

## Empirical Articles

# Alexithymia and Help-Seeking Attitudes in College-Aged Students

Alexitimia e Atitudes de Procura de Ajuda em Estudantes Universitários

Catarina L. Carosa\*<sup>a</sup>, Amy L. Button<sup>a</sup>

[a] Psychology Department, Alfred University, Alfred, NY, USA.

## Abstract

**Aim:** This epidemiological study focused on prevalence of the personality trait, alexithymia – the inability to recognize and describe one's own emotions – among college-aged students.

**Method:** Levels of normative alexithymia (measured by the NMAS), clinical alexithymia (measured by the TAS), as well as attitudes towards help seeking behavior (measured by the ATSPPH) were assessed.

**Results:** A total of 547 participants were collected from over 48 colleges and universities, primarily in Western New York. Results indicated that 89.5% of college students displayed moderate to high levels of normative alexithymia and 48.7% displayed moderate to high levels of clinical alexithymia. Additionally, there were no significant differences between the scores of men and women on either alexithymia measure. Significant findings indicated that there was a positive relationship between clinical alexithymia scores and attitudes toward help-seeking.

**Conclusion:** These results call into question previous literature, which states that there is no correlation between alexithymia and help-seeking behavior (Berger et al., 2005, <https://doi.org/10.1037/1524-9220.6.1.73>). The results of this study suggest a shift in culture, as well as a need for more research regarding alexithymia.

*Keywords:* gender, alexithymia, mental health, college students

## Resumo

**Objetivo:** Este estudo epidemiológico focou-se na prevalência do traço de personalidade alexitimia – incapacidade de reconhecer e descrever as próprias emoções – entre estudantes em idade universitária.

**Método:** Níveis de alexitimia normativa (medidos através do NMAS), alexitimia clínica (medida através do TAS), assim como atitudes em relação a comportamentos de procura de ajuda (medidos através do ATSPPH) foram medidos.

**Resultados:** Foram incluídos um total de 547 participantes de 48 colégios e universidades, maioritariamente da zona Ocidental de Nova Iorque. Os resultados indicaram que 89.5% dos estudantes universitários apresentaram níveis moderados a elevados de alexitimia, e 48.7% apresentaram níveis moderados a elevados de alexitimia clínica. Adicionalmente, não foram encontradas diferenças significativas entre os resultados de homens e mulheres em ambas as medidas de alexitimia. Os resultados significativos indicaram a existência de uma relação positiva entre resultados clínicos de alexitimia e atitudes em relação à procura de ajuda.

**Conclusão:** Estes resultados questionam a literatura existente, que afirma não existir correlação entre alexitimia e comportamentos de procura de ajuda (Berger et al., 2005, <https://doi.org/10.1037/1524-9220.6.1.73>). Os resultados deste estudo sugerem uma mudança cultural, bem como a necessidade de mais investigação na área da alexitimia.

*Palavras-Chave:* género, alexitimia, saúde mental, estudantes universitários

Psychology, Community & Health, 2020, Vol. 8(1), 204–218, <https://doi.org/10.5964/pch.v8i1.323>

Received: 2019-06-22. Accepted: 2019-10-13. Published (VoR): 2020-04-09.

Handling Editor: Alexandra Ferreira-Valente, William James Centre for Research (WJCR), ISPA-Instituto Universitário, Lisbon, Portugal

\*Corresponding author at: 1 Saxon Dr. Alfred, NY 14802. E-mail: [Catarina.carosa@gmail.com](mailto:Catarina.carosa@gmail.com)



This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International License, CC BY 4.0 (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Mental disorders in the United States are not a rare occurrence. In 2013, the National Institute of Mental Health (NIMH, 2013) estimated that 26.2% of Americans 18 years or older had a diagnosable mental disorder and about 6% suffered from a serious mental illness. While this 26.2% may seem high, the number of Americans who actually receive treatment for their mental disorder is only about half, which is extremely low (Substance Abuse and Mental Health Services Administration, 2015). Health insurance not covering the cost of treatment and perceived stigma both contribute largely to help-seeking behavior (Clement et al., 2015; Vogel, Wester, & Larson, 2007), but what if the reason for not seeking help is not that simple? What if these individuals are not able to explain or understand what they are feeling?

## Alexithymia

While working with patients with psychosomatic diseases, Sifneos noted that some of them mentioned experiencing symptoms of anxiety or depression. When specifically asked to describe the symptoms, however, they could not explain what they were feeling. They spoke of the physical sensations they felt but not the actual emotions. For example, anxiety was described as nervousness, agitation, restlessness, irritability and tension (Sifneos, 1967). In 1973, Sifneos officially coined the term *alexithymia*. Translated from Greek origins, alexithymia literally means “without words for emotions” (Levant, Allen, & Lien, 2014, p. 324). Defined as having trouble identifying emotions, not being able to distinguish between emotions and bodily sensations, and difficulty describing one’s emotions to others, this trait is present in both non-clinical and clinical samples (Levant et al., 2006). Alexithymia is associated with impaired verbal and nonverbal recognition of emotions. When comparing groups with high levels of alexithymia versus low levels, researchers found that the higher level group were less accurate in their recognition of emotions. This is particularly true for the emotions of anger and fear, which had the lowest accuracy scores (Montebarocci, Surcinelli, Rossi, & Baldaro, 2011).

It is important to note that while alexithymia is associated with diminished recognition of emotions, individuals with alexithymia do have and feel emotions; they just cannot describe or understand them. Sifneos’ patients who were identified as having alexithymia displayed emotions, but they had little information about their feelings and were unable to link these emotions with memories (Taylor, Bagby, & Parker, 1997).

