Impact of Mistreatment on Transition to CRNA Practice

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Disclosure Statement

We have no financial relationships with any commercial interest related to the content of this activity.

Introduction of Speakers

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Objectives

Define mistreatment, its prevalence among healthcare trainees, and the impact it has on academic success.

Assess the impact of mistreatment of nurse anesthesia residents during training and during the transition into clinical practice.

Discuss the results of a nationwide survey to inform recommendations for reporting and mitigating mistreatment of NARs during training.

Background

- Increased prevalence of mistreatment in all healthcare professionals and at all different levels of training and practice.
- Residents who faced mistreatment experienced depression, stress, low self-confidence, suicidal ideation, and were more likely to make medical errors (Leisy & Ahmad, 2016).
- Mistreatment resulted in decreased confidence, increased ‘sick calls,’ absence from work, normalizing behavior, and high turnover.
- Among nurses, it resulted in emotional and mental adverse effects impaired capability to provide safe patient care (Anusiewicz et al., 2020).
- The impact of these actions risks patient harm, increases stress levels, and eventually leads to high employee turnover.

Mistreatment Defined

- Mistreatment is defined as abusive conduct such as verbal abuse, threatening, intimidating, sabotage, or humiliating behaviors and can result in low morale, lower productivity, and increased absenteeism (TJC, 2021).
- Separately, it has also been described as a behavior that is disrespectful or lacks promotion of an individual's dignity (Mahoney et al., 2022).

Background

- 21% of nurses and 50% of student nurses have reported being physically assaulted and verbally abused by healthcare workers, patients, and their families (OSHA, n.d.).

- Workplace mistreatment can create a hostile work environment that may lead to poor psychological outcomes such as low self-confidence and suicidal ideation.

- A research from 262 surgical residency programs to assess mistreatment amongst general surgery residents found that gender discrimination was reported by 31.9% of all the residents of which 65.1% were women and 10.0% were men (Hu et al., 2019). Racial discrimination was reported by 16.6% of the residents and sexual harassment by 10.3%.

- Cook et al. (2014) conducted a study that assessed medical students across 24 medical schools. The research found that 64% of students reported at least one incident of mistreatment by faculty, while 76% reported at least one incident of mistreatment by residents. Sexist names or remarks, racially or ethnically offensive remarks and lower evaluations or grades were also found to be frequently reported.

- Nurses who experience bullying are more likely to bully others (Vessey et al., 2010)

Impact of Mistreatment on Nurse Anesthesia Residents

The literature demonstrates an increased reporting of trainee mistreatment over the past 10 years.

70% of NARs reported experiencing verbal abuse and claimed the abuse could affect self-awareness, critical thinking, psychomotor proficiency, and professionalism

(Elisha & Rutledge, 2011).

70.6% of student registered nurse anesthetists (SRNA) experienced discrimination such as racial slurs, microaggression, and offensive comments during their training

(Serrano et al., 2023).

Discrimination rates were highest amongst Middle Eastern or North African students 100% (3/3 students), African American 52.4% (11/21 students) & lowest in white Caucasian 12.9% (11/74 students)

(Serrano et al., 2023).

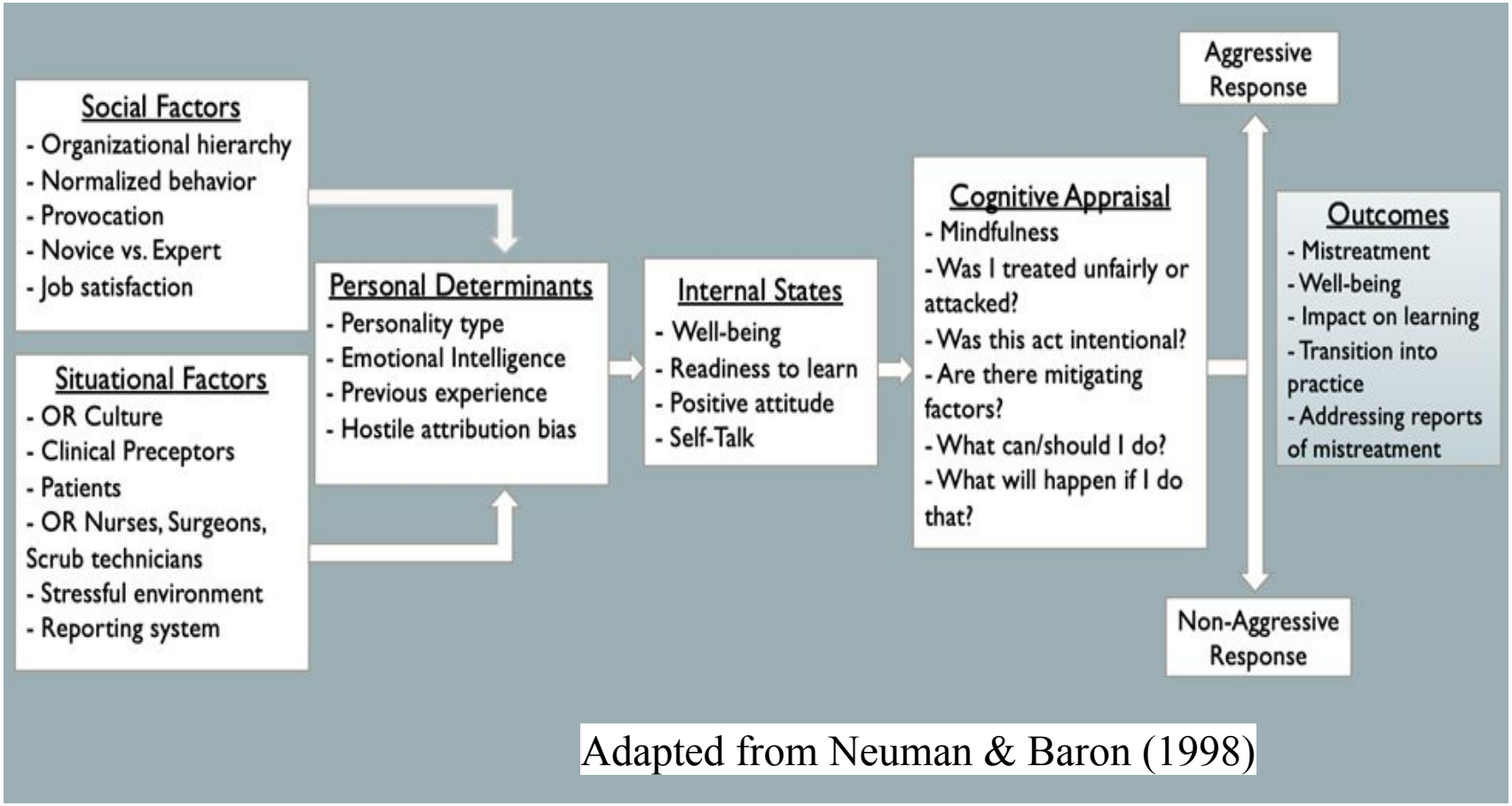
Research Question

What is the impact of perceived mistreatment on Certified Registered Nurse Anesthetist (CRNAs) transition into practice, and how are anesthesia programs addressing reports of mistreatment?

