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8:45 AM

Psychological Factors Contributing to Student Cognitive and Academic Complaints

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Perspective

- Over 25 years experience conducting research on the topics
- Over 25 years of assessing college students
 - Psychological concerns
 - Learning disorders/ADHD
 - Accommodations requests
- Over 20 years of teaching assessment and supervising assessment cases in a doctoral program
- Over 10 years of expert consulting work for accreditation requests
- Over 15 years of advising undergraduates on academic probation

Plan

- Speak from these perspectives
 - Focus on assessment and documentation
- Using empirical literature to provide evidence-based conclusions
 - Point to where current practices and the evidence base are contradictory
- Likely to feel controversial to some
 - But fairness to those with disabilities
 - Available resources, validity of need
 - And fairness to all who are seeking higher education

Major Points

- Many psychological concerns affect university students' academic functioning
 - But many students have academic concerns without psychological contributions
 - And academic concerns lead to psychological symptoms but that does not necessarily indicate disorder, diagnosis, impairment, or disability
- Psychological concerns, symptoms, disorders are not equivalent to impairment/disability
 - Many are treatable
 - Many are overdiagnosed and ignore the impairment criterion
 - How do we assess impairment?
 - * Measures of impairment can be malingered!
- There is no empirical basis for accommodations on the basis of psychological diagnosis
 - There is evidence that accommodations for individuals with ADHD are ineffective
- There is potential iatrogenesis in labeling someone as impaired/disabled/in need of accommodations

Mental Health Issues in College Students

- Individuals with MH conditions represent about 1% of all college students identified as having a disability.
- High rates of mental health concerns in college students
 - Although most studies are not using diagnostic criteria**
- Not different than rates in same age non-college attending peers
- Some evidence rates are increasing
 - But this may just be increased treatment seeking than increased rates per se
 - Some studies suggest increased severity of presenting problems
 - Or could be that increasingly likely that individuals with mental health are attending college
- Concerns about whether they are seeking or, even if seeking, getting appropriate treatment

Kim, S. (2012). *Just Healthy*. (2014). *Healthy Minds*. (2016). *Kim et al.* (2016). *Just for Psych*. (2016). *Just for Psych*. National Center for Education Statistics.

Mental Health and Cognitive Complaints

- Cognitive complaints are **not accurate** indication of cognitive impairment
- Cognitive complaints appear across a myriad of mental health conditions
 - As well as many medical conditions
 - As well as in normal aging
- Cognitive complaints are also **high base rate** in the general population
- Cognitive complaints are **vulnerable to noncredible report**

Mental health link to academic functioning

- University graduation rates for students with mental health difficulties lower than average
 - Dropout rate much higher (still high even among those without mental health difficulties)
- Some believe students with mental health issues may not identify to disability services, concern about stigma
 - NAMI data actually shows students likely to identify in order to seek accommodations, but less likely to identify in order to receive

treatment
 Carigan et al. 2007 *Psychiatry* 70(2): 100-110; 2010 *Journal of the American Academy of Child and Adolescent Psychiatry* 49(10): 1107-1114; 2011 "College Student's Secret" retrieved from http://www.nami.org/publications/2011/01/01/PublicationReports/SummaryReports/CollegeStudentsSecret_01SummaryReport.html#sthash=77161017-10112121ad7

Which came first? A chicken or egg problem

- Many psychological concerns affect university students' academic functioning
 - But many students have academic concerns without psychological diagnostic contributions
 - And there are many other contributors to academic functioning that should be considered
 - And academic concerns lead to psychological symptoms but that does not necessarily indicate disorder, diagnosis, impairment, or disability

Other important contributors to academic functioning in university students

- Sleep
 - Poor sleep behaviors common in university students
 - Poor sleep behaviors are related to academic performance
 - Examples: too few hours of sleep, poor sleep hygiene, social jet lag
 - While sleep could be related to MH issues, more likely just poor sleep habits
- Energy drink consumption
 - Widespread use, high intensity use very common
 - Associated with physical and cognitive complaints, and predicts poor GPA over time

Bailey (2012); *Am College Health*; 60(2): 88-92; Wilson & Weaver; *College Stud Psychol* (2009); Cross et al (2011); *Am College Health*; Champlin et al.; *Frontiers Psychiatry*

Other important contributors (2)

- Substance Use
 - High rates of use in undergraduates, especially alcohol and marijuana
 - National surveys and prospective studies show link between alcohol use and poor academic performance
 - Directly and indirectly
 - Also poor academic outcomes associated with marijuana use
 - Directly and indirectly (through skipping class)

Barnes et al. (2002), Cook & Peacock, 2001; Cook et al. (2012); Fendley (2004); Berk, Waldman (2001); UNCO, 2007; Peacock, Berry, Brubaker et al. (2002); Peacock, Ray, Hatcher (2008); Health Team.

