PREVALENCE AND CHARACTERISTICS OF NURSING STUDENTS WITH BACKGROUND CHECK FINDINGS

by

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ABSTRACT

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Background checks are used in nursing education as a means of assessing public risk. To date, there is little published data describing nursing students who have had prior involvement with law enforcement. This retrospective study describes prevalence and characteristics of background check data in nursing students. De-identified background check data were aggregated from a convenience sample of 16 US nursing programs set in large research universities. From 2014-2019, sampled programs conducted 45,648 background checks and 3.39% had findings. Individual program prevalence ranged from 0.00% to 13.33%. Felonies comprised 1.06%, criminal findings were 78.57%, non-criminal were 5.76%, and 14.61% were other. Substance abuse was the most common characteristic (23.71%), followed by disorderly conduct (8.66%), property crimes (2.39%) and crimes against persons (0.97%). The remainder of findings had incomplete characteristic data. Current evaluation of nursing student background check findings has not been tested through correlational research. These untested policies may exclude students who pose no risk. This may have a disparate impact upon students from underrepresented communities subject to structural racism in law enforcement. Educators should use research to create the least exclusionary policies needed to protect the public.

Keywords: students, nursing, criminal background, admission, placement

To

my wife,

my son,

and everyone who believed in me.

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Prevalence and Characteristics of Nursing Students with Background Check Findings

Background checks for records of prior involvement with law enforcement are common for students of nursing, allied health, and other professions of public trust (Phillipsen et al., 2012; see also Dickerson, 2008; Farnsworth & Springer, 2006; Hughes et al., 2013). Despite the widespread use of background checks, little is known about whether these records protect the public from individuals who pose a risk (Denver, Siwach et al., 2017). While the effectiveness of background checks in public protection is unknown, they have been shown to deter some college applicants. Students with background check findings are more likely to abandon the application process when a background check is involved (McGee et al., 2019; Stewart & Uggen, 2020). The deterrent effect may be greater for students from communities subjected to disparate policing and systemic racism (Hetey et al., 2016; Stewart & Uggen, 2020). The effect on applicants to nursing schools has not been directly studied. The deterrent effect of background checks may represent a barrier to the recruitment of students from communities underrepresented in nursing. Little research exists in nursing's professional literature to guide academic nurse educators as they evaluate background check results in the nursing school admission or clinical placement process (Averette, 2020). Nursing lacks the data necessary to describe the number of students entering nursing education with background findings or explore implications of those findings. The author asserts there is a need to describe background check findings in a multi-state sample of nursing students. This study will better inform admission and clinical placement policies to consider the impact upon public protection as well as inclusivity in nursing education.

Stigmatizing Language

Terms such as criminal, offender, and related terms label individuals and inflict social stigma (Denver, Pickett et al. 2017; Ewald, 2019). To avoid stigmatization, this paper will refer

to record searches related to prior involvement with law enforcement as "background checks" (BGC). Results of these record searches will be referred to as "findings".

Statement of the Problem

The author will review the use of BGC in academic nursing education and describe a significant gap in the literature. Background checks are used to assess individuals working in positions of public trust, such as nursing and allied health. The results reflect a person's past behavior and are assumed to predict if they would pose an unacceptable risk to the public if allowed to enter practice (Fowler, 2015; National Council of State Boards of Nursing [NCSBN], 2020). Some individuals with the most serious BGC findings are permanently barred from professional licensure. These bars are enacted by professional regulators such as a state board of nursing. Persons with less severe findings may be excluded temporarily or be allowed to enter practice (NCSBN, 2014; NCSBN, 2015). Differing methods of risk assessment are set in a framework of complex and sometimes contradictory laws, rules, and guidelines. This creates a regulatory framework which is difficult for students and educators to interpret (Averette, 2020; see also Dickerson, 2008; Ewald, 2019).

Academic nurse educators cannot rely upon the state board to interpret background checks for students. Most state boards of nursing do not evaluate students until they have completed their education and apply for licensure (NCSBN, 2014). Therefore, most state boards are not involved in evaluating student background check findings in the admission or clinical placement process. This leaves individual educators to admit or deny students with background findings based on individual organizational policies. These policies vary according to organizational interpretation of agency, state, and federal guidelines. Varied interpretations

create opportunity for disparity, bias, and discrimination (Ewald, 2019). As a result, it is often difficult to predict the impact of BGC findings on student admission or clinical placement.

Background Checks as Public Protection: Predicting Recidivism and Assessing Character

Background checks are thought to protect the public by excluding those who pose an unacceptable risk of harm. They reveal past actions which have harmed others or reflect a lack of moral character (Hartman et al., 2022). It is assumed BGC findings can identify individuals not to be entrusted with the care of vulnerable populations. Unfortunately, recidivism – a relapse into prior unacceptable behavior – is complex and difficult to predict (Hester, 2019). Equally complex is the assessment of "good moral character" or the lack thereof (Fowler, 2015; Phillipsen et al., 2012; Vranas, 2009). But how effective are background checks at protecting the public by predicting recidivism and evaluating good moral character?

Background Checks as Predictors of Recidivism

The US criminal justice system uses BGC findings to deter future behavior based on past behavior, especially through sentencing (Hester, 2019). Harsh punishment in sentencing guidelines is assumed to be a deterrent to future violation through the legal concept of retribution, the punishment for violating societal norms (Hermann, 2017). Denying occupational licensure is considered a justified retribution for violating the law a valid means to protect the public (Ewald, 2019; NCSBN, 2015). Research has found individuals with background findings are more likely to have future involvement with law enforcement (Hester, 2019). However, no theory has accurately predicted recidivism risk (Hester, 2019). Despite this lack of accuracy, background check results are used to evaluate public risk in employment and admission decisions (Denver, 2020; Weuve, 2008a; Weuve, 2008b). Denial of employment or admission is

rationalized as retributive justice that both punishes the guilty and protects the public (Hermann, 2017).

In addition to retributive justice, background check evaluations are thought to protect an organization against claims of negligence, the failure to prevent a foreseeable risk. Nursing school BGC evaluation at admission seeks to mitigate risks of negligent admission the way employers manage the risk of negligent hiring (Connerley et al., 2001; Dickerson, 2008). Proponents of negligent hiring theory argue that the background check finding predicts future behavior and exposes the public to a foreseeable risk (McElhattan, 2021). Similarly, if a college admits a student with a background finding who commits a future offense on campus, the college could be liable for negligent admission (Dickerson, 2008).

The US justice system exerts considerable philosophical influence over the admission and clinical placement process for students with background findings through the concepts of retributive justice and negligent admission. These concepts demonstrate the complexity of interpreting background check findings for public protection and inclusivity. Unfortunately, most collegiate administrators have no specific training on how to interpret background checks (Dickerson, 2008). Academic nurse educators lack guidance specific to assessing public risk in the evaluation of nursing students, which results in wide variation in how students with background findings are treated (Williamson et al., 2018).

Background Checks as Assessment of Character

In contrast to the retributive nature of deterring recidivism, the background check as an assessment of character may be thought of as preventative (McKechney, 2018). Background checks serve as the primary method of character assessment in nursing education and practice (Fowler, 2015; Phillipsen et al., 2012). Evaluation of good moral character assesses the ability of

an individual to protect vulnerable populations, be worthy of the confidence of the public, act according to the standards of the profession, and exhibit honesty in practice (McKechney, 2018). Regulators fear an individual who lacks good moral character may harm the public and bring the profession's reputation into disrepute (McKechney, 2018; Mooney, 2008; Ornstein & Weber, 2008).

While there is no single definition of good moral character, background check findings are thought to reflect character faults which may inhibit the development of professional ethics (Christensen & Simmons, 2020; Hartman et al., 2022). The American Nurses Association asserts that students who lack appropriate character are unlikely to become ethical practitioners (Fowler, 2015). Character is difficult to assess directly, and therefore background checks are used as a proxy for character assessment (Hartman et al., 2022; Phillipsen et al., 2012; Vranas, 2009). Background checks as proxy for character assumes that findings of previous involvement with law enforcement is evidence the individual lacks good moral character (McKechney, 2018). The use of vague assessments for good moral character have been associated with protectionist and discriminatory practices which promote disparity and inhibit social justice (Rhode, 2018).

Social Justice: Diversity, Disparities and Bias

Academic nurse educators have an obligation to advance admission policies which are racially just (Berry, 2010; Christensen & Simmons, 2020). The admission process has been identified by African American and Latinx adolescents as a deterrent from pursuing nursing education (McGee et al., 2019). The impact of background checks on these students has not been studied. However, the disparate impact of law enforcement upon communities of color (Hetey et al., 2013) may place them at greater risk of abandoning the college application process because of the background check (Custer, 2016; Stewart & Uggen, 2018).

Lack of Diversity in Nursing

Demand for academic nurse educators to produce new nurses is high. Employers in the US will be unable to fill an average of 203,000 registered nurse positions each year through 2026 (U.S Bureau of Labor Statistics [BLS], 2018). The need to educate students to fill these positions includes a need for more students from underrepresented communities. The current nursing workforce does not reflect the diversity of the public it serves. Persons of racial and ethnic minorities comprise 38% of the US population, but only 19.2% of the RN workforce (American Association of Colleges of Nursing [AACN], 2019). The AACN (2019) advocates for improving outreach and eliminating barriers to students from communities underrepresented in nursing. Racism in law enforcement leading to background check findings which deter nursing students from underrepresented communities has not been studied.

Individuals from underrepresented communities must be admitted and complete nursing education to create a workforce more representative of the population. It is unclear to what extent students from these communities may be deterred by background checks in the application process. Research in the broader collegiate population has evaluated the effect of a background check question on college applications. Students with BGC findings are more likely to abandon the application process, even when the findings were not significant (Stewart & Uggen, 2020). It may be inferred that nursing students with insignificant background findings may also be deterred. Nursing should consider whether disparities in policing produce background check findings that inhibit recruitment from communities underrepresented in the profession.

Disparities in Policing

Published data suggests that 30% of all Americans will have been arrested at least once by age 23 (Brame et al., 2014). Race and gender are significant factors in arrests for this age

group. Thirty-eight percent of white males and 49% of Black males will be arrested at least once by age 23 (Brame et al., 2014). These racial and gender disparities have implications for diversifying a profession composed largely of white females (Smiley et al, 2020).

Research has shown communities of color are subject to disparate levels of policing which result in arrests more often than whites (Hetey et al., 2016). Brame (2014) identified male and Black persons aged 18-23 at especially increased risk of involvement with law enforcement. This may create a structural barrier to nursing recruitment from these populations. The nursing workforce can only be diversified if students from underrepresented communities receive nursing education. Further research is required to identify and remove of barriers which may deter them (AACN, 2019; McGee, 2019).

Bias in Education

It is difficult to assess the deterrent effect bias in the background check process may have on nursing students from underrepresented communities. Without nursing research, academic nurse educators must rely upon studies from the broader collegiate context. Background checks in education emerged as an issue in the late 1990s because of episodes of violence in academic settings (Connerley et al., 2001; Marrs, 1997). Public demand for increased protection on college campuses resulted in the background check being widely used as a demonstration of a commitment to improve campus safety (Dickerson, 2008). Eventually, the background check became a part of the Common Application used by over 900 colleges (Common App, n.d.). This changed as research suggested background checks failed to accurately predict which individuals posed a public risk (Denver, Siwach et al., 2017). At the same time, concerns arose that their use was leading to bias with a disproportionate impact upon underrepresented communities (Ott & McTier, 2020). After more than a decade of use, the background check question was removed

from the Common App in 2019 (Davis, 2018). Academic nurse educators should consider whether nursing student background checks are justified by their protection of the public.

Background Checks in Nursing Education: State of the Science

The author's review of published studies on background checks in nursing and nursing education reveals little is known about student nurses with background findings. Much of the literature on the topic is drawn from expert opinion or case studies of experiences in single programs. Limited data has been published about background findings drawn from the general college-aged population, and from nurses in practice. It is unknown if differing characteristics in those populations limit the generalizability of results to nursing students. This is likely to be a hindrance to academic nurse educators seeking to create policies which are fair, inclusive, and protective of the public.

Without statistics describing the prevalence and characteristics of background check findings in a multi-state sample of nursing students, the profession is unable to evaluate whether the protective value of background checks justifies their use. This is exacerbated by a lack of evidence-based interventions to reduce public risk. Without interventions based on evidence, policies in individual programs must rely upon expert opinion, which can be fraught with bias and lead to discrimination in admission and clinical placement decisions.

To date, the only descriptive studies of nursing students with background findings are from two states: Louisiana, and Texas. Regulatory structure in Louisiana requires students to seek approval from the board of nursing prior to admission. The samples from Louisiana students were from 2006 (Smith et al., 2013) and 2008 (Moody, 2010). In these studies, between 14.5% and 14.7% of students had findings. It is unclear if results drawn from cohorts now over a decade old are generalizable to US nursing programs nationwide today. Data from Texas found

students with findings ranged from 10.57% to 13.58% (Johnston, 2016). It is unclear if data from Southern US states would be generalizable to students in Eastern, Midwestern or Western nursing education programs.

The nursing literature lacks foundational data collected from a multi-state sample of nursing students. The author's review of the literature reveals an unclear picture of the prevalence of nursing students with background findings and the characteristics of those findings. This represents a significant gap in the literature, which inhibits formulation of effective policy to protect the public and guide the practice of academic nurse educators. Further research is needed to describe the phenomenon in nursing students. A more generalizable study describing nursing students with background findings and the characteristics of those findings is required.

Background Checks in Nursing Education: Addressing the Gap

Nursing lacks foundational data describing the prevalence and characteristics of students in academic nursing education with background check findings, as well as the nature and severity of those findings. The author's review of the literature suggests there is no description of prevalence or characteristics of background check findings in a multi-state sample of nursing students. Without this foundational knowledge it is difficult to understand how many students are entering nursing educational programs with background findings and the characteristics of those findings. This lack of data inhibits formulation of admission and clinical placement policy to promote public protection and student inclusivity. The author conducted a descriptive study on a multi-state sample of US students to address this gap. This foundational data will inform the practice of academic nurse educators who seek to strengthen public protection while removing structural barriers to students who pose no undue risk to the public.

Purpose of the Study: Foundational Data

The author conducted a research study to collect foundational descriptive data of nursing students with background check findings. To date, no study of nursing students from multiple states has been identified. This is a significant gap in the literature of a profession which has utilized background checks for over a decade. The profession lacks a description of the prevalence and characteristics of background findings in undergraduate nursing students. This descriptive data is necessary to direct future research to identify which background check findings correlate with an unacceptable risk to the public if allowed to enter practice.

The study has the following objectives:

- Describe the prevalence of nursing students with background check findings
- Describe the most common categories of student background check findings
- Describe the most serious categories of student background check findings

Significance of the Study

The utilization of background check findings in admission and clinical placement processes varies from program to program due to differing interpretations of existing policies and laws (Hughes et al., 2013). This may result from a lack of correlational research to demonstrate specific findings are indicative of public risk (Averette, 2020; Civic Research Institute, 2010). Without a policy based on research, the public protective value of background checks may be limited. In addition, these policies may be a deterrent to enrollment of students from communities underrepresented in nursing but subject to disparate policing (Hetey et al. 2016; McGee, 2019). Current policies may allocate scarce educational resources to students who may pose a risk to the public, while deterring otherwise qualified students from entering the profession.

Implications for Public Protection

According to the National Council of State Boards of Nursing, background checks provide "insight into a pattern of thinking and behavior that might endanger the public," (NCSBN, 2014, para. 1). This is because past behavior is thought to indicate future risk. While some behaviors are thought to carry high risk in nursing, such as crimes of violence, abuse, or neglect of vulnerable individuals, other findings may be less indicative (Priola-Surowiec et al., 2014). For these findings, significant questions remain unanswered. Do past behaviors, such as operating a vehicle while intoxicated (OWI), indicate a single lapse in judgement, or a more serious substance misuse disorder? Should an individual with a single finding for OWI be considered to pose a risk? How do multiple related findings increase that risk? Policies must be carefully crafted to protect the public from individuals who pose a risk. These policies should maximize inclusivity of students who pose little or no risk.

Implications for Diversity, Equity, and Inclusion

This study has implications for diversity, equity, and inclusion in nursing education. This research describes the impact of prior involvement with law enforcement upon nursing students. The results of this study can be used to inform policies directed at diminishing the deterrent effect of background checks on communities underrepresented in nursing.

Implications for Nursing Education

Nationwide, nursing programs are at capacity and otherwise qualified students are turned away due to lack of clinical or classroom space (AACN, 2019). Academic nurse educators must ensure that limited clinical capacity is utilized in the most effective way possible. This allocation of a scarce clinical resource suggests that students without background check findings are impacted by the admission of students with findings. Allocation of scarce clinical resources to

students with background findings impacts students without findings as well. Academic nurse educators should ensure that students who pose a public risk and may face difficulty obtaining licensure due to background findings are appropriately excluded from the program. Students whose background poses no risk to the public should have the deterrent impact of background checks mitigated. This may help mitigate the impact of structural racism on students from underrepresented communities subject to disparate policing.

Research Approach

The author conducted a quantitative retrospective descriptive study to examine aggregated, de-identified data drawn from a multi-state sample of nursing students attending large public research universities.

Theoretical Framework

To date, no theory in nursing, education, or criminal justice has been shown to empirically predict public risk based on a record of prior involvement with law enforcement (Pierce & Runyan, 2010). Therefore, it may be necessary to adapt an existing theory to research the phenomenon. The author proposes to adapt Meleis' (2010) transitions theory to inform this research study. Meleis' theory is used to assess an individual in role transition and provides for nursing interventions to facilitate the desired outcome. This contrasts with educational theories which do not provide for nursing intervention, and criminal justice theories which incorporate concepts such as guilt and punishment which are outside the scope of practice for academic nurse educators (Christensen & Simmons, 2020).

Meleis' theory describes transitions as change experienced over time which results in adaptation to a new role (Chick & Meleis, 1986). Individuals in transition from one role to another must successfully acquire the characteristics associated with the new role. During

transition an individual may be at risk for negative outcomes when they experience critical events (Meleis et al., 2000). In Meleis' theory, nurses facilitate successful transition through targeted interventions such as education and role modeling (Im, 2014). Successful transition allows the individual to integrate the new role into their identity (Bohner, 2017; Im, 2014; Meleis, 2010).

Nursing education is a series of sequential situational events. Some events are critical, with the outcome determining student progression. One critical event is the background check. Students whose past behavior is not considered a risk to the public successfully transition and begin integrating "student nurse" into their identity. In this context, academic nurse educators assess the student's background check findings to determine if transition into the role of student nurse should be facilitated or inhibited. Therefore, transitions theory can be adapted to examine the role change students must undergo and target interventions to facilitate transition for students who pose no risk and inhibit those who do (Hart & Swenty, 2016; Meleis, 2010).

Research Questions

The author proposes a quantitative descriptive study to answer the following research questions:

- What is the prevalence of undergraduate nursing students with background check findings attending large public research university programs in the United States?
- What are the most common background findings among undergraduate nursing students attending large public research university programs in the United States?
- What are the most serious background findings among undergraduate nursing students attending large public research university programs in the United States?

- Do background check findings among undergraduate nursing students attending large public research universities in the United States differ significantly by region (East, South, Midwest, West)?
- Do background check findings among undergraduate nursing students attending large public research universities differ significantly in quantity, quality, or severity?

Definitions in this Study

For this study, these terms are described as follows:

- Background check: Review of official records for prior involvement with law enforcement.
- Background check finding: Results which indicate an individual has interacted with law enforcement. Such records may include arrests, charges, pending cases, dismissed charges, convictions, and other outcomes from the legal system.
- College student: student enrolled in general coursework, not admitted to a nursing program.
- Student nurse: student enrolled in coursework leading to a degree in nursing.
- Academic nurse educator: A registered nurse acting within a scope of practice to prepare students to enter the workforce as registered nurses.

Assumptions of this Study

This study assumes that:

- Academic nursing education is a practice within nursing bounded by a scope of practice (Christensen & Simmons, 2020).
- Students pass through a series of critical events as they progress through academic nursing education and transition into the role of registered nurse.

- These critical events carry indicators that a student may or may not successfully transition into the role of registered nurse.
- Academic nurse educators can measure these indicators and deliver interventions to facilitate or inhibit the transition from student to nursing student and eventually to registered nurse.
- The background check as currently used is an assessment of subjective indicators of student characteristics which may pose public risk.
- Assessment of nursing student indicators, including background check findings, is within the scope of practice for the academic nurse educator as part of the admission or clinical placement process.

Strengths and Limitations of this Study

The strength of this study is its collection of generalizable data on a sample of undergraduate nursing students in large public research universities. This quantitative descriptive study will measure characteristics of students with background check findings to accurately portray the phenomenon, its prevalence in a population, and identify variables for future correlational studies (Polit & Beck, 2017; Gray et al., 2017). Such descriptive studies have limitations. They do not provide causal inference and are subject to selection bias (Merrill, 2013). This study of aggregated data from students with background findings did not capture individual characteristics which may contribute to risk assessment, and may introduce confounding factors (Merrill, 2013). Confounding factors will be controlled for by targeted sampling of students from universities similar in size, setting, and mission.