Specific Aims

- Collect data from a nationwide sample of practicing CRNAs to quantify perceived mistreatment during their clinical and didactic training and determine impact on learning, well-being, and transition to practice
- Determine if different minorities groups, genders, or levels of experience perceived more incidents of mistreatment during their CRNA training
- Determine the prevalence and frequency and severity of various types of mistreatment reported in the training environment
- Identify strategies used by nurse anesthesia programs to resolve mistreatment and NARs' experiences with the systems in place
- Report of qualitative data related to strategies for CRNA success during their transition to practice

Theoretical Model of Workplace Aggression



Adapted from Neuman & Baron (1998)

Methods

- Created survey for pilot testing
- IRB approval - January 10th, 2024
- Pilot tested on February 6th, 2024
- Final survey created
- AANA survey deployment services launched the anonymous national survey to 2,680 CRNAs in practice less than 3 years
- Email reminder sent two weeks before survey closure
- Data collection concluded April 8th, 2024
- Data analysis
  - Qualtrics and SPSS for quantitative data
  - Microsoft Excel for coding and categorizing qualitative data.

Image credit: iStock

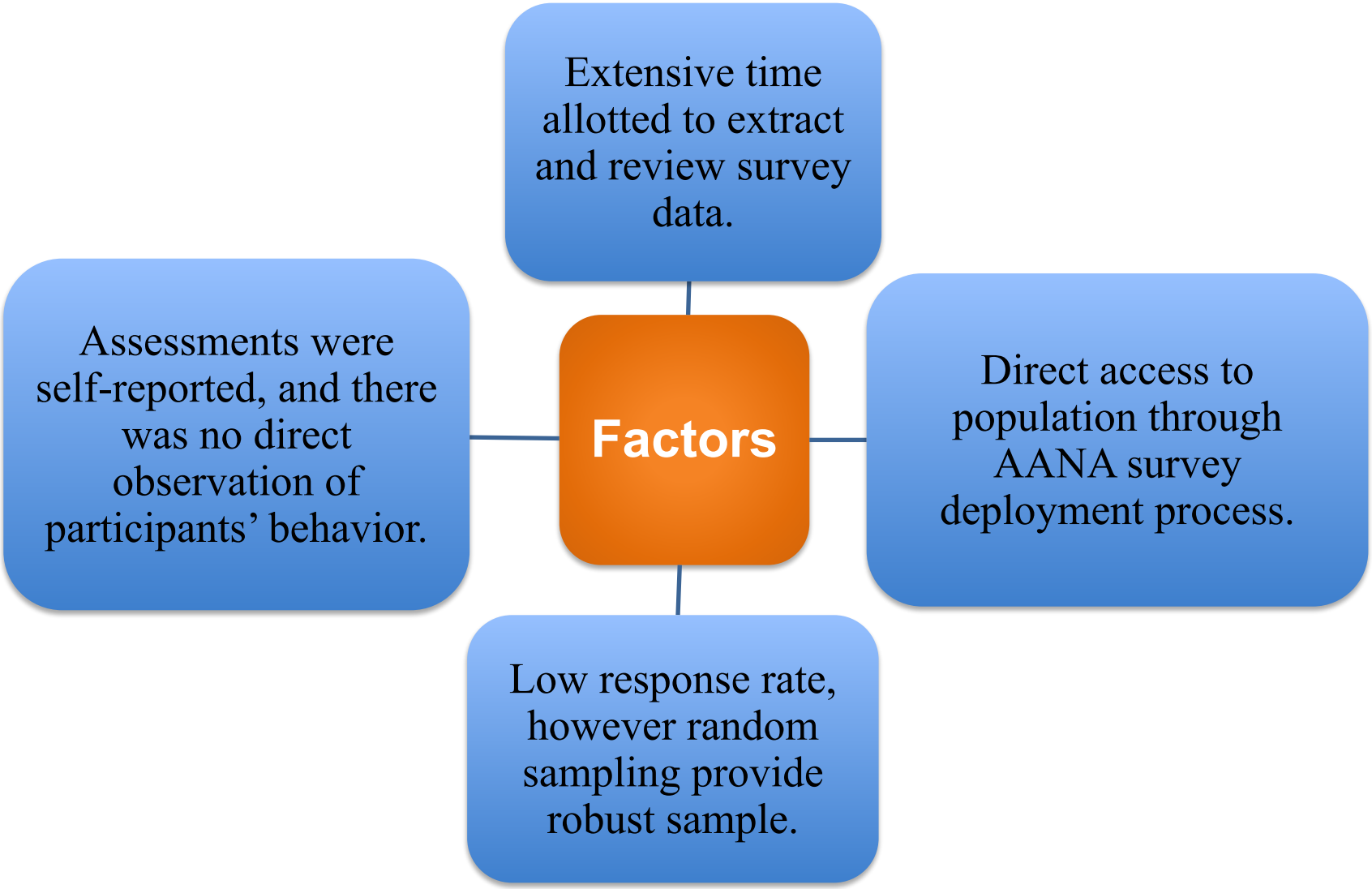
Quantitative Data analysis

- Comparison of variables and identification of correlations using Microsoft Excel and SPSS
- Data was divided into categories to identify trends related to gender, sexuality, race, and experience.
  - Analyzed as groups using SPSS
- WHO-5 Scale summed scores
  - Compared between groups using SPSS
- Independent t-test
  - Examined gender differences

Qualitative Data Synthesis

- Qualitative data was reviewed and aggregated into common themes and subthemes as needed.
- Excel was utilized for qualitative data analysis by coding, tracking themes and data segmentation.
- Pivot tables were used to create summaries and cross-tabulations and histograms for data display.

