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Frequency, Confidence, and Educational Satisfaction of Psychosocial Skills and Mental Health Recognition and Referral among Certified Athletic Trainers

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Frequency, Confidence, and Educational Satisfaction with Mental Illness Recognition and Referral among Certified Athletic Trainers

Context: Mental illness recognition and referral are required components of professional athletic training (AT) education however ATs often report feeling underprepared to assist with mental-health emergencies. **Objective:** Determine frequency and confidence of use, satisfaction of education related to mental illness recognition and referral. **Design:** Cross-sectional design. **Setting:** Online survey. **Patients or Other Participants:** 226 ATs (age=35.5±9.9, years of practice=11.9±9.0, 86 male/140 female). **Main Outcome Measure(s):** The independent variables were professional AT-program, professional psychosocial courses, highest-education, psychosocial CEUs, clinical-practice setting, years of experience. For each skill, individuals identified the average frequency with which the skill is performed each year, rated confidence in performing the skill, and rated satisfaction with professional-education related to the skill. **Results**: Anxiety was reported as most frequently recognized and referred. Majority of respondents reported they felt moderately/extremely confident in managing anxiety, panic attacks, depression, suicidal-ideation, and eating disorders but less confident or unconfident in managing psychosis and substance-use disorder. Majority of respondents reported feeling dissatisfied or only slightly satisfied with their education related to mental health recognition and referral. There were significant associations between years of clinical practice and self-reported frequency of referral for anxiety disorder ($\chi^2_{(87)}$=117.774, p=.016), and suicidal thoughts/actions ($\chi^2_{(87)}$=179.436, p<.001). For confidence there were significant positive associations between years of practice and self-reported recognition of anxiety disorders ($\chi^2_{145)}$=195.201, p=.003), referral for anxiety disorders ($\chi^2_{145)}$=15.655, p=.048), referral for panic attacks ($\chi^2_{145)}$=19.790,

p=.011). There were also significant associations between number of CEUs and **self-reported** confidence in recognizing suicide ($\chi^2_{(15)}$=26.650, p=.032), referring for suicidal concerns ($\chi^2_{(18)}$=40.456, p=.002), recognizing substance use ($\chi^2_{(18)}$=33.649, p=.014), and referring substance use ($\chi^2_{(18)}$=30.918, p=.029). There were no significant associations related to satisfaction. **Conclusions**: Significant associations indicated that ATs with fewer years of clinical practice (who completed professional programs more recently) reported higher confidence in mental health recognition and referral than those who had completed professional programs longer ago. We recommend that real-time interactions with individuals with mental health concerns or emergencies be incorporated into professional education programs, and increased emphasis on continuing education related to these topics.

Key Words: psychosocial intervention, psychosocial referral, mental health

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Key Points:

- Athletic trainers self-reported recognizing and referring patients with suspected anxiety disorders more frequently than any other skill related to mental health recognition and referral.
- Athletic trainers self-reported feeling more confident recognizing and referring patients with suspected anxiety, panic attacks, depression, suicidal ideation, and eating disorders and less confident recognizing and referring for suspected psychosis and substance use disorders.

- Increased emphasis on mental health recognition and referral is needed in professional athletic training education, and should be emphasized as part of continuing education requirements.

Injury in physically active individuals results in both physical and psychosocial impacts on the injured individual.[1–4] As the role of athletic trainers has expanded to emphasize holistic patient care, mental health recognition and referral have become required components of professional education programs. Both injured and uninjured patients struggle with mental health challenges and disorders, including anxiety disorders, mood disorders, eating disorders, substance use disorders, and psychotic disorders (such as schizophrenia).[5] It is important for athletic trainers to be able to recognize signs and symptoms of these disorders and to be confident in their ability to intervene and refer for suspected disorders or associated mental health emergencies (such as panic attacks, suicidal thoughts or actions, or self-harm).[6,7]

The 5th edition of the *Athletic Training Educational Competencies* (published in 2012) specifically included a Psychosocial Strategies and Referral (PS) content area,[8] with competencies and clinical integration proficiencies designed to ensure that athletic training students are exposed to learning situations that will increase their ability and confidence in providing psychosocial support to their patients. The 2020 Curricular Content Standards require students to be able to identify, refer, and give support to patients with mental health conditions.[9] However, competencies and curricular content standards are intentionally broad and are not prescriptive of how content should be instructed or evaluated. Previous studies have found decreased satisfaction with educational content related to these areas.[10,11] However, it has been over a decade since educational satisfaction in this content area has been evaluated.