Chapter Summary

In conclusion, student background check findings are evaluated for indicators an individual may pose a risk to the public if allowed to enter practice as a student nurse. Background check findings are used to assess this risk through the assumption that past behavior predicts future public risk, or the individual lacks good moral character to fulfil the public trust. The background check as a predictor of recidivism has not been validated through research. The concept of good moral character is open to interpretation and provides opportunity for bias and discrimination. Systemic racism in law enforcement and structural racism in society make it likely that the use of background checks at admission inhibit diversity, equity, and inclusion in nursing.

Academic nurse educators need research-based interventions to guide the admission and clinical placement process for students with background check findings. Yet, review of the literature reveals little data to inform educational policy. Despite the widespread use of background checks for over 10 years, nursing lacks a description of the prevalence of students with findings and their incidence in the nursing student population. The author asserts that descriptive research to determine trends in the most common and most serious findings in undergraduate nursing students will identify variables for future research. This should examine variables for correlations between prior interaction with law enforcement and public risk in practice. Until academic nurse educators understand the extent of background check findings among their students and the characteristics of those findings, admission and clinical placement decisions will continue to be made based on expert opinion in individual institutions. The process will remain subject to bias and uncertainty for students, educators, and the public. The descriptive study conducted by the author lays the foundation for a future program of research to improve public protection and remove barriers to nursing education.

Chapter 2: Review of the Literature

Background checks are searches for documentation of prior involvement with law enforcement. Background check findings are commonly used to assess public risk in the nursing school admission or clinical placement process. However, little is known about the prevalence of nursing students with background findings or how those findings predict public risk. The purpose of this systematic literature review is to identify what is published in the nursing, medicine, allied heath, and education literature to describe the prevalence of background check findings and guide the use of results in the nursing school admission and clinical placement process. This review of the literature will briefly examine the rationale behind background checks and situate them in the historic context. It will then review published studies which describe the prevalence of background check results in nursing students and how those results impact the admission or clinical placement process.

Definitions

Terms such as “criminal” or “offender” label individuals and inflict social stigma (Denver et al. 2017; Ewald, 2019). To avoid stigmatization, this paper will refer to record searches related to prior involvement with law enforcement as “background checks”. Results of these searches will be referred to as “findings”. Students without prior involvement with law enforcement would be considered as having no background check finding. Examples of records of prior involvement with law enforcement which would be considered a finding would be an arrest record or a conviction record. These records may vary in severity, from non-criminal to criminal charges, and from misdemeanors to felonies. Background checks may be conducted through local, state, or federal government agencies or commercial vendors and may produce differing results based on source (Farnsworth & Springer, 2006; Jones & Weninger, 2007).

Background

Nursing student background checks may be conducted at admission to college, admission to the nursing major, or as part of the clinical placement process (Williamson et al., 2018). Nursing program administrators must evaluate students with findings to determine whether they should be admitted to nursing school or placed in clinical experiences. There is little information to guide administrators in deciding which background check results have implications for public safety. Policies which are too inclusive may place the public at unacceptable risk from those whose past behavior indicates they may exploit the vulnerable populations that nursing serves. Alternatively, policies which are too exclusive harm those who have learned from past mistakes and represent no greater risk than individuals without background findings. Such exclusivity is more likely to harm individuals from communities underrepresented in nursing and subject to disparate policing. Excluding these students is unjust and hinders the diversity of the profession. The profession should not use public protection as a rationale for excluding students with background findings unless research finds a correlation between specific findings and public risk in practice.

Historic Context for Background Checks in Academic Nursing Education

Background checks in nursing emerged as an issue in the late 1990s as a result of episodes of campus violence. One such episode occurred in 1997, before background checks were widely utilized. Jo-Ann Marrs, head of the department of nursing at Pittsburg State University (PSU), described a murder committed by a nursing student at PSU who had lied during the admission process about a previous murder conviction. Marrs pleaded with colleagues to conduct background checks on nursing students: “Don’t let our story become your story,” (Marrs, 1997, p. 20; Alley, 2005).

In the early 2000s, background checks became more commonplace and by 2006, Farnsworth and Springer (2006) found 50% of nursing schools had implemented background checks for their students. Farnsworth and Springer highlighted the absence of a uniform process to use background check results for public protection. Public demand for "homeland security" increased substantially after 9/11 which led to nursing programs to associate the background check process with the US national response to terrorism (Farnsworth & Springer, 2006; Tate & Moody, 2005).

As of 2020, background checks have become widely used, but the process for interpreting results remains uncertain (Avarette, 2020). Most state boards of nursing are not involved in the nursing education admission process, leaving individual programs to make admission decisions and navigate site by site requirements for students to begin clinicals (Avarette, 2020; Willaimson et al., 2018).

Rationale for Background Checks in Academic Nursing Education

Nursing program administrators consider the past experiences of students as formative in the development of their professional ethics (Christensen & Simmons, 2020). Students who lack appropriate character are thought to be unlikely to become ethical practitioners (Fowler, 2015). It should be noted that character is difficult to assess, and background checks are used as a proxy for character assessment (Philipsen et al., 2012; Vranas, 2009). Administrators evaluate background check results to assess for findings believed to be associated with public risk (Connerly et al. 2001; Dickerson, 2008; Hughes et al., 2013). This is thought to be especially important for nursing students, whose practice will bring them into contact with vulnerable populations.

Background check evaluation varies widely due to differing interpretation of law, regulation, and policy (Dickerson, 2008; Ewald, 2019). At times, these laws and regulations may contradict each other (Ewald, 2019; see also Cary, 2013; Custer, 2016). Some state and federal regulations prohibit discrimination based on background findings, while others exclude individuals with certain findings from professional licensure (Ewald, 2019). Despite repeated calls for more standardized, objective policies, these have yet to be developed for students (Hughes, 2013; Williamson, 2018).

Objective

The objective of this systematic literature review is to identify what is published in the nursing, medicine, allied heath, and education literature to describe the prevalence of background check findings and guide the use of results in the nursing school admission and clinical placement process.

Method

The author conducted a systematic review of the nursing, medical, allied health, and education literature to identify the state of the science regarding the use of background checks in the nursing school admission and clinical placement process.

Eligibility Criteria

The use of background checks as part of the admission or clinical placement process is a transdisciplinary topic, including nursing, medicine, allied health, and education. Articles indexed in the CINAHL Plus with Full Text, PubMed, ERIC and Web of Science databases which discussed background checks in the context of collegiate education or the health professions from 1974-2021 were eligible for inclusion in this review. Articles related to other populations, news articles, and editorial opinions were also excluded. While language of

publication was not an exclusion criterion, all identified articles were written in the English language.

Search Strategy

The search strategy was developed by the author with assistance from two research librarians in a large, Midwestern research university. Nursing and allied health literature was searched using the CINAHL Plus with Full Text database. Medical literature was searched using the PubMed database. The ERIC database was searched to cover educational literature. Finally, the multidisciplinary database Web of Science was searched to improve coverage beyond the healthcare and educational literature. To improve consistency of searches across databases, searches were performed using similar methods. Standardized search terms in the form of Medical Subject Heading (MeSH) keywords were used in databases which supported them. Date range for results were set from 1974 to 2021 for consistency of inclusion across databases.

In the CINAHL Plus with Full Text database, a Boolean search string was utilized: "crim* AND [education, nursing] NOT forensic". This returned 281 results. The use of "crim*" captures terms with the root "crim", such as crime, criminal, criminals, and criminality. The Boolean conjunction AND limited these search results to records which also included the Medical Subject Heading (MeSH) term [education, nursing] to capture articles specific to academic nursing education. Articles related to forensic nursing were excluded using the Boolean operator "NOT forensic". Of these results, 261 were screened as off-topic by review of the article title or abstract. The remaining 20 articles were read in their entirety.

In the PubMed database, the search was constructed using similar MeSH terms and Boolean operators: "criminal background AND [education, nursing] NOT forensic" which returned 29 results. A second PubMed search was conducted using "criminal background AND

student" which returned 138 results. After removal of duplicates, and screening of off-topic results by title or abstract, 15 additional articles were read in their entirety.

In the ERIC database, the search was constructed similarly using the Boolean search string "student AND criminal AND background checks" which returned 14 results. No duplicates were identified. Nine articles were excluded as off-topic through review of title or abstract, and 5 additional articles were read in their entirety.

The Web of Science database was searched using the string "criminal background AND student" which returned 12 results. Six articles had previously been identified in other searches and were excluded as duplicates. The remaining six articles were screened as off-topic and no new articles were added from the Web of Science results.

These 35 articles were supplemented with 64 articles identified through hand search of reference lists and searches for related works by identified authors. All 99 articles were read or re-read in their entirety and 48 identified for inclusion in this literature review.

Selection Process

Articles discussing the use of background check results were included if they were in a context of college education, or education and practice in the nursing, medicine, or allied health professions. Articles which were clearly superseded by later works or policy changes were excluded, as were articles which advocated for the use of background checks without recommendations for policy. Articles which mentioned background checks as part of a news item were excluded. All identified articles were able to be retrieved directly or with the assistance of a research librarian; no articles were unable to be obtained.

Results

The database search identified 483 records. After removal of duplicates (n=10), abstracts were reviewed, and 293 articles were eliminated as off-topic. All 180 articles were retrieved for full review and 168 were found to be off topic. An additional 64 articles were identified through hand search of reference lists and author searches for related works. Of these, 28 articles were eliminated as off topic and the remainder were added to this review. A total of 48 articles were included in this review of the literature. For details, see the PRISMA table, Figure 1.

Study Characteristics

Results of the literature search were grouped by target population. They were categorized as college students and nursing education, professional nursing, and allied health professions. See Table 1, Table 2, and Table 3 for characteristics of studies included in this review and the contribution to the body of knowledge related to the use of background checks.

History of Background Checks in College Students and Nursing Education

The earliest article identified in this review of the literature was written by Mark Brown, a prospective student who applied to a nursing program in England prior to background checks becoming commonplace in nursing education (Brown, 1991). At this time, schools relied upon students to divulge prior interaction with law enforcement. According to Brown, "a stupid mistake" of failing to divulge a "a minor theft and a motoring offense," resulted in delay, and ultimately denial, of admission to a nursing program (Brown, 1991, p.48). Brown asked, "So why am I trusted to work as an auxiliary despite my past convictions – but not as a student nurse? ...[T]wo years' work within a ward environment should count in my favor," (Brown, 1991, p.48).

The move to conduct background checks, rather than rely upon self-disclosure, arose in part from Jo-Ann Marrs' description of a murder committed in the late 1990s by a nursing

student at Pittsburg State University (PSU). During the admission process, the student had lied about a previous murder conviction (Marrs, 1997; Alley, 2005). Once admitted, the student nurse sexually assaulted and murdered a student in another program. Marrs, who was head of the department of nursing at PSU when the murder occurred, pleaded with colleagues to conduct background checks on nursing students to help protect the public.

In the late 1990s and early 2000s, background checks became more common and by 2006, Farnsworth and Springer (2006) found 50% of nursing schools had implemented background checks for public protection. The authors highlighted the absence of a uniform process to interpret the results. The literature notes a shift in the public protection rationalization for background checks in the early to mid-2000s. At that time, the events of 9/11 led to an increased public demand for "homeland security". Nursing programs began to associate the rationale for conducting background checks with the US national response to terrorism (Farnsworth & Springer, 2006; Tate & Moody, 2005). From the mid-2000s to 2020, the link to "homeland security" fades, but authors continue to advocate for the use of background checks in college admissions and nursing programs. Most articles advocated for their use as expert opinion but provided little evidence to guide policy or demonstrate how background checks provided public protection. For examples, see Moody, 2010; Mooney 2008, and Averette, 2020.

This literature review identified four articles which provided data to support the use of background checks in nursing education. One describes the prevalence of state board of nursing discipline among nursing students in Louisiana (Moody, 2010). Johnston (2016) describes the prevalence of nursing students in Texas with background findings over a 4-year period. Smith et al. (2013) compares students in Louisiana to determine if background findings impact program completion, success on the licensure exam, subsequent involvement with law enforcement, and

subsequent professional misconduct. The fourth article (Stewart & Uggen, 2018) examines the impact of disclosing a background finding on the admission of college students.

Moody (2010) described the prevalence of nursing students receiving board discipline in Louisiana in 2008. The state board of nursing reviewed BGC for 6,448 students and conducted 685 investigations (10.6%), resulting in 53 disciplinary actions that year (Moody, 2010, p. 50). In these actions, 34 students had limitations imposed on their practice, 11 students had their admission delayed or denied, and eight students were suspended due to failure to comply with previous board orders (Moody, 2010, p. 50).

Johnston (2016) collected descriptive data from student nurses and nurses in a single state. Results were published as a report by the Texas Board of Nursing, not a peer-reviewed journal. Between 2011 and 2014, students with background findings in RN programs ranged from 10.57% to 13.58% (p.23).

Smith and associates (2013) studied a 2006 cohort of nursing students in Louisiana. They found that among 3,166 applicants, 14.7% had background findings. They studied a matched sample of 930 participants and found no significant difference in rate of program completion or pass rate on the National Council Licensure Examination (NCLEX). However, Smith et al. (2013) found a significant difference in subsequent involvement with law enforcement post admission for those with background findings than those without. They found 10% of students with prior involvement would have subsequent involvement with law enforcement compared to 3.4% of those without ($df = 1$, $\chi^2 = 11.064$, $p = .0009$) (p. 35-36). They also found increased likelihood of board sanction for those with background findings, 4.5% versus 1% for those without ($df = 1$, $\chi^2 = 9.71$, $p = .045$) (p. 36). While 18.2% of students with findings did not

disclose them in the nursing school admission or clinical placement process, Smith et al. (2013) did not find a significant difference in subsequent involvement with law enforcement.

Stewart and Uggen (2020) studied the impact of background findings and race on the college application process. They conducted a modified audit of 200 colleges by submitting 800 applications of matched applicant pairs in four classes: white with a felony record, white without a felony record, Black with a felony record, and Black without a felony record. Applicants were portrayed as being in their "early 20s" with similar educational performance. Those with a background finding disclosed they were on unsupervised probation for "aiding and abetting simple robbery" or "a single count of burglary" (p. 165). The authors found that applicants with a felony record were denied admission 2.5 times more often than those without felonies (p. 171). In this study, Black applicants with and without felony records were rejected at a slightly higher rate than similar white applicants, although this was not statistically significant (p. 172).

Role of Background Checks in Professional Nursing

Articles related to practicing nurses with background check findings provide evidence of how the profession's regulators handle licensure and hiring decisions for those with background findings. Academic nurse educators should apply these findings cautiously to students who have not yet completed their education. Nonetheless, the interpretation of background findings for practicing nurses should be considered in the educational context as students will be held to that standard when they enter professional practice. The research articles presented in Table 2 represent the state of nursing research related to practicing nurses with background findings. Again, articles which are expert opinion, news items, or state-specific regulatory updates may be discussed in the text but are excluded from the research table.

Clevette, et al., (2007) conducted a study of 184 RNs and LPNs in Nebraska to determine if there was a relationship between background findings and disciplinary actions. They found no correlation between prior involvement with law enforcement and disciplinary action post-licensure. This suggests involvement with law enforcement may not predict professional misconduct.

Johnston (2016) collected descriptive data from student nurses and nurses in a single state. Results were published as a report by the Texas Board of Nursing, not a peer-reviewed journal. Between 2011 and 2014, RNs with background findings ranged from 6.53% to 7.46%. Johnston described the use of background findings as a proxy for character assessment. Johnston advocated for the use of the algorithm developed by Priola-Surowiec et al. and published by the National Council of State Boards of Nursing (NCSBN) for use in decision making for nurse licensure.

Priola-Surowiec et al. (2014) developed the NCSBN algorithm for evaluating background check findings for the purpose of regulation and licensure. The algorithm assesses background check findings for a link to practice. Individuals with unrelated findings progress to licensure. Individuals with more significant background check results or lack of complete disclosure undergo more advanced screening to determine if a license should be issued. While not explicitly developed for use with students, it represents the state of the science for background check evaluation of professional nurses.

Zhong and colleagues (2009) conducted a case-control study to predict recidivism among nurses. In contrast to the earlier findings of Clevette (2007), they found 35% of nurses disciplined by the board had a background check finding prior to the incident, compared to 3% of control cases who did not. Binary logistic regression found that a background finding

increased future recidivism more than 4 times (n = 698, OR 4.36, CI [1.29 - 14.7], p = 0.018). This is one of the few research studies to test a relationship between background check results and subsequent involvement with law enforcement.

In 2011, the US Department of Health and Human Services Office of Inspector General published a nationwide descriptive study of a stratified random sample of 256 nursing facilities. This study found 3.6% of nurses employed in these settings had background findings prior to employment. It was noted that evaluating background check findings in healthcare was often hindered by incomplete results. This is the only nationwide study to describe prevalence of nurses with background findings who were hired and practicing in US nursing facilities.

Zhong, et al. (2016) retrospectively reviewed background findings among 4,260 nurses and 559 applicants with disciplinary actions submitted to the NURSYS database of the National Council of State Boards of Nursing in 2012 and 2013. They found that 4,001 individuals in the US RN or LPN population had been disciplined by a board of nursing due to a background finding. This represented 0.1% of the workforce of 4,664,102 nurses. Probation was the most common board sanction, with license suspension or revocation reserved for nurses "in cases of egregious crimes and especially for patient-related criminal activity," (p. 32).

Role of Background Checks in Allied Health Professions

The impact of background check findings upon unlicensed caregivers in the State of New York has been extensively studied by Denver and colleagues. In 2017, Denver noted that 48% of applicants with background findings seeking permission to provide home care were approved. Of these, 9% were re-arrested within one year, and 22% were re-arrested in three years. Denver points out that the risk of subsequent involvement with law enforcement may never be equal to

the general population and recommended a standardized waiting period to reduce uncertainty and disparities.

Building upon this work, Denver and Pickett, et al., 2017 retrospectively studied 6,646 unlicensed caregivers in New York state, finding that employment reduces recidivism. While the background check findings made it difficult to receive clearance to work, employment was seen as indicating "redemption" (p. 400).

Denver and Siwach, et al. (2017) further studied unlicensed caregivers in New York. They noted that balancing risk to the public against the benefits of employment for the individual was more than a simple policy choice. They found that while the majority of individuals did not have subsequent involvement with law enforcement, a few committed significant harm to the public. Of the 6,648 individuals with background findings in the study, 8% committed a subsequent felony and 5% committed a disqualifying offense within 3 years of being cleared to work.

Denver's further work (2020) examined the impact of "positive credentials", such as completion of training programs and letters of reference, on subsequent involvement with law enforcement. They found no clear evidence that "positive credentials" inhibited recidivism. They concluded that successfully contesting denial of employment was more indicative of access to social capital than rehabilitation.

Ewald (2019) conducted qualitative interviews with 109 barber and nursing aide regulators in 25 states to describe regulatory ambiguity which allowed civil servants to exercise broad discretion in licensure decisions. They found that individuals with background findings experience diminished status and vulnerability to those in power. Many acts in the evaluation

process were considered merely performative – and willingness to confess and comply was seen as evidence an applicant would be governable.

Papadakis and Hodgson et al. (2004) and Papadakis and Teherani et al. (2005) performed retrospective case-control studies on medical students who had been disciplined during their education to determine if they were more likely to be sanctioned by the medical board. They found that disciplined physicians were more likely to have demonstrated problematic behavior in medical school (OR 2.15, CI [1.15-4.02]). Behaviors during medical school most strongly linked to board sanctions included irresponsibility and diminished capacity for self-improvement.

Discussion

The findings of this systematic review of the literature reveal that little is known about the prevalence of nursing students with background findings. No published study on a representative sample of nursing students in the United States was identified. Nursing program administrators are left to generalize from studies conducted in single states with unique regulatory structures. These existing studies in the literature reflect a wide range in the prevalence of background check findings between nursing students and nursing professionals.

Studies Describing Prevalence of Background Check Findings

Smith et al., (2013) found that among the 2006 cohort of 3,166 nursing students in Louisiana, 467 had background findings, a prevalence 14.7% of the population. Johnston (2016) found that among students enrolled in RN program in Texas from 2011 to 2014, the prevalence of students with background findings ranged from 10.57% to 13.58%.

Among professionals, the US Department of Health and Human Services Office of the Inspector General reported in 2011 that 3.6% of nurses (RN and LPN) in long term care facilities

had background findings (p. 22). Johnston (2016) found the prevalence of background findings in Texas RNs in the years 2011 to 2014 ranged from 6.53% to 7.46%.