Barriers and Facilitators

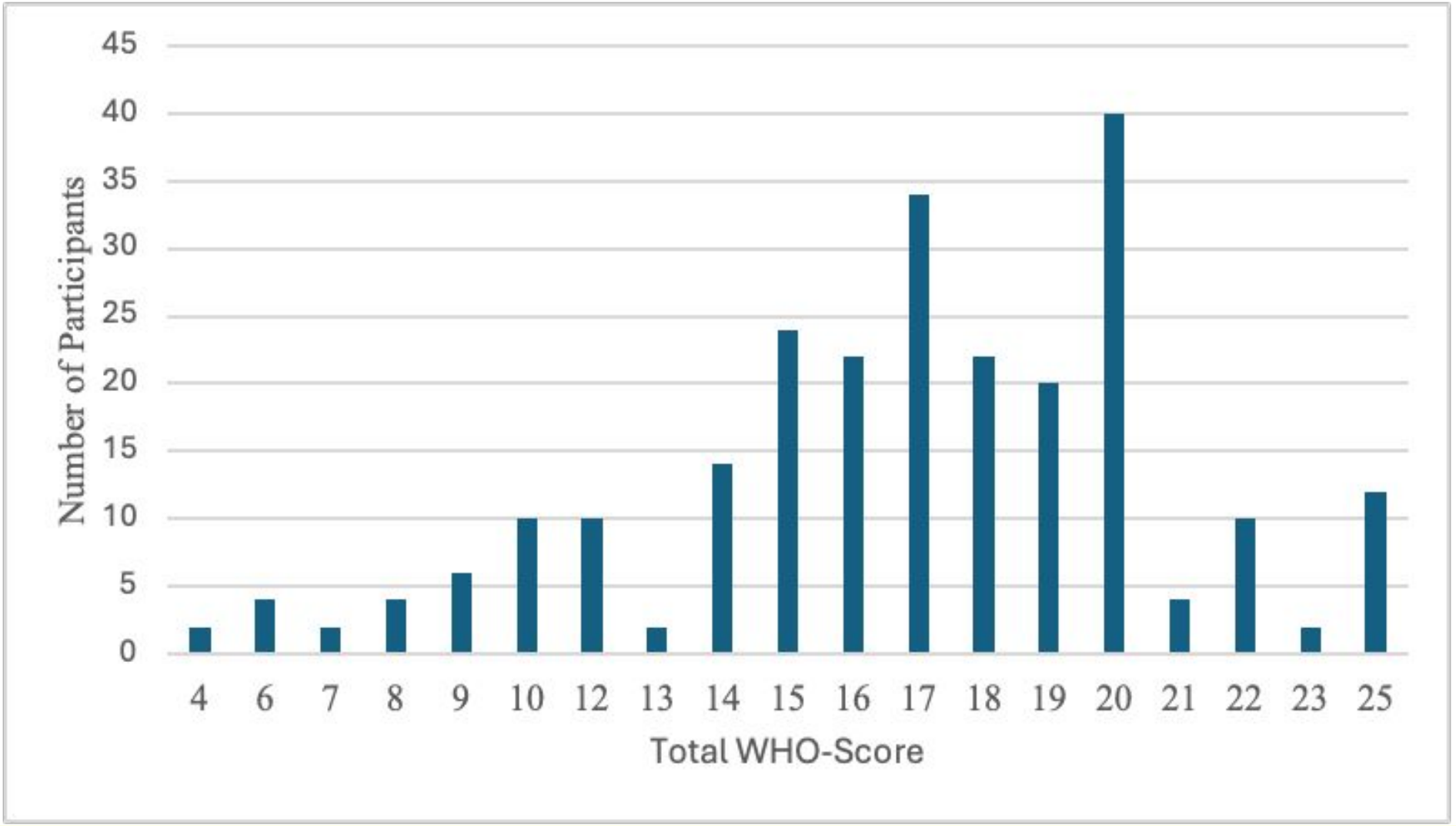


RESULTS

Demographics

Characteristics	N (%)	Characteristics	N (%)
Gender		**Age**	
Male	42 (33)	<24	0 (0)
Female	85 (66)	25-28	6 (4.7)
Self-Identify		29-32	38 (30)
Non-binary		33-36	34 (26.7)
		>36	49 (38.6)
Race/Ethnicity		**Sexual Orientation**	
AA/Black	5(3.9)	Heterosexual/straight	108 (85)
Native American	1 (.78)	Homosexual	10 (7.9)
Asian	7 (5.4)	Bisexual	6 (4.7)
Hispanic/Latino	5 (3.9)	Self-identify	1 (0.9)
Caucasian/White	107 (82.9)		
Other	4 (3.1)		
GPA		**Nursing Experience**	
< 3.0	0 (0)	<1 year	0 (0)
3.0 – 3.39	4 (3.3)	1-2 years	16 (12.9)
3.4-3.69	21 (17.1)	3-5 years	43 (33.9)
3.7-4.0	101 (79.7)	>5 years	68 (53.2)
Facility Type			
Large academic	80 (63)		
Suburban	17 (13.4)		
Urban	12 (9.4)		
Rural	0 (0)		
Other	18 (14.2)		

World Health Organization (WHO) Wellness Score Distribution



Mean WHO Scores by Racial Groups

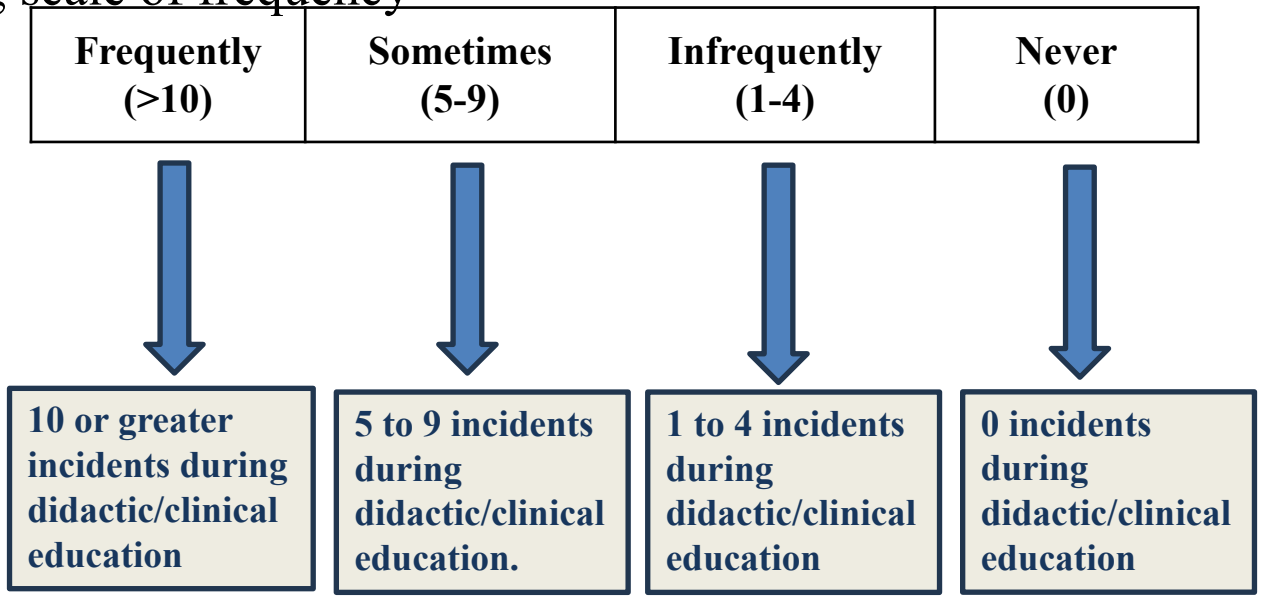
Percentage of Participants in Each Racial Group with WHO Scores <14