As a result of decreased educational satisfaction, athletic trainers may lack confidence in their ability to recognize mental health concerns and make mental health referrals as part of their

clinical practice. In fact, research published over the past two decades repeatedly suggests that athletic trainers report feeling underprepared to assist with mental health emergencies in their patients.[10–13] Mental health disorders are extremely prevalent in the United States with 18.5% of the US adult population[14] and 22% of US adolescents[15] suffering from a mental health disorder in any given year. However, while athletic trainers may recognize when mental health intervention may be beneficial, they have limited ability to actually implement techniques and assess the need for mental health services for athletes.[12,13] While confidence in skill use has been evaluated previously, to our knowledge frequency of skill use related mental illness recognition and referral has never been evaluated.

Given the increasing prevalence of mental illness across all subsets of the US population it is important for athletic trainers to be confident recognizing common signs of mental health challenges and disorders, and in their ability to make appropriate referrals.[16] Therefore the purpose of our study was to determine frequency of psychosocial skill use, confidence in their skill ability, and satisfaction of educational preparation related to mental illness recognition and referral. Secondary purposes were to evaluate associations between frequency of use and years of practice, and practice setting; associations between confidence in ability and highest education, years of practice, and number of continuing education units; and associations between satisfaction in educational preparation and AT program type, and number of psychosocial courses taken during their professional program.

METHODS

Subjects

We invited athletic trainers who were National Athletic Trainers' Association (NATA) members and who had been in full-time clinical practice for at least 3 years to participate in this study. An online survey was delivered via the NATA Research Survey Service to 1500 ATs who met inclusion criteria. 226 ATs completed the survey (age=35.5±9.9, years of practice=11.9±9.0, 86 males/140 females, Table 1); this number exceeded our a priori sample size estimation of 143 participants (based on desired power of 0.8 for chi-square and correlations). The study was approved by our Institutional Review Board and informed consent was obtained electronically prior to participants being given access to the survey questions.

Instrumentation

The survey was a 57-item instrument consisting of 9 demographic questions (Table 1) and 48 questions on psychosocial skills and mental health intervention and referral (frequency of skill use, confidence in ability to use skill, and educational satisfaction related to skill were asked about 16 items; Table 2). For each skill, we asked individuals to identify the average frequency with which the skill is performed each year (options: <1, 1-2, 3-5, 6+), to rate their confidence in performing the skill (6-point Likert-scale: extremely-confident to extremely-unconfident), and to rate their satisfaction with their professional education related to the skill (6-point Likert-scale: extremely-satisfied to extremely-unsatisfied, or not learned).

- Sample frequency question: On average, with REAL PATIENTS how many times PER YEAR do you identify potential signs and symptoms of non-suicidal self-harm or self-injury (such as cutting, burning, non-lethal overdoses, etc)?

- Sample confidence question: How confident would you be identifying signs and symptoms of non-suicidal self-harm or self-injury in a REAL PATIENT today?
- Sample satisfaction question: How satisfied are you with your professional education (athletic training program) related to identifying signs and symptoms of non-suicidal self-harm or self-injury?

The instrument was validated by a panel of six external athletic trainers who are considered experts in psychosocial intervention and referral content within athletic training. Prior to dissemination in this study we pilot tested the instrument with 20 individuals who were not in the pool of potential participants and test-retest reliability was calculated. Pilot testing demonstrated strong test-retest reliability (all r>.8). Descriptive statistics are reported in Table 1. Average frequency, confidence, and satisfaction for each skill is provided in Table 2. Chi-square tests of independence were calculated to examine association between variables (frequency, confidence, satisfaction) and skill use. Spearman Rank correlations were used to examine relationships between frequency, confidence, and satisfaction (reported in Table 3).

