Accommodation experience: Challenges and facilitators of requesting and implementing accommodations among college students with disabilities

George Mamboleo[a], Shengli Dong[b,*], Sean Anderson[b] and Adrionia Molder[a]
[a]*West Virginia University, Morgantown, WV, USA*
[b]*Florida State University, Tallahassee, FL, USA*

Abstract.
BACKGROUND: Despite positive impacts of accommodations on college success, students with disabilities continue to experience challenges in requesting and utilizing accommodations.
OBJECTIVE: This study examined challenges and facilitators of requesting and implementing accommodations among students with disabilities.
METHODS: Two hundred eighty-nine students were recruited from six public universities at a Mid-Atlantic U.S. state. Challenging and facilitative themes were identified using a conventional content analysis.
RESULTS: Facilitators for accommodation request include instructor caring and initiatives, and support of Disability Support Services (DSS). Facilitators for implementing accommodations entail instructor understanding and helpfulness, disability services resources, and student initiatives. Challenges for disability disclosure and accommodation request comprise maintaining uniformity to avoid classmate/instructor stigma, judgment, and unfair advantages; personal insecurity and anxiety; instructor/classmate lack of understanding about invisible disabilities; and students' lack of knowledge of available accommodations. Challenges for implementing accommodations include instructor lack of understanding and judgment of student; improper facilitation of accommodation by instructor; and DSS counselor did not advocate for students.
CONCLUSION: Students with disabilities still experience a great number of challenges to request and utilize accommodations despite the supports from transitional staff/faculty and students' own initiatives. Helping strategies involving various stakeholders should be applied to assist students with disabilities.

Keywords: Students with disabilities, disclosure, execution of accommodations, facilitators, challenges

1. Introduction

Postsecondary education significantly contributes to employment and overall quality of life for in a knowledge-based labor markets like that of the

US (Gittell, 2015), including individuals with disabilities (Chan, 2016; Sannicandro, 2016). Students with disabilities (SWDs) have increasingly become a significant presence on university campuses in the United States during the past 25 years (Bureau of Labor Statistics, 2015). Federal laws pave ways to enhance college enrollment for SWDs through reducing academic barriers they face by requiring equal and accessible education through the provision of appropriate and adequate accommodations. Both

*Address for correspondence: Shengli Dong, Ph.D., Associate Professor, Department of Educational Psychology and Learning Systems, College of Education, Florida State University, 3206J Stone Building, 1114W. Call Street, Tallahassee, FL 32306-4453, USA. Fax: +1 850 644 8776; E-mail: sdong3@fsu.edu.

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) prohibit discriminatory action directed toward SWDs enrolling in postsecondary institutions that receive federal financial assistance, and requires the provision of reasonable accommodations and program accessibility to prevent institutional discrimination and improve educational and career-related outcomes of SWDs (Office of the Assistant Secretary for Administration and Management, 2016). In addition, the Americans with Disabilities Act Amendments Act (ADAAA) and the Higher Education Opportunity Act further expand access and services provided to SWDs in postsecondary education (Keenan et al., 2019; Lee, 2009).

Despite these legal provisions, SWDs continue to be underrepresented in postsecondary education (Marshak et al., 2010; Zehner, 2018). The percentage of people with disabilities who have earned a college degree is lower compared to people without disabilities (Bureau of Labor Statistics, 2015). For example, 16.4% of people with a disability have earned a bachelor's degree, which is a little less than half of the bachelor's degrees earned by people without a disability (Bureau of Labor Statistics, 2015).

Academic dismissal, personal withdrawal, family responsibilities, and inadequate campus resources have been found to be the reasons why SWDs earn fewer educational degrees compared to students without disabilities (Marshak et al., 2010). Other reasons include limited academic and social integration among SWDs. Tinto's (1975, 1993) model of academic and social integration has been found to be applicable to SWDs (Shepler & Woosley, 2012).

Tinto's (1975, 1993) theoretical model of integration revealed that multiple factors (e.g., individual characteristics, pre-college experiences and commitments) directly impact students' academic performance and retention in college. However, Tinto (1975, 1993) argued that an individual's integration into the academic and social systems of the college plays the most important role on his or her performance and persistence in college. Social integration refers to levels of integration and of degrees of compatibility between an individual and one's social environment. Academic integration entails the individual's academic performance and the individual's intellectual development. According to Dong and Lucas (2016), academic and social integration for SWDs within higher education is highly asso-

ciated with their access and use of the university resources available through registration with disability support services, and request and use of accommodations.