Not surprisingly, alexithymia has been shown to be more common among men than women (Levant, Hall, Williams, & Hasan, 2009). As part of the Fatherhood Project, where his mission was to help men become more comfortable with identifying and expressing their emotions to become better fathers, Levant observed alexithymia in nonclinical male participants (Gresko, 2015; Levant et al., 2014). After observation, he offered the *normative male alexithymia hypothesis* to explain the restricted identification and recognition of emotions that is influenced by traditional male ideology (Levant et al., 2014). Specifically, he indicated that young men are instructed to suppress emotional expression, but the severity of such lessons results in a range of levels associated with this condition.

Alexithymia may be a reason that individuals, especially men, do not seek treatment (Levant et al., 2009). Further, because therapy primarily focuses on exploration of emotions, men who have this trait may have a difficult time engaging in therapeutic tasks. This may lead to negative perceptions and attitudes toward treatment (Cusack, Deane, Wilson, & Ciarrochi, 2006). In contrast, Berger, Levant, McMillan, Kelleher, and Sellers (2005) claim that there is no correlation between alexithymia and men’s help-seeking behavior. These researchers state that gender role conflict and traditional masculine ideology play a more significant role in

negative attitudes towards help-seeking. Consequently, additional research is needed to determine whether help-seeking behavior is impacted by characteristics of alexithymia.

Furthermore, with the exception of a few examples, concrete, empirically-based techniques to help people who have alexithymia are lacking. There is very little research on how therapists can help their clients who show signs of this trait. However, to help his patients overcome alexithymia, [Levant \(1992\)](#) focused on expanding their vocabulary with regard to vulnerable emotions. More recent research suggests that helping individuals with alexithymia construct words to describe difficult situations, understand feelings of the situation, and then, learn how to respond emotionally have been effective in improving their ability to deal with problems ([Vanheule, Verhaeghe, & Desmet, 2011](#)). In turn, this may result in more effective treatment of related mental illnesses or other difficulties since the clients will be able to more effectively talk about and describe what they are feeling.

## Gender and Emotions

As is implied by the socialization process accounted for in the normative male alexithymia hypothesis ([Levant et al., 2006](#)), it is not surprising that alexithymia is more commonly detected in men ([Levant et al., 2009](#)). It is debated, however, whether men and women differ in their ability to identify feelings, a common indication of alexithymia. [Pérusse, Boucher, and Mylene \(2012\)](#) report no difference while [Levant, Hall, Williams, and Hasan \(2009\)](#) indicate that men have a much more difficult time identifying feelings than women.

Identification of feelings is likely to be impacted by the emotional socialization of young boys by their parents and peers ([Feder, Levant, & Dean, 2010](#); [Levant et al., 2006](#)) and is sometimes referred to as the *boy code*: the rules and expectations for boys that come about due to gender stereotypes ([Pollack, 1998](#)). These spoken or unspoken rules seem to be heavily influenced by paternal figures. Fathers teach their children about sex-roles much more than mothers do, and they start these lessons at early ages ([Langlois & Downs, 1980](#)). Along the same lines, [Devine \(2018\)](#) found that when looking at the interactions with sons versus daughters, both parents were more elaborative and encouraging with their daughters than sons except when it came to negative emotions. Research shows that boys block themselves from feeling vulnerable emotions because they are made to feel ashamed for having these emotions by their parents and peers ([Feder et al., 2010](#)). Consequently, boys learn to be less expressive and more controlling of emotions as they develop. By the ages of four to six years, young boys learn to hide their responses to emotion ([Buck, 1977](#)).

Given the emotional development of most boys throughout their childhood and adolescence, it is not surprising that men often find it difficult to find words to describe their emotions. Research shows that this development continues as boys get older. In a sample of college-aged students, men were more emotionally restricted and possessed less open attitudes to emotions than women ([Komiya, Good, & Sherrod, 2000](#)). Consistent with when they are young, men continue to be socialized to restrict their vulnerable emotions as they grow older. [Lynch, Long, and Moorhead \(2018\)](#) found that there is a lack of conversation with family and friends about mental health with this same age group which in turn leads to perceptions that mental health problems are socially undesirable. Additionally, inhibiting and regulating emotions when around others is a social norm for men and when a man does not follow these norms, they experience a threat to their manhood ([Vandello & Bosson, 2013](#)). As a result, instead of outwardly showing emotions, men tend to logically think about what they are feeling. They view vulnerable emotions (i.e., sadness or fear) as meant only for women ([Levant et al., 2006](#)).

## Help-Seeking Behavior

Research has shown that the contrast between the roles and responsibilities of men and women, as well as their biological differences, contribute to the variation in mental health problems they suffer from and whether they actively seek help or not. Specifically, men are more likely than women to seek care at a later point after the onset of their symptoms. They might even delay until the symptoms become extremely severe (World Health Organization, 2002).

Traditional ideas of the man's role in society, concern over expressing affection toward other men, and concern about expressing emotions in general are all reasons why men have more negative attitudes about seeking professional psychological help (Good, Dell, & Mintz, 1989). Age also seems to play a role in attitudes toward help-seeking behavior. The older men are, the more positive attitudes they have towards seeking psychological help (Berger et al., 2005). Low mental health literacy, stigma, and not being able to physically see or touch what they are feeling are additional barriers to help seeking for men (Lynch et al., 2018). Contrastingly, the need for success, power, and competition does not seem to play a role in men's help-seeking attitudes (Good et al., 1989).