RESULTS

Frequency

Anxiety disorder was the most frequently recognized and referred, followed by major depression and eating disorders. Suicide, non-suicidal self-injury (NSSI), and psychosis were recognized and referred the least (Table 2). Significant associations were identified between years of clinical practice and frequency of referral for suspected anxiety disorder ($\chi^2_{(87)}$=117.774, p=.016), and between years of clinical practice and frequency of referral for suicidal thoughts or actions

($\chi^2_{(87)}$=179.436, p<.001). In both cases ATs with more experience referred more frequently. There were no other significant associations between years of clinical practice frequency of other skill use.

Significant associations were identified between practice setting and frequency of referral for individuals experiencing panic attacks ($\chi^2_{(45)}$=67.532, p=.0016) and between practice setting and frequency of recognition of signs of NSSI ($\chi^2_{(30)}$=49.876, p=.013); in both cases ATs working in a hospital setting referred more frequently. There were also significant associations between practice setting and frequency of recognition of signs of potential substance use disorder ($\chi^2_{(45)}$=62.630, p=.042) with ATs in hospitals and physician-offices recognizing patients more frequently, and between practice setting and referral for suspected substance use disorder ($\chi^2_{(45)}$=89.776, p<.001) with ATs in industrial, military, and professional sports settings referring less frequently.

Confidence

The majority of ATs felt moderately or extremely confident in their ability to recognize and refer for suspected anxiety disorder, panic attack, major depressive disorder, suicidal ideation, and eating disorder, while they were less confident or unconfident in their ability to recognize and refer for psychosis and substance use disorder (Table 2).

There were significant associations between years of clinical practice and recognizing signs of potential anxiety disorders ($\chi^2_{145)}$=195.201, p=.003), referring patients for suspected anxiety disorders ($\chi^2_{145)}$=15.655, p=.048), and referring patients with panic attacks ($\chi^2_{145)}$=19.790,

p=.011), with individuals with fewer years of experience reporting higher confidence and those with more years of experience reporting lower confidence. There were no other significant associations between years of clinical practice and confidence in any skill.

Significant associations were also identified between number of CEUs related to psychosocial content, and recognizing suicide ($\chi^2_{(15)}$=26.650, p=.032), referring for suicidal concerns ($\chi^2_{(18)}$=40.456, p=.002), recognizing substance use ($\chi^2_{(18)}$=33.649, p=.014), and referring substance use($\chi^2_{(18)}$=30.918, p=.029); those reporting 4+ CEUs were more confident.

There were no significant associations between confidence and highest-education for any skill (p>.05).

Satisfaction

The majority of athletic trainers who self-reported being dissatisfied or only slightly satisfied with their education related to the use of mental health recognition and referral skills, with the exception of NSSI, eating disorder, and psychosis. Additionally, a substantial percentage (range: 19.7% - 26.3%) self-reported they had not learned about anxiety disorders, panic attacks, major depressive disorder, suicidal thoughts or actions, or NSSI at all (Table 2).

There were no significant associations between satisfaction and type of professional AT program for any skill (all p>.05), or between satisfaction and number of psychosocial courses for any skill (all p>.05).

Frequency, Confidence, and Satisfaction Correlations

For all mental illness recognition and referral skills (with the exception of psychosis) there was a strong, significant, positive correlation between frequency of use and confidence, in that higher frequency of skill use was correlated with higher levels of confidence (Table 3). There was a similar pattern for frequency and satisfaction, with strong, significant, positive correlations for nearly all skills with the exception of suicide, NSSI, eating disorders, and psychosis (Table 3). Finally, there were strong, significant, positive correlations between confidence and educational satisfaction for all skills (Table 3), however an examination of the distribution of confidence and satisfaction indicates that confidence values were higher than satisfaction values for all skills (Table 2).

DISCUSSION

Anxiety disorders were most frequently recognized and referred, which correlates with national data suggesting that anxiety disorders are the most prevalent mental health disorder in US adults and adolescents (18.1% and 31.9%, respectively).[14,17] However, panic attacks, which present in approximately 13% of the population,[18] were identified 2-3 times per year by the majority of participants (51.1%) but referred <1 time per year (48.9%). This may suggest a lack of knowledge about the importance of referral or perhaps a lack of comfort in making this type of referral.