Zhong et al. (2016) studied 4,260 RNs, LPNs, APRNs, and 559 applicants nationwide who were sanctioned by their state board of nursing in 2012-2013 due to a background finding. These nurses represented less than 0.1% of nurses nationwide.

Studies Utilizing Background Check Findings as Predictors of Public Risk

The literature reflects conflicting data on the usefulness of background checks as a predictor of public risk. Among the student population, Smith et al. (2013) found that students with background check findings were no less likely to complete their education and pass the NCLEX. Nonetheless, these students were more likely to have subsequent involvement with law enforcement and face sanction from the board of nursing.

Clevette and colleagues' 2007 study of a small convenience sample (n = 47) of RNs and LPNs in Nebraska found no correlation between background finding prior and board sanction post-licensure.

Papadakis et al. (2005) studied 235 graduates from three medical schools and found students disciplined for unprofessional behavior during school more likely to receive board sanction once in practice (OR 2.15, CI [1.15-4.02], p = .02).

Zhong et al, (2009) conducted a case control study of disciplined RNs, LPNs, and APRNs and found 39% recidivism in five years, compared to 1% of control cases (n = 491). Prior background significantly increased risk (p = .014). Multiple findings increased risk (p<.001), males significantly higher risk (p = .028).

Limitations of Identified Literature

The limitations of the studies identified in this review of the literature include a majority of recommendations based on expert opinion. While a few quantitative studies have been conducted, most utilized small convenience samples drawn from single sites. No descriptive study of a representative sample of nursing students with background findings was identified. Nursing program administrators seeking an understanding of the issue must therefore generalize from these non-representative samples, or descriptions of other populations.

Social Justice, Disparities, and Bias

There has also been little examination of whether the background check process has a deterrent effect on students from communities underrepresented in nursing but subject to disparate policing. The Equal Employment Opportunity Commission Title VII prohibits the use of background check findings if they promote racial discrimination (Cary, 2013). Nursing educators must carefully balance their professional obligation to protect the public and comply with state laws mandating background checks against their ethical duty to diversify the profession and comply with antidiscrimination law.

Demand for academic nurse educators to produce graduate nurses is high. The nursing workforce in the US will be unable to fill an average of 203,000 registered nurses each year through 2026 (U.S Bureau of Labor Statistics [BLS], 2018). The demand for students from underrepresented communities to meet this need is also great. The current nursing workforce does not reflect the diversity of the public. Persons of racial and ethnic minorities comprise 38% of the US population, but only 19.2% of the RN workforce (American Association of Colleges of Nursing [AACN], 2019). To meet the need of the future nursing workforce, the AACN (2019) advocates for increased access for underrepresented persons in nursing education through improved outreach and elimination of barriers.

Background Checks: Gap in the Literature

This systematic review of published studies on background checks in nursing and nursing education reveals a gap in the literature. Little is known about the prevalence of student nurses with background findings. Much of the literature on the topic identified by the author is drawn from expert opinion or case studies of experiences in single programs. Generalizations from data about background findings in the college-aged population or professional nurses in practice may not be representative of the nursing student population. This is likely to be a hindrance to nursing education administrators seeking to create policies which are fair, inclusive, and protective of the public.

To date, the only descriptive studies of nursing students with background findings are from two states: Louisiana, and Texas. The Texas data was collected and paid for through grant funding for a limited time. State law in Louisiana requires students to seek approval from the board of nursing prior to admission. The samples from Louisiana students were from 2006 (Smith, et al., 2013) and 2008 (Moody, 2010). It is unclear if data drawn from single-state cohorts now over a decade old are generalizable to US nursing programs nationwide today.

Background Checks: Addressing the Gap

To date, no study of a representative sample of nursing students has described the prevalence of students with findings as they enter practice as student nurses. Nursing lacks a clear understanding of how to handle students with background findings in the admission and clinical placement process. There is no published description of prevalence or characteristics of findings in a sample which represents the nursing student population nationwide. Without this foundational knowledge it is difficult to develop informed policies for admission and clinical placement. Until we understand how many students are impacted by background findings and the

characteristics of those findings, we will be unable to conduct admission and clinical placement policy research to promote public protection and inclusivity. This review of the literature demonstrates the lack of sufficient published data to describe the population of nursing students with background findings.

Limitations of this Review of the Literature

This review of the literature has several limitations. Studies on this topic could be published in the literature of multiple disciplines, including nursing, allied health, medicine, or education. While the search was conducted in multiple databases (CINAHL Plus with Full Text, PubMed, ERIC and Web of Science), some literature may be overlooked. This literature review attempted to compensate by hand search of reference lists and searches for related works by prominent authors. As a result, 64 articles from outside the database search results were reviewed. None of the articles identified were from sources outside the United States or Great Britain. It is possible significant contributions to the topic exist in other countries. The author did not exclude search results written in languages other than English, but none were identified to be considered for inclusion.

Chapter Conclusion

This systematic review of the literature reveals a gap. The nursing literature lacks a study on a nationwide sample of nursing students describing the prevalence of background findings and the characteristics of those findings. The decision to include or exclude a student based on background findings will impact public safety and may carry unintended consequences for communities underrepresented in nursing. Academic nurse educators should remain aware that current admission and clinical placement decisions regarding background check findings are largely based upon expert opinion. There is a need for further research to inform policy which

ensures that only individuals who truly pose a risk to the public are excluded, while eliminating barriers for those who pose no risk.

Table 1

Review of Literature Related to Background Checks in College Students and Nursing Education

Author, year	Title	Population	Design and Sample	Findings
Alley et al., 2005	Nurses' promise to safeguard the public: Is it time for nationally mandated background checks	Nursing students	Expert opinion	Records are often inaccurate. Schools and clinical sites should work together to have similar policies. Consider age, time passed, and subsequent history.
Averette, 2020	Prelicensure nursing student with substance misuse history	Nursing students	Case study (n=1)	Student with previous DUI received second during nursing school. Denied by clinical site. School advocacy resulted in alternate placement and graduation.
Brown, 1991	Unfairly judged: Should a criminal record bar one from becoming a nurse?	Nursing students (UK)	Case study (n=1)	Student approved to work as assistant in hospital, undisclosed offense resulted in withdrawal of admission to nursing program.
Burns et al., 2004	Criminal background checks: Necessary admission criteria?	Nursing students	Expert opinion	Programs should check backgrounds to avoid "negligent admissions". Disqualifying crimes should include delivery of a controlled substance, retail theft and murder to mitigate foreseeable risk.
Council for Healthcare Regulatory Excellence, 2010	Student fitness to practice: Should the regulators receive every outcome?	Nursing and allied health students in UK	Expert opinion	Policy analysis. Background checks promote public protection through character evaluation. Collection of aggregated data needed to improve student guidance.
Dickerson, 2008	Background checks in the university admissions process: An overview of legal and policy decisions	College students	Expert opinion	Programs show commitment to campus safety and avoid negligent admission with clear policies. Most administrators do not have the expertise to evaluate results of background checks.
Farnsworth & Springer, 2006	Background checks for nursing students: What are schools doing?	Nursing programs	Descriptive study of 258 LPN, ADN, and BSN programs	50% of schools performing background checks at that time. No guidelines on how to interpret results. Public protection linked to terrorism post 9/11.
Hughes et al., 2013	Criminal background checks in U.S. higher education: A review of policy developments, process implementations, and postresults [*sic*] evaluation procedures	College students	Qualitative study of 132 Division I and II college administrators	Colleges act to protect students and reduce liability. Balancing privacy against liability results in "damned if you do, damned if you don't". Most decisions made by HR managers who have no specific training.
Jones et al., 2009a	Background checks: To do or not to do	Nursing students	Expert opinion	Background check process for students and faculty determined by individual facility policy. Clear policies should be developed and communicated.
Jones et al., 2009b	Background checks on students and faculty?	Nursing students	Expert opinion	Reprint of Jones et al., 2009a

Jones & Weniger, 2007	Student criminal background checks: considerations for schools of nursing	Educational law and regulation	Expert opinion	Discussion of law, including FERPA, FCRA, and FACTA. Board of nursing review justified to allocate educational resources. Follow a clear, transparent policy for conducting background checks.
Marrs, 1997	Don't let our story become your story: Prohibit anyone convicted of 'crimes against people' from getting nursing licenses	Nursing students	Case study (n=1)	Nursing student on parole for murder misrepresented facts at admission and subsequently murdered a college student. Began nationwide call for background checks in nursing education.
Moody, 2010	Louisiana's approach to criminal background checks of nursing students	Nursing students	Descriptive study of 6,448 nursing students in single state	Of 6,448 students, 685 investigated, 34 conditionally admitted, 11 delayed or denied, 8 suspended for failure to comply. Majority for substance abuse.
Mooney, 2008	Should past crimes stop you nursing?	Nursing students (UK)	Case study (n=1)	Students dismissed from nursing programs for theft "bring the profession into disrepute". Author advocated any conviction should prevent admission.
Philipsen et al., 2012	Criminal background checks in nursing: Safeguarding the public?	Nursing students	Expert opinion	Background checks evaluate good moral character. Past behavior predicts future behavior. Arrests without convictions may result in a presumption of guilt.
Pierce & Runyan, 2010	Criminal records and college admissions	College students	Expert opinion	While reducing campus violence and protection from liability has an “intuitive appeal” there is little evidence that background checks reduce campus crime.
Pierce et al., 2014	The use of criminal history information in college admission decisions.	College students	Delphi study of 112 US college admissions officers	61% collected at least some background check information on applicants. Majority rationale was to reduce violence and mitigate liability, despite a single incident being a poor predictor of future behavior. Arrests without conviction played a role in admission decisions.
Smith et al., 2013	Prelicensure RN students with and without criminal histories: A comparative analysis	Nursing students	Single state case control (n=3,166)	Of 3,166 students 467 had finding (14.7%). Case control found no difference in graduation or NCLEX pass rates. 10% had subsequent background finding.
Stewart & Uggen, 2020	Criminal records and college admissions: A modified experimental audit	College students	Audit of 280 matched test pairs Black/white with/without background check results	Applicants with felonies rejected 2.5x more often than those without. Blacks with records rejected more often than whites with records (26.7% vs 23.8%, $p < .001$).
Tate & Moody, 2005	The public good: regulation of nursing students.	Nursing students	Expert opinion	Review of rules regulating students in a single US state. Regulators exclude individuals who pose a

Tee & Jowett, 2009	Achieving fitness to practice: Contributing to public and patient protection in nurse education	Nursing students (UK)	Case study single program review	public risk. The profession "determined long ago" certain criminal behavior poses undue risk (p. 49). Proposed integrated model for monitoring fitness to practice. Stressed collaboration between schools, clinical sites, and regulatory agencies.

Table 2

Review of the Literature Related to Background Checks in Professional Nursing

Author, year	Title	Population	Design and Sample	Findings
Boyd & Miller, 2013	Nurse licensure criminal background checks	Nurses	Expert opinion	Fingerprint-based background checks are more reliable and thorough than other methods.
Brous, 2009	Implications of criminal background checks.	Nurses	Expert opinion	Background check findings adjudicated by human resources. Felonies, misdemeanors, and findings unrelated to practice can impact employment.
Clevette et al., 2007	Nursing licensure: An examination of the relationship between criminal convictions and disciplinary actions	LPNs and RNs in a single state	Descriptive study, convenience sample from one state (n=184)	No correlation between background finding prior and board sanction post-licensure.
Hopkins & Thomas, 2013	Developing guidelines for evaluating the results of criminal background checks	Nurses	Expert opinion	Guidelines should consider nature, seriousness, age and time elapsed since findings. Does finding relate to practice or an opportunity to repeat behavior?
Johnston, 2016	Criminal history and nurse licensure	Nurses and students from single state	Descriptive study of RNs, LVNs, and students 2011-2014	Background checks as measure of character. RN students with findings ranged 10.57%-13.58%. RNs with findings ranged 6.53%-7.46%
Ohio Board of Nursing	Criminal history and effect on nursing education program enrollment, license eligibility and employment	Nurses	Expert opinion	Ohio Board of Nursing will not evaluate student background findings for enrollment eligibility. Schools set their own admission criteria. Completion of a degree does not guarantee eligibility for licensure.
Priola-Surowiec, Abram, et al., 2014	Guidelines for assessing candidates with criminal histories	Nurses	Expert opinion	Evaluators should evaluate seriousness, personal statement, and completion of court mandates. Minor offenses unrelated to practice should be excluded. Some candidates may require psychological evaluation for personality disorders.
Priola-Surowiec, Kunard, et al., 2014	Criminal background check guidelines	Nurses	Expert opinion	NCSBN proposed standard for regulators to evaluate background findings in licensure decisions.
Shalo, 2009	Protecting the public from bad nurses	Nurses	Expert opinion	Boards of nursing require legislative authority to conduct background checks. Expect findings on 5-8% of RNs. Findings complicated by lack of disclosure.
Sheets & Kappel, 2007	The case for criminal background screening: Informed licensure decision making	Nurses	Expert opinion	Nursing practice is a privilege. Profession has a duty to exclude individuals who pose a risk. Criminal history reflects thoughts, judgement, and behavior under stress. The role is not to retry or second-guess the justice system. Advocates for a permanent bar for all felony convictions.
US Department of Health and Human Services Office of	Nursing facilities' employment of individuals with criminal convictions	Nurses and employees in nursing facilities	Descriptive study (n=35,286) of employees from stratified random	5% of direct care staff had criminal convictions. 3.6% of nursing. 92.3% of facilities employed individuals with background findings.16% of all employees had conviction

Inspector General, 2011			sample of 256 US nursing facilities	after employment. Background check records frequently incomplete.
Waneka et al., 2011	A study of California nurses placed on probation	RNs in a single state	Case control (n=282 on probation, n=298 control cases)	Younger nurses, men, and associate degree nurses more likely to be on probation. Prior background findings and substance abuse increased risk. Number of nurses on probation (282) small compared to CA population of RNs (224,905).
Zhong et al., 2009	Probation and recidivism: Remediation among disciplined nurses in six states	APNs, RNs and LPNs in 6 states	Case control (n=207 on probation, n=491 control cases)	39% recidivism. Prior background significantly increased risk (p=.014). Multiple findings increased risk (p<.001), males significantly higher risk (p=.028).
Zhong et al., 2016	A review of criminal convictions among nurses 2012–2013	RNs, LPNs in Nursys® database	Descriptive (n=4,260 nurses, 559 applicants)	4,260 nurses and 559 applicants sanctioned in 2012-2013 due to background finding. Male and LPN/LVN nurses overrepresented. Substance misuse and theft were the most common. 18% did not disclose findings.

Table 3

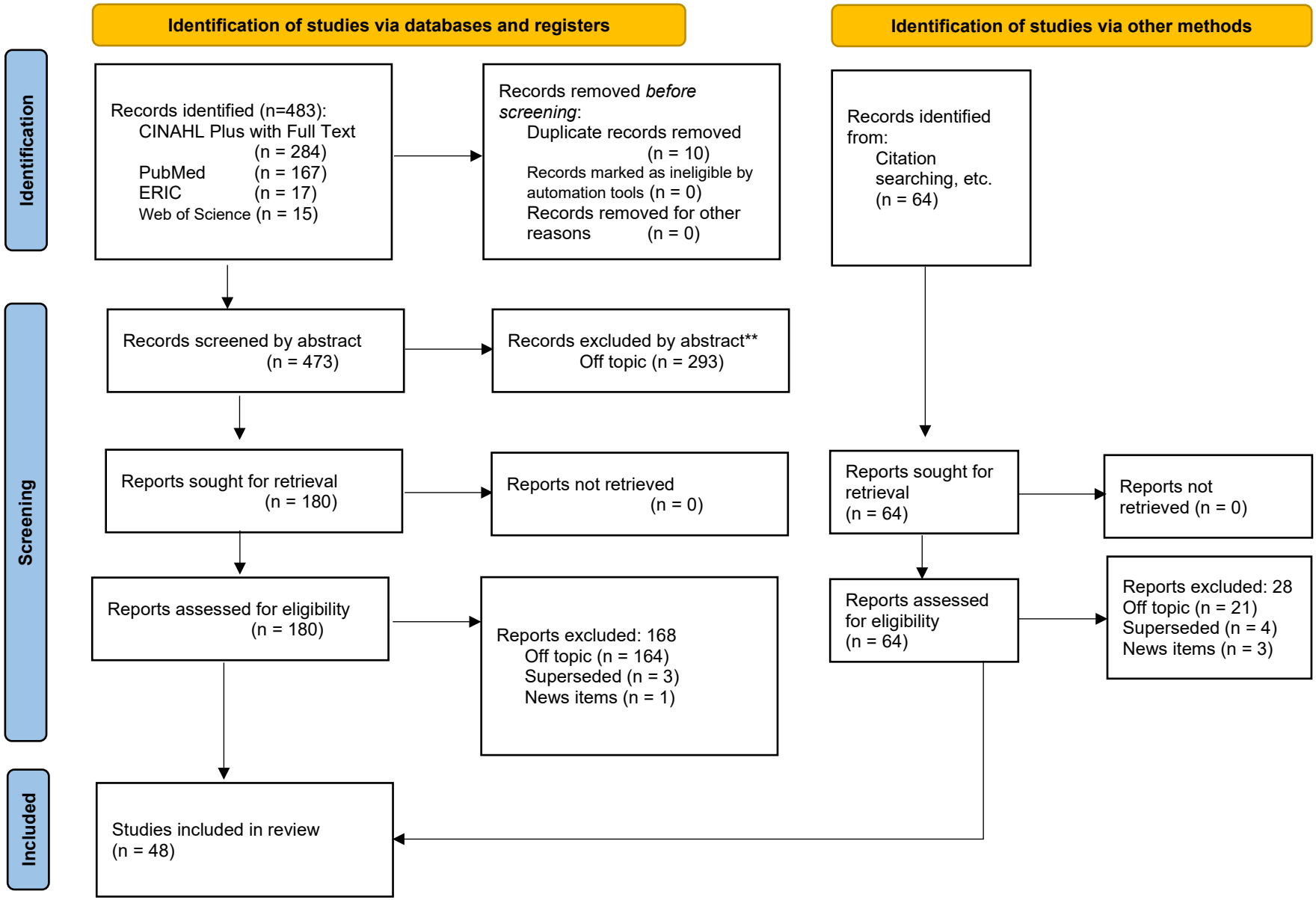
Review of the Literature Related to Background Checks in Allied Health Professions

Author, year	Title	Population	Design and Sample	Findings
Denver, 2020	Criminal records, positive credentials, and recidivism: Incorporating evidence of rehabilitation into criminal background check employment decisions	Unlicensed caregivers in single state	Retrospective, correlational (n=1,144)	No clear pattern that evidence of rehabilitation is negatively correlated with recidivism. Contesting denial may show rehabilitation. Ability to contest limited by social capital. Those denied more likely to be nonwhite, with more convictions, more recent convictions. Rearrest in 3 years similar 25% v 26%.
Denver, Pickett, et al., 2017	Evaluating the impact of "old" criminal conviction decision guidelines on subsequent employment and arrest outcomes	Unlicensed caregivers in single state	Retrospective, correlational (n=6,646)	Formalized threshold reduces uncertainty, but individuals with convictions may never be the same risk as those with no convictions. 48% cleared to work on initial determination. 9% arrested within 1 year. 22% arrested within 3 years.
Denver, Siwach, et al., 2017	A new look at the employment and recidivism relationship through the lens of a criminal background check	Unlicensed caregivers in single state	Retrospective, correlational (n=6,648)	The argument that background check clearance will decrease crime has never been validated empirically; cleared for employment reduces chance of 1 yr rearrest by 2.2%, 4.2% over 3 years.
Ewald, 2019	Barbers, caregivers, and the "disciplinary subject": Occupational licensure for people with criminal justice backgrounds in the United States	State regulators for barbers and nursing assistants	Qualitative interviews with regulators (32 barber, 77 nursing assistant)	Expunged crimes, sealed records and arrests without convictions may still be considered. Applicants face uncertainty and open-ended vulnerability.
Moore, 2014	Criminal background checks: Their role during the admissions process	Physician Assistant students	Expert opinion	Policy analysis. Timing of background check between admission and clinical placement varies between programs. Should be considered with other "red flags" of unprofessional behavior but avoid disparate impact upon underrepresented students.
Papadakis et al., 2004	Unprofessional behavior in medical school is associated with subsequent disciplinary action by a state medical board	Medical school graduates from single site	Case control (n=68 disciplined, n=196 control.)	Medical students disciplined for unprofessional behavior during school more likely to receive board sanction (OR 2.15, CI [1.15-4.02], p=.02)
Papadakis et al., 2005	Disciplinary actions by medical boards and prior behavior in medical school	Medical school graduates from single site	Case control (n=235 disciplined, n=469 control)	Student behaviors most strongly associated with subsequent medical board include "severe irresponsibility" and "severely diminished capacity for self-improvement" (OR 3.0, CI [1.9-4.8])
Siwach, 2017	Criminal background checks and recidivism: Bounding the causal impact	Unlicensed assistive personnel	Bivariate analysis (n=6,947) UAP in single state	Employment denial due to background finding led to 2.7% increase in rearrest within 1 yr, 4% increase in 3 years.