Researchers suggest that men might be more likely to seek psychological help if it is thinking-focused rather than feeling-focused (Berger et al., 2005). Since men associate feelings with being feminine, cognitive-oriented, rather than emotion-oriented, counseling techniques could help men be more open and have positive attitudes towards therapy (Wisch, Mahalik, Hayes, & Nutt, 1995). Additionally, cognitive approaches focus more on problem solving skills than other approaches, which is preferable to men, especially those who have high gender role conflict (Wisch et al., 1995). Recent research has reported that increasing mental health literacy and small group based programs may additionally encourage more men to seek help (Lynch et al., 2018).

Other factors, besides gender, may also contribute to attitudes toward help-seeking. Depending on a person's diagnosis, there are different reported rates of treatment use. According to the NIMH (2015), more than half of individuals diagnosed with a mood disorder (i.e., depressive and bipolar disorders; 56.4%) or post-traumatic stress disorder (57.4%) are receiving treatment. The rates are less for anxiety disorders (42.2%), personality disorders (39%), and eating disorders (anorexia nervosa, 33.8%; binge eating disorder, 43.6%; bulimia nervosa, 43.2%). Obsessive-compulsive disorder, dissociative disorder, attention deficit hyperactivity disorder, and autism spectrum disorder treatment rates were not reported (NIMH, 2015).

Among college students specifically, only 40.4% of individuals seek treatment (NIMH, 2008). Students report that lack of time, privacy concerns, lack of emotional openness, and financial constraints as barriers to seeking treatment (Hunt & Eisenberg, 2010). Stigma has also been reported as a key factor in why students may have more negative attitudes toward seeking help (Eisenberg, Downs, Golberstein, & Zivin, 2009).

## Present Study

It is important to provide more research regarding alexithymia and its possible connection with help seeking. Doing so may help improve treatment for individuals who are seeking counseling and also have this trait. Additionally, it may help us understand whether people with this trait may be more or less likely to seek counseling. The first necessary step, which was addressed in this study, was to determine the prevalence of alexithymia in college-aged students and the relationship between alexithymia and attitudes towards help-seeking. To our

knowledge, only two previous studies report prevalence rates of alexithymia in the general population in the United States. One, using the Toronto Alexithymia Scale (TAS), reported prevalence rates of clinical alexithymia (13.4% high alexithymia and 18.4% moderate alexithymia; Lane et al., 1996). The second, also using the TAS, reported that out of 234 college students, 12.4% had alexithymia (Schuetz & Multon, 2017). It is important to consider studies that have reported prevalence rates of alexithymia in countries outside the United States as well when creating a hypothesis. Research conducted in Finland showed that alexithymia is estimated to affect 13% of the general population (Salminen et al., 1999). An 11-year follow-up study reported alexithymia to be a stable personality trait in the Finnish population (Toimunen et al., 2011). Additionally, research in Spain showed that there was a significant percentage of young people who have high levels of alexithymia (24.1%) although there were not significant differences between men and women (Galván, 2014). Alexithymia has also been shown to be more prevalent in women in clinical samples (de Barros, Furlan, Marques, & de Araujo Filho, 2018) but to our knowledge, has not been studied in a college sample. In this study, it was hypothesized that alexithymia, at both the normative and clinical levels, would be prevalent among college students and rates would be similar to the United States rates mentioned above. Additionally, while there is a plethora of research that states that normative alexithymia is more common in men (e.g., Levant et al., 2006), there have not been any exact prevalence rates reported. When comparing genders, it was hypothesized that there would be a larger number of men than women at both levels, which is based on previous research findings, as well as the nature of the trait.

The relationship between alexithymia and help-seeking behavior was varied in the literature; so, further assessment was warranted. The current study assessed attitudes, not behaviors, but attitudes are an indication of whether or not an individual will perform that behavior (Fazio & Williams, 1986). The present researchers predicted that higher alexithymia scores would result in negative attitudes towards help-seeking since therapy is often perceived to be focused on emotions and people with higher levels of this trait have difficulty identifying and describing emotions (Berger et al., 2005).

## Method

### Participants

Data was collected for the present study from 619 college-aged students. The total sample size was reduced to 547 due to exclusion of participants who: had missing data, completed the survey twice, were not between the ages of 18 to 24 years, or did not identify as a man or woman. The participants (ages 18–24,  $M = 19.77$ ,  $SD = 1.544$ ) were from various postsecondary institutions, mostly located in the Western New York region. The majority of students (47.1%) were enrolled in medium program master's colleges and universities as according to the Carnegie Classification system (Carnegie Foundation for the Advancement of Teaching, 2015). Of the total sample, 171 participants identified as men and 376 as women. Nearly 80% identified as white, 7.3% as black or African American, 6% as Hispanic or Latino, 3.7% as Asian/ Pacific Islander, 2% as bi-racial, 1.1% as Native American, and 0.4% as other. Class year of participants was indicated as follows: 32.3% first year, 20.7% second year, 24.8% third year, 17.8% fourth year, 2% fifth+ year of undergraduate coursework, and 2.4% graduate students. Using the New York State Department of Education (2010) college major classification system, psychology was the most popular major (30.2%) among our sample. Over 7% of students reported being diagnosed with a mental illness in the previous 12 months and 24.2% reported being diagnosed in their

lifetime for a total of 31.7% answering *yes* to having a diagnosis. The remaining participants answered *no* (66.6%) or *unsure* (1.7%) to the question regarding diagnosis. The most prevalent diagnoses were anxiety (22.9%) and depressive disorders (18.5%). Approximately 7% of the participants had ADHD, 3.5% disclosed an eating disorder, and 2.7% endorsed the presence of PTSD. Each of the remaining disorders was endorsed by less than 2% of the total sample (see Table 1).

