

Universally Accessible: An investigation of college accommodations for students with autism spectrum disorder in the United States and Netherlands

Mikayla “Mak” Pennington  
Psychology Major  
June, 2024

Faculty Advisor: Dr. Miranda Kucera

Essay completed in partial fulfillment of the requirements for graduation with Global Honors, University of Washington, Tacoma

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Approved:



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Faculty Adviser

6/5/2024

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Date



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Executive Director of Programs, IIGE

6/6/2024

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## Abstract

With the global prevalence rate of autism spectrum disorder (ASD) increasing in post-secondary institutions, such as colleges and universities, having accessibility to accommodations becomes important to ensure ASD undergraduate students' success. Many colleges and universities are required to provide accommodations for students with disabilities, yet often students with ASD find the accommodations given do not meet their individual needs or believe they would not benefit from the accommodations the disability support officers (DSOs) provide. Moreover, studies found that students in their first year of college find college more challenging due to the transition from secondary to post-secondary education. Programs to aid ASD students from secondary to post-secondary education have been provided, but studies find that students often feel the program is missing topics that would benefit them.

Additionally, discrimination and stigma about ASD are still displayed by faculty members or students in universities as students with ASD pursue their educational goals. The discrimination creates an internal and external struggle for ASD students as they try to navigate through the institution, which in turn hurts their chances for academic success. It is also important to consider the cultural contexts for students and colleges when researching accommodations provided. Primary sources for ASD research are conducted in higher socioeconomic areas, which often encompasses Western beliefs about ASD. This can cause accommodations based on unrepresentative research to not support ASD students with different backgrounds.

This paper seeks to analyze how students with ASD experience accommodations and explore how an orientation program that uses Universal Design of Learning could benefit students with ASD by conducting a literature review of previous studies from the United States

and the Netherlands. To address issues of discrimination and stigma, integrating Universal Design of Learning (UDL) into faculty training would benefit the students and faculty members. UDL's main principle is to provide inclusive teaching and assessment for students, regardless of if they are or are not neurodiverse. Studies have found that many faculty members are interested in learning more about UDL, but research is still expanding and exploring the topic.

### *Introduction*

Over the last two decades, the global prevalence rate of autism spectrum disorder (ASD) has risen, and having accommodations and support for ASD individuals is becoming increasingly important. (Solmi et al., 2022). Within postsecondary education settings, such as college, university, trade school, and vocational training, students with ASD are increasing with about 2% meeting the criteria for ASD (Davis et al., 2021). A plausible reason for the increase of ASD on a global scale can be attributed to the increased screening, awareness, and acceptance of ASD in many countries. Autism spectrum disorder is described as persistent deficits in social communication and social interaction in various contexts while also having restricted or repetitive behaviors, interests, or activities, and having hyper- or hypoactivity sensory input (APA, 2013). Autism spectrum disorder also comorbid with other psychiatric disorders such as attention deficit hyperactivity disorder (ADHD), anxiety, and other neurodevelopmental disorders (Lai, 2023). Thus, autistic college students may require extra support to complete their degree as they adjust to the unfamiliar environment.

When given proper and accessible accommodations, students with ASD are more likely to graduate from postsecondary education than those who are not provided accommodations

(Accardo, Kuder et al., 2019). In addition, attaining a college degree is linked to career and life success, such as better chances for employment and higher wages (Davis et al., 2021). For students with ASD, graduating from college or university provides life skills that will benefit them post-graduation (Accardo, Bean et al., 2019). Those who have completed their degree reported a higher quality of life, such as employment rates, and increase of wages (Davis, 2021). However, many colleges lack the support or accommodations for ASD students, resulting in students not completing their education (39%) when compared to their peers without ASD or any disability (59%) (Petcu et al., 2021). Many students report feeling anxious, isolated, and social struggles as they try to adapt to the unfamiliar environment (Davis, 2021). For many students, self-advocating for accommodations is difficult as they may or may not have had support in different educational settings, such as K-12.

When entering post-secondary education, students with disabilities need to go to the disability support office (DSOs) and disclose their disability, which requires paperwork and the burden of proof. Further, many students report that that DSOs could not help or accommodate them, as much of the accommodations provided are often based on different disabilities, rather than ASD (Kim et al., 2021). What makes advocating difficult for autistic students is the possible discrimination they may face when asking for or receiving accommodation. While this can be attributed to many different outcomes, which will be discussed later, a probable reason for stigma could come from autism being an “invisible disability,” as there are no physical signs to show that someone is autistic or not. Paired with the many other challenges autistic students can face, being able to advocate for themselves and continuously disclose their disability can become tiring and frustrating for many autistic students.