Accommodations play an important role in maintaining students' academic success at institutions of higher learning (Dong & Lucas, 2016; Kim & Lee, 2016). In contrast to high school students with disability whose needs are catered to by teachers and family members, SWDs in college are required to take the initiative to disclose their disabilities and request accommodations in order to be covered under the laws and access accommodations (Magnus & Tøssebro, 2014; Timmerman & Mulvihill, 2015). Despite benefits of accommodations, request rates among college SWDs remain low (Dong & Lucas, 2016; Marshak et al., 2010).

Several facilitators for accommodation request and utilization of accommodations have been reported in the literature. These include past positive experiences with accommodations requests (Barnard-Brak et al., 2009), self-awareness and self-advocacy skills (Cole & Cawton, 2015; Timmerman & Mulvihill, 2015), availability of supports and resources such as DSS (Erten, 2011; Meeks et al., 2015), and mentoring (Patrick & Wessel, 2013).

On the hand, several challenges also exist that prevent SWDs from requesting and utilizing accommodations. These include negative attitudes and practices of faculty regarding the provision of accommodations (Erten, 2011; Hong, 2015), unfamiliarity with available support services or lack of knowledge about disability (Barnard-Brak et al., 2009; Lightner et al., 2012; Lombardi & Murray, 2011), nature and type of disabilities (Salzer et al., 2008; Sniatecki et al., 2015). For example, SWDs with invisible disabilities who received academic support services were ashamed and/or stigmatized when they disclosed their disability to faculty and other students (Salzer et al., 2008), and faculty were found to hold increasingly negative attitudes toward students with mental health disabilities and learning disabilities (Sniatecki et al., 2015). Lindsay and colleagues (2018) provided a systematic review of empirical studies on challenges and facilitators of disability disclosure and accommodation for students within postsecondary education, published in English language peer-reviewed journals ranging from 1996 to 2016.

The previous studies examining challenges and facilitators for requesting and implementing accommodations among college SWDs shed light on the

accommodation request process. However, the studies have limitations. First, the studies examined either implementation of accommodations or request for accommodations. None of the studies addressed both perspectives. Second, only a few (10 out of 34 accessible articles) in the review addressed both challenges and facilitators of accommodations. Furthermore, the majority of qualitative studies utilized relatively small convenience samples from a single university. The present study aims to add to the existing literature by investigating both challenges and facilitators of request and implementation of accommodations and using a relatively larger sample among college SWDs from multiple campuses in the United States. The study sought to answer the following research questions.

1. What are the challenges of requesting and implementing accommodations among SWDs in higher education?
2. What are the facilitators of requesting and implementing accommodations among SWDs in higher education?

2. Method

2.1. Participants

Participants were students registered with DSS at six public colleges and universities located in a Mid-Atlantic U.S. state. A total of 289 students were included in the final sample. Of those, 93 (32.2%) were males and 194 (67.1%) were females, and 2 (.7%) did not provide information. The distribution across class was as follows: 53 freshmen (18.3%), 59 sophomores (20.4%), 59 juniors (20.4.2%), 83 seniors (28.7%), 33 graduate students (11.4%), and 2 (.7%) did not provide information. The median age of the participants was 25 years old. Participants also self-reported their disabilities and were able to select one more one type of disability. The participants self-reported the following types of disabilities: 104 (36%) as ADD/ADHD; 71 (24.6%) as emotional/psychological disabilities; 69 (23.9%) as learning disability and medical condition, respectively; 32(11.1%) as deaf/hard of hearing; 24 (8.3%) as orthopedic/mobility; 15 (5.2%) as blind/visual impairment; 14 (4.8%) as head injury; 11 (3.8%) as speech and communication disorder; and 8 (2.8%) as autism.