Table 1

*Prevalence of Mental Illness Diagnosis Among Sample*

Diagnosis	<i>n</i>	%
ADHD	40	7.3
Anxiety Disorder	125	22.9
Autism Spectrum Disorder	6	1.1
Bipolar Disorder	8	1.5
Borderline Personality Disorder	5	0.9
Depression	101	18.5
Dissociative Disorder	2	0.4
Eating Disorder	19	3.5
Obsessive Compulsive Disorder	10	1.8
Post-Traumatic Stress Disorder	15	2.7
Schizophrenia	0	0
Prefer not to Disclose	1	0.2
Other Disorder	5	0.9

Participants were recruited through a variety of methods. At one small western New York university, recruitment involved the Introduction to Psychology participant pool and an e-mail was sent through the university's residence life office to all of the students living on campus requesting participation. Additionally, several other western New York postsecondary institutions were asked to send the survey to their students. The survey link was also shared on social media (i.e., Twitter and Facebook) as well as posted on the Psi Chi National Honor Society website and on a national Social Psychology database.

## Measures

### Toronto Alexithymia Scale (TAS)

The TAS (Bagby et al., 1994) is a 20-item inventory used to assess clinical alexithymia by measuring 3 factors: difficulty identifying feelings, difficulty describing feelings, and externally-oriented thinking. It uses a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) and scoring for 5 of the questions is reversed. This results in a total score and is interpreted as follows: higher scores indicate higher levels of alexithymia and lower scores indicate lower levels of alexithymia. Scoring at or above 61 means the participant has high alexithymia (i.e., alexithymia), and a score at or below 51 means low alexithymia (i.e., non-alexithymia). The TAS has good consistency and reliability ( $\alpha = .86$ ,  $r = .77$ ; Bagby, Ayeart, Morariu, Watters, & Taylor, 2014).

### Normative Male Alexithymia Scale (NMAS)

The NMAS (Levant et al., 2006) is a 14-item self-report measure that uses a 7-point Likert scale to assess normative male alexithymia, which is known as a milder form of alexithymia. The scale ranges from 1 (*strongly disagree*) to 7 (*strongly agree*). It was initially developed for assessing men, but can also be used on women,

and has been used on women several times in the past (Levant et al., 2006). To obtain the total score, seven items must be reversed. The sum of the responses is then divided by 20 for the mean item score, or total score. Higher scores on the NMAS indicate higher levels of normative male alexithymia and lower scores indicate lower levels of normative male alexithymia. The NMAS has shown good internal consistency ( $\alpha = .92$ ) and good test-retest reliability ( $r = .91$ ; Levant et al., 2006).

### Attitudes Toward Seeking Professional Psychological Help (ATSPPH)

The ATSPPH (Fischer & Turner, 1970) is a 29 item self-report measure used to assess help-seeking attitudes. The 4-point Likert scale ranges from 0 (*disagreement*) to 3 (*agreement*). High scores indicate positive attitudes toward seeking help and low scores indicate negative attitudes toward seeking help. The ATSPPH has good internal consistency ( $.83 < \alpha < .90$ ; Fischer & Turner, 1970; Hatchett, 2006).

### Procedure

After the study was approved through the University's Institutional Review Board, data collection began through an online program. A hyperlink to the study was provided in the invitations to participate. Before beginning, participants were asked to consent online by typing their name after reading the form. After consenting to participate, college-age students answered several demographic questions and were asked if they had ever been diagnosed with a mental illness. Specification of particular diagnoses was asked if the respondents reported the presence of a mental illness. Participants were then asked to complete three self-report measures respectively: the NMAS, TAS, and lastly, the ATSPPH. After completion of all three surveys, a debriefing statement and the opportunity to receive compensation was presented. The total amount of time to complete the forms and questionnaires was 20 to 30 minutes.

Upon completion of the survey, participants were asked if they would like to receive a \$1.00 gift card to Amazon as compensation. Psychology students from particular institutions were offered either class credit or the gift card. Regardless of whether they received class credit or the gift card, all participants were also asked if they wanted to be entered in a drawing for a \$5.00 Amazon gift card.

## Results

Nearly 50% of the participants in this study had moderate or high alexithymia, as measured by the TAS. Additionally, approximately 90% had moderate or high levels of normative alexithymia, as measured by the NMAS (see Table 2).

Table 2

*Prevalence of Alexithymia in College-Aged Students*

Level of Alexithymia	Clinical <i>N</i> = 534		Normative <i>N</i> = 534	
	<i>n</i>	%	<i>n</i>	%
Low	274	51.3	56	10.5
Moderate	115	21.5	370	69.3
High	145	27.2	108	20.2

*Note.* Clinical = Toronto Alexithymia Scale; Normative = Normative Alexithymia Scale.

The relationships between both alexithymia measures and gender yielded similar results. Using cross tabulation, results indicate little variation between the scores of men and women on the TAS or the NMAS (see Table 3). A chi-square test showed that neither normative alexithymia,  $\chi^2(2) = 2.135, p = .344$ , nor clinical alexithymia,  $\chi^2(2) = 2.063, p = .356$ , showed a significant gender difference.

Table 3

*Prevalence of Alexithymia in College-Aged Students Across Genders*

Gender	Clinical						Normative					
	Low		Moderate		High		Low		Moderate		High	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Men	80	43.7	42	24.9	47	27.8	14	8.4	122	73.5	30	18.1
Women	194	53.2	73	20	98	26.8	42	11.4	248	67.4	78	21.2

Note. Clinical = Toronto Alexithymia Scale; Normative = Normative Alexithymia Scale.