Other important contributors (3)

- General cognitive ability and academic readiness
 - Part of disability criteria
 - Dependent on admission policies of university in question
- ACT, Inc. (2012)
 - only 25% students taking ACT score in way suggesting they are ready for entry level college courses
 - 28% of students met none of four indicators
- NAEP (2009)
 - Just 36% US high school seniors at or above proficient in reading, only 26% in math

National Center for Education Statistics, The Nation's Report Card: Grade 12 Reading and Mathematics 2009 National and State Test Results (Washington, DC: 2010).

ACT, Inc. (2012). The condition of college & career readiness 2012 (Policy Report). Retrieved from <http://www.act.org/documents/CCR12-12-Nation's-Report-Card.pdf>

Adjustment issues related to academic functioning

- Homesickness and transition to college
 - 3 times more likely to drop out in prospective studies
 - May or may not be a direct effect or indirect (via effect on academic performance)
 - Evidence that it is direct: institutional attachment and social adjustment more strongly predictive of retention than academic adjustment or personal-emotional adjustment
 - Also related to GPA directly, especially academic adjustment

Thurman & Visher (2002); 104 College Health; Cook & Karkonen (2012); SA by Author

Stress of College can Lead to Psychological Concerns/Symptoms

- College students report high levels of stress
 - Attributed in part to academic rigor and academic concerns
 - 63-69% reported moderate to severe stress during adjustment to college
 - Predictive of less physical activity, poorer physical health, higher depression and anxiety symptoms, more substance use
 - Effects especially seen in females, individuals who identified as members of minority groups, and non-heterosexuals.

Seppink et al (2018) JNMD

Major Points

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- Psychological concerns, symptoms, disorders are not equivalent to impairment/disability
 - Many are treatable
 - Many are overdiagnosed and ignore the impairment criterion
 - How do we assess impairment?
 - Measures of impairment can be malleable!
- There is no empirical basis for accommodations on the basis of psychological diagnosis
 - There is evidence that accommodations for individuals with ADHD are ineffective
- There is potential iatrogenesis in labeling someone as impaired/disabled/in need of accommodations

What is impairment/disability? ADA

- Legal term not medical one
 - Physical or mental impairment that substantially limits one or more major life activities (including those who have record of such an impairment, even if currently do not have one, or if do not have one but are "regarded" as having one)
 - But this is not a specialized activity
 - And is not temporary
 - Must be a physiological or mental disorder (so "stress" or "depression" may or may not be impairment depending on whether they result from documented disorder)
 - Substantially limits is key: EEOC: unable to perform major life activity that average person in general population can perform, or significantly restricted as to the condition, manner, or duration under which an individual can perform the major life activity compared to the way the average person in the general population can perform it
 - College is not the average person (still not normative)
 - Graduate school is definitely not an average person activity

Canada

- Provincial responsibility
 - but consistent with Canadian Human Rights Act and Charter of Rights and Freedoms
 - Does vary then by province in interpretation
- National Educational Association of Disabled Students
- Ontario: Accessibility for Ontarians with Disabilities Act 2016

Psych Dx does not equal Disability

- Many psychological disorders are over/misdiagnosed
 - Even when diagnosed accurately, does not equal impairment
 - How is impairment assessed?
- Many psychological disorders are treatable
- Psychological disorders are often episodic

So what is evidence of impairment/disability?