This paper seeks to analyze how students with ASD experience accommodations and explore how a orientation program and Universal Design of Learning could benefit students with ASD by conducting a literature review of previous studies. For this paper, post-secondary education and undergraduate students within the United States, and the Netherlands will be the focal point of research. For the United States, this would include colleges and universities where students complete their associate's or bachelor's degree. There are five different post-secondary institutions in the Netherlands, however, universities and hogescholen (HBO institutions) are the most comparable to the United States. The cultural and educational differences amongst the two countries, along with the different progress each country has made, is the reason for comparing the United States and the Netherlands. The use of both person-first and identity-first language when talking about ASD individuals will be used throughout this paper as well. This is to follow what previous researchers (E.g., Stark & Lindo, 2022; Bakker et al., 2022; Gillespie-Lynch et al., 2017) have done when discussing autism, as well as to show respect to individuals who prefer the identity-first language.

### *Challenges and Difficulties Autistic Students Face*

Across the United States, and the Netherlands, college students with ASD report multiple challenges when working to acquire their degree, ranging from academic to non-academic struggles. For example, navigating support, receiving the diagnosis for ASD, the sensory environment, creating interpersonal relationships, and disclosing to other people are a few common themes or challenges autistic students experience in post-secondary education (Nelson et al., 2023). When moving into post-secondary education, students with ASD must advocate for themselves to receive accommodation and to talk with their professors to access the

accommodation given to them by DSOs (Li et al., 2020; Bakker et al., 2020). Many autistic students fear having negative social interactions with their professor due to the stigma associated with ASD (Li et al., 2020). Thus, students do not get the accommodations they need to overcome academic challenges, such as completing assignments, finishing tests in the classroom, and having accessible notes (Davis et al., 2021; Accardo, Kuder et al., 2019). However, academic barriers are not the only difficulty autistic students may experience as many students face mental health concerns due to the lack of a social network or increased stress when moving into an unfamiliar environment.

Within the academic sphere, many autistic students report issues of executive functioning when completing their college degree (Stark & Lindo, 2022). Executive functioning is an individual's actions to complete, create, or sustain chosen goals. (Stark & Lindo). For ASD students, reconstitution of information, emotional regulation, planning, organization, and cognitive flexibility are some common executive functioning struggles autistic students may experience (Stark & Lindo). Paired with an unsupportive environment, autistic students struggle more to succeed in college and have a lower chance of graduating than their peers (Tops et al., 2017). Despite DSOs, the accommodations offered are either not aligned with the students' needs or is inaccessible due to paperwork requirements (Kim & Crowley, 2021). Accessing accommodations is often the most reported struggle for autistic students as to be given accommodations, students must disclose and provide their diagnosis, as if they must "prove" their disability (Nelson et al., 2023).

ASD students not only have academic struggles but also non-academic struggles, which can include social struggles, mental health challenges, and facing stigma and/or discrimination (Ayala, 2023; Davis et al., 2021; Lai; 2023). For ASD students moving into their first year of

college, they can be more socially susceptible to social isolation, bullying, abusive relationships, and sexual assault due to not having social support from peers and the increased stress of moving into an unfamiliar environment (Ayala, 2023). A contribution to stigma and discrimination towards ASD is the social dominance orientation/theory, or SDO, which states that individuals in a higher social class encourage social hierarchies that create inequalities for those in the lower social class (Bäckström & Björklund, 2007). Those with a higher SDO are more likely to exhibit stigma towards ASD or unwillingness to address inequalities autistic students may face in college or university (Waisman et al., 2023). In addition, non-autistic students or faculty may form a negative first impression of an autistic student if they are not aware of the student's disability, which requires disclosure from the student, and with the negative interactions, the student may feel less inclined to ask for accommodations.

Research indicates that many autistic students receive or go to DSOs in their third or fourth year in college rather than first year students (T. Bakker et al, 2022; Accardo, Bean et al., 2019). This can be attributed to multiple factors, such as burnout or seniority, that fourth year students experience near the end of their degree. First-year autistic students may be unaware of the supports or accommodations available, or the support offered can be harmful due to the double empathy problem (Lai, 2023). The double empathy problem is when two people from different backgrounds or experiences have difficulty empathizing with one another due to their differences (Milton, 2018). Combined with a high SDO, non-autistic or neurotypical individuals may not be able to interact or poorly interact with autistic students, adding to both the academic and non-academic struggles students face. Fourth- and third-year autistic students may overcome this more than first-year students due to being exposed to SDOs or by having multiple interactions with neurotypical peers, leading to the double empathy problem becoming weaker.