Weuve, 2008a	Criminal background checks part 1: Implications on [*sic*] employment	Athletic therapists	Expert opinion	Policy analysis. Background check essential to avoid negligent hiring and manage foreseeable risk. Policy should be well-written and contain a business need to exclude individuals with specific findings.
Weuve, 2008b	Criminal background checks part 2: Implications for education	Athletic therapists	Expert opinion	Policy analysis. Policy must balance public protection against disparate impact. Policies vary for background check prior to admission versus clinical placement. Criteria often unclear. Avoid blanket bans which are often discriminatory. Categorize as crimes against persons, property, or substance abuse.
Williamson et al., 2018	Clinical experiences: Navigating the intricacies of student placement requirements	Allied health	Expert opinion	Policy analysis. Policy differences between agencies create uncertainty for students and clinical coordinators. Programs may need to identify the most stringent requirements to maximize student options for placement.
Wyatt et al., 2008	Student criminal background checks in colleges of allied health	Allied health	Descriptive (n=40) administrators in school of allied health professions association	40% of respondents implemented a background check in response to site requirements. 70% used an outside vendor to perform checks. Further research required to determine impact of findings on program admission and completion.
Zelna & Works, 2018	Background checks and drug screenings for radiologic science students	Radiologic science students	Expert opinion	Policy analysis. Background checks evaluate students for violations of professional code of ethics. Programs need to develop policies and guidelines for conducting checks and applying results.

Figure 1.

PRISMA diagram.



From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/

Chapter 3: Methodology

Background checks for prior involvement with law enforcement are common in academic nursing education (Dickerson, 2008; see also Farnsworth & Springer, 2006; Hughes et al., 2013; Phillipsen et al., 2012). Background check findings are documentation of involvement with law enforcement, such as arrest and conviction records. These background check findings are considered during the admission or clinical placement decision process (Williamson et al., 2018). The rationale is to protect vulnerable populations from students who may harm them. Educators evaluate background check findings to determine if a student's past behavior suggests an unacceptable risk to the public in practice (Alley et al., 2005). Despite their widespread use, background checks have not been shown to improve safety, and may inhibit social justice (Pierce & Runyan, 2010). The author will briefly review gaps in the literature related to the evaluation of background check findings in academic nursing education. The author will then design a retrospective descriptive study to identify the prevalence and characteristics of findings in a nationwide sample of nursing students. This descriptive data will inform a program of future research to propose hypothetical relationships between background check findings and public risk in nursing students.

Background

Despite the widespread use of background checks, little is known about students entering nursing education with background check findings or how past involvement with law enforcement predicts public risk (Pierce & Runyan, 2010). Data published by Brame et al. (2014) suggest that 30% of Americans aged 18-23 will be arrested at least once. Arrest rates increase based on gender and race: 38% of white males and 49% of Black males in this age

group will be arrested (Brame et al., 2014). It is unclear if the arrest rate of college-aged Americans is generalizable to the nursing student population.

Most state boards of nursing expect nursing education programs to set their own policies for admission and evaluate student background findings at licensure (Burns et al., 2004). This may lead to a student completing nursing education but being ineligible for licensure. One example occurred in the late 1990s where a convicted murderer in Louisiana received a pardon, graduated from nursing school, and passed the licensure examination (Moody, 2010). The individual was denied a license by the Louisiana board of nursing due to their conviction, despite having received a pardon. The student sued; however, the board of nursing's decision was upheld at the trial and appellate levels. The Louisiana State Board of Nursing was concerned that future individuals may also invest time and money in pursuing a nursing degree, despite background findings that render them ineligible for licensure. They persuaded the Louisiana legislature to extend the Board of Nursing's regulatory authority to students (Moody, 2010). This created an opportunity for researchers to study student background check findings in the state.

Two studies were conducted on background check findings among Louisiana nursing students. Smith et al., (2013) studied nursing students from Louisiana's 2006 cohort and found 467 of 3,166 (14.7%) had background check findings. Moody (2010) examined Louisiana's 2008 nursing student cohort and found 685 of 6,448 (10.2%) had background findings. It is unclear if samples drawn from a single state over a decade ago are generalizable to nursing students in other states.

Data exists from one other state. The National Council of State Boards of Nursing (NCSBN) provided a grant to the Texas Board of Nursing (2008) to conduct background checks on nursing students at enrollment. Johnston (2016) issued an NCSBN report which described the

portion of Texas nursing students with background findings. During the years 2011 to 2014, the percentage of students with background findings ranged from 10.57% to 13.58%. By comparison, registered nurses applying to the Texas Board of Nursing for licensure by endorsement had background finding rates from 6.53% to 7.46% during the same period (Johnston, 2016). The disparity between students in the state of Texas and nurses from other states applying for licensure by endorsement could indicate students from a single state are not generalizable to a broader population.

These studies of nursing students only report the prevalence of findings among their sampled students. They do not report the most common or most severe findings that may play a role in assessing public risk. Characteristics which may indicate differing risk include crimes against persons (e.g., assault), crimes against property (e.g., theft), or crimes involving substance abuse (e.g., driving under the influence). These categories have been identified in previous research related to employment decisions and board sanction (US Department of Health and Human Services Office of Inspector General, 2011; Zhong et al., 2016).

This brief overview of the literature indicates a significant gap in nursing knowledge. To date, no multi-state study has described the prevalence or characteristics of background findings in nursing students. No published study describes the prevalence of categorical findings thought to predict public risk, such as crimes against property, crimes of violence, and substance abuse. A study of nursing students from multiple US states is necessary to describe the prevalence of students with background findings. Identification of the most common and most severe background check findings may be used to generate hypotheses to direct future research into their validity as predictors of public risk.

Purpose

The nursing literature lacks a descriptive study of the prevalence and incidence of background check findings in a multi-state sample of nursing students. The literature also lacks a description of the most common or most serious background findings among student nurses. The author asserts there is a need for a descriptive study to inform a critical examination of the implications of those findings for public protection. The results of this study will inform nursing educators who balance public protection and nursing program inclusivity.

Research Aims

The aim of this retrospective study is to collect foundational descriptive data of nursing students with background check findings. This will address the existing gap in the literature, while informing future research into inclusivity and public protection.

Research Questions

This study answered the following research questions:

- What is the prevalence of undergraduate nursing students with background check findings in a multi-state sample of large public research university programs in the United States?
- What are the most common background findings among undergraduate nursing students in a multi-state sample of large public research university programs in the United States?
- What are the most serious background findings among undergraduate nursing students in a multi-state sample of large public research university programs in the United States?

- Do background check findings among undergraduate nursing students in a multi-state sample of large public research universities in the United States differ significantly by region (East, South, Midwest, West)?

Study Design

The author conducted a quantitative retrospective descriptive study to examine aggregated, de-identified data drawn from a multi-state sample of nursing students attending large public research universities. The data collected identified the most common and most severe background check findings in the sampled population. Results of this study will inform a program of future research to improve the inclusivity of nursing education and the use of background check findings in the admission and clinical placement process. This study was determined by the Institutional Review Board of the University of Wisconsin – Milwaukee to be exempt as non-human subject research (see Appendix).

Study Method

This retrospective descriptive study examined aggregated, de-identified data through partnership with a consumer reporting agency. Quantitative data was drawn from a convenience sample of nursing students attending large, public, research universities in multiple US states. This data included:

- Years 2014, 2015, 2016, 2017, 2018, 2019
- Number of students submitted for background check each calendar year
- Number of students with a background finding of any type
- Number of students with severe findings (felonies)
- Number of students with findings related to persons (e.g., violence)
- Number of students with findings related to property (e.g., theft)

- Number of students with findings related to substance abuse (e.g., driving under the influence)
- Number of findings with incomplete data (e.g., arrest data without court outcome)

Study Sample

Studies conducted upon samples which are not representative of an entire population lack external validity which limits their generalizability (Siedlecki, 2020). To date, prevalence and characteristics of background findings have not been described in a representative sample of US nursing students. The American Association of Colleges of Nursing (AACN) reports that in 2020, there were 251,145 students enrolled in 1,035 nursing schools in the US (AACN, 2021). These include small and large public, private, urban, and rural institutions. Potential confounding variables exist, such as demographic differences between rural and urban students, and socioeconomic disparities between students enrolled in public and private universities. The author will control for these confounders by sampling student nurses from programs set in large public research universities.

The author has identified the Coalition of Urban Serving Universities (2020) as a nationwide network of 40 public research universities across the United States. Coalition members comprise schools similar in size, setting, and mission (Coalition of Urban Serving Universities, 2020). The author sampled these universities through partnership with a consumer reporting agency. Consumer reporting agencies furnish results of publicly available records for use in credit decisions and employment purposes and are regulated by Federal statutes (Title 15, 1970/1998). Nursing and allied health educators frequently outsource the complex and time-consuming background check process to consumer reporting agencies (Denver, & Siwach, et al. 2017; Williamson, 2018; Wyatt et al., 2008). One agency has been identified that claims to serve

70% of colleges and universities covering 80% of nursing students in the US (CastleBranch, 2021). The 29 programs listed in Table 4 were cross-referenced with the consumer reporting agency to determine which programs had data available. For complete details of sampling with inclusion and exclusion criteria see Figure 2.

Table 4

Large Research Universities with Nursing Programs

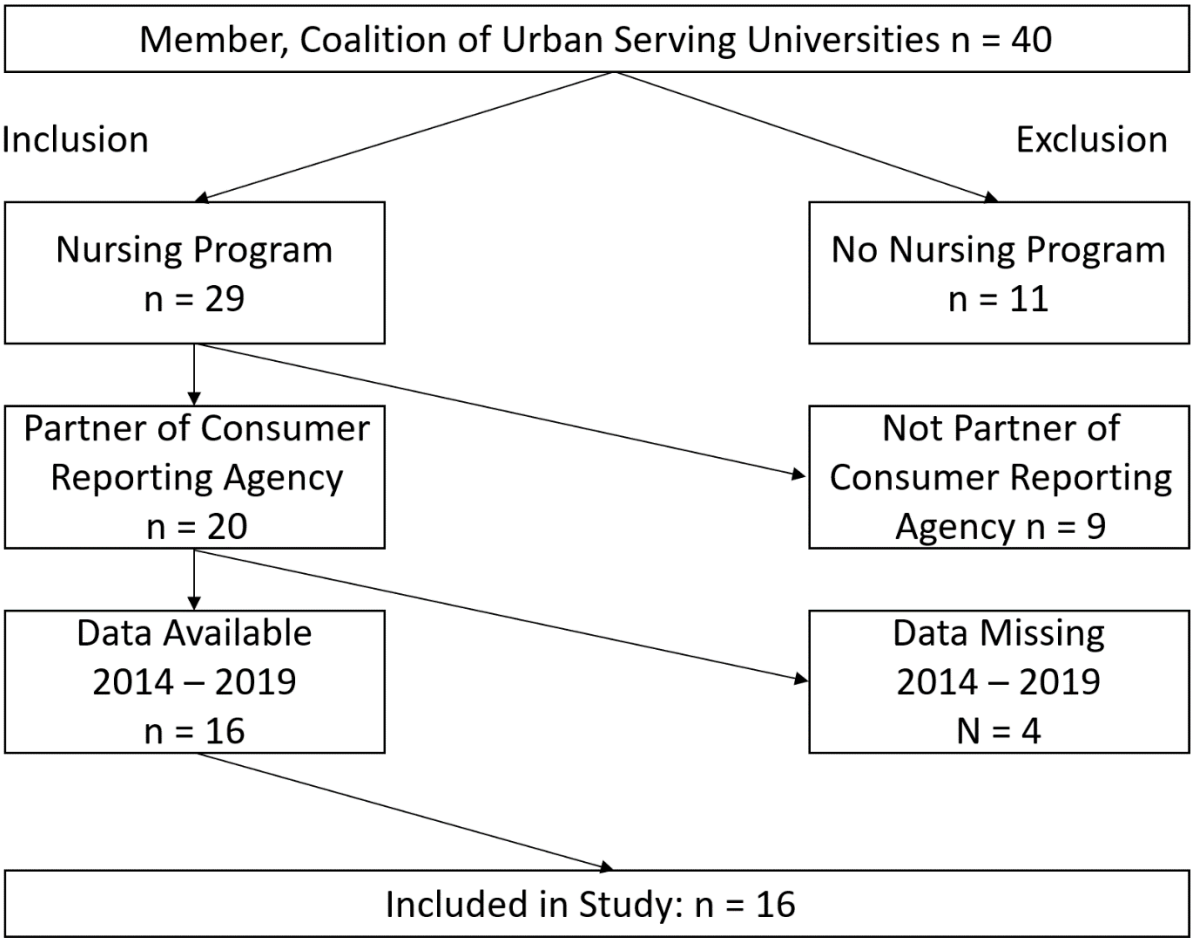
East	South
Morgan State University	Florida International University
SUNY – Downstate Medical Center	Georgia State
Temple University	University of Alabama at Birmingham
University of Albany	University of Central Florida
University of Massachusetts – Boston	University of Memphis
Virginia Commonwealth University	University of North Carolina – Charlotte
	University of Tennessee - Knoxville

Midwest	West
Cleveland State	Arizona State
Indiana University – Purdue	California State University – Fresno
The Ohio State	California State University – Northridge
University of Cincinnati	California State University – Fullerton
University of Illinois – Chicago	San Jose State
University of Wisconsin – Milwaukee	University of Colorado – Denver
Wayne State, Michigan	University of Houston
	University of New Mexico
	University of Texas – San Antonio

Note. Members of the Coalition of Urban Serving Universities identified as hosting a nursing program from information published on individual university websites. (Coalition of Urban Serving Universities, 2020)

Figure 2

Sampling Methodology



To ensure confidentiality, program data was de-identified and named randomly by region, i.e., “Midwest 1, Midwest 2, West 1, East 1,” etc. Numbers were not assigned alphabetically to prevent program identification by simple matching. Site identities were retained by the data analyst at the agency but not accessed by the researcher. Partnership with a large consumer reporting agency allowed access to a multi-state sample of nursing students in large public research universities across the US. Resulting data was aggregated at the program level, overcoming challenges related to individual student data. These include vulnerability of students as a population and the need to ensure protection of subjects while researching a stigmatizing topic (Shivayogi, 2013).

Study Setting

This study was set in baccalaureate degree nursing programs housed in large public research universities in the United States. While the setting may limit generalizability to programs of differing characteristics, such as rural colleges or students outside the US, it will help control for confounding variables. One example would be private colleges with cohorts of advantaged students. These students may have greater access to social capital, such as expert legal counsel, which could allow them to minimize consequences of involvement with law enforcement (Denver, 2020; Pierce & Runyan, 2010).

Study Participants

This study collected aggregated, de-identified data on students from nursing programs housed in large public research universities. This was accomplished through partnership with a nationwide consumer reporting agency which furnishes background checks.

Study Conceptualization and Operationalization of Variables

Data collected in this study included background check findings and the characteristics of those findings. The category and severity of the finding are thought to indicate the risk an individual may pose to the public. Characteristics which are thought to indicate differing public risk include crimes against persons, crimes against property, and crimes involving substance abuse (US Department of Health and Human Services Office of Inspector General [US DHHS], 2011; Zhong, et. al, 2016). These variables should be clearly conceptualized and operationalized to promote objective measurement and reduce threats to internal validity (Siedlecki, 2020).

Conceptualization and Operationalization: Background Checks

For this study, background check was defined as a review of official records for prior involvement with law enforcement. These records may be collected from a law enforcement agency or from a consumer reporting agency. Law enforcement records may be obtained at the state, local, or federal level (Denver et al., 2017). The national database is maintained by the Federal Bureau of Investigation (FBI), while databases at the state level may be maintained by the state court system or state department of justice (US DHHS, 2011). Consumer reporting agencies aggregate publicly available information and sell reports which are commonly used in employment decisions (Denver et al., 2017). Results of background checks may vary based on the source, and results – even from official agencies– may be inaccurate or incomplete (Alley et al., 2005; Jones et al., 2009). Due to the complexity of collecting data from different local and state agencies, as well as the FBI, schools frequently utilize background checks purchased through vendors (Dickerson, 2008). Therefore, this study utilized data aggregated in partnership with a large consumer reporting agency.

Conceptualization and Operationalization: Background Check Findings

For this study a background check finding is defined as any result which indicates an individual has interacted with law enforcement. Such records may include arrests, charges, pending cases, dismissed charges, convictions, and other outcomes from the legal system. (Alley et al., 2005). A student without a record of prior involvement was categorized as having no finding, while students with records were characterized as having a finding. Students with findings were further categorized based on type and severity of finding, which may indicate varying levels of public risk (US DHHS, 2011).

Conceptualization and Operationalization: Categorizing Background Check Findings

The US Department of Health and Human Services Office of the Inspector General (2011) conducted a study of nurses in a representative nationwide sample of nursing facilities. Their report placed findings into one of six categories: crimes against persons, crimes against property, driving under the influence of drugs or alcohol, driving-related crimes (other than DUI), drug-related crimes, and "other" (US DHHS, 2011, pp. 10–11). A simplified version of these categories was used in this study.

Conceptualization and Operationalization: Findings related to Persons

This study used the US DHHS definition of "crimes against persons". Examples include findings for "assault, battery, murder, rape, or robbery" (US DHHS, 2011, p. 9).

Conceptualization and Operationalization: Findings related to Property

This study used the US DHHS category "crimes against property", which included findings related to "burglary, larceny, possession of stolen property, shoplifting, theft, vandalism, writing bad checks," and similar offenses (US DHHS, 2011, p. 9).

Conceptualization and Operationalization: Findings related to Substance Abuse

The US DHHS report separated findings related to driving under the influence of drugs or alcohol from other findings of substance abuse (US DHHS, 2011, p. 9-10). For this study, the variable of interest is whether a student may have a substance abuse history, not whether the finding was driving-related. Therefore, this study will utilize a single category of substance abuse.

Conceptualization and Operationalization: Disorderly Conduct

Disorderly conduct laws serve to prevent or reduce the risk of public disorder (Morgan, 2021). These laws generally lack definition of prohibited behavior and allow punishment of an individual even if disorder does not result from their actions (Morgan, 2021). The vague nature of a conviction for disorderly conduct makes it difficult to determine what behavior was punished. Disorderly conduct laws have been criticized as reinforcing structural racism by otherizing and stigmatizing marginalized persons (Morgan, 2021).

The US DHHS Office of the Inspector General report placed disorderly conduct in the category of "other" which included multiple findings. This made it difficult to determine the prevalence of disorderly conduct in employees of nursing facilities. In US DHHS report, "other" represented 26.4% of background findings, the second most common category behind property crimes (US DHHS, 2011, p. 21). Findings of disorderly conduct require additional research to determine if the behavior was related to the practice of nursing and indicative of public risk (Hopkins & Thomas, 2013). Therefore, this study described the number of findings of disorderly conduct among the sampled population.

Conceptualization and Operationalization: Findings with Incomplete Data

Background check findings are often incomplete. They frequently omit the disposition of a case, such as whether an individual was convicted, or charges were dismissed. (US DHHS,

2011; Zhong et. al, 2016). This information could be essential to an accurate assessment of public risk and incomplete records could represent a significant obstacle to making admission or clinical placement decisions for nursing students. This study categorized findings as incomplete if the outcome of the case could not be determined from the background check results.

Data Collection Procedure

The author worked with a data analyst in the partnered consumer reporting agency who aggregated and de-identified six years of background check data from large public research university nursing programs. The analyst utilized a computer program to collect data from within background check files and categorize the results. Scripts were written to use keywords derived from exemplar records which triggered categorization of the record. Example keywords for findings related to persons included assault, aggravated, weapon, violence, threat, attack, harm, and battery. Property keyword examples included larceny, theft, arson, burglary, vandal, rob, property, and damage. Keywords used to categorize substance abuse included paraphernalia, possession, intoxicated, DUI, DWI, OWI, intent, and distribute.

Data Analysis

Descriptive studies report characteristics of variables of interest as they occur in real life, without manipulation by the researcher (Siedlecki, 2020). Descriptive data reported in this study include prevalence (number), trend over time, and central tendency (mean, standard deviation). Results of the data aggregation and deidentification were provided to the author who organized them in Microsoft Excel® (Version 2202) for analysis using IBM SPSS Statistics (Version 28).

Generalizability

The nursing literature lacks a descriptive study of a multi-state sample of nursing students with background findings. This study addressed that gap by describing the phenomenon in

undergraduate students attending large public nursing programs in the US. The results of this described the prevalence and characteristics of background findings in the sampled students. The sample included 19 of 29 nursing programs from the Coalition of Urban Serving Universities who utilize the partnered consumer reporting agency for background checks (see Figure 2). This produced results which are generalizable to other large public nursing programs in the US. Generalizability to private programs, rural areas, or programs outside the US may be more limited. Individuals seeking to apply results of this study to their own program would need to understand how their students may differ from those enrolled in the sampled programs.