- School records
- Prior high stakes test scores (without accommodations)
- Current grades
- Psychoeducational test results
- Cognitive test results
- **Self report?**

Gray et al (2016)

- *Journal of Learning Disorders*
- High rates of SR cognitive/academic impairment in college students
- But no impairment in current GPA, school records, standardized test scores (cognitive and academic)
- Concluded that SR was more accurate!
- **No control for base rates OR noncredible report/behavior**

Evidence that SR impairment is potentially invalid

- Lewandowski, Lovett, Coddling, & Gordon (2008) poor specificity of academic concerns
- Bryant et al (under review) self-reported impairment can be malingered
- Suhr et al (under review) self-reported impairment related to noncredible report and performance (likely malingering) in accommodations evals

Lewandowski et al. (2008) / 10/10

Implications

- Relying only on SR to document impairment or disability is not supported by research
- Concerns about academic functioning are high base rate in nonclinical UG students
- Concerns about academic functioning and impairment are easily malingered and are related to behaving noncredibly
- **Need to document impairment in other ways**

What about transient impairment/disability?

- Very little data exist on how to address an episodic disability
- Usually treated as an illness, expected to withdraw until health improves
 - Some have argued that should provide accommodations rather than force withdrawal
 - Those arguments never talk about treatment!
- 2012 NAMI survey of 763 US college students
 - No longer attending college because of MH
 - More than half received no treatment, about 45% no accommodations
 - They felt the most effective accommodations were medical leave, being able to withdraw without penalty, excused absence from class to attend treatment (all over 50%); adjustments in test settings or homework, including extended time (about 33%); increased availability of academic advisors (32%)

Depression (DSM-5)

- 5 or more of the following present during same 2 week time period, at least one of which is depressed mood or loss of interest/pleasure
 - Depressed mood most of the day nearly every day
 - Markedly diminished interest or pleasure in all or almost all activities most of the day nearly every day
 - Significant weight loss when not dieting or weight gain or decrease/increase in appetite nearly every day
 - Insomnia or hypersomnia nearly every day
 - Psychomotor agitation or retardation nearly every day (observable, not merely subjective)
 - Feelings of worthlessness or excessive/inappropriate guilt nearly every day
 - Diminished ability to think or concentrate or indecisiveness nearly every day
 - Recurrent thoughts of death, SI
- Cause clinically significant distress or impairment in social, occupational, or other important areas of functioning
- Not attributable to such effects of substance or another medical condition
- Clinical judgement on whether a response to a significant loss, which can resemble this, is actually more than just the loss and thus should be diagnosed as depression
- Not better explained by other disorders
- No manic or hypomanic episode

Depression continued.

- Single or recurrent episode
- Coded as mild, moderate, severe, with psychotic features
- When not full criteria met, but had in past, can code as in partial or full remission
- Unspecified used when symptoms do not meet full criteria/insufficient information
- Other specified might include when shorter duration than 2 weeks or when clinician chooses to use that label even though not full criteria met

Depression can be effectively treated

- Evidence that both CBT and IPT are highly effective treatments for depression
- Even brief guided self help interventions are effective
- Time limited targeted CBT also very effective
- Computerized transdiagnostic treatments for CBT for showed large ES for depression

Herdey et al (2010) American Psychiatric Association (2010), Reuser et al (2005), Under et al (2010)

Implications

- Diagnosis could be mild or even not meet criteria (unspecified)
- Diagnosis does not require impairment at all
 - Could be just self-reported distress
- Depression is very treatable, even in time-limited fashion
- Should impair BEYOND academic setting per se
- DIAGNOSIS IS NOT A DISABILITY

Anxiety

- Most common in the university setting
 - Generalized Anxiety Disorder
 - Social Anxiety Disorder
 - PTSD
- Text Anxiety is NOT an anxiety disorder

General Anxiety Disorder

- Excessive anxiety and worry occurring more days than not for at least 6 months, about a number of events or activities
- Difficult to control the worry
- Associated with 3 or more of following, with at least some more days than not
 - Restlessness/keyed up/on edge
 - Easily fatigued
 - Difficulty concentrating/mind going blank
 - Irritable
 - Muscle tension
 - Sleep disturbance
- Clinically significant distress or impairment

Social Anxiety Disorder

- Marked fear/anxiety about one or more social situations in which exposed to possible scrutiny by others
- The fear is that person will act/ behave in way that shows anxiety and will be negatively evaluated (humiliating, embarrassing)
- Social situation almost always provokes fear/anxiety
- Social situations avoided or endured with intense fear/anxiety
- Out of proportion to actual threat
- Lasts 6 months or more
- Clinically significant distress or impairment

Important notes about social anxiety

- 75% of individuals have age at onset between 8 and 15, so unusual for it to first manifest in college
 - First onset in adulthood only after humiliating event, major life event
 - Often if not signs of disorder in childhood then signs of social inhibition/shyness
- Usually affects social relationships

PTSD

- Exposure to actual or threatened death, serious injury, or sexual violence in one or more ways
 - Direct experience
 - Witnessing in person as occurred to others
 - Learning that actual/threatened death of family member or friend that was violent or accidental
 - Experiencing repeated/extreme exposure to aversive details of traumatic events (first responders or police officers)

PTSD cont.