The frequency with which suspected major depression was identified and referred seems on-par with reported prevalence rates (6.8% of US adults, 12.8% of US adolescents).[14,17] Additionally the frequency with which suicidal thoughts or actions were identified and referred were nearly

identical, indicating that clinicians were willing to refer for this mental health crisis. However, while the majority of individuals self-reported feeling confident in their ability to recognize and refer (83.9% and 83.2%, respectively), only about half self-reported feeling satisfied with their educational preparation related to suicide recognition and referral (51.5% and 47.4%, respectively). This may indicate the need for an increased focus in professional education programs related to recognition and referral for suicidal thoughts or actions. Related to non-suicidal self-injury (NSSI) the majority of individuals indicated identifying and referring <1 time per year (75.2% and 81.8%, respectively), however national statistics tell us that the lifetime prevalence of NSSI in adolescents and young adults is 15-20%, and in adults is ~6%.[19] This may indicate under recognition of NSSI in our patients and may suggest the need for increased educational focus on this topic.

The majority of participants self-reported being confident (88.4-89.1%) and satisfied with their education (97.8-98.5%) related to eating disorder identification and referral. Self-reported confidence in our study is higher than what has been reported previously, where only 27% of athletic trainers felt confident identifying a female patient with an eating disorder and only 38% felt confident asking a patient if she had an eating disorder.[20] Related to substance use disorder, in our sample the majority self-reported identifying and referring for substance use disorder <1 time per year (59.1% and 76.6%, respectively), despite the fact that 8.1% of US adults and 11.4% of US adolescents aged 13-18 have a diagnosable substance use disorder in any given year.[14,17] Among US college students the prevalence of substance use disorder is 39.6%.[21] Data from our study (with 64% of participants working in the college setting), paired with national

data on substance use disorder prevalence, may indicate that these disorders are being underrecognized and referred by athletic trainers.

Mental health disorders involving psychosis, including schizophrenia, are among the least prevalent mental health disorders (4.6 per 1000, or 0.46%),[22] however schizophrenia has a median age of onset of 27 years,[23] making initial presentation likely during the college years and early adulthood. While it is certainly possible that athletic trainers may never encounter an individual experiencing psychosis, it is important that they feel confident in their ability to recognize signs and symptoms and make an appropriate referral. Based on our sample, AT education programs are doing a good job related to this with 100% of the sample reporting they feel satisfied with their educational preparation, however only about half of the sample feel confident in their ability to identify and refer (51.5% and 51.8%, respectively). This underscores the need for additional training and continuing education related to mental health disorders.

While there were only a few significant associations, those that were significant indicated that athletic trainers with fewer years of clinical practice (who completed professional programs more recently) had more confidence than those who had completed professional programs longer ago. This may be the result of increased focus on psychosocial intervention and referral in newer editions of AT Educational Competencies.[8] Still, the majority of athletic trainers were dissatisfied or only slightly satisfied with their professional education. Given the frequencies that athletic trainers self-reported using skills, and that type of professional AT program and number of psychosocial courses taken was not related to educational satisfaction, programs at all levels should provide more practical education related to recognition and referral of mental health

conditions. Additionally, the large percentages of individuals who self-reported not learning about many mental health disorders as part of their professional programs should be of concern to the Commission on Accreditation of Athletic Training Education (CAATE) and the Board of Certification. Specifically, real-time interactions with individuals with mental health concerns or emergencies should be incorporated into professional education programs. This may be accomplished through preceptor education (encouraging preceptors to include athletic training students in conversations with patients about mental health concerns) and/or through standardized patient scenarios in the curriculum. Other interactive activities including exploratory counseling sessions, certification in mental health first aid and/or training in suicide prevention, and participation in a mental health standardized patient scenario have been shown to be effective at increasing awareness of, and empathy for, individuals living with mental illness,[24] and increasing athletic training students' critical thinking and confidence in their ability to recognize mental health concerns and make appropriate referrals.[24–29] Such activities would satisfy CAATE Curricular Content Standards 77 (identify, refer, and give support to patients with behavioral health conditions) and 94 (develop and implement procedures for identifying patients with behavior health problems and referring patients to qualified providers).[29] Reflective journaling following these interactive experiences has also been shown to support the development of critical thinking and prevention of negative patient outcomes.[24,30,31] It has been previously suggested that this type of reflective journaling meets CAATE Curricular Content Standard 67 related to self-assessment of professional competence.[24]

Limitations of our study include small sample size and uneven distribution of clinical practice settings and professional program type. The self-reported nature of the data collected was also a

limitation. Frequency of skill use could be validated by cross-referencing patient charts over a given period of time. Future research should look to increase the sample size with the goal of more equal representation of various professional settings in order to confirm significant findings and trends identified in this study and should also examine how mental health competencies are being implemented successfully in AT programs to increase confidence in skill use and satisfaction with educational preparation.