WHO Score by Gender

- Higher mean WHO-5 well-being scores were seen for males when compared to females
- An independent t-test comparing the WHO scores between genders (16.53 vs 17.21) was not statistically significant (p=0.396)

Rating Scale

- Participants were asked to rate reports of mistreatment including physical abuse, verbal abuse, discrimination, and behavioral experiences using a rating scale of frequency



Types of Mistreatment Reported by Participants

Mistreatment types	N	Frequently (%)	Sometimes (%)	Infrequently (%)	Never (%)
Threatened with physical harm	117		0.9	10.3	88.9
Verbal abuse	119	19.3	21	31.1	28.6
Physical harm	117		0.9	7.7	91.5
Sexual advances	117	1.7	1.7	18.8	77.8
Sexual favors exchange	117			0.9	99.1
Extra clinical hours threat	117	6.0	7.7	14.5	71.8
Gender discrimination	117	2.6	6.0	10.3	81.2
Sexist remarks/Name calling	117	6.0	5.1	30.8	58.1
Lower grades due to gender	117		3.4	10.3	86.3
Racial discrimination	116		4.3	7.8	87.9

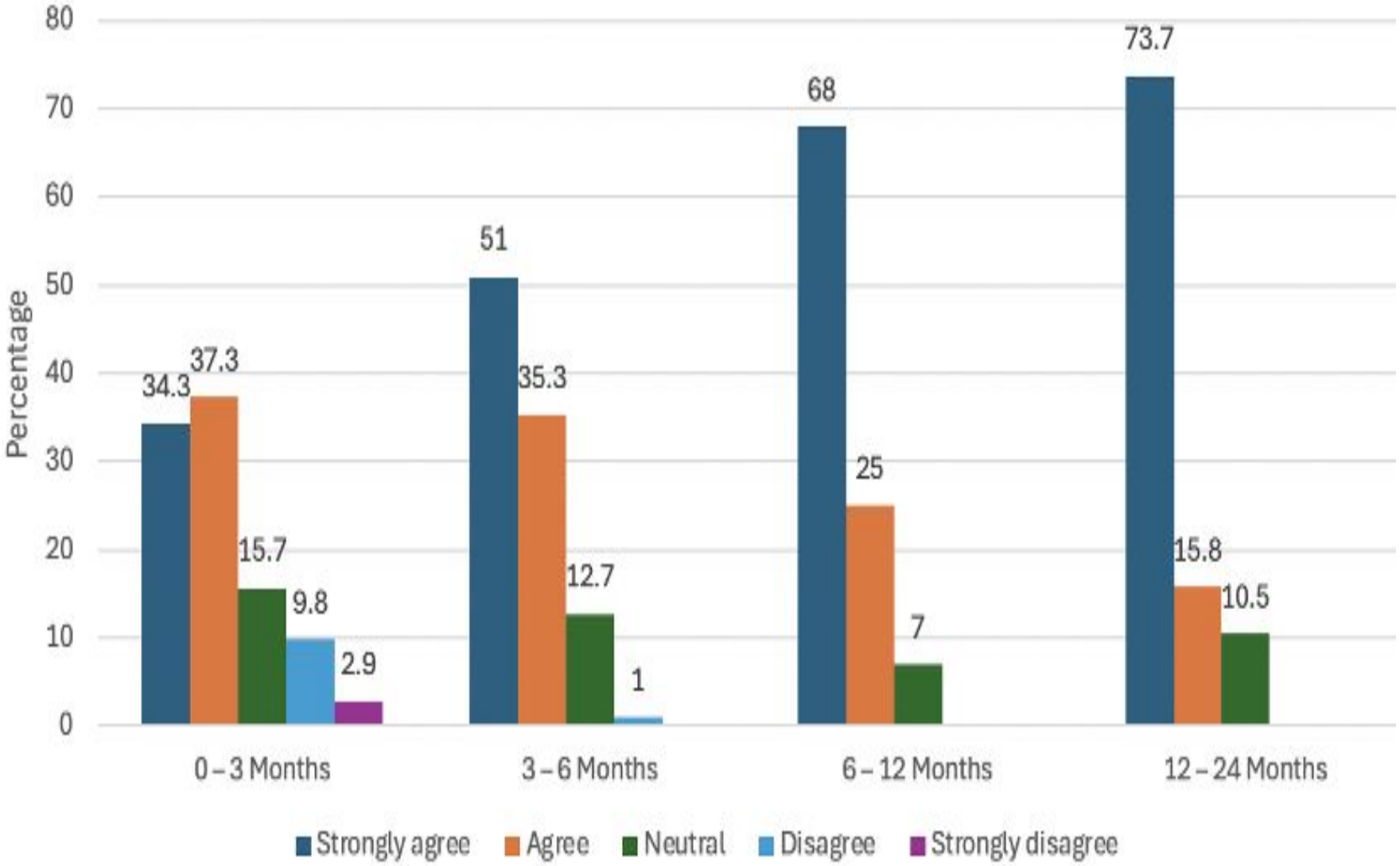
Types of Mistreatment

Mistreatment types	n	Frequently (%)	Sometimes (%)	Infrequently (%)	Never (%)
Offensive racial remarks	116	0.9	1.7	12.1	85.3
Lower grades due to race	116		2.6	6.0	91.4
Religious discrimination	116		0.9	1.7	97.4
Offensive religious remarks	116		0.9	4.3	94.8
Lower grades due to religion	116		0.9	0.9	98.3
Sexual orientation discrimination	116	1.7	0.9	0.9	96.6
Offensive sexual orientation remarks	116	0.9		2.6	96.6
Lower grades due to sexual orientation	116	0.9	1.7	0.9	96.6
Offensive racial remarks	116	0.9	1.7	12.1	85.3
Lower grades due to race	116		2.6	6.0	91.4