Despite the challenges ASD students face, with the support and accommodations from their college or university, students with ASD can be successful students.

### *The United States*

The Americans with Disabilities of 1990 requires public places to offer accommodations and accessibility for people with disabilities and prohibits discrimination regarding a person's disability (The Americans with Disabilities Act [ADA], 1990). Other than the ADA, there is the Individuals with Disabilities Act (IDEA) and Section 504 in the Rehabilitation Act which provide additional support and requirements for disabled people; but IDEA is only applicable in primary and secondary education settings (Individuals with Disabilities Act [IDEA], 2004; Section 504, 1973). Due to ADA and Section 504, post-secondary institutions are required to provide accommodations if they receive federal funding, thus autistic undergrad students have access to accommodations they need. To ensure ADA and Section 504 are being enforced, the Office of Civil Rights (OCR) reviews instances of discrimination while investigating different organizations should they not be following federal law (Office of Civil Rights [OCR], 2024). From here, multiple organizations for autism sprouted in an effort to continue the protection and support for autistic individuals in the United States.

In the 1990s, the neurodiversity movement began and worked to increase the acceptance of autism through organizations and forming connections (Baumer & Frueh, 2021). Today there are multiple organizations that work to connect families and autistic individuals with recourses and provide a platform for autistic individuals to grow a community. Some of these organizations include the Autism Self Advocacy Network (ASAN), the American Autism Association, the

Color of Autism, and many more that work to empower and educate individuals about autism (Interagency Autism Coordination Committee [IACC], 2024). One organization, Autism Speaks, has been criticized by the autistic community due to the wording and imagery Autism Speaks uses (Ulatowski, 2022; Cushman, 2023; Autistic Self Advocacy Network [ASAN], N.A.; Morales, 2022). Further, many question the core beliefs of Autism Speaks, often embodying the “medical” perspective where autism needs a “cure” rather than acceptance and support (Cushman, 2023; Ulatowski, 2022). Despite the negative perception Autism Speaks has, other organizations like ASAN and the Color of Autism have created supportive organizations that aid individuals with autism.

Looking at autistic college students in the United States, there are areas in accommodations given that could be improved to be more inclusive and beneficial for autistic students. Most of the time, autistic students do not disclose their diagnosis due to the lack of understanding college professors or faculty may not have (Accardo, Bean et al., 2019). In Accardo, Bean et al, during the interview, a student explained how a professor told them “too bad” when they asked for support, rather than providing additional help to ensure the student’s success (2019). With negative interactions with professors, autistic students are less likely to ask for accommodations from their school’s DSO (Cox et al., 2021). What is interesting is that many autistic students report that having a faculty mentor or professor they can meet with is beneficial, making it one of the preferred supports autistic students use (Accardo, Kuder et al., 2019). It can be inferred that having supportive professors or faculty members is greatly beneficial for autistic students as requesting accommodations becomes easier for the students. The support from faculty and professors can also provide a social network for students with autism as entering a new environment without their social network creates barriers for students.

When receiving accommodations, autistic students find some beneficial while others are less beneficial. Most accommodations granted are based on other disabilities rather than the different characteristics ASD has (Kuder & Accardo, 2018). Most accommodations colleges and universities offer are for academic purposes, but autistic students also experience non-academic and social difficulties, as stated earlier. Autistic college students need to develop the skills to be independent after leaving secondary education due to now being a legal adult (Petcu et al., 2021). In addition, autistic college students are now required to manage more responsibilities such as finances, housing, cooking, and managing their accommodations, which adds extraneous pressure on top of entering a new environment (Cox et al., 2021; Petcu et al., 2021). Due to the unique experiences autistic students face, post-secondary institutions have begun to offer increased specialized programs, but students feel as though the accommodations could be improved upon (Kuder & Accardo, 2018). Some of these supports include individual housing, supportive mentors, direct communication from the DSO and professor, social support, and creating a community (Cox et al., 2021; Kim & Crowley, 2021). Many of the recommended actions for colleges and universities to take is not solely on DSOs, but on the entire campus to increase acceptability and understanding about autism. By taking these actions, and increasing inclusivity, post-secondary education in the United States would be able to support autistic students with their education.