Conclusions

Athletic trainers are reporting high frequency of use for mental health identification and referral skills however a large subset of our sample was dissatisfied with their professional education related to these topics**.** While it seems that professional AT education has improved related to mental illness, especially related to recognition and referral for anxiety disorders, major depression, and eating disorders, it is still not adequately preparing athletic trainers for clinical practice, given the prevalence of mental illness in our current society. Athletic training professional education programs and continuing education programming should emphasize interactive experiences, including practical, real-time interactions or simulations related to recognition and referral of mental health conditions.

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Table 1: Demographics

Total n	Age (mean ± SD)	Gender	Years of Clinical Practice (mean ± SD)	Practice Setting	Program Type	# Psych. Courses (n, %)	Highest Education	# Psych CEUs † (n, %)
226	35.5 ± 9.9	86 male, 140 female	11.9 ± 9.0	Middle / High School: 45 (19.9%) Clinic/Hospital/ Physician Office: 7 (3.1%) College: 145 (64.2%) *Other: 24 (10.7%)	BS BA: 180 MS/MA: 24 Internship: 22	0: 21 (9.3%) 1: 86 (38.1%) 2: 80 (35.4%) 3+ 39 (17.3%)	BS/BA: 17 Some MS/MA: 3 MS/MA: 178 Some Doctoral: 19 Clinical Doctorate: 6 Terminal Doctorate: 3	0: 18 (8%) 1-3: 77 (34.1%) 4-5: 70 (31%) 6+: 61 (27%)

†Number of CEUs in the past 5 years
*Other: industrial (n=5, 2.2%), military (n=4, 1.8%), performing arts (n=4, 1.8%), other (n=11, 4.9)

Table 2. Frequency, Confidence, and Satisfaction of Psychosocial Skills Use (percentage for each category)

Skill	Frequency	Confidence	Satisfaction
Identifying s/s of suspected anxiety disorder	<1 time: 10.2 1-2 times: 30.7 3-5 times: 32.8 6+ times: 26.3	Extremely confident: 21.9 Moderately confident: 48.2 Slightly confident: 21.2 Slightly unconfident: 5.8 Moderately unconfident: 2.9	Extremely satisfied: 7.3 Moderately satisfied: 27.7 Slightly satisfied: 14.6 Slightly dissatisfied: 20.2 Moderately dissatisfied: 5.1 Extremely dissatisfied: 4.4 Not learned: 19.7
Initiate mental health referral for suspected anxiety disorder	<1 time: 26.3 1-2 times: 40.1 3-5 times: 21.9 6+ times:11.7	Extremely confident: 35.0 Moderately confident: 43.8 Slightly confident: 16.1 Slightly unconfident: 4.3 Moderately unconfident: 0.7	Extremely satisfied: 11.7 Moderately satisfied: 24.8 Slightly satisfied: 17.5 Slightly dissatisfied: 15.4 Moderately dissatisfied: 6.6 Extremely dissatisfied: 3.6 Not learned: 20.4