Quantitative Approach: Strengths

Quantitative descriptive research measures characteristics of the phenomenon of interest (Polit & Beck, 2017). It seeks to accurately portray the phenomenon, its prevalence in a population, and describe variables for future correlational studies (Gray et al., 2017; Siedlecki, 2020). This study reported descriptive data of prevalence and central tendency over a six-year period. Results of this study will inform admission and clinical placement policy decisions and direct future research into background findings correlated with public risk.

Quantitative Approach: Limitations

Quantitative descriptive studies have limitations. They do not provide causal inference and are subject to selection bias (Merrill, 2013). This study of aggregated data from students with background findings did not capture individual characteristics which may contribute to risk assessment, or be confounding factors (Merrill, 2013). Confounding factors were controlled for by targeted sampling of students from universities similar in size, setting, and mission. The study was conducted on a sample of students drawn from large public nursing programs which utilized the partnered consumer reporting agency. This may limit generalizability, such as to small

programs in rural settings. Unknown confounders may limit generalizability if programs that select other consumer reporting agencies have students that differ significantly from those in this sample. Individuals seeking to generalize the findings of this study to their own program should exercise caution.

Ethical Considerations

Studies involving student data present ethical challenges to the researcher. Student educational records are protected by the Family Educational Rights and Privacy Act (FERPA) (US Department of Education, 2020). Concerns about maintaining student privacy could make a school reluctant to grant access to individual background check records. Schools may be challenged by the workload and expense necessary to aggregate and deidentify data for a researcher. A researcher may face additional resistance if educational programs fear institutional stigma because of publishing data about students with background findings enrolled in their program.

Other federal regulations further complicate access to student background findings. They are records protected under the Fair Credit Reporting Act (FCRA) and the Fair and Accurate Credit Transactions Act (FACTA) (US Federal Trade Commission, 2018). These acts place limitations on who may access background check information and how results may be used. This may compound the difficulty of accessing student background check data at the individual level.

This study overcame the challenges to data access posed by FERPA, FCRA, and FACTA by analyzing aggregated data provided through a partnership with a consumer reporting agency. The data analyst employed by the partnered agency provided de-identified aggregate data for this study. This eliminated potential violations of FERPA, FCRA, and FACTA by removing all individual identifiers.

Challenges Related to Students as a Vulnerable Population

Students are a vulnerable population in research, particularly when a study is being conducted by an investigator in a dual role at their institution, such as instructor and researcher (Ridley, 2009; Shivayogi, 2013). This vulnerability comes from students' lack of positional power in relation to the researcher, which may expose them to retaliation for lack of participation or coercion through a reward for participation (Ridley, 2009). This study aggregated data at the institutional level, eliminating the risk of coercion or retaliation an individual student may have experienced during recruitment.

Challenges Related to Background Findings as a Sensitive Subject

Previous involvement with law enforcement is stigmatizing (Denver et al., 2017; Ewald, 2019). Targeted recruitment of students with background findings may reinforce societal or institutional labels which make it more difficult for a student to leave an episode behind them (Denver et al., 2017; Hester, 2019). This is of particular concern in relation to the recruitment process. The literature suggests students with background findings are likely to represent a small portion of all nursing students in an institution (Moody, 2010; Smith, 2013). When the targeted population is small, discussion or publication of specific characteristics may allow identification of individuals in the study. The stigmatizing nature of background check findings requires researchers to protect participants from reputational harm when disseminating results (Shivayogi, 2013). The design of this study minimized reputational risk for individuals or programs by handling only de-identified aggregate data.

Study Design Strengths

This study provided foundational descriptive data on the prevalence and incidence of nursing students with background findings in US baccalaureate degree nursing programs housed

in large public research universities. It also described the most common and most serious types of findings by category: findings related to persons, findings related to property, findings related to substance abuse, and findings related to disorderly conduct. These broad categories have been used previously in the US Department of Health and Human Services Office of Inspector General report (2011) which may allow limited comparison to a nationwide study of employees in nursing facilities. Collection of aggregated, program-level data provided protection to individual students who may have felt coerced or reluctant to participate in research about a stigmatizing topic. Descriptive data of prevalence central tendency, including mean and standard deviation, over a six-year period provided generalizable results to inform the practice of academic nursing educators.

This study also provided insight into background checks which return incomplete information. Incomplete records may hinder the admission or clinical placement decision. The decision to admit a student to a nursing program has far-reaching implications. It requires commitment by the student to financial and academic requirements. It requires the nursing program to allocate scarce clinical placement opportunities (Williamson et al., 2018). It will bring the student into contact with vulnerable members of the public during clinical experiences. This study described the proportion of background checks which undermined the admission or clinical placement decisions through incomplete data.

Study Design Limitations

There are limitations to this study design. Aggregated, de-identified data prevents correlating background check information at the student or program level with other data. One example would be pass rates on the National Council Licensure Examination (NCLEX). While determining if a correlation exists between students with background check findings and NCLEX

pass rates may have implications in admission decisions, it may also serve to de-identify the host institution. De-identified data also prevents recognition of students who may be included more than once and double counted. This could occur if a student completed background checks in more than one year or at multiple institutions. An additional limitation is that by relying upon a consumer reporting agency to provide retrospective data, only information collected by the agency can be included in the study. Race data was not in the vendor database; therefore, it was not possible to describe the racial characteristics of students in the sampled students.

Addressing Limitations of the Study Design

The benefits of retrospectively studying aggregated, deidentified data outweighed the limitations. The only studies to date which describe prevalence of background check findings in nursing students were conducted in cohorts drawn from single states. This study was designed to capture a broad sample of students enrolled in large, public, research universities across the US. It protected students and nursing schools from potential stigma by removing personal and institutional identifiers. Partnership with a consumer reporting agency provided access to background check results from 20 large public university nursing programs nationwide.

Foundation for Future Research

It should not be assumed that all individuals engaged in misconduct have an equal chance of being detected, arrested, prosecuted, and convicted. Systemic racism in law enforcement targets individuals from underrepresented communities for increased scrutiny. Studies have shown persons of color are subjected to traffic stops, handcuffing, vehicle searches, and arrests more often than whites (Hetey, et al., 2016). Future research should identify whether disparate policing causes the background check to be an unjust deterrent to nursing students from underrepresented communities.

Policies which assess the presence of background check findings in nursing students may assume that any prior involvement with law enforcement represents a risk to the public. This ignores the context in which the problematic behavior occurred and assumes that past behavior predicts future risk. It is unclear if a person who shoplifted from a store is likely to steal from a patient or hospital as a nursing student. A potential link between behavior during school and professional behavior must be examined in nursing. Studies have suggested that problematic behavior in medical school predicted professional misconduct in physicians (Papadakis et al., 2004; Papadakis et al., 2005). Future research could be conducted to investigate whether background findings in nursing students correlate with professional misconduct in nursing practice.

Chapter Conclusion

The National League for Nursing recognizes academic nurse education as a specialized practice within the profession (Christensen & Simmons, 2020). Hallmarks of excellence include education of diverse learners who transition into the role of nurse and integrate the ethics of the profession (Christensen & Simmons, 2020). The nursing education literature does not reflect the evidence necessary to determine which students with background findings will successfully transition into ethical nurses. As a result, admission decisions are guided by policies which vary based on individual interpretation of conflicting policies from multiple stakeholders. Nursing must improve its ability to protect the public. This includes the ability to assess students with background findings for public risk. Academic nurse educators should conduct the research necessary to ensure qualified students are admitted and identify dangerous individuals to be turned away. This descriptive study of a multi-state sample of nursing students identifies the

most common and most severe background check findings. Results of this study can direct future research into valid risk assessment.

Nursing must improve its representation of the communities it serves through educating students from more diverse backgrounds. These students are deterred from the nursing profession, in part, by difficulties in the application process (McGee et al., 2019). Systemic racism in law enforcement has a disparate impact upon communities underrepresented in nursing (Hetey et al., 2016). Background checks have been shown to deter students in the broader collegiate population (Custer, 2106). The role of the background check as a deterrent in the nursing school application process has not been studied. Future research is required to ensure that qualified students from underrepresented communities are not discouraged from entering nursing school due to background check policies. Especially if interpretation of background check results cannot be empirically shown to protect the public.

The author conducted a retrospective descriptive study in partnership with a nationwide consumer reporting agency to determine the prevalence of students with background check findings in nursing education. Identification of common background check findings in a multi-state sample of nursing students identified variables of interest which may inform future research into predicting public risk. This research will improve the profession's ability to protect the public and reduce the impact of systemic racism in law enforcement on communities underrepresented in nursing.

Chapter 4: Prevalence of Nursing Students with Background Check Findings

Background checks (BGC) are searches of official records for documentation an individual has had prior involvement with law enforcement. Commonly used terms such as "criminal background check" or "criminal record" label individuals and inflict social stigma (Denver et al. 2017; Ewald, 2019). To avoid stigmatization, this paper will use the term background check (BGC) and results will be referred to as findings. These findings may include documents from law enforcement agencies or courts from local, state, and federal levels. Nursing educators and administrators evaluate BGC findings to determine whether students would pose a risk to the public if admitted to nursing education or placed in clinical experiences (Farnsworth & Springer, 2006; Philipsen et al., 2012). The purpose of this retrospective study is to describe the prevalence of nursing students with background check findings in a sample of students attending large public nursing programs across the US.

Background

Despite the widespread use of background checks, little is known about their role in the prediction and mitigation of public risk (Denver, Siwach et al., 2017). Use of BGC in collegiate education has not been shown to improve safety on campus; however, the process has been shown to deter applicants with BGC findings (Custer, 2016; Ott & McTier, 2020). This deterrence may be greater for students from communities underrepresented in nursing and subject to systemic racism through disparate policing (Decoux Hampton et al., 2021; Hetey et al., 2016; Stewart & Uggen, 2020). It is difficult to estimate the impact on these underrepresented students because there is little published research on the prevalence of nursing students with BGC findings.

Literature Review

The author identified two prior studies which described the prevalence of students with BGC findings, one from Louisiana and one from Texas. Smith et al., (2013) studied 3,166 Louisiana nursing students from 2006 and found 467 (14.7%) had BGC findings. Johnston (2016) described nursing school graduates applying for licensure in Texas from 2011 to 2014. During that 4-year period, the rate of background findings among applicants ranged from 10.57% to 13.58%. It is unclear if the results of these studies are representative of nursing students with BGC findings across the US. To date, no study has described the prevalence of students with BGC findings in multiple states. The purpose of this study is to address that gap in the literature.

Method

The author conducted a retrospective descriptive study of aggregated, de-identified data drawn from a convenience sample of nursing students attending 16 large public research universities in the US. This study was categorized as "exempt" by the University of Wisconsin – Milwaukee Institutional Review Board due to its use of only aggregated, de-identified data.

Design and Sample

The American Association of Colleges of Nursing (AACN) reported there are 251,145 students enrolled in 1,035 nursing schools across the US (AACN, 2021). These include small, large, public, private, urban, and rural institutions. Differences between schools may introduce variables which confound the assessment of the prevalence of students with BGC findings. These may include demographic differences between students in small and large programs, or socioeconomic disparities between students enrolled in public and private schools. To control for these confounders, the author collected data from a convenience sample of programs set in large public research universities. The Coalition of Urban Serving Universities (2020) is a group of 40

large public research universities across the United States. The author identified 29 of 40 coalition member universities which offer baccalaureate nursing education by reviewing publicly available descriptions on program websites. Access to aggregated, de-identified background check data from these programs was obtained through partnership with a consumer reporting agency.

Nursing programs frequently delegate the BGC to consumer reporting agencies due to the complexity and labor required in the process (Denver, & Siwach, et al. 2017; Williamson, 2018; Wyatt et al., 2008). Consumer reporting agencies are federally regulated businesses which provide BGC for use in employment and credit purposes (Fair Credit Reporting Act, 2017). The author partnered with an agency that claims to provide BGC for 80% of nursing students across the US (CastleBranch, 2021). Programs which did not utilize the partnered consumer reporting agency or did not have data available for the complete study period were excluded from this study. Sixteen of the 29 Coalition of Urban Serving University programs had data available for all years 2014-2019. See Table 5. See Figure 3 for sampling methodology.

Table 5

Large Research Universities with Nursing Programs

East	South
Morgan State University	Florida International University
SUNY – Downstate Medical Center	Georgia State
Temple University	University of Alabama at Birmingham
University of Albany	University of Central Florida
University of Massachusetts – Boston	University of Memphis
Virginia Commonwealth University	University of North Carolina – Charlotte
	University of Tennessee - Knoxville

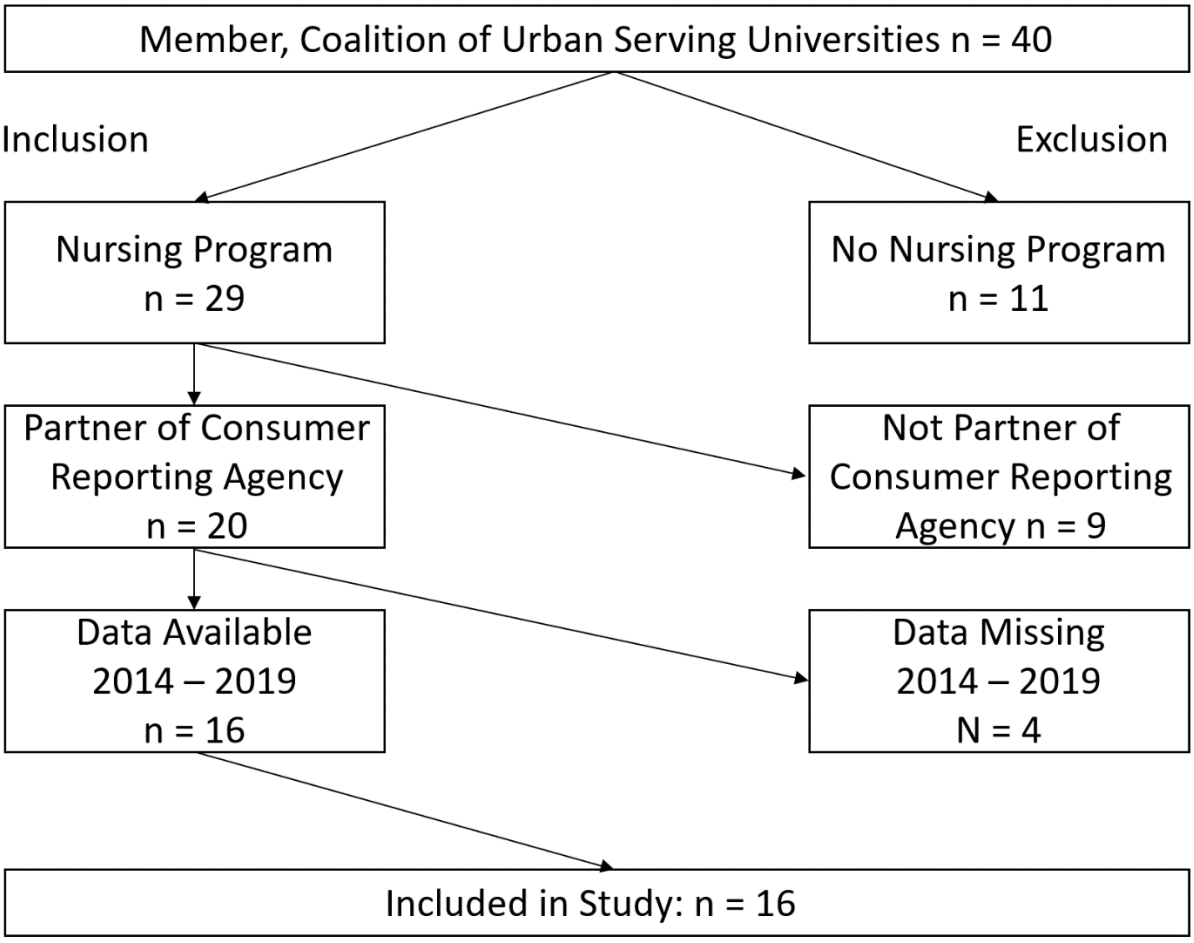
Midwest	West
Cleveland State	Arizona State
Indiana University – Purdue	California State University – Fresno
The Ohio State	California State University – Northridge
University of Cincinnati	California State University – Fullerton

University of Illinois – Chicago	San Jose State
University of Wisconsin – Milwaukee	University of Colorado – Denver
Wayne State, Michigan	University of Houston
	University of New Mexico
	University of Texas – San Antonio

Note. Members of the Coalition of Urban Serving Universities identified as hosting a nursing program from information published on individual university websites. (Coalition of Urban Serving Universities, 2020).

Figure 3

Sampling Methodology



Data Collection and Analysis

The author worked with a data analyst at the consumer reporting agency to identify the key information to extract from stored documents. The analyst then created a program to

automate the search of stored files and aggregate the desired data. This is called data-scraping (Hofstetter, 2021). Data were scraped from files associated with the identified programs from 2014-2019. Data scraped included the number of students submitted for BGC from each program for each calendar year, number of students with a BGC finding of any type, and characteristics of those findings. The analyst aggregated the results at the program level and de-identified the programs by assigning them a random identifier by region, i.e. "East 1, East 2, Midwest 1, Midwest 2…". The analyst retained the code book containing program identities, which was not accessed by the researcher. Individual level data, including student demographics, were not available due to aggregation. Reporting only aggregated data was viewed as a safeguard against potentially exposing individuals or programs to the stigma associated with background findings. This provided an additional layer of protection to students with BGC findings, a vulnerable research population (Shivayogi, 2013). Data were organized and cleaned in Microsoft Excel (Version 2202) and analyzed using IBM SPSS Statistics (Version 28).

Results

Twenty-nine large public research universities with nursing programs were identified. Of these, 20 universities had data available. After listwise deletion of programs with missing data, 16 programs remained for analysis.

Prevalence of Nursing Students with Background Check Findings

The nursing programs aggregated in this study conducted 45,648 BGC through the partnered consumer reporting agency from 2014 to 2019. Of these, a total of 1,548 (3.39%) BGC contained findings which indicated the student had prior interaction with law enforcement. Nursing programs in the Midwestern US were over-represented (22,628) comprising nearly half

of the total BGC (49.57%). See Table 6 for a complete description of the aggregated regional background checks.

Table 6

Aggregated Nursing Student Background Checks by Region, 2014-2019

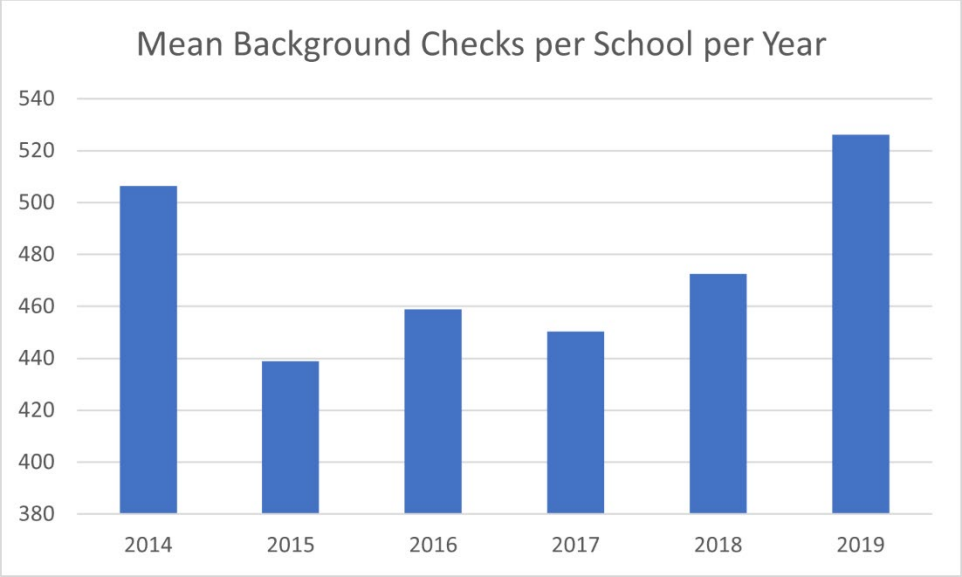
Region	Region Total BGC	Region Total BGC with Findings	Region percent BGC with Findings	Min % Findings per site per Year	Max % Findings per site per Year	Mean % Findings per site 2014-2019	SD of % Findings per site 2014-2019
East	7,588	291	3.84%	0.00%	13.33%	4.55%	4.28%
Midwest	22,628	858	3.79%	0.26%	10.18%	3.25%	2.2%
South	7,841	165	2.10%	0.00%	8.64%	2.62%	3.17%
West	7,591	234	3.08%	0.00%	9.41%	2.63%	2.41%
Total	45,648	1,548	3.39%	0.00%	13.33%	3.2%	2.98%

Findings by Year

From 2014 to 2019, the mean number of background checks yearly per program ranged from 438 to 526 (See Figure 4). The mean percentage of BGC with findings ranged from 2.54% to 3.91% during this period. Variation in the mean percentage of BGC findings year to year were within one standard deviation and therefore unlikely to represent a meaningful trend over time. See Figure 5.