Analyses regarding the relationship between alexithymia scores and help-seeking attitudes indicated that NMAS total scores were not significantly associated with attitudes towards help seeking ( $\beta = -.068, p = .227$ ). Surprisingly, higher TAS scores significantly indicated more positive attitudes towards help seeking ( $\beta = .596, p < .001$ , Cohen's  $f^2 = .429$ ).

Additional multiple regression analyses were done with mental health diagnoses to examine the relationships between diagnoses and attitudes towards help-seeking (see Table 4). The only diagnosis that reached statistical significance was depression ( $\beta = -.160, p < .05$ , Cohen's  $f^2 = .041$ ), which was significantly associated with negative attitudes.

Table 4

*Multiple Regression Analyses Connecting Diagnoses With Attitudes Towards Help-Seeking Behavior*

Mental Illness Diagnosis	$\beta$	<i>p</i>
Mental Illness Diagnosis	.046	.649
ADHD	-.009	.871
Anxiety Disorder	-.058	.501
Autism Spectrum Disorder	.063	.257
Bipolar Disorder	-.031	.535
Borderline Personality Disorder	.084	.074
Depression	-.160	.021
Dissociative Disorder	-.014	.777
Eating Disorder	-.009	.852
Obsessive Compulsive Disorder	-.048	.350
Post-Traumatic Stress Disorder	.042	.414
Prefer Not to Disclose	-.045	.394
Other Disorder	.015	.752

A sensitivity analysis was performed to determine if there was an interaction effect between the reported presence of a mental illness and alexithymia scores on help-seeking attitudes. It was determined that there was



a nonsignificant interaction between diagnosis and score on the TAS,  $F(1, 533) = 3.027, p = .082$ . Additionally, there was a nonsignificant interaction between diagnosis and NMAS score,  $F(1, 529) = 3.650, p = .057$ .

## Discussion

The current study measured the prevalence of both clinical and normative alexithymia among college-aged students. Results from the present analyses show that the highest prevalence rates are in the low clinical alexithymia and the moderate normative alexithymia categories. This means that many college students do have difficulty, though usually at a mild level, identifying and describing their emotions. These results were expected though previous literature had reported differently. In one previous study using the TAS, 13.4% of the population had high alexithymia and 18.4% had moderate alexithymia (Lane et al., 1996). In another study, 12.4% of college students had alexithymia (Schuetz & Multon, 2017). The current study reports rates of 27.2% for high alexithymia and 21.5% moderate alexithymia. While previous research does not provide prevalence rates for normative alexithymia, rates were highest for the moderate normative alexithymia level (69.3%). One possible explanation for this could be due to the fact that people do not verbally communicate as much as they used to. With the introduction of technology and texting, students most often communicate with others through use of their phones. In fact, technology-based communication is dominant among millennials (Botterill, Bredin, & Dun, 2015). As a result, there appears to be a cultural shift where discussion about sensitive topics, such as our emotions, occurs through technology rather than in face-to-face conversations (Dolev-Cohen & Barak, 2013; Green et al., 2005). Therefore, it is possible that technology could make it more difficult for individuals to identify and verbalize how they feel.

In addition to assessing overall prevalence in college students, the current study aimed to also look at prevalence based on gender. The analyses showed that there were no significant differences between the scores on both the clinical and normative tests for men and women. This leads the researchers to question the hypothesis created in the 1970s stating that alexithymia is more common in men than women and may even be normative in men (Levant et al., 2009). Social norms and roles have changed since the 1970s, and we are breaking what has been known for so long as *normal* gender roles. In the 1970s, roles were just beginning to change. While there was growing support for gender equality and a less restrictive view of gender roles, men were still expected to be dominant, attend college, and make money for their families, while it was the women's job to care for the children and the home (i.e., cook and clean before their husband came home; Brooks & Bolzendahl, 2004). Today, however, women are embarking on more professional roles than in the past and joining men in the workforce at relatively similar rates (United States Census Bureau, 2015). In fact, it is now the norm for women to get a job and contribute to the family's finances which can be seen by the increase in their rate of participation in the workforce (Gardner, 2017). As women are becoming more professional, they are also being taught to be less emotional. Women are told to *act like men do*, meaning that they need to be stoic and unemotional, especially at work (Wajcman, 2013). It appears women are possibly being socialized in the same way that men are, but it is unclear at what age this is happening, whether it is when they are young or in high school and college. Young boys are often instructed by caregivers early in childhood to hide their vulnerable emotions (Feder et al., 2010; Levant et al., 2006), and it appears as though women are given the same messages at some point in life. If they want to be taken seriously, they are told to not cry or express any sad emotions. With women and men both taking on the professional role, women are also being taught to hide their vulnerable emotions (Perrone et al., 2009).

The current study also sought to look at the connection between alexithymia and attitudes toward help-seeking. Results indicated that higher scores on the NMAS were associated with more negative attitudes towards seeking professional psychological help. This finding, however, was not statistically significant, which supports [Berger et al.'s \(2005\)](#) claim that there is no connection between alexithymia and help-seeking behavior. In contrast, higher levels of clinical alexithymia were significantly associated with more positive attitudes towards seeking professional psychological help, which supports [Levant et al.'s \(2009\)](#) claim. This finding was significant and leads us to believe that people with this trait may not be able to communicate their emotions well, but they understand that this is a difficulty that can be addressed through counseling. It is possible that individuals with characteristics of alexithymia are aware that something is wrong and although they cannot describe it, they recognize that seeking a therapist's support could be helpful.