### *The Netherlands*

Often referred to as “autism friendly” the Netherlands have made strides in improving the quality of life for individuals with ASD, especially for those in post-secondary education (Boven, 2020). Passed in 2003, the Equal Treatment of Disabled and Chronically Ill People Act (The

Equal Treatment Act) prohibited the discrimination of disabled people entering post-secondary, including autistic college students (Waddington, 2023). Then, the Higher Education and Research Act (WHW) requires federally funded universities and HBOs undergo an accreditation process, including assessing whether the facilities and programs are accessible to disabled students (European Commission, 2024). Finally, in 2015, the Strategic Agenda for Higher Education was launched to lower course dropouts and students switching courses in all educational settings (European Commission). The policy works to help match students with courses that will benefit them, provide individualized learning experiences, and pay more attention on students' various talents. This is completed by assessments, vocational testing, and having HBOs or universities engage with students in secondary education. As such, post-secondary education is required to provide accessible accommodations for students with disabilities, with the Netherlands Institute for Human Rights, (College voor de Rechten van de Mens) or NIHR, ensuring the Equal Treatment Act is being applied along with other legislation involved in equity (Waddington, 2023).

Other than legislation, multiple organizations and advocacy groups have worked tirelessly to inform Dutch people about ASD and provide a space for autistic people to advocate for themselves. Some of these organizations include the Mental Health Fund, Dutch Association of Autism (Nederlandse Vereniging voor Autisme; NVA), From the Autism Perspective (Vanuit Autisme Bekeken; VAB), and Personen uit het Autisme Spectrum (PAS), all of which have worked extensively to bring attention to autism and those who are autistic (Boven, 2020; Waltz et al., 2015). For example, the VAB is a national organization that has created initiatives and incentives for businesses, mental health facilities, and schools to create an inclusive environment for people with ASD, which was proven effective (Boven, 2020). The term “autism-friendly” or

“autismvriendelijkheid” came out in the 2000s from these ASD organizations as a quick word to describe the work these organizations were accomplishing to create a neurodiverse environment (Boven, 2020). As a result, the Netherlands has created a social and policy framework to support autistic students through post-secondary education.

With advocacy organizations working at both personal and policy levels, these organizations were able to change the national narrative of autism. By using collective advocacy, individuals that participated in the organizations were able to strengthen their self-advocacy skills (Waltz et al., 2015). This can be seen in postsecondary education settings where students with ASD disclosed their diagnosis to the school at the beginning of the school year (M. Bakker et al., 2020). By disclosing their diagnosis, autistic students can access more resources from their school to support their studies and educational goals (M. Bakker et al.). While in university or HBO, autistic college students participate in school activities at the same rate as their peers with other or no recorded disabilities (T. Bakker et al., 2019). Autistic students’ grade point average, GPA, and goal setting is also comparable to other students, showing that autistic students enjoy their studies as much or more than their peers (T. Bakker et al., 2022).

Despite this, students explained that they did not expect to keep disclosing their diagnosis and had to request support by themselves, which created a high barrier for some when asking for accommodations (M. Bakker et al., 2020). Without the appropriate accommodations, autistic students struggle with test taking and sustaining study habits (T. Bakker et al., 2022). As autistic students continue with their studies, there is a noticeable decline in participation and progression due to burnout, feelings of withdrawal, and disinterest, even if autistic students find enjoyment in their studies (T. Bakker et al., 2022; T. Bakker et al., 2020). By their second-year, autistic students are more likely to not appear for classes or extracurriculars, creating a notable pattern

(T. Bakker et al., 2022). With signs of burnout and no-shows, universities, and HBOs can use these signs as early predictors to provide extra support for autistic students so that they can progress with their peers. Further, inclusive teaching and support groups for autistic students can ensure that they progress with their peers while also managing stress or practicing resiliency (T. Bakker et al., 2022). By taking these steps, the Netherlands will be able to create an inclusive environment would allow autistic college students progress with their peers and build the skills needed after graduation.