2.2. Data collection procedure

Institutional Review Board (IRB) approval was granted at each of the institutions where data were collected. All students registered at each of the institutions' DSS were contacted and received an email inviting them to complete a survey that explained the purpose of the study. The study included an online survey using Qualtrics software. Staff at DSS were asked to send the survey to the students through their listserv. The survey included one open-ended question that inquired about the students' past experiences with requesting accommodations from a university instructor. If the student had requested accommodations, an explanation of how the accommodations were met was sought. If no, they were asked to describe factors preventing them from requesting accommodation. Among the 289 students, 226 provided responses to the open-ended question while seven responses were excluded due to lack of readability. The top three accommodations requested included extra time on test, test in another room, and note taker. No personal identifying information was sought in order to maintain anonymity of the participants. The voluntariness and confidentiality issues related to the study were explained to participants. Participants were invited to voluntarily enter a drawing for an IPad Mini and one of twenty $25.00 Starbucks gift certificates that were available. In order for the participants to be entered into the drawing, they were asked to voluntarily provide an email address at the end of the survey where they would receive correspondence regarding the drawing. Participants were informed that their email addresses were not linked to the survey.

2.3. Data analysis

Conventional content analysis (Elo & Kyngas, 2008; Hsieh & Shannon, 2005) was used to examine the responses to the open-ended questions on accommodation experiences and related challenges and facilitators of requesting and execution of accommodations. According to Hsieh and Shannon (2005), conventional content analysis is used to explore a phenomenon, under which research literature or existing theory is limited, through the systematic classification process of coding and identifying themes or patterns. Rather than using preconceived hypotheses and assumptions, researchers use an inductive method in which they immerse in data to allow

categories, themes and insights to emerge (Kondracki & Wellman, 2002).

We started the data analysis process through reading the open-ended responses multiple times, getting ourselves immersed in the data, and obtaining a sense of wholeness of the data. During the initial phase of the data analysis, we used a thematic approach by reading through the open-ended responses without presumptions on the data, and highlighting words and phrases from the responses that seemed to capture the key concepts and ideas. In the course of data coding, we kept a record of statements that we were not sure about as well as our personal impression and reflection. We also wrote notes besides statements that had links or associations with each other. We maintained this audit trail throughout the coding process, which facilitated the process of identifying codes and themes accurately and objectively.

As the process continued, we reviewed the open-ended responses and labeled codes from data that came directly from the text, which helped with the initial coding scheme. We then checked the initial coding, identified discrepancies between the coding, and obtained a consensus after discussion. Next, we sorted the codes based upon their relations and links with each other into categories and meaningful themes (Patton, 2002). Once themes were identified through reading all the open-ended responses, we examined the relations between the themes and checked if any of the themes could be grouped together to form an overarching theme, and/or identified a hierarchy within the themes so as to make better sense of the data. The data analyses did not end until

it became clear that no new theme could be gleaned from the data (Berg & Lune, 2012).

Both the first and second authors have research and clinical experiences in working with individuals with disabilities and/or have experiences in conducting qualitative research. The third and fourth authors also have interests and/or experiences in disabilities issues. The separate coding by multiple researchers with different level of familiarity with disability and accommodation issues provide a greater opportunity to reduce biases in the coding process (Shenton, 2004). Discussion on coding discrepancies also provided researchers opportunities to examine personal assumptions and biases in the coding process and introduce multiple perspectives.

3. Results

3.1. Facilitators for disclosure of disability and request for accommodations

Among 226 participants, only 6 provided comments related to facilitators for disclosure of disability and request for accommodations. The following exploratory themes were identified: instructor caring and initiatives, and support of staff of DSS. All the themes can be found in Table 1.

Instructor caring and initiatives. Participants acknowledged the role played by instructors in the accommodation process through taking a proactive approach and an understanding attitude by providing needed supports (i.e., referral and connecting

Table 1
Themes of Challenges and Facilitators for Accommodation Request and Execution