Figure 4

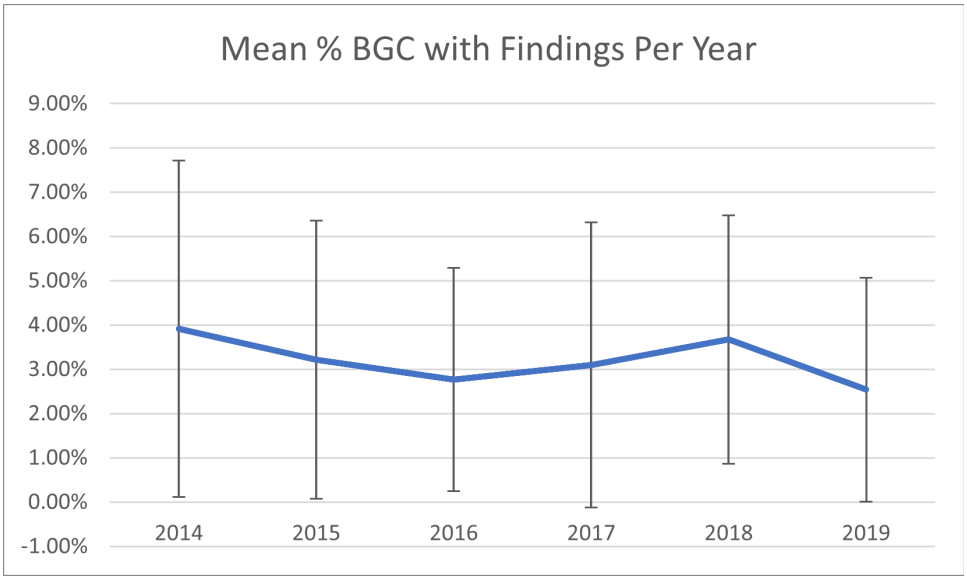
Mean BGC Per School Per Year



Note. Mean BGC performed per school per year.

Figure 5

Mean Percentage of BGC Findings Per School Per Year



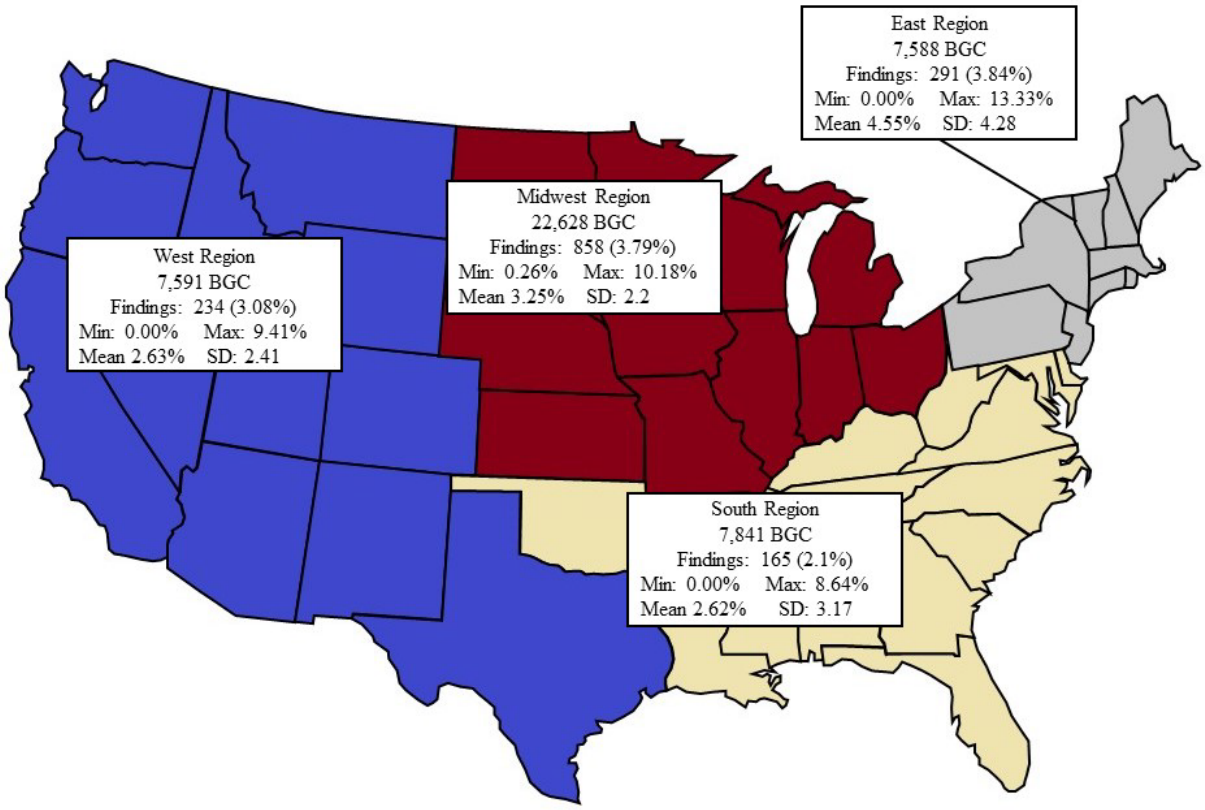
Note. Error bars represent standard deviation.

Findings by Region

Data were aggregated by region based on categorization of the Coalition of Urban Serving Universities (2020a). Sampled programs included three schools in the East region, two schools in the South, five schools in the Midwest, and six in the West. Nursing programs in the Midwest were overrepresented, comprising nearly half of all BGC included in this study. See Figure 6.

Figure 6

Aggregated Nursing Student Background Checks by Region, 2014-2019



Note. Mean, minimum, maximum, SD of background checks by US region.

Comparison to FBI Data

The Federal Bureau of Investigation publishes arrest data as part of its Uniform Crime Reporting (UCR) program (US Department of Justice [US DOJ], 2019). Regional arrest data was available for the years 2014-2019. This provides a method to compare nursing students to the general population. Independent *t*-testing was used to compare the mean regional background check findings in the student nurse population to the mean regional FBI arrest rate. Regional mean percentage of students with BGC findings (n = 16, M = 3.0956%, SD = 2.46856%) compared to regional FBI arrest percentage of the US population (n = 4, M = 3.1923%, SD = 0.33477%) were not significantly different, t(18) = -0.077, p = 0.940). See Table 7 and Figure 7.

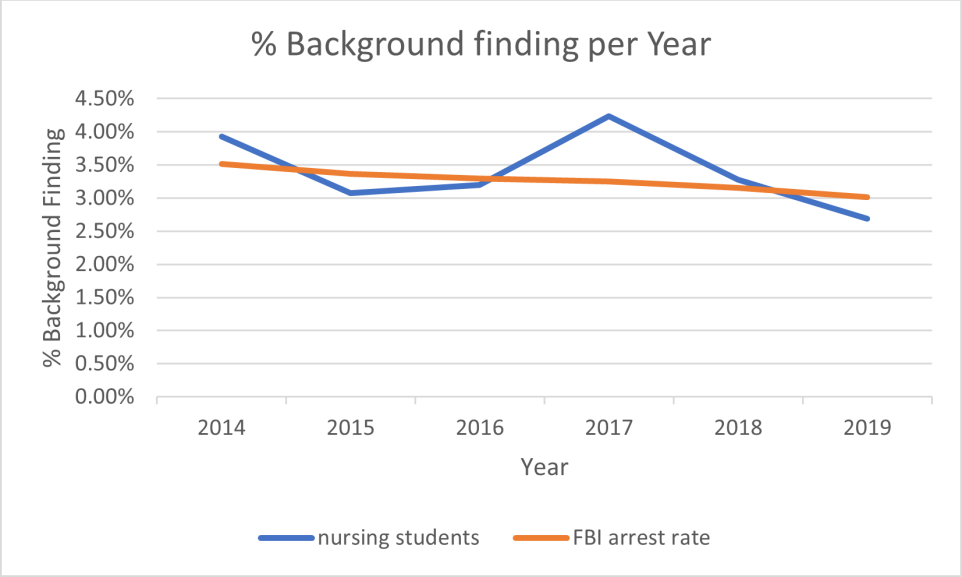
Table 7

Comparison of Aggregated Regional Mean of Nursing Students with Background Check Findings and Mean FBI Yearly Arrest Rate

	Regional % students with BGC finding		FBI regional Arrest %				
	M	SD	M	SD	t(18)	Two-Sided p	Cohen's d
Background finding	3.0956%	2.46856%	3.1923%	0.33477%	-0.077	0.940	2.25762%

Figure 7

Nursing Student BGC Findings Compared to FBI Arrests in the General Population



Note: Comparison of mean regional BGC findings and mean regional FBI arrest rates.

Discussion

This is the first multi-year, multi-state study to describe the prevalence of nursing students with background check findings in large university programs. The 16 nursing programs set in large research universities conducted 45,648 BGC from 2014-2019. Aggregated results showed the regional mean of students with BGC findings ranged from 2.1% to 3.84% during this six-year period. By comparison, roughly 12% of females in the US (regardless of race) have been arrested by age 18 (Brame et al., 2014). Rates for males are higher: 22% of white males and 38% of black males have BGC findings by age 18 (Brame et al., 2014). This suggests that nursing students in this study may differ significantly studies of a similar age group in the general population.

The findings of this study contrast with earlier studies of student nurses. A statewide study of Louisiana's 2006 cohort documented BGC findings in 14.7% nursing students (Smith et al., 2013). In comparison, the FBI reported Louisiana's 2006 arrest rate as 7.8% (US DOJ, n.d.).

In another study, Johnston (2016) described between 10.57% and 13.58% of Texas nursing school graduates from 2011 to 2014 as having BGC findings. For the same period, the FBI reported the arrest rate in Texas ranged from 3.2% to 4.3% (US DOJ, n.d.). These two studies were conducted by their respective state board of nursing and captured all students in the state. This study suggests that aggregated regional mean nursing student involvement with law enforcement more closely reflects the arrest rate in the general population. The sample in this study may not accurately reflect all nursing students due to policy variations between programs.

These policy variations may explain the wide range of BGC findings among programs in this study, from 0.00% to 13.33%. Schools may screen students for prior involvement with law enforcement through questions in the application process prior to the official BGC (Center for Community Alternatives, 2015). Students who self-disclose a BGC finding may not be admitted, and therefore not progress to the formal background check. Program policies which exclude students with BGC findings may explain how some universities had no findings in their students submitted for BGC. In contrast, other programs may not use self-disclosure or BGC findings as part of the admission decision. This could explain programs with increased numbers of students with findings, and potentially more inclusive student cohorts (Decoux Hampton et al., 2021).

Implications

Background checks are often a barrier to college admission for students from underrepresented communities. A recent study by Decoux Hampton et al. (2021) found that Southern programs with less racially diverse student cohorts were more likely to use BGC findings in the admission decision (Decoux Hampton et al., 2021, p. 21). The results of this study found the two universities in Southern region had the lowest mean percentage of students with background findings (2.62%), the lowest maximum (8.64%), and smallest SD (3.17%) of any US

region. One southern university conducted a total of 4799 background checks during the six-year study period with only 2 BGC findings. It is possible that screening procedures may eliminate students who self-disclose prior involvement with law enforcement before to admission. At these schools, students who self-disclose the existence of a finding may never undergo the formal BGC.

Study Limitations and Recommendation for Further Research

This study has several limitations. Aggregated data were used, which prevented access to individual-level demographic data. Use of aggregated data limits the ability of the author to describe potentially significant factors such as race or socioeconomic status of individuals with BGC findings. The use of aggregated, deidentified data reduced potential stigmatization of individuals or programs and justified the study design. Removal of individual identifiers raises the potential a background check could be double-counted. This could occur if an individual completed a background check in more than one year or at multiple universities.

Convenience samples which are not representative of an entire population lack external validity, and limits generalizability of the results (Siedlecki, 2020). In this study, convenience sampling limited data aggregation to nursing programs affiliated with the partnered consumer reporting agency. This partnership was essential to gain access to BGC data from 16 large university nursing programs from all regions of the US. Nevertheless, the reader should consider if the convenience sample may obscure significant differences in programs or students outside the study.

The study should be considered in its historical context. This retrospective study of the years 2014-2019 occurred prior to the declaration of the global SARS-CoV-2 pandemic in March

of 2020 (Adil et al., 2021). The pandemic may have impacted patterns of law enforcement or applicants to nursing education which may affect BGC findings among nursing students.

Caution should be used interpreting the comparison of the FBI regional arrest data to the percentage of students with background check findings. The FBI data includes every arrest reported to the FBI UCR system in that year. By comparison, the background check data aggregated in this study is a history of all reported contact an individual has had with law enforcement at any point in their adult life. This may lead to an overestimation of involvement with law enforcement by nursing students. Similarly, the FBI UCR data represents all adult arrests reported to the FBI, which would likely include individuals who are not representative of the nursing student population.

Chapter Conclusion

This study represents the first report of prevalence of background check findings in a multi-year, multi-state sample of nursing students attending large universities. Partnership with a large consumer reporting agency allowed data scraping of over 45,000 BGC in 16 large university nursing programs from 2014-2019. Independent *t*-testing suggests the mean percentage of students with BGC findings did not differ significantly from mean FBI arrest data for the same years (3.1% vs 3.19%, $p = 0.940$). This suggests that, in aggregate, nursing students have BGC findings more representative of the general public than suggested by prior studies.

The wide difference between program minimum (0.00%) and maximum (13.33%) may be a result of differing admission policies among programs. Programs with no BGC findings among their students may be excluding those who self-disclosed prior involvement with law enforcement as part of the application process. Programs which admit students with BGC findings may not be inquiring about prior involvement with law enforcement and conducting the

BGC after the admission decision is made. Preferential admission of students without BGC findings may inhibit building a more representative student body (Decoux Hampton et al., 2021). This may represent a structural barrier to improving diversity in the nursing profession.

One rationale for conducting background checks is to protect the public from students whose BGC findings indicate they pose a risk to the public. The value of BGC findings as a predictor of a risk in nursing student practice has not been researched. This study begins to address that gap in the literature by providing the first multi-year, multi-state data on nursing students with BGC findings in large university programs. Future research should be directed to describing the most common and most severe findings in this student population to examine the potential risk such students may present. Nursing has a professional obligation to protect the public (Fowler, 2015). The profession should examine whether BGC findings serve their purpose in public protection, or if they represent an unjust barrier to students who pose no risk. Such a barrier could inhibit the profession's effort to be more inclusive and reflect the communities it serves.

Chapter 5: Characteristics of Nursing Students with Background Check Findings

The use of background checks (BGC) in academic nursing education has been commonplace for nearly two decades. The rationale for performing BGC is public protection and preservation of trust in the nursing profession (Philipsen et al., 2012; Sheets & Kappel, 2007). These rationales are founded on the assumption that past behavior predicts future behavior, and by extension that more serious behavior is predictive of greater risk (Philipsen et al., 2012). Despite the importance placed on background checks, little is known about the types of BGC findings in nursing students or their severity. To date, there have been no published studies which describe characteristics of BGC findings in the nursing student population. This inhibits an understanding of how BGC findings should be used to predict public risk in admission and clinical placement decisions. The purpose of this study is to describe the most common and most serious characteristics of background check findings in students attending large research universities across the US.

Stigmatizing Language

Language surrounding this topic can be stigmatizing. Labeling an individual as a "criminal" or "offender" can make it difficult for a person to put prior involvement with law enforcement in their past (Denver et al., 2017; Ewald, 2019). To avoid stigmatization, this paper will refer to record searches for prior involvement with law enforcement as "background checks" (BGC) and results of those searches as "findings". BGC findings differ in severity based on what the individual is charged with, and whether guilt is established in court. In this paper, the author will use terms such as "criminal" and "felony" to refer to categorical severity characteristics of BGC findings, not as labels for people.

Background

While background checks are widely used in nursing education, little is known about how background findings should be used to predict and mitigate public risk (Denver, Siwach et al., 2017). Properly interpreting BGC is complex and requires careful balance between public protection and laws which prohibit discrimination against individuals with BGC findings (D'Andrea, 2014). If a student with BGC findings is admitted to a nursing program and subsequently harms a patient, a lawsuit for negligent admission could result. Such a suit carries financial liability for the program which is perceived to be greater than the risk of a fine for discrimination (Dickerson, 2008; Hughes et al., 2013). Thus, administrators may justify rejecting a student with BGC findings as "erring on the side of caution" to protect the public and the college. It is difficult to refute this justification, as there is little risk assessment research published in the nursing literature (Dickerson, 2008; Hughes et al., 2013). Admission and clinical placement decisions are often made based on the opinion of administrators who lack specific training in the interpretation of BGC results (Hughes et al., 2013). These opinions vary among schools and clinical agencies and have led to inconsistent BGC policies in nursing education (Williamson et al., 2018).

History of Background Checks in Nursing Education

The development of BGC policies in nursing education as a means of protecting the public should be considered in its historical context. The call for background checks for nurses and nursing students began in the late 1990s in the aftermath of tragic events where individuals with BGC findings caused harm to others (Bellandi, 1998; Marrs, 1997). In one such event, a senior nursing student murdered a 20-year-old home economics student two blocks from campus. The nursing student had a prior conviction for murder but had lied about it at admission. There was no way to know the true nature of the student's past because BGC were not part of the

school's admission process. This case, and others like it, led to a call for mandatory review of BGC findings for nurses and others in healthcare to mitigate public risk (Fiesta, 1999).

The State of Wisconsin was among the early states which required BGC for nurses. In 1998, the chief legal counsel for the Wisconsin Department of Health and Family Services stated, "Our job is to ensure the protection of vulnerable clients…And so far, not all employers have done that," (Bellandi, 1998, para. 21). Proponents of BGC for all healthcare workers asserted that they would protect the public by excluding those convicted of serious crimes (Bellandi, 1998). Even so, there were concerns at the time that some individuals who did not pose a threat to the public would lose opportunities due to their BGC findings (Bellandi, 1998).

In the early-2000s, societal change in the United States after the September 11th attacks brought an increased call for policies focused on homeland security. One of the hijackers was in the US on a student visa (Farley, 2015). As a result, BGC for nursing students became linked to public protection and the war on terror (Farnsworth & Springer, 2006). While suggesting a link between nursing students and terrorism may seem difficult to justify now, it was accepted at that time: "Society's interest in safety has been heightened by the threat of terrorism and it seems prudent to protect the public by regulating those entering a profession where the need for public trust is paramount" (Tate & Moody, 2005, p. 51).

The issue of public trust and nursing's professional reputation has also been used to justify background checks. Some nurses argued that the public trust should be protected through the "stringent security" background checks would provide (Carney, 2005, p. 2). Others argued that the BGC provided "assurance that nurses have integrity…and can be trusted," (Philipsen et al., 2012, p. 708). It was even argued that the public trust would be eroded by media coverage of

"extreme cases" of nurses with BGC findings and keeping those with BGC findings out of the profession was justified as a means of preserving that trust (Shalo, 2009, p. 26).

Link to Public Protection

While it is argued that BGC protect the public, there is little empirical research to explain which BGC findings have implications for public safety (Pierce & Runyan, 2010). As a result, policies may be too inclusive or too exclusive. Policies which are too inclusive may place the public at unacceptable risk from those whose past behavior indicates they may exploit the vulnerable populations that nursing serves. Alternatively, policies which are too exclusive harm those who have learned from past mistakes and represent no greater risk than individuals without BGC findings. Students from communities underrepresented in nursing are often subject to disparate policing and may be more vulnerable to BGC policies unsupported by research. Unjustly excluding students from underrepresented communities due to insignificant BGC findings hinders efforts to diversify the profession. Public protection should not be a rationale for excluding students with background findings unless there is an empirically demonstrated correlation between specific findings and public risk. To date, the justification that BGC improve public protection is "[b]ased on the observation that past behavior is a predictor of future behavior…" (Philipsen et al., 2012, p. 708). Beyond this observation, there is very little descriptive or predictive research to inform BGG policy in nursing education.

Existing Descriptive Research

Two published studies, each from single states, were identified in the literature. In a study of Texas nursing students applying for licensure at graduation, Johnston (2016) found between 10.57%-13.58% of nursing school graduates had findings at the time they applied for licensure. The type or severity of the findings were not described in the Texas study. In a study of

Louisiana nursing students, Smith and colleagues (2013) found 467 of 3,166 (14.7%) had a BGC finding. The study did not describe type or severity of the findings. In analysis of a matched-pair subset, there were no statistically significant differences in program completion or NCLEX success between students with and without BGC findings (Smith et al., 2013).