### *Universal Design of Learning*

As colleges and universities strive to become inclusive, the shift in ASD research has shifting from a deficit perspective based on medical models to how to improve autistic students' quality of life when attending post-secondary education (Cox et al., 2021). From this change in research, the application of Universal Design of Learning (UDL) in classrooms or DSOs has become a focal point for many researchers to create inclusive environments for autistic students in post-secondary settings (Gillespie-Lynch, 2017; Waisman et al., 2023; T. Bakker, 2022; Li et al., 2020). UDL was created based on the work and principles of Universal Design, which is how architecture should focus on diversity and inclusion so that others access different facilities or buildings (Waisman et al., 2023). When applied to college or university settings, UDL encourages different forms of learning and different ways to express what students are learning (Gillespie-Lynch et al., 2017). UDL also supports students' strengths and weaknesses, creating inclusive spaces for students to learn from each other, regardless of whether the student does or does not have ASD or other disabilities (Waisman et al., 2023).

The application of UDL in post-secondary education has multiple benefits, such as providing social and non-academic support for autistic students due to an increase in understanding about autism. When receiving accommodations, as stated earlier, many faculty members are often unequipped or uninformed about autistic students' needs. With the integration of UDL, faculty are made aware of ASD, which lowers stigma, and can accommodate or modify their classroom to ensure equitable success for their students. Further, students who are neurodiverse or neurotypical also benefit from including UDL principles. Neurodiversity is an umbrella term used to describe how individuals think, behave, or learn, but also distances autism from the medical model (Baumer & Frueh, 2021). Colloquially, neurodiversity is another word for autism or ADHD, but neurodiversity also includes learning, developmental, and neurological disorders. Both UDL and neurodiversity aim to increase inclusivity for individuals and accessibility to different supports, thus the two are often used together.

In a study that analyzed the effectiveness of UDL training, researchers found that once professors completed the training, stigma and SDO associated with autism decreased and remained stable after completing a post-test a month later (Waisman et al., 2023). With the decreased negative perception of autism, students with autism may feel more comfortable disclosing their disability and asking for support from faculty and professors (Dwyer et al., 2023). By informing faculty and professors about ASD, the double empathy problem and SDO is not only lessened, but different aspects expressed by autistic students are better understood by faculty and professors (Gillespie-Lynch et al., 2020). Thus, when autistic students speak with their professor about their accommodations, the student does not have to worry about explaining the process of attaining accommodations, such as confidentiality protections. For example, when a student receives accommodation for their disability, faculty or professors are not allowed to ask

the student what their disability is or required to know. With UDL, faculty would be better informed about how to support neurodiverse and disabled students in their classroom without putting the responsibility on the student to inform their faculty or professors.

UDL is beneficial when integrated into the classroom's curriculum by providing different assessment methods, incorporating hands-on experience, demonstrating that diversity is valued, and providing consistent, accessible communication with faculty (Gillespie-Lynch et al., 2017). While some faculty may be aware of UDL or agree with the principles or mission of UDL, faculty often do not apply UDL in classrooms due to a lack of knowledge or experience (Li et al., 2020). In Waisman et al., the researchers found that UDL training decreased stigma and provided the information and tools needed to create inclusive teaching environments (2023). After completing the pre-test and the training, 80% of participants provided plans for implementing UDL in their classrooms. In comparison, 64% have actualized their plans and implemented UDL strategies in their classrooms (Waisman et al., 2023). For faculty to engage in and apply UDL strategies in their classrooms, they need outside support from their university to participate in the training to benefit their students and themselves.

In the United States and the Netherlands, different post-secondary education institutions offer UDL trainings for their faculty and professors. For example, the University of Washington Tacoma (UWT) offers a UDL training for faculty and professors called Passport. However, Passport is not required for professors. It needs to be taken on the professors' own initiative, which can be difficult as professors and faculty are busy with their separate work on the campus. As a result, professors, and faculty at UWT may not be informed about the benefits of UDL being applied to their curriculum. In the Netherlands, the Centre of Expertise for Inclusive Education (Expertisecentrum Inclusief Onderwijs), or ECIO, has created a UDL handbook for

professors and faculty in post-secondary education to incorporate inclusive teaching strategies for autistic or other neurodiverse students (Hoefeijzers, Ilbrink, & van Veen, 2021). The ECIO works with multiple organizations in the Netherlands, including federal organizations, but the handbook is not required for colleges or universities to use, despite being easily accessible. Overall, implementing UDL into the structure of faculty training benefits both professors and autistic students, including those who are undiagnosed.