Overall, the present findings do not reveal whether there is a direct relationship between alexithymia and attitudes toward help-seeking. It is possible that there may be other factors not measured in this study that have contributed to these results. For example, students on most college campuses have access to free mental health care, which may give them more positive attitudes towards seeking help. While stigma is still evident on a college campus, slowly decreasing rates of stigma may also play a role in students' attitudes towards seeking help. Previous research has found that if there is less judgment and disgrace surrounding seeking help, especially within people's own perceptions, individuals would develop more positive attitudes towards it ([Eisenberg, Downs, Golberstein, & Zivin, 2009](#)). Also, about 32% of the students in the current sample were psychology majors, which may also play a role in positive attitudes, due to the increased knowledge of mental health services and its benefits. Additionally, because attitudes do not necessarily mean that they will seek help, it is unclear whether individuals with higher levels of clinical and normative alexithymia will actually seek help if they need it. While the current findings cannot answer that question, further research including these variables may be able to.

Additional analyses were done to look into the association between college students' diagnosis of mental illness and help-seeking attitudes. The present study found that individuals who have been diagnosed with depression have more negative attitudes towards seeking help. This is supported by previous research, which states that participants diagnosed with depression are not likely to seek help, due to concerns about disclosing their feelings to informal sources as well as professionals ([Barney, Griffiths, Christensen, & Jorm, 2009](#)). This may also contribute to why only a little over 50% of people with mood disorders seek treatment ([NIMH, 2015](#)). There were no other significant results for associations between diagnoses and attitudes towards help-seeking.

## Limitations and Future Directions

One limitation to this study is that the measures were provided in an online survey format. Thus, the diagnosis question could have been misinterpreted. Although participants were asked to only endorse diagnoses that had been made by mental health professionals, some participants may have endorsed diagnoses that they thought they had or that had been self-diagnosed. Another limitation is the sample, which was mostly comprised of students at colleges and universities in Western New York. Though the sample size was large, a better representation of students in the United States is needed for future studies. Other limitations include not measuring income or socioeconomic status of the participants.

Future research could also assess the connection between alexithymia and help-seeking behavior, not just attitudes. Someone may have positive attitudes toward seeking help but may not necessarily seek help. The current study was limited to only attitudes, so, an accurate representation of college students' help-seeking behavior was not depicted. Alexithymia and gender roles could also be studied to see if there is as strong a correlation as previous research states (Fischer & Good, 1997). Since the current research shows no significant connection between gender and alexithymia rates, looking at alexithymia and gender roles may show whether or not gender roles are changing, as is hypothesized. The association between technology and alexithymia could also be researched. The platform people feel most comfortable talking about their feelings on could lead to results that show whether individuals are primarily using their smartphones or other technology to communicate about their emotions rather than face-to-face. This would likely be related to symptoms of alexithymia. Lastly, different age groups and alexithymia should be considered. Would the same results be found in children or adolescents? By looking at this, research may be able to pinpoint whether there is a shift in women and their emotional expression. Since the current results show that there is not a significant gender difference in levels of alexithymia, but previous research says that only boys are socialized to hide their vulnerable emotions, it is important to determine when women are being taught this (Feder et al., 2010).

Overall, there needs to be more research done on alexithymia, especially since it has been shown to be prevalent in college-aged students. Students need to learn how to identify and communicate their emotions particularly since hiding vulnerable emotions can lead to negative effects (Feder et al., 2010).

### Competing Interests

The authors have no conflicts of interest.

### Funding

Funding was received from Psi Chi: The International Honor's Society in Psychology and the Alfred University Honors Program.

### Acknowledgments

We would like to thank Dr. Bethany Johnson and Dr. Michele Lowry for their support and guidance with data analysis and study conclusions.

## References

- Bagby, R. M., Ayearst, L. E., Morariu, R. A., Watters, C., & Taylor, G. J. (2014). The internet administration version of the 20-item Toronto Alexithymia Scale. *Psychological Assessment, 26*(1), 16-22. <https://doi.org/10.1037/a0034316>
- Bagby, R. M., Parker, J. D. A., & Taylor, G. J. (1994). The twenty-item Toronto Alexithymia Scale-I: Item selection and cross validation of the factor structure. *Journal of Psychosomatic Research, 38*(1), 23-32. [https://doi.org/10.1016/0022-3999\(94\)90005-1](https://doi.org/10.1016/0022-3999(94)90005-1)
- Barney, L. J., Griffiths, K. M., Christensen, H., & Jorm, A. F. (2009). Exploring the nature of stigmatizing beliefs about depression and help-seeking: Implications for reducing stigma. *BMC Public Health, 9*(1), 61-72. <https://doi.org/10.1186/1471-2458-9-61>