- Presence of one or more intrusion symptoms associated with the traumatic event
 - Recurrent, involuntary, intrusive distressing memories
 - Recurrent distressing dreams related to the event
 - Dissociative reactions (flashbacks)
 - Intense/prolonged psychological distress at exposure to internal or external cues that symbolize/resemble the event
 - Marked physiological reactions to internal or external cues

PTSD cont (2)

- Persistent avoidance of stimuli associated with the trauma, seen in one or both of:
 - Avoidance or efforts to avoid distressing memories, thoughts, feelings
 - Avoidance or efforts to avoid external reminders that arouse distressing memories
- Negative alterations in cognitions and mood associated with the trauma; seen in 2 or more of
 - Inability to remember important aspect of trauma
 - Persistent/exaggerated negative beliefs or expectations about self, others, world
 - Persistent distorted cognitions about cause or consequences of the trauma that lead to blame
 - Persistent negative emotional state
 - Markedly diminished interest or participation in significant activities
 - Detachment/estrangement from others
 - Inability to experience positive emotions

PTSD cont (3)

- Marked alterations in arousal and reactivity associated with the trauma, seen in 2 or more of
 - Irritable behavior and angry outbursts
 - Reckless or self destructive
 - Hypervigilance
 - Exaggerated startle response
 - Problems with concentration
 - Sleep disturbance
- All of these last more than a month and cause **significant distress or impairment**

Anxiety Disorders and Academic Performance

- PTSD current, childhood trauma related to grades, attrition in first year
 - Prospective studies of new trauma also predict grades after first year
- Anxiety disorders generally associated with poor academic performance and dropout
 - Both cross sectional and longitudinal studies
- Social anxiety does **not** typically predict GPA or attrition

Kessler et al (1995) Am J Psychiatry; Duncan (2000) J Interpers Violence; Sachdev & Read (2012) J Clinical Psy; Strahan (2005) PID

“Test Anxiety”

- When students report that symptoms of anxiety reduce their academic performance and prevent them from demonstrating their true abilities on an exam
- Note this is NOT the same as social anxiety
- May or may not be consistent with phobia/panic
- Cannot be due to lack of ability/preparation for the exam
 - How to document adequately prepared for exam?

DSM-5 Criteria for phobia

- Marked fear or anxiety about specific object or situation
- Phobic object/situation always provokes immediate fear/anxiety/panic
 - Not just chemistry exams for example
- Phobic object/situation actively avoided or endured with intense fear/anxiety
- Out of proportion to actual danger and context
 - Must be intense, severe, not normal fears that commonly occur
- Lasts 6 months or more
- Clinically significant distress or impairment

DSM criteria for panic attack

- Abrupt surge of intense fear or discomfort, reaches peak within minutes with 4 or more of
 - Heart palp, pounding, accelerated HR
 - Sweating
 - Trembling/shaking
 - SOB/smothering
 - Choking
 - Chest pain or discomfort
 - Nausea/abdominal distress
 - Dizziness/unsteady/lightheaded/faint
 - Chills/heat
 - Numbness/tingling
 - Derealization or depersonalization
 - Fear losing control or going crazy
 - Fear dying

Other specified and unspecified anxiety disorder

- Other specified: when does not meet full criteria but want to specify reason for using the “other” diagnosis, such as limited symptoms or not occurring more days than not
- Unspecified: when does not meet full criteria, when insufficient data to make a full diagnosis, but don’t want to specify.