Identifying s/s of suspected panic attack	<1 time: 27.0 1-2 times: 51.1 3-5 times: 15.3 6+ times: 6.6	Extremely confident: 29.9 Moderately confident: 41.6 Slightly confident: 21.2 Slightly unconfident: 6.5 Moderately unconfident: 0.7	Extremely satisfied: 10.9 Moderately satisfied: 20.4 Slightly satisfied: 16.8 Slightly dissatisfied: 21.0 Moderately dissatisfied: 6.6 Extremely dissatisfied: 3.6 Not learned: 22.6
Initiate mental health referral for suspected panic attacks	<1 time: 48.9 1-2 times: 35.8 3-5 times: 11.7 6+ times: 3.6	Extremely confident: 27.7 Moderately confident: 36.5 Slightly confident: 24.8 Slightly unconfident: 9.4 Moderately unconfident: 1.5	Extremely satisfied: 10.2 Moderately satisfied: 18.2 Slightly satisfied: 21.2 Slightly dissatisfied: 16.8 Moderately dissatisfied: 5.8 Extremely dissatisfied: 1.5 Not learned: 26.3
Identifying s/s of suspected major depressive disorder	<1 time: 35.0 1-2 times: 49.6 3-5 times: 10.9 6+ times: 4.4	Extremely confident: 23.4 Moderately confident: 41.6 Slightly confident: 26.3 Slightly unconfident: 3.6 Moderately unconfident: 2.2 Extremely unconfident: 2.9	Extremely satisfied: 10.9 Moderately satisfied: 24.8 Slightly satisfied: 13.9 Slightly dissatisfied: 19.7 Moderately dissatisfied: 5.1 Extremely dissatisfied: 5.8 Not learned: 19.7

Initiate mental health referral for suspected major depressive disorder	<1 time: 54.7 1-2 times: 36.5 3-5 times: 6.6 6+ times: 2.2	Extremely confident: 24.1 Moderately confident: 38.0 Slightly confident: 24.1 Slightly unconfident: 9.4 Moderately unconfident: 2.2 Extremely unconfident: 2.2	Extremely satisfied: 10.2 Moderately satisfied: 19.7 Slightly satisfied: 20.4 Slightly dissatisfied: 18.1 Moderately dissatisfied:5.8 Extremely dissatisfied: 5.8 Not learned: 21.9
Identifying s/s of suspected suicidal thoughts or actions	<1 time: 70.8 1-2 times: 27.7 3-5 times: 1.5	Extremely confident: 17.5 Moderately confident: 41.6 Slightly confident: 24.1 Slightly unconfident: 11.6 Moderately unconfident: 5.1	Extremely satisfied: 8.1 Moderately satisfied: 21.3 Slightly satisfied: 22.1 Slightly dissatisfied: 17.0 Moderately dissatisfied: 5.9 Extremely dissatisfied: 6.6 Not learned: 19.1
Initiate mental health referral for suspected suicidal thoughts or actions	<1 time: 75.2 1-2 times: 23.4 3-5 times: 0.7 6+ times: 0.7	Extremely confident: 25.5 Moderately confident: 38.7 Slightly confident: 19.7 Slightly unconfident: 11.7 Moderately unconfident: 2.9 Extremely unconfident: 1.5	Extremely satisfied: 8.0 Moderately satisfied: 20.4 Slightly satisfied: 19.0 Slightly dissatisfied: 19.0 Moderately dissatisfied: 5.8 Extremely dissatisfied: 6.6 Not learned: 21.2

Identifying s/s of non-suicidal self-harm or self-injury	<1 time: 75.2 1-2 times: 21.2 3-5 times: 3.6	Extremely confident: 13.1 Moderately confident: 37.2 Slightly confident: 27.2 Slightly unconfident: 17.6 Moderately unconfident: 3.6 Extremely unconfident: 0.7	Extremely satisfied: 13.1 Moderately satisfied: 37.2 Slightly satisfied: 8.7 Slightly dissatisfied: 17.6 Moderately dissatisfied: 3.6 Extremely dissatisfied: 0.7 Not learned: 19.7
Initiate mental health referral for non-suicidal self-harm or self-injury	<1 time: 81.8 1-2 times: 16.8 3-5 times: 1.5	Extremely confident: 19.0 Moderately confident: 38.7 Slightly confident: 24.1 Slightly unconfident: 12.4 Moderately unconfident: 2.9 Extremely unconfident: 2.9	Extremely satisfied: 19.0 Moderately satisfied: 38.7 Slightly satisfied: 5.1 Slightly dissatisfied: 12.4 Moderately dissatisfied: 2.9 Extremely dissatisfied: 2.9 Not learned: 19.7
Identifying s/s of suspected eating disorder	<1 time: 47.1 1-2 times: 42.6 3-5 times: 8.1 6+ times: 2.2	Extremely confident: 21.9 Moderately confident: 44.5 Slightly confident: 22.6 Slightly unconfident: 10.2 Moderately unconfident: 0.7	Extremely satisfied: 47.1 Moderately satisfied: 42.6 Slightly satisfied: 8.1 Slightly dissatisfied: 2.2

