of home science were highly capable of managing their intrapersonal emotions. American College Health Association conducted a survey in 2009 and found that 46% of college students said they felt "things were hopeless" at least once in the previous 12 months. About a third of these students suffered from depression, making it difficult to function. While this speaks about college in general, it just proves that institutions fail in providing psychological and counselling support to the students.

Researcher indicated that effectiveness of health messages may be amplified by including an interpersonal influence component, such as encouraging individuals to intervene if they suspect a friend or family member is suffering from depression. The self-efficacy and response efficacy, as well as perceived knowledge, could be used to help determine students; readiness to talk with a friend who may be suffering from depression. Empathy (specifically empathic concern and perspective-taking) can also play a significant role in health promotion efforts that blend media and interpersonal health messages (Egbert, 2014) [9].

Table 1 reflects that when intelligence of selected respondents was assessed majority of young adults from college of agriculture, home science and technology (51.30%, 50% and 38.70%) were found with poor intelligence scores followed by young adults with average (21.20%, 13.70% and 32.50%) and good scores (27.50%, 36.30% and 28.80%) from respective colleges. Mental health is closely related with academic achievements for the success of any type of education. Ashok and Pathak (2019) [4] explained that that mental health affects the learning and retaining of knowledge in the classroom. Students having good mental health show more academic achievement. A mentally healthy person acquires more information, skill and knowledge which give

them control over environment. Students having good mental health show more academic achievement as compared to mentally unhealthy students. Academic institution play a critical role in promoting health and safety of student. Severe perceived stress was associated with worse academic achievement and worse physical health, as well as higher rates of psychiatric and impulsive disorders. Researches may suggest associations between stress and numerous aspects of mental/physical health in young adults, which could be an important consideration for individuals working with college students (Leppink *et al.* 2016) [16]. Researches show that parental encouragement is positively related to academic achievement of pre-university students (Sudarshan, 2019) [22].

It is also evident in table 1 that the p value clearly shows that there is a significant association found between the colleges and selected aspects i.e. sense of conflictlessness (.001), interpersonal awareness (.003), intrapersonal awareness (.02) and overall emotional management (.002) while non-significant association was found in the overall mental health, physiological health, daily routine activity, emotional stress, sense of self, overall emotional status and intelligence.

It can be concluded from the above table that as far as college was concerned, majority of young adults from each college portrayed poor mental health. The percentage of poor mental health was higher among respondents of agriculture college respondents as compared to respondents belonging to college of college of technology and Home Science. A significant association found between the colleges and selected aspects of mental health i.e. sense of conflictlessness, interpersonal awareness, intrapersonal awareness and overall emotional management while non-significant association was found in the overall mental health, physiological health, daily routine activity, emotional stress, sense of self, overall emotional status and intelligence with respect to college of respondents. It can be said that as per curriculum of different colleges, association can be observed mental health status of young adults.

Conclusion
In conclusion, mental health issues are prevalent among college students. Academic pressure, combined with the difficulties that come with starting and attending college, might trigger the onset of mental illness. Young adults who attended college of agriculture had a larger rate of poor mental health than those who attended college of home science or college of technology. A significant association was found between mental health of young adults and selected causative factors education. Mental health problems can affect many areas of students' lives, reducing their quality of life, academic achievement, physical health, and satisfaction with the college experience. These issues can also have long-term consequences for students, affecting their future employment, earning potential, and overall health (Eisenberg, 2017). As a result, it can be claimed that the demand for counselling and specialized services in institutions is increasing (Gallagher *et al*. 2000) [12]. This research will help in planning guidelines, strategies for prevention and treatment of mental health in future by providing the baseline data for current time and place.

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