Themes	n	(%)
Facilitators for Request/Disclosure of Disability		
• Instructor caring and initiatives	3	(1.4)
• Support of disability services	3	(1.4)
Facilitators for Execution of Accommodation		
• Instructor understanding and helpfulness	83	(37.9)
• Disability Services resources (accommodation registration/letter, advocate assistance)	13	(5.9)
• Student Initiatives	16	(7.3)
Challenges for Request/Disclosure of Disability		
• Maintaining uniformity to avoid classmate/instructor stigma, judgment, and unfair advantages	29	(13.2)
• Personal insecurity and anxiety	7	(3.2)
• Instructor/classmate lack of understanding about invisible disabilities	5	(2.3)
• Student's lack of knowledge of available accommodations and skills on request	4	(1.8)
Challenges for Execution of Accommodation		
• Instructor refusal, lack of understanding, judgment of student	39	(17.9)
• Instructor improperly facilitates accommodation	14	(6.4)
• Disability Services counselor did not advocate for students	3	(1.4)

students with appointments) to DSS. This role helped SWDs to overcome challenges and difficulties and enabled them to take the initiative to request accommodations. The following statement exemplifies this:

> Three years into my college education I felt as if I was going to have a nervous breakdown so I went to one of my professors and explained what was going on. She set up an appointment with the disability center and also helped me set up an appointment with a doctor. I was assessed and after all was said and done I was told that I did have a learning disability. I was able to get accommodations at school now.

Furthermore, participants identified instructor caring attitude as an essential ingredient in the accommodation process. A participant expressed the need for instructors and other staff to identify and make necessary referrals for SWDs as exemplified by the following response: "....so teachers, advisers and counselors, please listen to your students because they may not come out and admit they have a problem but still need your help getting started in the right direction."

Support of DSS. Participants in this study expressed that DSS is instrumental in providing proof of documentation in a timely manner. One participant revealed that: "... . after discussion and proof of affiliation with the disability services, [my professor] allowed me to do an alternative of writing an essay."

Furthermore, DSS was identified as the avenue to assist SWDs to be skillful in requesting accommodations and advocating for themselves. The theme was exemplified by a participant who stated: "... .my accommodation needs being met are the amazing people running the DSS here. They're willing to help you with anything, even help you learn how to speak with professors about your accommodations."

3.2. Facilitators for execution of accommodations

Among 226 participants, 111 provided comments related to facilitators for execution of accommodations. The following themes were identified: instructor understanding and helpfulness; disability services resources (i.e., accommodation registration/letter, advocate assistance); and student initiatives.

Instructor understanding and helpfulness. Approximately 38% of the participants revealed

that instructors' understanding of students' circumstances and offering of proactive assistance aided in the implementation of accommodations. For example, participants pointed out that their instructors went beyond expectations by meeting with students early in the academic semester to prevent issues, rather than taking a reactive approach after the students began struggling. One participant expressed:

> ... All of my Professors have worked with me and went above and beyond to help in any way possible. They also talked with me independently at the beginning of the semester to make sure to accommodate all my needs so I can be successful in my classes now as well as help me succeed in the future.

The instructors' familiarity and use of appropriate technology was also acknowledged as a way to help SWDs have their accommodation needs met. One participant stated: "... . he figured out a way to stream what he was putting on the screen to my laptop so I could see it up close and be able to read the documents ... . able to participate in the class."

One of the reservations that SWDs expressed about the request and use of accommodations was the concern that they would inadvertently disclose their disability identity to peers. Participants reported that the instructors conceived creative and caring approaches to providing accommodations while protecting students' privacy, which is crucial to students requesting and using accommodations in postsecondary institutions. One participant stated his instructors extended the time for the entire class so as not to reveal the student's disability to the entire class. Another participant said that a thought of taking the student to a small office or lounge use extra time or "end up giving the rest of the class extra time so I don't stick out like a sore thumb, which is actually my preference."

DSS resources. Participants described the assistance that the DSS staff provided in their accommodations experience in regard to the execution of accommodations such as proctored exams. The support and aid from DSS staff helped to build a relationship with SWDs, as well as assisted SWDs transition to college life. One participant gave an account of the experiences:

> ... I have been able to talk to my disability counselor about getting extended test time, note taking, and other accommodations. I have been given the

opportunity to have my disability service counselor to proctor my final exam. The disability service counselor has been willing to work with me so I can get accommodations for my class in order to be successful.

Furthermore, DSS also played a key role in coordination with instructors and students. One participant stated: "I utilize extended time on my tests. The proctoring sessions are coordinately [sic] among the professor, the Office of Disabilities Services and me. It has worked well over my time here."