### *Orientation Programs for Neurodiverse and Disabled Students*

The introduction of transitioning programs or curriculum for students is still being researched and applied, but many papers have found pros and cons to the programs currently offered (Ayala, 2023). However, post-secondary institutions should offer orientation for autistic students that introduces them to the resources available on campus. Transition programs from secondary to post-secondary education often focus on building social skills or creating a support group for the summer to prepare autistic students for the change in environment and expectations (Hotez et al., 2018; Rowe, 2022). Students that did participate in transition planning or received instruction focused on transition planning were two to three times more likely to pursue a post-secondary degree (Lei et al., 2018). In addition, transition programs are required to be offered to autistic students that receive accommodations in secondary education in the United States (IDEA, 2004). While participating in transition programs is beneficial for autistic students heading to post-secondary education, the transition programs do not provide explicit resources or advice for specific colleges or universities, unless the transition program is being provided by the institution (American Autism Association [AAA], 2022). Creating an orientation program that

focuses on introducing autistic, neurodiverse, and disabled students to the resources available at the university.

Offering orientation to new students is in the interest of the college or university due to increasing the possible persistence students will have to graduate (Shmulsky et al., 2015). Orientations are one way that first-year students learn about the possible resources or communities that are located on the college's campus. In addition, orientation can also help students find belonging on campus by being introduced to new students and faculty (Schroeder et al., 2021). By having a neurodiverse specific orientation, it provides the opportunity for autistic students, and possibly their parent(s) or guardian(s), to attend and learn more about the DSO or other resources the college or university provides. Further, providing a more extensive tour of the college, the anticipatory anxiety some autistic students experience will decrease as they learn the layout of the college and where buildings are (Shmulsky et al., 2015). As stated earlier, many autistic students are unaware of the possible accommodations they can access while in post-secondary education, but by having an orientation that specifically discusses how to access accommodations and provide the first steps will increase the access students have.

At the orientations, having prior students from the university will allow new autistic students gain student insight to how to navigate the university that faculty or staff may not know (Shmulsky et al., 2015). These prior students will also provide "unwritten" rules of the university or the expectations that faculty may expect, which can be difficult for students with autism to learn on their own (Shmulsky et al.; Dwyer et al., 2023). Other than prior students, having autistic students volunteer to share their experiences and how they access resources creates a sense of belonging and acceptance for new students (Schroeder et al., 2021). In Washington state, Bellevue College offers a program called Neurodiversity Navigators, which focuses on providing

support for neurodiverse students via self-advocacy, support groups, and access to resources (N.A., 2024). The program provides new autistic students with different options on learning about the program, such as virtual videos or attending the college's orientation, making it accessible for new incoming students. As a result, new autistic students can contact the DSO through Neurodiversity Navigators and learn about what accommodations are available and which accommodations will best support them.

However, orientation programs do not only have to focus on resources or communities on universities' campuses. The Universitat Politècnica de Catalunya (UPC) – BarcelonaTech provided an orientation for new autistic students and the researchers found various areas that students want in the program (Lopez et al., 2018). This includes discussing how to explain their learning style to professors, different techniques on studying and resolving stressful situations, and creating a dialogue between students with autism and students who do not have autism (Lopez et al.). One additional topic orientation programs should include is students' rights to access accommodations and the laws that protect students with disabilities (Fernández-Batanero et al., 2022). With the addition of these various subjects, a community can be formed between first-year students as they attend the orientation, but also informs the students about the various supports the college offers. The introduction of a disability or resource-based orientation would also assist students who may be unaware of their disability or neurodiversity, which can then allow them request assistance for something they may not have been previously self-aware of.

### *Research Limitations and Future Research*

This paper was a literature review of post-secondary institutions within the United States and the Netherlands, which has created limitations for this paper. One of the limitations is that the cultural differences between the Netherlands and the United States is not thoroughly explored to explain the differences in social attitudes towards ASD. In addition, there are differences in the healthcare system of both countries, which can impact who and when individuals receive the diagnosis for ASD. The importance of this determines whether the individual does or does not receive accommodations from their post-secondary institution, which the majority of participants used in previous studies have the diagnosis for ASD.

Further, there is a possibility of a gap in the research based on sex and gender. In the United States, females are more likely to attend college compared to males, regardless of racial or ethnic identity (National Center for Education Statistics [NCES], N.A.). However, males are more likely to be diagnosed with ASD compared to females for various reasons (Aylward et al., 2021). Therefore, it can be speculated that the statistics about enrollment and prevalence of autism in post-secondary education could be higher due to the discrepancies in diagnosis for ASD. There is also the intersectionality autism has with other identities and comorbidities with other disorders that were listed earlier in this paper.