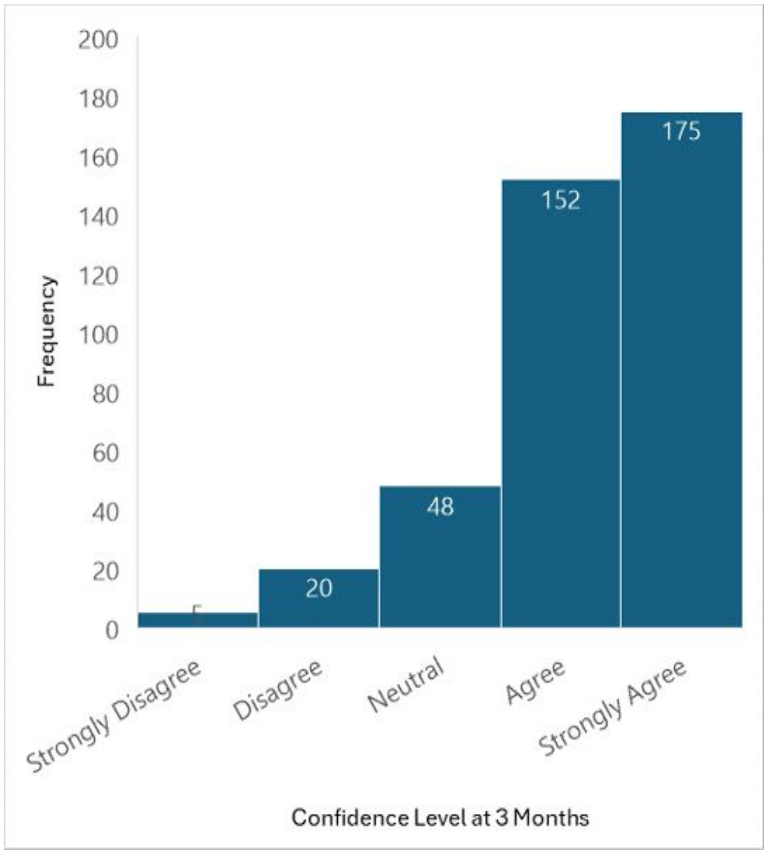
Perpetrators of Mistreatment

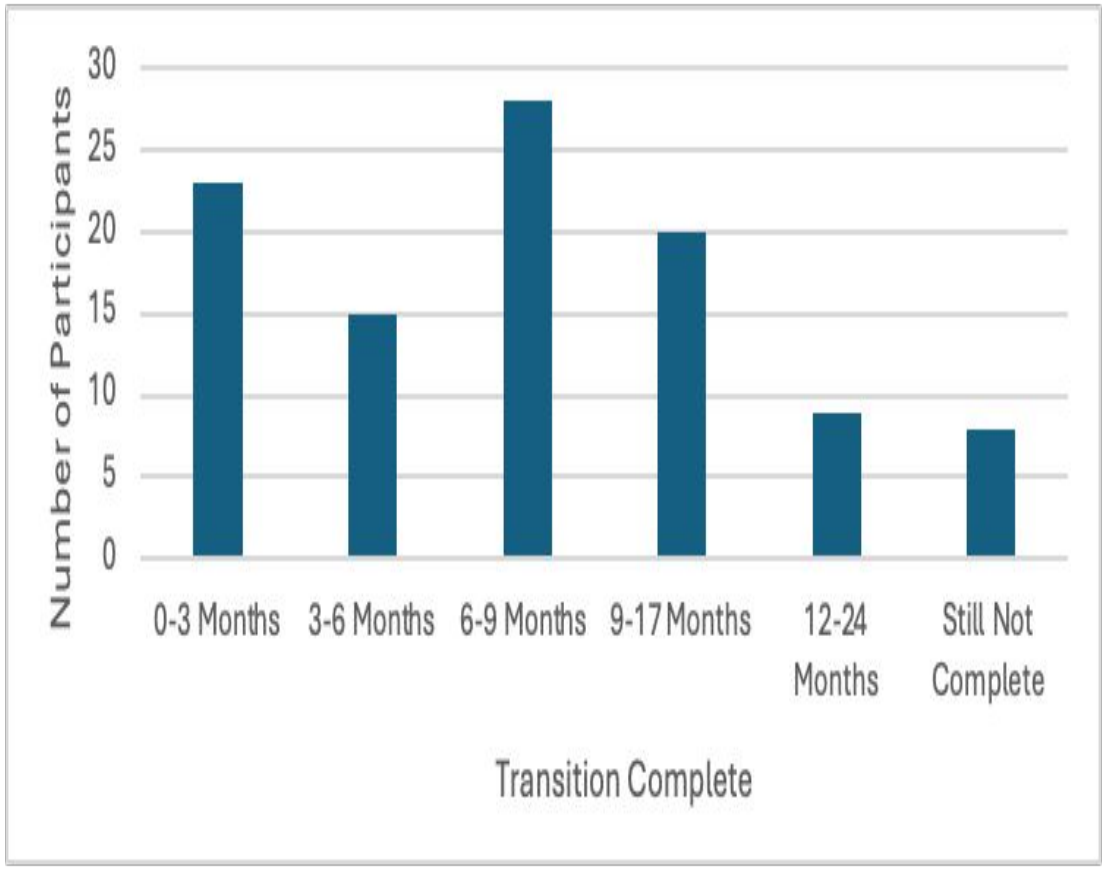
Responsible for:	n	CRNA (%)	MDA (%)	Surgeons (%)	Other (%)	Peers (%)	Nurses (%)	Faculty (%)
Physical harm threats	16	31.3	43.8	12.5	6.3	6.3		
Verbal abuse	189	39.7	24.9	18.5		0.5	8.5	7.9
Physical harm	10	40	50		10			
Sexual advances	30	43.3	33.3	16.7	3.3		3.3	
Gender discrimination	30	46.7	40	3.3				10
Sexist remarks	84	34.5	23.8	22.6	2.4	2.4	9.5	4.8
Lower grades/evaluation due to gender	20	60	20					20
Racial discrimination	20	55	15	5		5		20
Racial remarks/Name-calling	32	31.3	9.4	12.5	9.4	6.3	12.5	18.8
Lower grades due to race	15	60	6.7					33.3
Religious discrimination	5	20		20				60
Offensive religious remarks	9	22.2	22.2	22.2		11.1	22.2	
Lower grades due to religion	4	25	25					50
Sexual orientation discrimination	6	33.3	16.7					50
Offensive sexual orientation remarks	7	42.9	14.3	14.3			14.3	14.3
Lower grades due to sexual orientation	6	33.3	16.7					50