Existing Predictive Research

Research into the value of BGC findings in nurses or nursing students to predict future behavior and public risk is limited. A single study of professional misconduct in nursing students with BGC findings was identified. Smith and colleagues (2013) studied a matched-pair subset of 930 Louisiana nursing students with and without BGC findings and found 4.5% of students with findings had subsequent professional misconduct, compared to 1% who did not ($\chi^2 = 9.71$, $p = 0.045$).

Two studies of BGC findings as predictors of public risk in nurses had conflicting results. Clevette et al. (2007) studied a convenience sample of 184 licensed practical nurses (LPNs) and registered nurses (RNs) in Nevada who were disciplined in 2003-2004. The authors found no correlation between prior criminal conviction and disciplinary action post licensure. In contrast, Zhong and colleagues (2009) conducted a study of RNs and LPNs (n=207) subject to board sanction in six states compared to 497 control nurses who were not disciplined. Their analysis of a subset of their sampled nurses found 56% with prior findings had subsequent involvement with law enforcement within 5 years compared to 33% in nurses without BGC findings (p=0.014).

These three studies correlate one behavior followed by another behavior. This may be an example of the logical fallacy *post hoc ergo propter hoc*: because one event followed the other event, a causal relationship between the two is assumed (Bowes et al., 2020). In these studies, no characteristics of individual BGC findings and the subsequent behavior are reported. While it

might be logical to assume that a prior finding related to shoplifting might be related to subsequent theft from a patient, the causal relationship between a shoplifting arrest and other forms of patient harm is less clear. The lack of descriptive research on the most common and most severe categories of findings in the nursing student population represents a gap in the literature which inhibits policy development in nursing education. The purpose of this study is to address this gap. The author collected data which describes the prevalence and characteristics of background check findings among nursing students.

Method

In this retrospective descriptive study, the author examined aggregated, de-identified data to describe the categorical characteristics of BGC findings in nursing students. In this study, the author utilized a convenience sample of nursing students attending 16 large public research universities in the US. The Institutional Review Board of the University of Wisconsin – Milwaukee determined the study to be exempt due to its use of aggregated, de-identified data.

Design and Sample

Nursing education in the US includes over 250,000 students enrolled in more than 1,000 BSN programs across the US (American Association of Colleges of Nursing [AACN], 2021). These programs vary in size, setting, and mission. Variation between programs may introduce confounding variables. Examples of confounders include student demographic differences between large and small programs, or greater socioeconomic privilege for students enrolled in private versus public programs. To control for these confounders, the author collected data from a convenience sample of nursing programs drawn from the Coalition of Urban Serving Universities (2020). This group represents 40 large public research universities across the United States. Publicly available program descriptions were reviewed, allowing the author to identify

member universities offering nursing education. The author was provided access to aggregated, de-identified background check data from 16 of the 40 programs through partnership with a consumer reporting agency.

Consumer reporting agencies are federally regulated businesses which provide BGC reports for use in employment and credit purposes (Fair Credit Reporting Act, 1996/2018). Nursing programs often delegate the BGC to consumer reporting agencies to simplify the report process (Denver, & Siwach, et al. 2017; Williamson, 2018; Wyatt et al., 2008). The partnered consumer reporting agency claims to provide BGC to most nursing programs across the US (CastleBranch, 2021). In this study, 19 of 40 identified programs utilized the partnered consumer reporting agency, and 16 had data available for the years 2014-2019. Programs which were not clients of the agency were excluded from this study. Programs were also excluded if BGC data were not available for all years 2014-2019. See Table 8 and Figure 8.

Table 8

Large Research Universities with Nursing Programs

East	South
Morgan State University	Florida International University
SUNY – Downstate Medical Center	Georgia State
Temple University	University of Alabama at Birmingham
University of Albany	University of Central Florida
University of Massachusetts – Boston	University of Memphis
Virginia Commonwealth University	University of North Carolina – Charlotte
	University of Tennessee - Knoxville

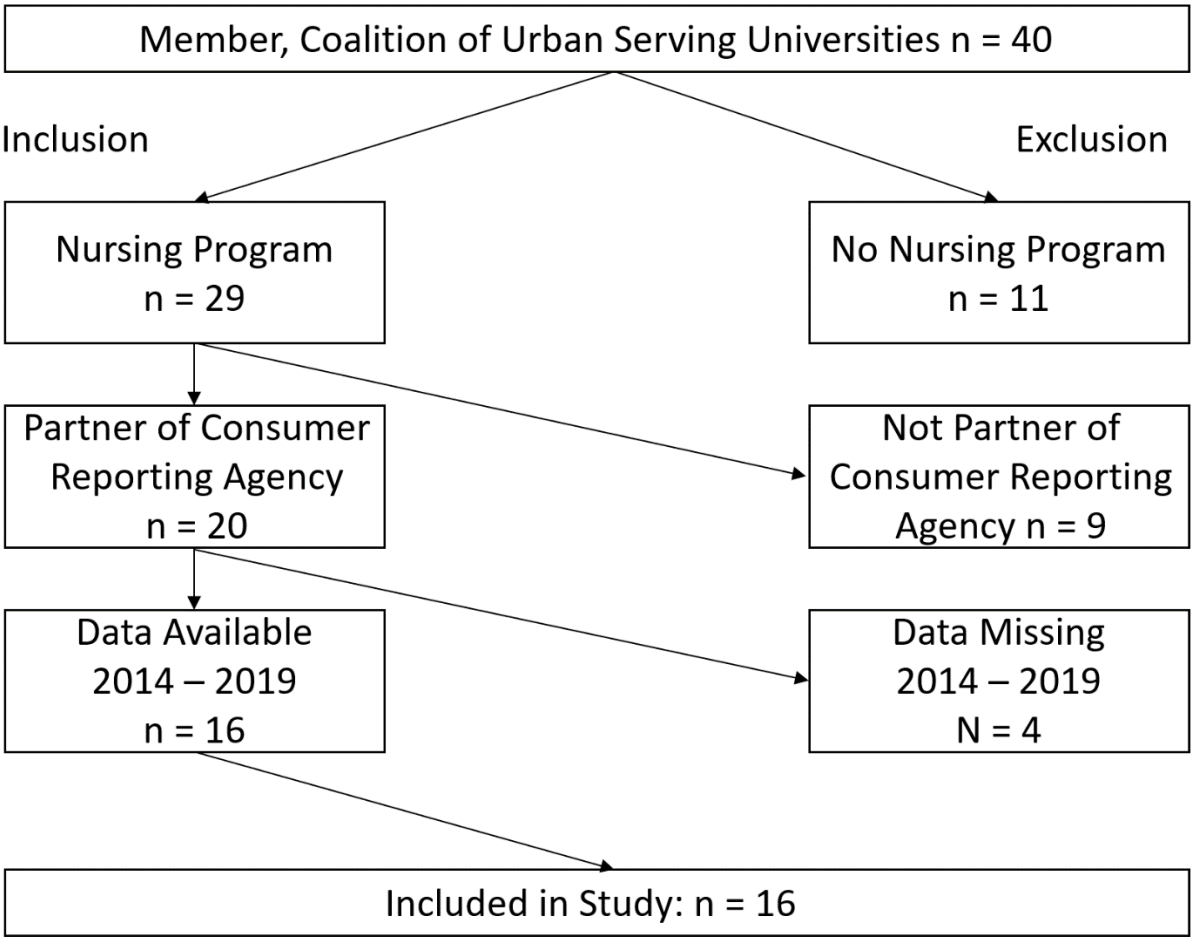
Midwest	West
Cleveland State	Arizona State
Indiana University – Purdue	California State University – Fresno
The Ohio State	California State University – Northridge
University of Cincinnati	California State University – Fullerton
University of Illinois – Chicago	San Jose State
University of Wisconsin – Milwaukee	University of Colorado – Denver

Wayne State, Michigan	University of Houston University of New Mexico University of Texas – San Antonio

Note. Members of the Coalition of Urban Serving Universities with nursing programs identified from information on university websites (Coalition of Urban Serving Universities, 2020).

Figure 8

Sampling Methodology



Data Collection and Analysis

The author partnered with a data analyst at the consumer reporting agency to identify the pertinent BGC characteristic data. The analyst then created an automated program to extract and aggregate the data from thousands of files associated with schools in the sample. This process is referred to as data scraping (Hofstetter, 2021). Data scraped included the number of students

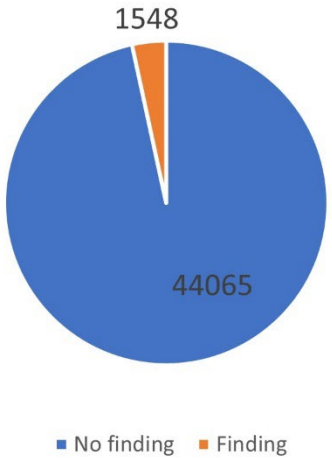
submitted for BGC from each program for the years 2014-2019, number of students with a BGC finding of any type, and characteristics of those findings. Output from the data scraping program was de-identified by assigning schools a random identifier by region, i.e., East 1, East 2, Midwest 1, Midwest 2, etc. The analyst retained the code book of program identities which was not accessed by the author. Identifying students or programs associated with BGC findings may have exposed them to reputational harm. Aggregation of de-identified data at the program level provided an important safeguard for students as a vulnerable research population (Shivayogi, 2013). Microsoft Excel (version 2202) was used to organize, clean, and analyze the data.

Results

In this study, data were aggregated from 16 nursing programs housed in large research universities. From 2014-2019, the sampled programs conducted 45,613 BGC. Of these, 1,548 (3.39%) had findings indicating that the individual had prior contact with law enforcement. See Figure 9. Data scraped from the 1,548 BGC with findings were analyzed to describe the severity and characteristics of these findings.

Figure 9

Aggregated BGC, 2014-2019



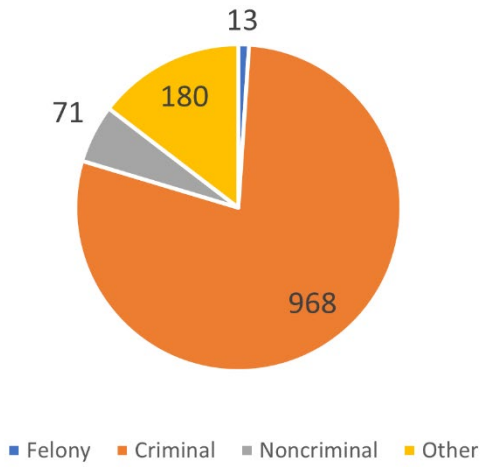
Severity of Aggregated BGC Findings 2014-2019

Severity characteristic data were scraped for categorization as non-criminal (least severe), criminal (moderately severe), and felony (most severe) (University of Minnesota Libraries, n.d.). The least severe findings are non-criminal, such as ordinance violations. Penalties for these violations are likely a fine and have little implication for professional practice (Wisconsin Department of Children and Families, 2019). These are distinct from criminal charges which are more serious and may result in a fine as well as confinement for up to one year in jail. The most serious crimes are felonies, which may result in incarceration in the prison system for more than one year (Chapter 939 Crimes - General Provisions, 1977).

The analyst used a data scraping algorithm to extract keywords from BGC findings and categorize them according to severity by keywords. The following keywords were used to categorize findings as non-criminal: civil, traffic, infraction, minor, petty, ordinance, violation, or municipal. Keywords used to categorize findings as criminal included criminal and misdemeanor. Keywords associated with felony findings included felony, murder, and homicide. Boolean operators were included to categorize by most serious keyword. For example, data were flagged as non-criminal if they did not contain keywords categorized as criminal or felony. BGC findings which did not contain any representative keywords were categorized as other. Of the 1,548 BGC findings, 1,232 had severity data available. Of these, 13 (1.06%) were categorized as felonies, 968 were criminal (78.57%), 71 were non-criminal (5.76%), and 180 were other (14.61%). See Figure 8.

Figure 10

Severity of Aggregated BGC Findings, 2014-2019



Characteristics of Aggregated BGC findings 2014-2019

Background findings were categorized broadly as related to persons, property, substance abuse, or disorderly conduct. Findings which lacked necessary descriptors to allow categorization were labeled as incomplete.

Findings Related to Persons

Findings related to interpersonal violence were categorized as person. Related keywords scraped from BGC data included: assault, aggravated, weapon, violent, violence, threat, attack, harm, and battery. In this study, 15 of 1,548 BGC findings (0.97%) were categorized as involving harm to persons. See Figure 8.

Findings Related to Property

Findings which involved taking of or damage to possessions were categorized as property. Keywords scraped from BGC data categorized as property included: larceny, theft, arson, burglary, vandalism, robbery, damage, entering, stolen, and destruction. In this study, 37 of 1,548 findings (2.39%) fell into the property category. See Figure 8.

Findings Related to Substance Abuse

Findings which involved use of illegal use of substances were placed in the category of substance abuse. Keywords included: paraphernalia, possession, intoxication, DUI, DWI, OWI,

influence, driving while, intent, distribute, drug, alcohol, substance, illicit, narcotic, driving under, and operating. In this study, 367 of 1,548 findings (23.71%) were categorized as substance abuse. See Figure 8.

Findings of Disorderly Conduct

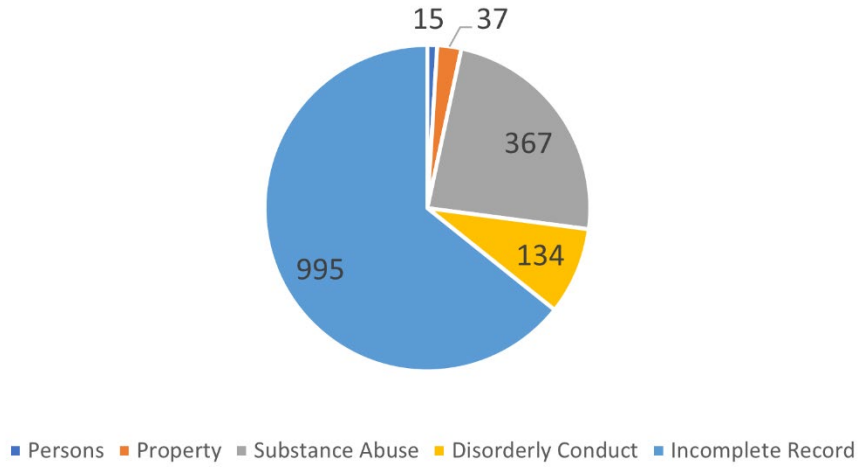
When an individual acts in a manner which disrupts public order, a finding of disorderly conduct may result (Morgan, 2021). Disorderly conduct laws are "vague and broad in scope," and even behaviors which do not actually result in disorder may still be punished (Morgan, 2021, p. 1641). As a result, it may be difficult to assess whether a finding of disorderly conduct should be considered in the nursing school admission or clinical placement process. Some experts suggest disorderly conduct may not be significant (Hopkins & Thomas, 2013; Johnston, 2016). Even so, colleges have expelled students with findings of disorderly conduct when they were not fully disclosed (Dickerson, 2008). Keywords used to identify findings in this category include disorder, resist, nuisance, reckless, noise, loiter, disturb, and improper. Findings related to public consumption or intoxication were also placed in this category as they disrupt the public order. In this study, 134 of 1,548 findings (8.66%) were categorized as disorderly conduct. See Figure 8.

Findings with Incomplete Data

Background check findings are frequently incomplete, despite the perception that they represent a full and accurate picture of past behavior (Lageson et al., 2015). When records are incomplete, the decision may be made based on the reader's perception of what the past behavior may represent (Lageson et al., 2015). In some cases, the student may be asked to retrieve arrest records from law enforcement or court documents from the legal system. This exposes students to further stigmatization (Ewald, 2019). In this study, 995 of 1,548 records (64.28%) were categorized as incomplete due to lack of data allowing categorization. See Figure 11.

Figure 11

Characteristics of Aggregated BGC Findings, 2014-2019



Discussion

This study provides the first description of the most common and most serious BGC findings in a convenience sample of nursing students attending large research universities from 2014-2019. The use of BGC in nursing education is often justified as public protection, although the link to public protection has not been well studied. Few studies in nursing have examined the link between BGC findings and subsequent law enforcement involvement, and a causal relationship between specific BGC findings and harm to the public has not been established.

Prior research which compares students with and without BGC findings for subsequent misconduct is contradictory. One published study by Smith et al. (2013) suggested students with BGC findings were more likely to commit professional misconduct. In contrast, the work of Clevette et al. (2007) did not find such a correlation. Without a discussion of characteristics in common between professional discipline and prior BGC finding, such arguments may be criticized as fallacious *post hoc ergo propter hoc* logic. The descriptive characteristics in this study begin to address this gap by identifying the most severe and most common findings.

Most Common Severity of BGC Finding

Background check findings in this study were described by severity, which included non-criminal, criminal, and felony. Non-criminal findings are considered relatively minor, usually punished by a fine and only rarely include incarceration. Criminal charges are more serious, usually involving larger fines and the possibility of serving up to a year in jail. The most serious category of finding is felony, which may incur significant fines as well as serving a prison sentence greater than one year. The most common severity in this study was criminal, which made up 968 of the 1,548 BGC findings (78.57%). If BGC findings have predictive value, it may be easy to exclude nursing students with felony convictions as posing great risk, and to admit students with non-criminal findings as posing relatively little risk (Priola-Surowiec et al., 2014). Administrators interpreting BGC findings for the nursing school admission or clinical placement process should be prepared to address these moderate-severity findings which may be more difficult to adjudicate.

Most Common Category of BGC Finding

The most common BGC findings in this study were categorized as substance abuse, which made up 367 of 1,548 findings (23.71%). This aligns with published studies which describe substance abuse as a major problem in the college environment (Skidmore et al., 2016). Administrators should consider whether BGC findings related to substance abuse represent behavior considered part of college life, or a more serious problem (Skidmore et al., 2016). Students with a substance abuse problem may represent a greater risk if allowed to enter practice. Practice issues related to substance abuse, such as practicing while impaired or diversion of controlled substances for personal use, are a significant factor in disciplinary action by nursing boards (Pastorius, 2007).

Implications

Nursing students with BGC findings are subjected to increased scrutiny to enter the profession. The process lacks transparency, and there is little published in the nursing literature to provide guidance to students or administrators (Ewald, 2019). Universities and clinical agencies frequently have differing admission and clinical placement policies. This may result in students with BGC findings which are accepted in some settings while denied in others (Williamson et al., 2018).

Education and employment are both thought to have a positive impact upon the lives of individuals with BGC findings, reducing the likelihood of future involvement with law enforcement (Denver et al., 2017). Denial of employment, on the other hand, increases the likelihood of subsequent arrest (Siwach, 2017). The high demand for nurses presents the opportunity for employment at a median wage of $77,600 annually. This is substantially higher than the median annual wage for all US workers: $45,760 (US Bureau of Labor Statistics, 2022). This provides access to financial and social capital for registered nurses and their families. Students must successfully complete nursing education to gain employment in the profession. Educational administrators should enact policies for admission and clinical placement that allow students with insignificant BGC findings to pursue these opportunities.

The use of BGC in collegiate education has been shown to deter students with findings from completing their application, without an improvement in campus safety (Custer, 2016; Ott & McTier, 2020). The deterrent effect may be greater for students from communities underrepresented in nursing. Students from these communities may be subject to systemic racism because of disparate policing (Decoux Hampton et al., 2021; Hetey et al., 2016; Stewart & Uggen, 2020). Denying admission to students with insignificant BGC findings may disproportionately impact students from underrepresented communities. This may create a

structurally racist barrier to diversification of the nursing student population. The impact is difficult to estimate because it has yet to be researched. Further research is required to mitigate the impact of BGC on diversity, equity, and inclusion.

Study Limitations and Recommendations for Further Research

This study has several limitations. The study collected aggregated, de-identified data. Individual-level data, including race, socioeconomic status, and other demographics were not collected. Collection of this demographic data may have provided further insight into the implications of BGC findings in the diversity, equity, and inclusivity of nursing education. Reporting demographic data could increase the risk of identifying individuals from small cohorts, such as students with felony findings. De-identification of individuals prevented removal of students who completed background checks in multiple years or at more than one university. The limitations of aggregated data were justified by the additional protection provided to students who could have experienced reputational harm if identified by publication of the findings.

This study utilized a convenience sample of nursing programs affiliated with the partnered consumer reporting agency. The sample of nursing programs in this study may not be representative of all nursing programs which may limit generalizability of the results (Siedlecki, 2020). Partnering with a consumer reporting agency provided essential access to BGC data from 16 large US nursing programs. Without this partnership, data collection at this scale might not have been possible. Therefore, limitations associated with convenience sampling were justified by making access to the data possible.

This retrospective study of the years 2014-2019 should be considered in its historical context. Sampling occurred prior to the global outbreak of the SARS-CoV-2 pandemic in March

of 2020 (Adil et al., 2021). Societal changes such as lockdowns may have resulted in differing patterns of law enforcement. The healthcare staffing crises during the pandemic may have changed characteristics of applicants to nursing education. Readers would need to consider these limitations when generalizing these results to students in the endemic phase of SARS-CoV-2.