- Berger, J. M., Levant, R., McMillan, K. K., Kelleher, W., & Sellers, A. (2005). Impact of gender role conflict, traditional masculinity ideology, alexithymia, and age on men's attitudes toward psychological help seeking. *Psychology of Men & Masculinity, 6*(1), 73-78. <https://doi.org/10.1037/1524-9220.6.1.73>
- Botterill, J., Bredin, M., & Dun, T. (2015). Millennials' media use: It is a matter of time. *Canadian Journal of Communication, 40*(3), 537-551. <https://doi.org/10.22230/cjc.2015v40n3a2884>
- Brooks, C., & Bolzendahl, C. (2004). The transformation of US gender role attitudes: Cohort replacement, social-structural change, and ideological learning. *Social Science Research, 33*(1), 106-133. [https://doi.org/10.1016/S0049-089X\(03\)00041-3](https://doi.org/10.1016/S0049-089X(03)00041-3)
- Buck, R. (1977). Nonverbal communication of affect in preschool children: Relationships with personality and skin conductance. *Journal of Personality and Social Psychology, 35*(4), 225-236. <https://doi.org/10.1037/0022-3514.35.4.225>
- Carnegie Foundation for the Advancement of Teaching. (2015). The Carnegie Classification of Institutions of Higher Education. Retrieved from <http://carnegieclassifications.iu.edu>
- Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., . . . Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine, 45*, 11-27. <https://doi.org/10.1017/S0033291714000129>
- Cusack, J., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2006). Emotional expression, perceptions of therapy, and help-seeking intentions in men attending therapy services. *Psychology of Men & Masculinity, 7*(2), 69-82. <https://doi.org/10.1037/1524-9220.7.2.69>
- de Barros, A. C. S., Furlan, A. E. R., Marques, L. H. N., & de Araujo Filho, G. M. (2018). Gender differences in prevalence of psychiatric disorders, levels of alexithymia, and coping strategies in patients with refractory mesial temporal epilepsy and comorbid psychogenic nonepileptic seizures. *Epilepsy & Behavior, 82*, 1-5. <https://doi.org/10.1016/j.yebeh.2018.02.026>
- Devine, D. (2018). *Mothers' and fathers' differential discussion of emotion with their school age children* (Unpublished masters' thesis). Virginia Polytechnic Institute and State University, Blacksburg, VA, USA.
- Dolev-Cohen, M., & Barak, A. (2013). Adolescent's use of instant messaging as a means of emotional relief. *Computers in Human Behavior, 29*(1), 58-63. <https://doi.org/10.1016/j.chb.2012.07.016>
- Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review, 66*(5), 522-541. <https://doi.org/10.1177/1077558709335173>
- Fazio, R. H., & Williams, C. J. (1986). Attitude accessibility as a moderator of the attitude-perception and attitude-behavior relations: An investigation of the 1984 presidential election. *Journal of Personality and Social Psychology, 51*(3), 505-514. <https://doi.org/10.1037/0022-3514.51.3.505>
- Feder, J., Levant, R. F., & Dean, J. (2010). Boys and violence: A gender-informed analysis. *Psychology of Violence, 1*(S), 3-12. <https://doi.org/10.1037/2152-0828.1.S.3>
- Fischer, A. R., & Good, G. E. (1997). Men and psychotherapy: An investigation of alexithymia, intimacy, and masculine gender roles. *Psychotherapy, 34*(2), 160-170. <https://doi.org/10.1037/h0087646>

- Fischer, E. H., & Turner, J. L. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology, 35*, 79-90. <https://doi.org/10.1037/h0029636>
- Galván, E. L. (2014). Alexithymia: Indicator of communicative deficit in emotional health. *Procedia: Social and Behavioral Sciences, 132*, 603-607. <https://doi.org/10.1016/j.sbspro.2014.04.360>
- Gardner, D. (2017). When women lean in: In a world still run by men when women accede to power it helps all women. *Northeast Pennsylvania Business Journal, 32*(3). Retrieved from [https://issuu.com/cngnewspapers/docs/merged\\_e4bf76de3ba8ee](https://issuu.com/cngnewspapers/docs/merged_e4bf76de3ba8ee)
- Good, G. E., Dell, D. M., & Mintz, L. B. (1989). Male role and gender role conflict: Relations to help seeking in men. *Journal of Counseling Psychology, 36*(3), 295-300. <https://doi.org/10.1037/0022-0167.36.3.295>
- Green, M. C., Hilken, J., Freidman, H., Grossman, K., Gasiewski, J., Adler, R., & Sabini, J. (2005). Communication via instant messenger: Short- and long-term effects. *Journal of Applied Social Psychology, 35*(3), 445-462. <https://doi.org/10.1111/j.1559-1816.2005.tb02130.x>
- Gresko, B. (2015, March). Ronald Levant: Boys don't cry [Interview with Ronald Levant]. *Guernica*. Retrieved from <https://www.guernicamag.com/boys-dont-cry/>
- Hatchett, G. T. (2006). Additional validation of the attitudes toward seeking professional psychological help scale. *Psychological Reports, 98*(1), 279-284. <https://doi.org/10.2466/pr0.98.1.279-284>
- Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. *The Journal of Adolescent Health, 46*(1), 3-10. <https://doi.org/10.1016/j.jadohealth.2009.08.008>
- Komiya, N., Good, G. E., & Sherrod, N. B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology, 47*(1), 138-143. <https://doi.org/10.1037/0022-0167.47.1.138>
- Lane, R. D., Lee, S., Reidel, R., Weldon, V., Kaszniak, A., & Schwartz, G. E. (1996). Impaired verbal and nonverbal emotion recognition in alexithymia. *Psychosomatic Medicine, 58*(3), 203-210. <https://doi.org/10.1097/00006842-199605000-00002>
- Langlois, J. H., & Downs, A. C. (1980). Mothers, fathers, and peers as socialization agents of sex-typed play behaviors in young children. *Child Development, 51*(4), 1237-1247. <https://doi.org/10.2307/1129566>
- Levant, R. F. (1992). Toward the reconstruction of masculinity. *Journal of Family Psychology, 5*(3-4), 379-402. <https://doi.org/10.1037/0893-3200.5.3-4.379>
- Levant, R. F., Allen, P. A., & Lien, M. C. (2014). Alexithymia in men: How and when do emotional processing deficiencies occur? *Psychology of Men & Masculinity, 15*(3), 324-334. <https://doi.org/10.1037/a0033860>
- Levant, R. F., Good, G. E., Cook, S. W., O'Neil, J. M., Smalley, K. B., Owen, K., & Richmond, K. (2006). The normative male alexithymia scale: Measurement of a gender-linked syndrome. *Psychology of Men & Masculinity, 7*(4), 212-224. <https://doi.org/10.1037/1524-9220.7.4.212>
- Levant, R. F., Hall, R. J., Williams, C. M., & Hasan, N. T. (2009). Gender differences in alexithymia. *Psychology of Men & Masculinity, 10*(3), 190-203. <https://doi.org/10.1037/a0015652>