Anxiety can be effectively treated

- CBT has large effect size on many types of anxiety (12-15 sessions typical course)
- CBT particularly effective for GAD, even short term (8-12 sessions)
- Psychological treatments for social anxiety are MORE effective than drugs
- PTSD also effectively treated with psychotherapy (CPT, PE) even brief
- Panic symptoms also effectively treated with CBT, even ultra brief (5 sessions)
- Computerized transdiagnostic treatments for CBT for showed medium ES for anxiety

Havassy et al (2018); Churchill et al (2017); Cass et al (2016); Kessler et al (2012); Furukawa et al (2017); Omer et al (2011); Mayhew et al (2014); Management of generalized anxiety disorder group (2012); Finkel & Lubkin (2017)

Implications

- Diagnosis could be mild or even not meet criteria (unspecified)
- Diagnosis does not require impairment at all
 - Could be just self-reported distress
- Anxiety disorders are very treatable, even in time-limited fashion
- Should impair BEYOND academic setting per se
- DIAGNOSIS IS NOT A DISABILITY
- Social anxiety specifically: likely that treatment would ask to engage in social evaluative situations
 - So avoidance of public speaking could be harmful to getting better!

OCD

- Presence of obsessions, compulsions, or both
 - Obsessions
 - Recurrent and persistent thoughts, urges or images that are intrusive and unwanted, cause anxiety or distress
 - Attempt to ignore, suppress, or neutralize them
 - Compulsions
 - Repetitive behaviors or mental acts that an individual feels driven to perform in response to an obsession or a rigid rule
 - Aimed at preventing or reducing anxiety or distress, or preventing a dreaded event or situation, BUT not connected in realistic way which what designed to neutralize or prevent, or are clearly excessive
- Time consuming or cause clinically significant distress or impairment

OCD and implications for academic functioning

- OC symptoms related to problems organizing, rewriting, obsessive to do lists, failure to complete tasks
- Accommodation implication: extended time might actually be BAD choice!
 - No research evidence one way or another
- OC symptoms are associated with lower grades.

Reynolds et al (2007), Underhill et al (2000), Gelfand, Gelfand (2004)

OCD is treatable

- Meta-analyses show
 - Significantly low attrition from treatments with CBT versus meds
 - Very strong effect sizes when compared to wait list and placebo and meds with placebo trials
 - For adults, even stronger ES than meds
 - Much higher rates of remission
- self-help can be helpful but appears some contact with therapist is necessary for large ES

Reynolds et al (2008), Liu, Du, Shephard et al (2018), Lerner, Psychiatry (Perry et al 2018)

Implications

- Diagnosis could be mild or even not meet criteria (unspecified)
- Diagnosis does not require impairment at all
 - Could be just self-reported distress
- OCD is very treatable, even in time-limited fashion
- Should impair BEYOND academic setting per se
- DIAGNOSIS IS NOT A DISABILITY

A few words about ADHD

- BR in college age at most 4%
- Very easily malingered
 - Rates from 10 to 40% of those who present for eval Many differential diagnoses should be considered (including many already discussed conditions that are treatable)
- **No evidence accommodations are effective**
- **There are interventions that could be effective**

Hartman & Biederman, 2010; Marshall et al 2010; Feller et al 2011; Saloner et al 2007; Kuhn et al 2004; Barkley et al., 2010; Biederman et al., 2011; Barkley et al., 2010; Miller et al., 2010; Leventhal et al 2010; Kohn et al 2017; Biederman et al 2018; Feller 2018; Biederman et al 2018

Major Points

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Labels and Diagnoses Can Be Harmful!

- Common Sense Model of Illness
 - Part 1: development of illness representations
 - Part 2: illness representations influence coping, behavior, and relate to outcome
- Belief in consequences and controllability (either personal or physician/treatment) predict outcomes
- Applied to ADHD
- Can also apply in psychological conditions
- Iatrogenesis

Take Home Messages

- Many psychological concerns affect university students' academic functioning
 - But many students have academic concerns without psychological difficulties, academic concerns caused by many other things
 - ADHD academic concerns lead to psychological symptoms but that does not necessarily indicate disorder, diagnosis, impairment, or disability
- Psychological concerns, symptoms, disorders are not equivalent to impairment/disability
 - Many are treatable
 - Many are overdiagnosed and ignore the impairment criterion
 - How do we assess impairment?
 - Measures of impairment can be misleading!
- There is no empirical basis for accommodations on the basis of psychological diagnosis
 - There is evidence that accommodations for individuals with ADHD are ineffective
- There is potential for stigma in labeling someone as impaired/disabled in need of accommodations