Initiate mental health referral for suspected eating disorder	<1 time: 54.7 1-2 times: 39.4 3-5 times: 4.4 6+ times: 1.5	Extremely confident: 26.3 Moderately confident: 40.9 Slightly confident: 21.2 Slightly unconfident: 9.4 Moderately unconfident: 1.5 Extremely unconfident: 0.7	Extremely satisfied: 54.7 Moderately satisfied: 39.4 Slightly satisfied: 4.4 Slightly dissatisfied: 1.5
Identifying s/s of suspected psychosis	<1 time: 96.4 1-2 times: 3.6	Extremely confident: 4.4 Moderately confident: 17.5 Slightly confident: 29.2 Slightly unconfident: 30.7 Moderately unconfident: 9.5 Extremely unconfident: 8.8	Extremely satisfied: 96.4 Moderately satisfied: 3.6
Initiate mental health referral for suspected psychosis	<1 time: 97.8 1-2 times: 2.2	Extremely confident: 10.2 Moderately confident: 16.8 Slightly confident: 24.8 Slightly unconfident: 29.9 Moderately unconfident: 8.0 Extremely unconfident: 10.2	Extremely satisfied: 97.8 Moderately satisfied: 2.2

Identifying s/s of suspected substance use disorder	<1 time: 59.1 1-2 times: 29.9 3-5 times: 6.6 6+ times: 4.4	Extremely confident: 13.9 Moderately confident: 40.9 Slightly confident: 25.5 Slightly unconfident: 16.1 Moderately unconfident: 2.9 Extremely unconfident: 0.7	Extremely satisfied: 59.1 Moderately satisfied: 29.9 Slightly satisfied: 6.6 Neutral: 4.4
Initiate mental health referral for suspected substance use disorder	<1 time: 76.6 1-2 times: 19.0 3-5 times: 2.2 6+ times: 2.2	Extremely confident: 16.1 Moderately confident: 34.3 Slightly confident: 27.0 Slightly unconfident: 16.1 Moderately unconfident: 3.6 Extremely unconfident: 2.9	Extremely satisfied: 76.6 Moderately satisfied: 19.0 Slightly satisfied: 2.2 Neutral: 2.2

Table 3. Spearman Rank Correlations for Frequency, Confidence, Satisfaction

Item	Frequency and Confidence	Frequency and Satisfaction	Confidence and Satisfaction
Signs of Anxiety Disorder	r=.427, p<.001	r= .161, p=.027	r= .454, p<.001
Refer for Anxiety Disorder	r= .539, p<.001	r= .190, p=.009	r= .408, p<.001
Signs of Panic Attack	r= .369, p<.001	r= .148, p=.042	r= .438, p<.001
Refer for Panic Attack	r= .485, p<.001	r= .175, p=.016	r= .439, p<.001
Signs of Major Depression	r= .417, p<.001	r= .161, p=.027	r= .538, p<.001
Refer for Major Depression	r= .516, p<.001	r= .316, p<.001	r= .490, p<.001
Signs of Suicide	r= .275, p<.001	r= .057, p=.439	r= .434, p<.001
Refer for Suicide	r= .290, p<.001	r= .006, p=.936	r= .424, p<.001
Signs of NSSI	r= .282, p<.001	r= .085, p=.245	r= .558, p<.001
Refer for NSSI	r= .313, p<.001	r= .143, p=.050	r= .473, p<.001
Signs of Eating Disorder	r= .344, p<.001	r= .056, p=.447	r= .612, p<.001
Refer for Eating Disorder	r= .358, p<.001	r= .140, p=.054	r= .550, p<.001
Signs of Psychosis	r= .130, p=.074	r= .127, p=.083	r= .697, p<.001
Refer for Psychosis	r= .123, p=.093	r= .154, p=.034	r= .626, p<.001
Signs of Substance Use Disorder	r= .286, p<.001	r= .230, p=.001	r= .582, p<.001
Refer for Substance Use Disorder	r= .346, p<.001	r= .290, p<.001	r= .607, p<.001