- Lynch, L., Long, M., & Moorhead, A. (2018). Young men, help-seeking, and mental health services: Exploring barriers and solutions. *American Journal of Men's Health*, 12(1), 138-149. <https://doi.org/10.1177/1557988315619469>
- Montebarocci, O., Surcinelli, P., Rossi, N., & Baldaro, B. (2011). Alexithymia, verbal ability and emotional recognition. *The Psychiatric Quarterly*, 82(3), 245-252. <https://doi.org/10.1007/s11126-010-9166-7>
- National Institute of Mental Health. (2013). The numbers count: Mental disorders in America. Retrieved from <http://www.lb7.uscourts.gov/documents/12-cv-1072url2.pdf>
- National Institute of Mental Health. (2015). Prevalence. Retrieved from <https://www.nimh.nih.gov/health/statistics/prevalence/index.shtml>
- National Institute of Mental Health. (2008). Use of mental health services and treatment among adults. Retrieved from <https://www.nimh.nih.gov/health/statistics/prevalence/use-of-mental-health-services-and-treatment-among-adults.shtml>
- New York State Department of Education. (2010). NYSED's definition of liberal arts and sciences. Retrieved from [http://www.qc.cuny.edu/Academics/GenEd/about/Documents/NYS\\_DeptofEd\\_Def\\_Requirements.pdf](http://www.qc.cuny.edu/Academics/GenEd/about/Documents/NYS_DeptofEd_Def_Requirements.pdf)
- Perrone, K. M., Wright, S. L., & Jackson, Z. V. (2009). Traditional and nontraditional gender roles and work – family interface for men and women. *Journal of Career Development*, 36(1), 8-24. <https://doi.org/10.1177/0894845308327736>
- Pérusse, F., Boucher, S., & Mylene, F. (2012). Observation of couple interactions: Alexithymia and communication behaviors. *Personality and Individual Differences*, 53(8), 1017-1022. <https://doi.org/10.1016/j.paid.2012.07.022>
- Pollack, W. (1998). *Real boys: Rescuing our sons from the myths of boyhood*. New York, NY, USA: Owl Books.
- Salminen, J. K., Saarijärvi, S., Aärelä, E., Toikka, T., & Kauhanen, J. (1999). Prevalence of alexithymia and its association with sociodemographic variables in the general population of Finland. *Journal of Psychosomatic Research*, 46(1), 75-82. [https://doi.org/10.1016/S0022-3999\(98\)00053-1](https://doi.org/10.1016/S0022-3999(98)00053-1)
- Schuetz, S., & Multon, K. D. (2017). The relationship of alexithymia, interpersonal problems and self understanding to psychological distress in college students. *North American Journal of Psychology*, 19(1), 139-154.
- Sifneos, P. E. (1967). Clinical observations on some patients suffering from a variety of psychosomatic diseases. *Acta Medica Psychosomatica*, 7, 1-10.
- Substance Abuse and Mental Health Services Administration. (2015). More Americans continue to receive mental health services, but substance use treatment levels remain low. Retrieved from <http://www.samhsa.gov/newsroom/press-announcements/201509170900>
- Taylor, G. J., Bagby, R. M., & Parker, J. D. A. (1997). *Disorders of affect regulations: Alexithymia in medical and psychiatric illness*. Cambridge, United Kingdom: Cambridge University Press.
- Tolmunen, T., Heliste, M., Lehto, S. M., Hintikka, J., Honkalampi, K., & Kauhanen, J. (2011). Stability of alexithymia in the general population: An 11 year follow-up. *Comprehensive Psychiatry*, 52(5), 536-541. <https://doi.org/10.1016/j.comppsy.2010.09.007>
- United States Census Bureau. (2015). 2015 U.S. Census. Retrieved from <https://www.census.gov>

- Vandello, J. A., & Bosson, J. K. (2013). Hard won and easily lost: A review and synthesis of theory and research on precarious manhood. *Psychology of Men & Masculinity*, 14(2), 101-113. <https://doi.org/10.1037/a0029826>
- Vanheule, S., Verhaeghe, P., & Desmet, M. (2011). In search of a framework for the treatment of alexithymia. *Psychology and Psychotherapy*, 84(1), 84-97. <https://doi.org/10.1348/147608310X520139>
- Vogel, D. L., Wester, S. R., & Larson, L. M. (2007). Avoidance of counseling: Psychological factors that inhibit seeking help. *Journal of Counseling and Development*, 85(4), 410-422. <https://doi.org/10.1002/j.1556-6678.2007.tb00609.x>
- Wajcman, J. (2013). *Managing like a man: Women and men in corporate management*. Cambridge, United Kingdom: Polity Press.
- Wisch, A. F., Mahalik, J. R., Hayes, J. A., & Nutt, E. A. (1995). The impact of gender role conflict and counseling technique on psychological help seeking in men. *Sex Roles*, 33, 77-89. <https://doi.org/10.1007/BF01547936>
- World Health Organization. (2002). Gender and mental health. Retrieved from <http://apps.who.int/iris/bitstream/10665/68884/1/a85573.pdf>