Future research should continue investigating accommodations and supports given to autistic students in various other countries, some notable ones being Taiwan, Ethiopia, and Japan. Included in future research areas is incorporating neurodiversity into diversity, equity, and inclusion (DEI) practices. Dwyer et al., lists various actions and recommendations colleges and universities should take to create inclusive and supportive environments for autistic students (2023). Other than implementing UDL into colleges, the researchers also recommend including neurodiversity into DEI practices. By including neurodiversity into DEI, colleges and

universities can address the intersectionality of ASD, have staff and faculty trained to address neurodiverse issues, and make initiatives to address the inequalities neurodiverse students may experience while attending post-secondary education (Dwyer et al., 2023). As autism continues to be researched, it is important to continue investigating how institutions can support individuals with ASD as an effort to create inclusive environments.

### *Discussion*

By combining Universal Design with orientation programs for autistic students, colleges and universities will be able to provide an inclusive teaching environment that supports the vast diversity of students. Autism and neurodiversity have been pathologized due to being described in the medical model, which has framed autism as a deficit to a person's life (Cox et al., 2021). As a result, autism continues to be stigmatized and not understood unless autism is prevalent in an individual's life or had training that covered autism (Waisman et al., 2023). Building inclusive environments should not mean adding accessibility as an afterthought, but rather being the center focus when designing schools or curriculum. UDL strives to fill this gap in inclusivity by working at various stages in post-secondary education, but starting with how classrooms are structured is the immediate benefit students will feel (Waisman et al., Dwyer et al., 2023). Yet, changing curriculums or completing massive overhaul on the education system is not the only principle of UDL.

Often, small changes to the classroom create an environment where autistic students feel comfortable asking for additional accommodations or can thrive with the small adjustments. For example, priming is when professors provide autistic students with the schedule or materials that

will be used in class to prepare them for the lesson, which reduces anxiety from not being prepared (Organization of Autism Research [OAR], 2021). With UDL training, faculty would be informed of priming and would offer it to their students, rather than having an autistic student request accommodations for their class. Other small accommodations professors would be able to provide are taking breaks, dimming lights, flexible seating, and providing clear instructions for assignments, such as providing a rubric (OAR, 2021; Bennie, 2023).

While the United States and the Netherlands are unique from each other, there is a gap in inclusive teaching, which UDL would fill (T. Bakker et al., 2022; Waisman et al., 2023). As this paper has described, there is efforts to increase UDL into post-secondary education, yet none of the listed is required for faculty to participate in. For faculty to be informed of UDL, the university should provide support and information about its implementation into classrooms as professors and faculty may enjoy the structure compared to traditional lectures. Another benefit is that UDL encourages communications between faculty and DSOs, rather than having students act as the liaisons between the two. For the student, having to go back and forth to access accommodations can become tiring and frustrating as they continuously must disclose their diagnosis.

In addition, having a resource specific orientation requires attending faculty or staff to be knowledgeable about what is offered at the university. Autistic students will be able to meet with staff or faculty they will need to be in communication at the orientation, allowing the students to feel less anxious when requesting accommodations. College orientations also allow parent(s) or guardian(s) to attend, which allows the new student to ask their guardian what they need or answer questions they may not know. The jump from being a minor to an adult puts additional responsibilities on autistic individuals that they may have not originally been accustomed to.

Paired with an unfamiliar environment and lack of knowledge about resources, the drop-out or not completing their college degree becomes apparent. Therefore, providing additional options for autistic students to learn about the resources on campus provides equitable support as they transition from secondary to post-secondary education.

### *Conclusion*

In conclusion, post-secondary institutions in the United States and the Netherlands should strive to create neuroinclusive environments for autistic students to ensure their success. By implementing UDL into classrooms, professors would be more knowledgeable about autism, which lessens the burden on the student to inform their professor about the process of acquiring accommodations and confidentiality autistic students have. To increase the access and knowledge about DSOs on campuses, having a orientation specific to disability and neurodiversity allows new autistic students learn about the resources on campus, while also meeting the faculty and staff that work at the offices for the resource. These two actions not only benefit students diagnosed with autism or other disabilities, but also support students who may not know they are neurodiverse or students who do not have disabilities. Post-secondary institutions should strive for inclusivity that benefits all students and create equitable resources to ensure students' success.

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