Confidence of New CRNAs



Timeline for Full Transition to CRNA





Experiences During Transition to Practicing CRNA

Positive Themes of Transition from NAR to CRNA n=56	Negative Themes of Transition from NAR to CRNA n=56
• Feeling supported (21.4%) • Familiar site (16.1%) • SRNA experience during training was positive (10.7%) • Well-developed coping skills (8.9%) • Felt confident (8.9%) • Was given independence as an SRNA (3.6%) • Comprehensive orientation provided (3.6%)	• Lack of confidence during training (34.2%) • High practice expectations (26.3%) • Unfamiliar site (13.2%) • Too much time off prior to transition (10.5%) • Feeling unsupported (7.9%) • Toxic culture of the clinical site (7.9%)

Sample of Barriers During the Transition from NAR to CRNA

Negative theme	%	Comments
Confidence	34.2	"I had to overcome a lot of imposter syndrome. I also went to a medically directed facility where the MDAs became problematic at year 1 due to some practice changes. They exhibited belittling behaviors that actually decreased my confidence. I now practice independently with a supportive group of CRNAs and have seen my confidence grow in a healthy way." "I suffered from imposter syndrome my entire school training, so I lacked a lot of confidence in myself. But I came to a low stress, high respect (higher than my training anyway) place and it helped a lot." "Gaining confidence that your decision making is valid"
Practice expectations	26.3	"Challenges mostly included having a few months off before the transition and working with physicians that expected your practice to be as good as those who have worked for 3-5 years."
Unfamiliar site	13.2	"I began working at an entirely unfamiliar place…." "….The biggest challenge was learning the flow of the new place…" "I think if I started as a CRNA in a clinical site I had been to before I would have felt more confident. I started in a medically directed model (never experienced in clinical) in a new setting that was unfamiliar and it was difficult to gain confidence at first"
Time off	10.5	"I did take a 3 month break from the time I graduated until the time I started so I felt a little rusty getting back into the flow of things" "I was away from the OR for 7 months before I started my first job and I felt like I'd forgotten a lot. Also, I was at a facility where I didn't train, so I didn't know where anything was or who anybody was, and I only got 2 days of orientation."
Unsupported	7.9	"When I started my first job (my current job), I got called into my manager's office because someone had complained that I was "too green". My manager told me to find informal mentors that could help me. He specifically wanted to do it informally because if it was a formal mentorship, it would go on my work record which implied a negative connotation. It gave me anxiety and flashbacks about school where I was constantly told I was not good enough." "I had a very difficult transition, and I didn't have a strong support system to lean on during the transition."
Culture	7.9	"My transition to CRNA accelerated when I left the toxic culture of the "best hospital in the world" and the "oldest program for nurse anesthesia" and was treated with respect."