Student initiatives. Participants expressed that they needed to take control of their situation and provide plenty of information and guidelines to their instructor ahead of time on their accommodation needs to facilitate the smooth execution of the accommodation requests.

> I inform all professors that my condition involves me being absent from class on a regular basis. I ask that when I email them, informing them of my absence for the day, that they notify me of whatever I missed so I may catch up. Also, that if they become concerned about my attendance to not hesitate to call me into their office to talk.

Results also showed that SWDs took initiatives in the process of execution of accommodations as one participant with ADHD explained to his professor why extended time was needed: "... my ADHD tends to get the best of me and causes me to procrastinate and/or lose focus while doing assignments, and sometimes I may need an extended time to do my assessment(s) due to this factor."

Unfortunately, SWDs, in some cases, need to take a legal action against their instructors to protect their rights and have their accommodation provided such as filling a complaint with the university student services as indicated below: "... he has refused on multiple occasions to allow me to record lectures and I had to refer him to student services and file a complaint with the head of the department to get him to follow the paperwork..."

3.3. Challenges for disclosure of disability and request for accommodations

Among 226 participants, 45 provided comments related to challenges for disclosure of disabilities and request for accommodations. The following themes were identified including maintaining uniformity to avoid classmate/instructor stigma and unfair advantages; personal insecurity and anxiety; instructor/classmate lack of understanding about invisible disabilities; and students' lack of knowledge of available accommodations.

Maintaining uniformity to avoid classmate/instructor stigma, judgment, and unfair advantages. Participants expressed a need to remain like other students to avoid being stigmatized, judged or perceived as unfairly advantaged. One participant said, "I personally try to keep my condition quiet because I prefer to not be treated any differently than any other students unless it is necessary." Another one responded, "I think the issue that needs addressed ... and also eliminating any apprehension they have about the "stigma" associated with getting what some may consider an unfair advantage." One participant who was not receiving services indicated, "I have not had to request accommodations but would be hesitant in the future because they might think or treat me differently." The reluctance to request accommodations stemmed from fear of the instructor's past attitude as one participant stated, "Getting through graduate school has been especially difficult without receiving accommodations, but I think being in an environment where my professors assume from the beginning that I'm lazy or stupid is worse."

Personal insecurity and anxiety. Personal insecurities and anxiety played a role in student's willingness to request and disclose disability. One participant who had received accommodations in the past said, "... I approached about extended test taking time and rescheduling for the most part seemed to be alright with it. They still keep in contact with me when I reach out but as I have a good amount of anxiety it's hard to do so sometimes." Another participant expressing similar sentiments said, "... I am still hesitant to tell anyone of any of my disabilities because I feel that the label is misunderstood and that there is a broad and painful stigma of incapability attached to it."

Instructor/classmate lack of understanding about invisible disabilities. Another barrier to request and disclose disability was lack of understanding about invisible disabilities by instructors or classmates. A participant said, "... I am unwilling to disclose the information because most people don't understand that just because I look completely normal doesn't mean that I don't struggle with a disability."

Participants with invisible disabilities felt that they were disadvantaged due to the lack of understanding on invisible disabilities from their instructors and peers. One such participant said, "My disability isn't obvious to the naked eye. Profs in past just think I'm lazy." Similarly, another indicated that " . . . These are educators that need serious training in managing adult learners with disabilities. Just because my disability is not obvious or physical does not mean that it is any the less a disability." One participant who did not receive accommodations said, " . . . I'm always afraid of talking to them about my bipolar disorder or my anxiety because I feel they won't believe me . . . "

Student's lack of knowledge of available accommodations and skills on request. Some participants were not aware of accommodations available to them. One participant who was not receiving services at the time of the study said, " . . . I never received any curve on my grades nor did I receive extended time on assignments as it was not made clear that these were options for me. If I had known, I likely would have taken advantage of them." Similarly, another participant expressed, "I have personally talked to other students with disabilities, usually ADD/ADHD, and they have no idea that they can receive accommodations . . . " Another participant who was not receiving services thought it was difficult to approach instructors for accommodations and indicated so by saying that "I honestly don't know how to go about asking a professor for accommodations. I wouldn't know the right words to say to him/her".