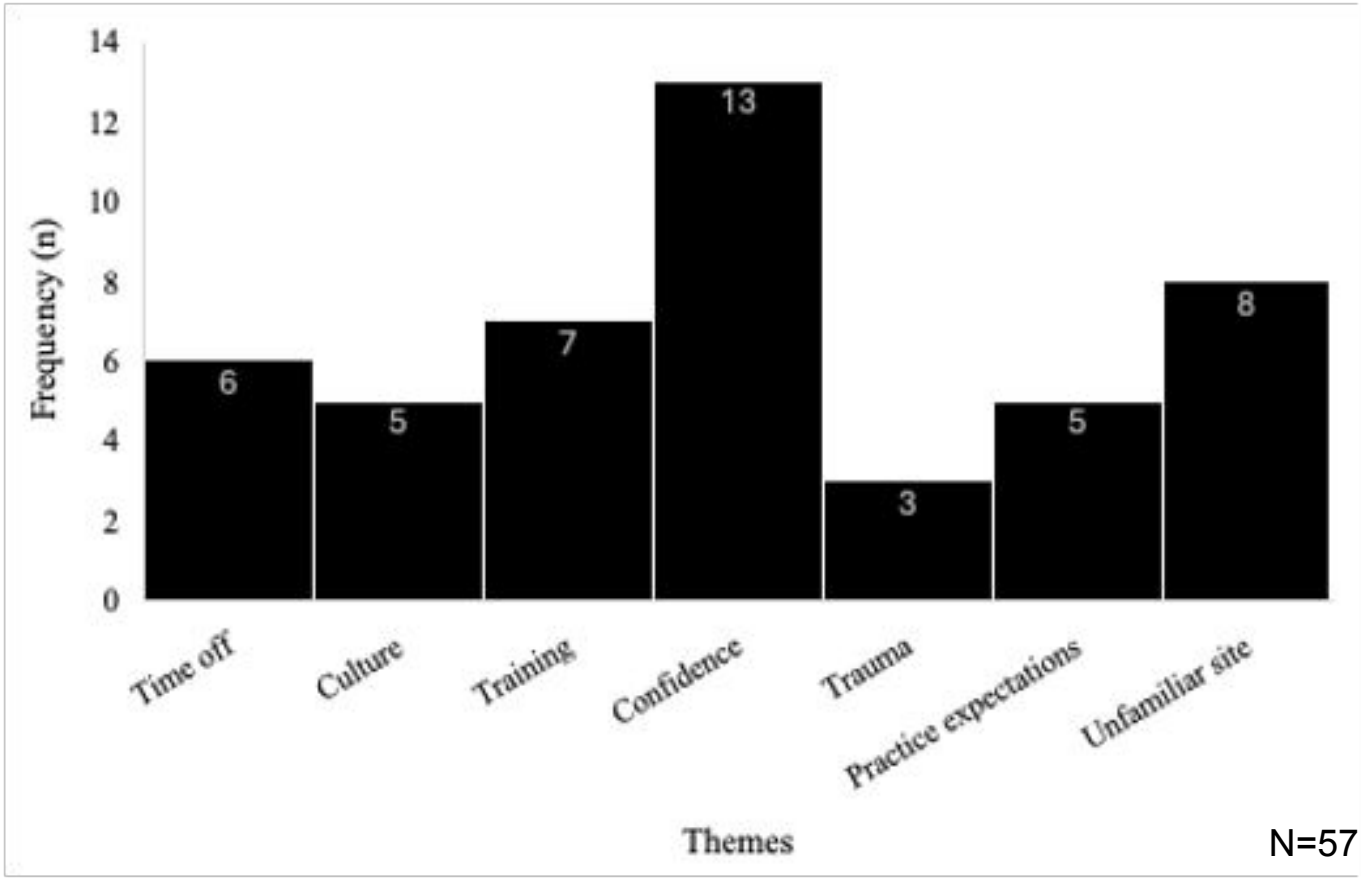
Barriers Faced in the 1st 6 Months

Themes	Frequency	Comments
Lack of confidence	28% (n=13)	"Lack of self-confidence despite indicators that I was doing well. Anxiety over performance, how to keep everyone around me placated." "Struggling with imposter syndrome and confidence." "Anxiety about not performing well and potential consequences of that" "The only barrier was self-confidence" "No barriers, just me lacking confidence"
Micromanagement, inadequate training	15% (n=7)	"Lack of complete independence as a SRNA" "Lack of autonomy as a student" "Being placed on an unofficial "mentorship" program because 3 months after starting my first job, I was told I was "too green."
Practice expectations	13% (n=6)	"Having students during the first six months impeded my transition." "Busy schedule with lots of call." "Poor workplace culture. Given undesirable assignments because I was new impeded my transition because it burned me out." "I only had 2 days of orientation at a facility I didn't train at. I didn't know where anything was or how things worked, so I felt like I was thrown in the deep end to sink or swim." "Fast paced environment with high expectations and the added stress of making partner."

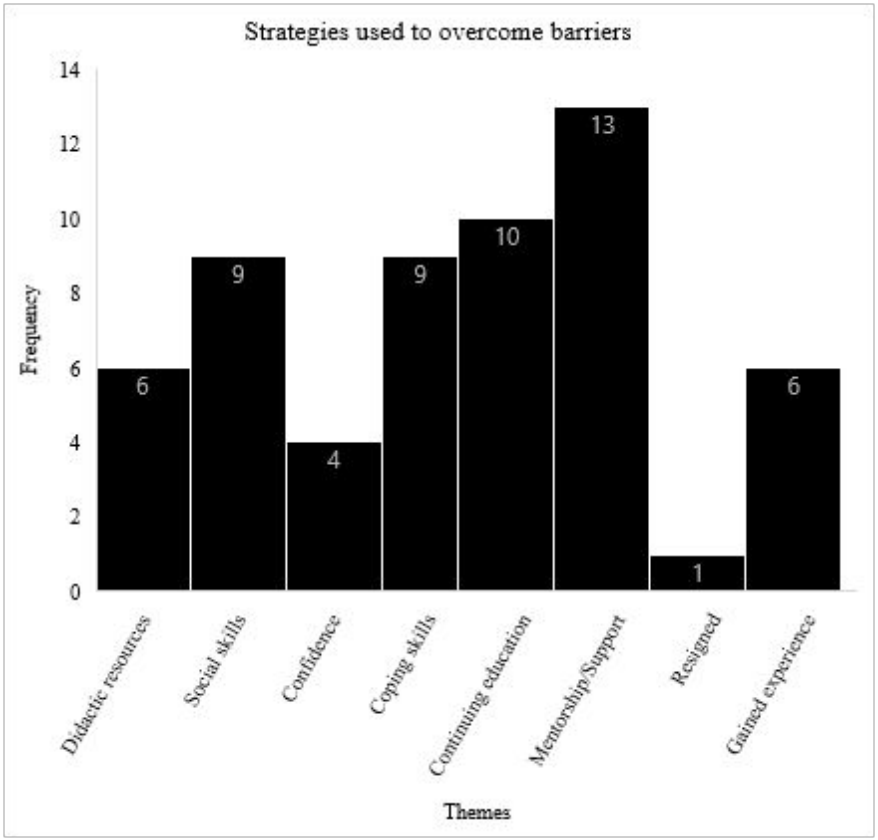
Barriers Faced in the 1st 6 Months

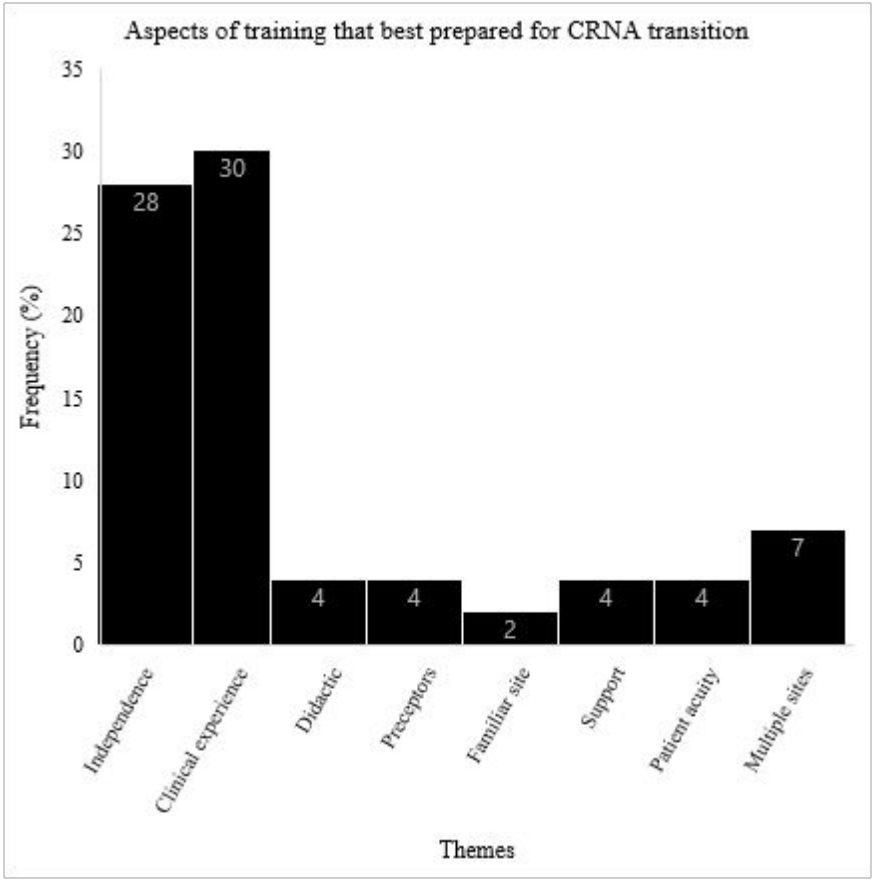
Themes	Frequency	Comments
Unfamiliar site	13% (n=6)	"New institution, new OR team (nurses, physicians, etc), time off since it took 6 months for my licensing and credentialing to go through." "Began work at a hospital I did not have a clinical rotation at. Not terribly difficult, but new surroundings/equipment/people make the transition from NAR to CRNA slightly more difficult." "New hospital, different doctors and personalities to learn."
Work culture, lack of respect	11% (n=5)	"CRNA coworkers assigned to me as a resource during my first six months would sometimes continue to treat me as an SRNA" "Gossiping and negativity from physician anesthesiologists" "MDA limiting my exposure to certain cases, saying I would never be able to do them" "Politics with anesthesiologists and surgeons. Lack of strong orientation to hospital. Training in level 2/3 trauma center versus level 1"
Time off, delayed start	11% (n=5)	"Time it took to schedule boards and get credentialed." "Poorly organized onboarding process through HR and the anesthesia department at the hospital." "Delayed start bc of credentials so felt kinda rusty"
Trauma from training	7% (n=3)	"Anxiety and lack of confidence that I developed during residency." "Trauma and PTSD from school."