3.4. Challenges for execution of accommodation

Fifty-six out of the 226 participants provided comments related to challenges for execution of accommodations. Among the 56 comments, the following themes were identified: instructor lack of understanding, and judgment of student; instructor improperly facilitates accommodation; and DSS counselor did not advocate for student.

Instructor lack of understanding, and judgment of student. Some participants felt that their instructors refused to provide them needed accommodations, lacked understanding regarding accommodations or were judgmental against them. One participant was critical about a particular professor and said that "I tried to receive help due to my test anxiety and was told I couldn't. Taking tests is really hard for me and I went to the professors for help but got told no. In turn I failed . . . " Another participant believed

that some instructors refused to provide accommodations because the instructors did not understand how to provide the needed accommodations: " . . . I had a professor state to the disability advocate that they don't know how to grant extended time on Blackboard assignments and that therefore they would not do so."

Regarding extended time, some of the participants felt that this was problematic for their instructors. One participant said that "the majority of professors are very accommodating. However, one in particular was condescending regarding my request for extended test time." Another participant thought that an instructor did not see the need for the requested accommodations. "I have asked for and received in all but 1 class permission for special circumstances. In one class the professor refused to grant me any special circumstances due to the fact that 'she didn't see the need'". One participant had an issue with international faculty and indicated that " . . . the foreign teachers still don't really understand what it means to get extra time on assignments and tests."

Improper facilitation of accommodations by instructor. Based on participants' responses, it was clear that some instructors were not providing the accommodations appropriately. One participant reported being interrupted when taking an examination and said,

> I had been placed in a room with another student since the testing booths were overbooked, and a "Do Not Disturb" sign was not posted on the door so we had visitors several times enter the room and even open the door to the cubicle.

Another participant was told to personally look for a place to take an examination and the examinations were not on days indicated in the syllabus. The participant said, " . . . request for test taking in private have not been accommodating to me. I'm told to find a quiet place to take my test or schedule for myself. The tests are not always on the date that's in the syllabus." Another participant who needed a quiet environment for testing reported that the place where the examination was proctored was not conducive to test taking. "The noise from outside the room made it difficult to hear her. She did allow me to ask her to repeat something which would have not been done during class." Similarly, a participant reported being interrupted when taking an examination. The participant said, "Have been interrupted when taking exams in quiet room by other faculty administering the exam

telling me to hurry up or the time is almost up when I get extended testing time and it's supposed to be quiet."

DSS counselor did not advocate for students. Some participants also indicated that disability services counselors who are supposed to be advocates for students were to some extent a barrier to execution of accommodations. Regarding this notion, one participant said that,

> The disability advocate, rather than argue the point, simply forwarded me the email and their response - and that was the end of that. The disability advocate never resolved the problem and that particular professor has not had anyone to refute his responses. I am worried that the same thing will continue to happen in the upcoming Spring Semester and that I will be forced to be my own advocate to the University, simply because the disability advocate remains silent to my complaints.

Another participant reported an experience in which the DSS staff were perceived not helpful in advocating for students with a documented disability: "I do not understand how a documented disability with the University can just be written off as my lack of responsibility. The Office of Disability also told me that they could not do anything for me."

4. Discussion

The study aimed to explore challenges and facilitators that may be associated with disclosure of disabilities, and request and execution of accommodations among college SWDs. Explorative facilitating themes for request/and or disclosure of disability were identified as instructor caring and initiatives as well as the support of disability services. However, only a few students reported these initiatives. Regarding facilitators for execution of accommodations, around 38% of responses indicated that instructors were supportive of their accommodations needs and provided needed assistance to facilitate their accommodation needs. These finding mirror those past studies (e.g., Cole & Cawthon, 2015; De Cesarei, 2015; Morris & Turnbaull, 2007) who reported that positive experiences with faculty serve as a facilitator for disability disclosure.

Other critical factors for accommodations execution reported in the present study were disability services resources such as accommodation registration/letter and advocacy assistance and students' initiatives. Participants reported that they took an active role in the process by self-disclosure and request of accommodations to the concerned parties. This is in line with the finding that SWDs must marshal their self-awareness and self-advocacy skills (Cole & Cawton, 2015; Timmerman & Mulvihill, 2015) to ensure that they receive needed accommodations. Finally, students reported that filing a complaint with disability services or department chair that involved formal complaints and legal processes were instrumental in ensuring they received needed accommodations. We argue that college SWDs do not need to take such drastic measures in order to receive accommodations that they legally deserve in order to be successful in their education career. DSS as well as college administration should provide the students accommodations and supports to facilitate their success.