Barriers Faced in the First 6 Months as a New CRNA



Overcoming Barriers & Being Prepared For Practice





What Could Have Been Done?

Theme	%	Comments
Independence	26.8	"Being used as staff earlier" "More opportunity to do make my own anesthetic plan and experiment as a student rather than being consistently micromanaged" "Have more sites that support independent CRNAs" "More independence at clinical sites. The "student" nomenclature often places us into a spot where people are unsure of our abilities. NAR is a far better term." "If I could have been alone in a room more or left to fail a bit more without affecting patient safety. Having a CRNA in the room with you always you learn to rely on that second set of hands." "More exposure to independent CRNA practice. I didn't get that until my first military deployment. That changed my professional trajectory. Should have been more of that during training."
Nothing/Unsure	19.6	
Emotional support	17.6	"More emotional support" "Some sort of class on battling anxiety and low confidence maybe." "If I hadn't been at that clinical site and dealing with homophobic and physical abuse, I would have been much stronger in clinical. (My grades were never an issue)" "More of a focus on mental health." "Having wellness days for students to use to reduce burnout" "Wellness measures"
More clinical experience/multi-sites	12.5	"More clinical experiences" "Equal opportunities in clinical experiences." "Different clinical site rotations"
Supportive clinical environment	10.7	"I would have advocated for myself sooner when I was in the abusive clinical situation. That destroyed my confidence in a way that took years to heal." "Being more protected from preceptors who don't teach and/or are malicious so that clinicals can be a safe environment to learn." "More support from CRNA and MDA preceptors, making it seem like they actually wanted to teach instead of it being a nuisance." "Creating an environment of training that is not based on humiliation"
More regional & lines experience	5.4	"More regional experience and perhaps additional rotations at all CRNA practices." "More access and experience with the less common procedures (Central lines, peripheral nerve blocks, etc)" "More regional experience with PNBs."
Felt well-prepared	5.4	"I was given the tools I needed during my training." "My training was very strong"
ACT model exposure	3.6	"Exposure to direction models" "Exposure to medically directed model"
Billing & Contract negotiation training	1.8	"Learn more about billing and contract negotiations"
Clinical compensation	1.8	"Paid us a stipend during clinical training."

Reporting Systems in Nurse Anesthesia Programs

How Mistreatment was Reported by SRNAs	n	%
Reported to another student	30	31.3
Reported to other people not listed	27	28.1
Reported to a faculty member	21	21.9
Reported to a clinical coordinator	14	14.6
Reported to a mentor	2	2.1
Utilized program reporting system	2	2.1

Systems in Place to Support NARs

Theme	n	%
Not sure/None/Unknown	33	45.2
Program support in clinical/Supportive faculty/Advisors	21	28.8
Report but inaction	8	11.0
Different program resources	5	6.8
Wellness program	3	4.1
Anonymous reporting	3	4.1

Discussion

- Qualitative data from this study revealed:
  - New CRNAs who perceived mistreatment during training did not transition well into their new role
  - Some blamed their negative transition experience from their loss of confidence and its lingering effects due to the way they were treated during training.
  - Participants reported post-traumatic stress disorder and anxiety during their transition and perceived that it was directly related to their experiences during training.
  - Some reported regret spending all their training in constant fear.

- Themes that impeded smooth transition:
  - Lack of independence during training
  - Deteriorating confidence during training due to micromanagement, constant negative criticism, toxic work environments, lack of support, public humiliation and experiencing imposter syndrome.

Discussion

- Quantitative data from this study revealed:
  - Females NARs experienced more mistreatment than male NARs
  - The most common mistreatment reported sometimes and frequently were verbal abuse (40%); public humiliation (32%); threats of extra clinical hours (13%); and sexist remarks or name calling (10%)
  - 32% (37/114) CRNAs reported that their academic success was affected by mistreatment during clinical training.
  - 16% (19/118) CRNAs reported that their academic success was affected by mistreatment during didactic training.
  - In this study 71% of Caucasian, 71% of Asians, 40% of Hispanics, 20% of African Americans and Others reported public humiliation and verbal abuse sometimes or frequently.
  - 40/122 (32.7%) participants-initiated treatment during anesthesia school for

Translation of Findings

- Research findings confirmed prevalence of mistreatment of NARs.
- The importance of bringing awareness to stakeholders with the goal of creating a zero-tolerance policy on mistreatment of NARs during training.
- The importance for Nurse anesthesia programs to create anonymous and empowering reporting systems for mistreatment concerns.
- The goals of the Nurse anesthesia programs should be producing high quality graduates who are confident, efficient and empowered to safely care for patients and to advocate for the CRNA profession.
- A new CRNA should be provided with ‘adequate’ orientation and support during their transition

Recommendations for Mitigation

- All the stakeholders must prioritize to provide: a safe training environment, zero tolerance to abusive and bullying behaviors, accountability of unwarranted actions, safe reporting systems that guarantees no retaliation and a system that tracks the outcome of reports to combat inaction.

- Programs could adopt an anonymous reporting system to give NARs a platform where they can report their concerns without fear.

- Some ways to improve NARs experiences in clinical settings could be addressed by collaborating with clinical sites to have a process in place for ‘recruiting’ preceptors which provides training or behavior expectations to inform preceptors on the importances of empowering NARs while keeping up with performance expectations.

References