The current study also revealed multiple barriers to disability disclosure, request and utilization of accommodations. Attitudes towards disability disclosure from faculty and peers' attitudes towards disability disclosure play an important role in disability disclosure and accommodation request. The participants reported that negative attitudes and stigma from faculty and peers impact their disclosure of disability and request for accommodations. According to past research (e.g., Green, 2007; Lindsay et al., 2017; Marshak et al., 2010), SWDs who face peer and faculty discomfort and patronizing attitudes experience a sense of exclusion and marginalization. Negative attitudes of peers and faculty and accrued sense of social isolation might compel SWDs to conform with social norms of able-bodied society for fear of being judged or treated differently, thus, preventing them from disclosing their disability and requesting accommodations. In addition to attitudes of faculty and peers, college SWDs' attitudes and awareness of disability and accommodations are highly associated with disability disclosure. For example, some of the participants in the current study reported not wanting to be associated with disability and wanted to appear "normal," especially those with invisible disabilities. Past research also found that participants did not disclose by hiding or denying their disabilities. In other studies, SWDs chose not to disclose disability due to negative view of their disabilities and associated accommodations (Barnard-Brak et al., 2010; Cawthon & Cole, 2010; Magnus & Tossebro, 2014).

Participants in the present study also indicated that lack of understanding about invisible disabilities by instructors or peers was another challenge to disclosure of disability. These findings are consistent with other studies (Cole & Cawthon, 2015; Hindes & Mather, 2007; Magnus & Tossebro, 2014). Due to fears regarding the perception of disabilities by both faculty and peers, SWDs tend to underreport disabilities, resulting in underutilization of services provided by DSS in postsecondary institutions (Barnard-Brak et al., 2010). It is imperative that students develop self-awareness of the nature of their disability and recognize the benefits of requesting accommodations. This awareness will motivate the students to self-advocate and take initiatives to disclose and utilize available resources to facilitate their academic success.

Participants also reported a relatively low level of knowledge of accommodations/ADA and available resources as a challenge to request and disclosure of disability. These findings are consistent with past research (Cawthon & Cole, 2010; Lightner et al., 2012; Newman & Madaus, 2015). Low level of knowledge of accommodations and available resources could serve as an obstacle to recognizing rights and benefits of disclosing disabilities as well as utilizing accommodations among SWDs. For example, the low disclosure rates among college SWDs was found to be associated with lack of knowledge of resources available and limited familiarity with individualized education plans (Newman & Madaus, 2015). Lightner et al. (2012) also reported that students that lack knowledge about their disability and available accommodations and services delayed their disclosure.

The current study also found that faculty lacked necessary knowledge of accommodations and needs of college SWDs. Faculty members' knowledge of disabilities and disability law, their willingness to offer accommodations, productive teaching practices, and overall disability etiquette have been found to impact their ability to successfully provide accommodations for SWDs (Cook et al., 2009; Hong, 2015).

Erten (2011) reported that DSS is a critical source of accommodation support. Only a handful of participants in the present study reported that DSS played a role in facilitating the request and disclosure of disability. The perceived lack of support from DSS may be an indication that DSS needs to take a more proactive role in advocating and assisting SWDs. Furthermore, given these findings, there seems to be a potential that these counselors are faced with limited resources that might lead to the lack of advocating efforts.

5. Limitations

While the present study provides valuable information regarding challenges and facilitators for requests and execution of accommodations among SWDs, it has several limitations. First, the survey method used in this study made it challenging to follow up participants with their responses in case there was something that needed clarification. For example, some responses to the survey were short without clear background to the statements, which hindered clear understanding of the meaning of the responses. Participants might have also provided socially desirable responses due to the nature of a survey study. Second, due to convenience sampling of participants, findings of the present study have limited applicability to the population that was studied and may not be representative of experiences all SWDs in other institutions of higher learning. Lastly, because the survey asked participants to talk about their personal experiences, there is a possibility of response bias due to participants basing their answers on specific experiences they recalled at the time of the survey as opposed to their general experience with accommodation requests.

6. Implications for practice

The present study offers several implications for practice. DSS and related transition organizations should collaborate to enhance transition services for SWDs from secondary education to postsecondary education in the following ways: First, students need to be educated on the changes of legislative rights and obligations under ADA (1990) and ADAAA (2008) during the transition, and be prepared to take initiatives and learn to thrive in college. Training on college expectations and resources available on campuses such as workshops on accommodation or Disability 101 courses can help students with disability to familiarize with relevant laws, expectations and resources. Second, students need to understand factors that affect disability disclosure and accommodation requests. A lack of understanding on these factors may lead them to underestimate the potential impact of disability and fail to recognize their

accommodation needs and benefits of disclosure. Thus, postsecondary institutions and transition services should provide training on dispelling stigma and prejudice related to disability and help seeking, and enhance knowledge related to nature and impact of disabilities. For example, peer supports coordinated by DSS or student disability associations can help new students enhance self-awareness on their strengths and functional limitations and provide them skills to combat disability-related discrimination. Third, students may need to enhance their knowledge of accommodations and negotiation skills in order to communicate their accommodation needs. To achieve this, disability professionals at the postsecondary institutions as well as transition service staff may need to hold workshops and/or focus groups to foster SWDs' ability to self-advocate through identifying, requesting and utilizing accommodations and supports. If accommodation requests are not met with prudent efforts, SWDs should also be provided information on administrative and legal procedures to seek solutions.

Findings of the present study indicate that only a small number of participants thought DSS played a facilitative role both in request/or disclosure of disability and execution of accommodations. The finding also indicates that some DSS counselors did not advocate for students These finding may indicate a need for DSS to integrate positive attitude training towards disability among their staff to enable them to provide adequate services. DSS may also need to play an active role in advocating for SWDs beyond the traditional role of fulfilling the legal mandates of ADA. These findings may further indicate a need for an integrated approach to accommodations and support services provision in colleges to potentially include counselors from local state vocational rehabilitation service (VR) organizations who also have familiarity with employment related resources. These approaches may not only prepare SWDs for their future employment but also enhance their self-efficacy and competence in seeking academic supports.

Some participants also reported that some faculty and peers without disabilities were a barrier for request/disclosure of disability. To mitigate the barrier, we suggest diversity training in the area of disability for both faculty and students without disability to recognize the privilege of able-bodied society, and benefits of an inclusive campus environment for all. Instructors (including teaching assistants) can also be effective in helping SWDs to be successful by

enhancing their knowledge on ADA and accommodation, and skills to identity needs of SWDs through regular training and orientation for faculty members and teaching assistants on topics related to disability and accommodation. Faculty and DSS staff may need to be knowledgeable about the provisions of the Americans with Disabilities Act Amendments Act and Higher Education Opportunity Act, and understand that they are required to provide appropriate academic accommodations to SWDs (Keenan et al., 2018).

7. Implications for research

Considering limitations of cross-sectional studies, longitudinal designs are warranted in future research. Such studies would be geared toward following SWDs to try to understand their thinking regarding challenges and facilitators of accommodation request and execution during different stages of their academic development. Similarly, focus groups could be utilized to study challenges and facilitators of accommodations due to their inherent advantage of providing researchers with the ability to obtain detailed information about personal and/or group feelings, perceptions and opinions. Focus group methodology has gained popularity within the disability research due to its flexibility, open format, and its potential to elicit not only participants' views and preferences, but also the interaction of participants during the group process (Kroll, Barbour, & Harris, 2007). Finally, based on the findings from the current study, quantitative research that utilizes the constructs and variables found in this qualitative study is warranted to test the current findings and examine the relationship between challenges and facilitators and participants' academic performance and social integration on campus.

8. Conclusion

Assisting college students with disabilities to be successful is critically important. Despite the supports from transitional staff and students' own initiatives in the areas of disability disclosure and accommodation request, college students with disabilities still experience challenges in requesting and utilizing accommodations. Helping strategies that involve various stakeholders should be employed to assist college students with disabilities to be success-

ful in their pursuit of postsecondary education and future career.

Conflict of interest

None to report.

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