Despite these limitations, this study makes an important contribution to the literature. This is the first study to describe a multi-year, multi-state sample of students attending nursing programs set in large universities. This study shows that, among students with findings, the most common findings are related to substance abuse. While the most common severity of findings is criminal (78.57%), felonies were rare, comprising just 1.06% of BGC with findings from 2014-2019.

Chapter Conclusion

The rationale for using background findings in academic and clinical nursing education is protection of the public. Unfortunately, predicting future behavior based on BGC findings is inexact at best. Trained criminologists in the justice system struggle to use BGC findings effectively in sentencing, and interpretation of factors which may contribute to recidivism varies (Johnston, 2013; Kalra et al., 2022). It is more difficult for administrators in nursing educational programs who lack specific training to interpret BGC findings and apply the results. Academic nursing education should continue to study BGC findings in nursing students to improve inclusivity and public protection as they prepare a more diverse workforce. Special attention should be given to the most common BGC finding characteristics identified in this study to determine if there is correlation to public risk in the clinical or practice setting. Future research can build upon the results of this study and explore categorical risk prediction to better inform nursing school admission and clinical placement policies. Only students who can be shown to

pose a risk to the public should be denied entry into the profession. Currently, accurate interpretation of BGC findings as a predictor public risk remains a gap in the literature.

Chapter 6: Conclusion

Background checks have been used in nursing education for over 20 years. To date, a causal link between specific BGC findings and public harm has not been identified. The author conducted this study to describe the prevalence and characteristics of BGC findings among nursing students in large universities. The author suggests this study advances nursing educational research by identifying the most common and most serious background check findings. This lays the foundation to prioritize future research into correlations between students with specific BGC findings and public risk.

Nursing educators use BGC to assess whether prior student behavior indicates an unacceptable risk to the public. Proponents argue that BGC findings assess student behavior and character (Philipsen et al., 2012). According to the ANA Code of Ethics, students who are "a rogue, scoundrel, liar and cheat in personal life," are unlikely to be a "virtuous nurse" (Fowler, 2015, p. 81). These students are denied admission to nursing education or excluded from clinical placement (Hartman et al., 2022). Virtue is difficult to assess, and the use of BGC as proxy for character brings inherent risk of bias and discrimination (Philipsen et al., 2012; Vranas, 2009).

Academic nurse educators struggle to implement fair admission and clinical placement policies which balance public protection and inclusivity (Averette, 2020; Civic Research Institute, 2010). Nursing research has not established a correlation between specific BGC findings and public risk. Educators must rely upon the opinion of their institutional administrators, who often have no specific training to interpret BGC (Hughes, et al., 2013). This results in policy variations between schools and clinical sites. These variations may hinder public protection and are likely a barrier to educating a more diverse nursing workforce. Policies which are too inclusive may admit students with behavior or character that does not align with

nursing's professional ethics. Policies which are too exclusive may reject students who learned from a past mistake and represent no undue risk. Ineffective BGC policies may deter students with findings from pursuing nursing education, even if their finding is insignificant (Hetey et al. 2016; McGee, 2019). This deterrence may be greater for underrepresented students and an unacknowledged element of structural racism in nursing education. This structural racism may be due to the influence of the US criminal justice system in the interpretation of BGC.

The Influence of the Justice System upon BGC Policy in Nursing

The US justice system seeks to deter behavior outside societal norms. It does so by punishing individuals who violate those norms. The system uses BGC findings to predict future behavior and deter it through punishment in the sentencing process (Hester, 2019). Harsh sentencing is intended to protect the public by punishing the guilty and deterring them from repeating the behavior. This is based on the legal concept of retribution, where punishment is imposed on an individual for violating the law (Hermann, 2017). Severe punishments also act as a deterrent to others who seek to avoid a similar sentence. The influence of retributive justice as a punishment or deterrent can be seen in professional education and licensure.

Society grants individuals the privilege of practicing in protected professions through issuance of licenses. This privilege is granted to those who meet qualifications set by the state, in this case a board of nursing (Dilling & Miller, 2012). Standards of professional licensure protect the public from unqualified individuals who are likely to cause harm in practice. Denying occupational licensure to individuals with serious BGC findings is a retribution for violating the law (Ewald, 2019; NCSBN, 2015). Students who complete their education will undergo a BGC prior to being issued their professional license (Priola-Surowiec et al., 2014). When an individual with BGC findings nursing is denied professional education or licensure it is rationalized as

punishing the guilty and protecting the public (Hermann, 2017). Thus, retributive justice influences the BGC evaluation process for education and licensure of individuals.

In addition to individual retributive justice, the US justice system may also punish schools who admit students with BGC findings. Organizations are expected to protect the public from foreseeable harm. Failing to do so may make an organization liable for negligence (Dickerson, 2008). Educators evaluate BGC findings to demonstrate their effort to foresee and mitigate such a risk. If a student with BCG findings caused harm in the campus or clinical setting, it could be argued that the finding predicted the harm. If such a claim were proven, the school could be liable for negligent admission (Connerley et al., 2001; Dickerson, 2008). Therefore, retributive justice can be seen as influencing the BGC process for students and organizations from admission to licensure.

The current system of nursing student BGC evaluation is founded upon retributive justice. It justifies exclusion of students with findings as punishing the guilty, protecting the public, and avoiding negligence. The system is not based on predictive or even correlational research in the nursing student population. Nursing educators need a better understanding of BGC findings in their students. This will lay the foundation for future research to correlate public risk and the severity of student BGC findings. The author designed this study to describe the prevalence and characteristics of BGC findings in a sample of student nurses.

Summary of Findings

This retrospective descriptive study examined BGC findings in US nursing students. The author utilized a convenience sample of 16 nursing programs set in large universities from 2014-2019. De-identified data were scraped from 45,648 BGC and analyzed to answer the following research questions:

- What is the prevalence of undergraduate nursing students with background check findings attending large public research university programs in the United States?
- What are the most common background findings among undergraduate nursing students attending large public research university programs in the United States?
- What are the most serious background findings among undergraduate nursing students attending large public research university programs in the United States?
- Do background check findings among undergraduate nursing students attending large public research universities in the United States differ significantly by region (East, South, Midwest, West)?

Prevalence of Nursing Students with BGC Findings in this Study

The author designed this study to aggregate data from 16 nursing programs housed in large research universities for the years 2014-2019. During that period, the nursing education programs in this study conducted 45,648 BGC. Of these, 1,548 (3.39%) had findings indicating that the individual had prior contact with law enforcement. The range from program to program during this period was 0.00% to 13.33%. The author found no statistically significant difference in year-to-year mean percentage of background check findings, or comparison of region to region.

Prevalence of BGC findings in in nursing students have been reported in two prior studies from single states. Smith and colleagues (2013) found 14.7% of all Louisiana students had BGC findings at enrollment. Johnston (2016) found BGC findings ranged from 10.57% to 13.58% among all Texas students applying for licensure. In each study, the BGC findings among the entire state's nursing students were gathered through the respective state board of nursing. In this

study, the lower mean (3.39%) and range (0% to 13.33%) suggest some programs exclude or deter students with findings.

In the general population, roughly 12% of females (regardless of race) have been arrested by age 18 (Brame et al., 2014). Rates for males are higher: 22% of white males and 38% of black males have BGC findings by age 18 (Brame et al., 2014). The disparity between BGC findings in the general population and mean of nursing students in this study suggests the populations differ. The explanation may lie in the admission policies of the 16 programs in this study. The minimum percentage of BGC with findings of programs in this study was zero. This may represent a program which rejects students who self-disclose a BGC finding during the admission process. The maximum percentage of students with a BGC finding in this study was 13.33%. This is more in line with results of prior studies and the national average. It may represent a program which conducts the BGC after a student is admitted.

Characteristics of BGC Findings Among Nursing Students in this Study

Prevalence is only one part of the risk assessment associated with background checks. The characteristics of the finding are also relevant (Dilling & Miller, 2012). This is the first study to describe characteristics of BGC findings in nursing students at large research universities. These characteristics encompass type and severity of finding which may be an indicator of public risk. Student findings were categorized as related to persons, property, substance abuse, or disorderly conduct. Findings which could not be categorized were identified as other or incomplete.

BGC findings related to substance abuse were most common in this study, comprising 367 of 1,548 findings (23.71%). Substance abuse frequently occurs in the college environment (Skidmore et al., 2016). It represents an issue among practicing nurses as well. Nursing boards

frequently evaluate issues of impaired practice or diversion of controlled substances for personal use. These investigations often result in disciplinary action (Pastorius, 2007). Nursing educators should assess students with BGC findings related to substance abuse. Some students may have an isolated event which they learned from. Others may have BGC findings with a pattern of behavior which indicates a more serious problem (Skidmore et al., 2016). Individuals who display patterns of behavior may need referral for specialized assessment prior to entering practice (Priola-Surowiec et al., 2014).

In this study, 15 of 1,548 BGC findings (0.97%) were related to interpersonal violence and categorized as person. Students with a history of harming others should be carefully evaluated (Priola-Surowiec et al., 2014). They may pose an increased risk of harm to patients, students, or instructors if admitted. Students in this category may have difficulty obtaining licensure after graduation. Educators should consult their state nursing regulations for licensure limitations which arise from these findings. Some may result in a permanent or temporary bar to licensure. Students with these findings should receive objective guidance about their impact on their education and future licensure. Employment options may be limited for students with serious BGC findings if the board of nursing issues an encumbered license.

In this study, 37 of 1,548 student BGC findings (2.39%) were related to property theft or damage and categorized as property. Students with property findings may have difficulty overcoming the perception of "Once a thief, always a thief." Nursing students have access to patient belongings, expensive equipment, and other valuables in hospital, clinic, and community settings. Students with BGC findings related to property may have difficulty being trusted to enter practice (Hopkins & Thomas, 2013).

Findings related to disorderly conduct represent actions which disrupt or threaten public order. In this study, 134 of 1,548 findings (8.66%) were categorized as disorderly conduct. BGC findings related to disorderly conduct can be problematic to evaluate. The broad nature of disorderly conduct makes it difficult to determine if these students pose a risk in practice. In some cases, students may accept a plea bargain which results in a finding related to disorderly conduct (Morgan, 2021). This may be done on the advice of counsel attempting to mitigate the impact on nursing education. An example would be an arrest related to theft in an attempt to avoid the "Once a thief, always a thief," stereotype. Students with disorderly conduct findings may need to supply details of the charges to determine their implications for nursing education.

Severity of BGC Findings Among Nursing Students in this Study

This study describes severity characteristics on a continuum from least-severe "non-criminal" to moderately severe "criminal", and most severe "felony" (University of Minnesota Libraries, n.d.). Of the 1,548 BGC findings in this study, 1,232 had associated severity data. BGC findings at the extremes may be easier to adjudicate. In this study, 71 of 1,232 student findings (5.76%) were non-criminal. Non-criminal BGC findings are thought to have little implication for professional practice (Wisconsin Department of Children and Families, 2019). At the other extreme are felonies - serious findings which represent a threat to the public. Students with felony convictions may be barred from licensure, especially for crimes with a direct relationship to practice (Sheets & Kappel, 2007; Wisconsin Department of Health Services, 2011). In this study, a small minority of findings were categorized as felonies: 13 of 1,232 (1.06%).

Criminal findings of moderate severity may be more difficult to assess for potential risk to the public. Of the 1,232 BGC findings in this study with severity data, 968 were criminal

(78.57%). These findings cannot be assumed to be unrelated to practice but must be carefully assessed. Educators must consider circumstances related to the finding to determine if the student poses a risk in the practice setting. Such factors may include access to vulnerable populations, access to patient valuables, or opportunities to divert controlled substances (Dilling & Miller, 2012). Educators may need to request additional documentation from students to determine the relevance of circumstantial details.

In this study, 180 BGC findings (14.61%) had severity information which could not be categorized through the data scraping algorithm. These were categorized as "other". Educators reviewing BGC findings which are not easily categorized will likely need additional documentation. Students with incomplete or unclear BGC findings may need additional time to supply supplemental documentation.

Incomplete Findings Among Nursing Students in this Study

Background check findings are frequently incomplete, despite the perception that they represent a full and accurate picture of past behavior (Lageson et al., 2015). When records are incomplete, the decision may be made based on the reader's perception of what the past behavior may represent (Lageson et al., 2015). In some cases, the student may be asked to retrieve arrest records from law enforcement or court documents from the legal system. This exposes students to further stigmatization and traumatization (Ewald, 2019). In this study, 995 of 1,548 records (64.28%) were missing characteristic data and 316 (20.41%) were missing severity data.

Variation in BGC Prevalence

In this study there was variation between individual programs and regions of the US. Students with findings ranged from 0.00% to 13.33% of BGC submitted by individual programs (M = 3.2%, SD = 2.98%). The wide range and standard deviation made it difficult to establish

statistical significance between programs or years. To examine nursing student BGC findings in broader context, the author compared the mean prevalence of BGC findings in this study to the mean FBI yearly arrest rate. There was no statistically significant difference between the aggregated yearly mean of nursing students with BGC findings (M=3.1%, SD 2.47%) and the mean FBI yearly arrest rate (M=3.19%, SD 0.33%, t(18) -0.077, two-sided p= 0.94, Cohen's d 2.26%). Therefore, this study does not suggest a statistically significant variation in prevalence of BGC findings over time or between regions.

Review of Strengths and Limitations

This study is the first to describe prevalence and characteristics of BGC findings in nursing students attending large research universities. It was able to do so due to the strengths of the study design. Partnership with a consumer reporting agency provided access to data from 16 nursing programs. De-identification and aggregation through data scraping provided access to over 45,000 BGC results. Direct access to records on this scale would be complex due to privacy laws governing educational and criminal justice records. The use of aggregated, de-identified data provided important protection to students and programs which made this study possible.

The strengths of this study design were accompanied by limitations of data aggregation, convenience sampling, and the COVID pandemic. The use of aggregated, de-identified data prevented collection and correlation of individual-level characteristics such as race, gender, or socioeconomic status. De-identified data prevented removal of duplicate student background checks. Students who completed background checks in more than one year or at multiple institutions could be included more than once. The sample was limited to universities which contracted with the partnered consumer reporting agency for conducting BGC. The reader should consider the limitations of this convenience sample when generalizing the results. The data in

this study was aggregated prior to the outbreak of the SARS-CoV-2 virus. Readers would need to consider how student enrollment or BGC findings may differ in the endemic phase of SARS-CoV-2. However, these limitations were justified by making access to the data possible.

Implications for Public Protection

The results of this study carry implications for public protection. It may be straightforward to assess BGC findings which are non-criminal and unlikely to pose a problem in practice. In this study, these low-risk findings were present in less than 6% of BGC. Similarly, it may be easy to identify felonies as high risk. Just over 1% of the BGC findings in this study were categorized as felonies. It is more difficult to predict public risk posed by moderately severe findings, which made up nearly 79% of the findings. It may not be possible to make determinations for students with incomplete BGC results without requesting additional information.

Educators evaluating BGC in nursing education programs need to consider the difficulty adjudicating these findings in admission and placement decisions. Hopkins and Thomas (2013) and Priola-Surowiec et al. (2014) have proposed guidelines for evaluating BGC findings at licensure. Findings which include violence or sexual offenses are considered more serious and merit additional scrutiny in the licensure process. Dishonesty in the disclosure process, or a pattern of behaviors also increase the level of concern. Candidates may be required to submit additional documentation or undergo psychological testing to assess public risk. The predictive value of these guidelines has yet to be researched in nursing students. Therefore, nursing educational policy continues to be heavily influenced by the retributive justice philosophy of the criminal justice system. We must reject the biases of individual decision-makers and the assumption of "Once a thief, always a thief." Instead, educators should move toward more

accurate and just policies. These policies must protect the public from individuals who continue to pose a risk. We must also acknowledge students may have grown from an experience and no longer represent a risk to the public. This research should critically consider how these policies may have a disparate impact and remove unjust barriers.

Implications for Nursing Education

Academic nurse educators should consider their approach to students with BGC findings. Nursing regulators focus on public protection through occupational licensure after education. It may be appropriate for regulators to view discipline related to BGC findings through a lens of retributive justice. Nursing educators strive to protect the public by preparing students with the knowledge, skills, and ethics of the profession. Educators should be wary of retributive justice influences in the evaluation of BGC findings during admission and clinical placement. The influence of retributive justice should be rejected as outside the nurse educator scope of practice.

The National League for Nursing defines the scope of practice for academic nurse educators. It includes the education of diverse learners who integrate the ethics of the profession and transition into the role of a nurse (Christensen & Simmons, 2020). Nurse educators must allocate educational resources equitably. Students with BGC findings should be evaluated holistically, considering changes in their life since the event which mitigate public risk. This may reduce barriers faced by students from communities subject to structural racism through disparate policing. Only students whose BGC findings indicate they pose an undue risk to the public should be excluded from nursing education.

Research on the deterrent effect of the BGC process for nursing students from underrepresented communities has yet to be conducted. Research in higher education suggests the evaluation of BGC findings has a disproportionate impact upon underrepresented

communities (Ott & McTier, 2020). This was one factor in removing questions about prior involvement with law enforcement from the Common Application in 2019 (Davis, 2018). Similarly, the BGC should be evaluated holistically and consider evidence a student has put an event behind them. Students should be allowed an opportunity to demonstrate accountability and describe meaningful personal growth. Such students deserve an opportunity to begin nursing education.

Background Checks and the Admissions Process

The US justice system exerts considerable philosophical influence over evaluation of BGC findings in the admission and clinical placement process. Punishment through denial of admission is justified as retributive justice. The defense against being sued for negligence justifies excluding some students as protective of both the public and the school. This illustrates the philosophical complexity of the current BGC evaluation process. Nursing educators can take steps to mitigate the deterrent impact of the BGC. Background checks can be removed as a structural barrier in the application to nursing school by conducting the BGC after completion of a holistic admissions process. This means the BGC is not assessed until after an admission decision has been made. The process should be transparent for both students and the public. BGC assessment requires educators and students to navigate varied and often contradictory standards. Unfortunately, most collegiate administrators have no specific training on how to interpret background checks (Dickerson, 2008). As a result, there is often no one to advocate or prepare students for the impact of the BGC process (Williamson et al., 2018).

Preparing Students for the BGC Process

Students may benefit from preparation for the BGC prior to entering the nursing major. Educators could include information about the BGC process in pre-nursing courses which

discuss professionalism. Students can be provided a clear explanation as to when, how, and why the BGC will be conducted. Educators should provide examples of findings which are unlikely to cause a problem for clinical placement and which are problematic. Students should be encouraged to think about behaviors that may trigger interaction with law enforcement. This can be an opportunity for students to reflect critically upon risky behaviors. These may include underage drinking, driving under the influence, and use of illicit substances. Students should be encouraged to stay focused on the goal of becoming a nurse and how new BGC findings could jeopardize it.

A resource person may help nursing students navigate the BGC process as they progress through the nursing major. This resource can help students maintain realistic expectations about how BGC findings may impact their education and future practice. Expectations include frequency of BGC, individual site determinations, and requests for additional documents. Students with adverse BGC findings may need review from time to time to determine placement options and eligibility for progression. The resource person can review options and eligibility criteria with partnered clinical agencies. There should be a clear plan to update partners if changes in student BGC findings occur.

When a student has a BGC finding, its implications for clinical placement should be discussed early. Students should be made aware of policy differences between clinical sites which could limit opportunities. Discuss with the student how the impact of the finding may diminish over time or be greater for different populations. Students should be informed of sites, like schools or children's hospitals, which may have more stringent BGC requirements. If a student is denied placement due to a BGC finding, educators should be transparent and discuss

their options. This could include placement at alternative sites, delayed progression, or exit from the program.

Preparing Educators for the BGC Process

Educators should be prepared to address the most common findings among nursing students. Organizations should have policies which guide assessment of BGC findings, but these assessments must be individualized to each student. Holistic assessment of individual student findings should consider characteristics and severity which may imply risk. Does the finding relate to persons, property, or substance abuse? Are there similarities between the circumstances of the finding and the practice population or setting? Are there multiple findings which indicate an ongoing pattern of behavior? Has sufficient time passed for the student to demonstrate desistence from further involvement with law enforcement? These questions may help educators conduct individualized evaluation of student BGC findings for risk in the practice setting.

Educators should be guided by policies applied consistently to all students with BGC findings. These policies should differentiate between the impact of a single finding and multiple findings. Patterns of related findings may suggest a serious problem, such as multiple citations for underage drinking. In other cases, it may be more difficult to determine if a relationship exists between findings. A finding related to theft and a finding related to alcohol may be directly related, indirectly related, or unrelated. Educators may need to discuss events and circumstances with students for important details not reflected in BGC findings. This can include an opportunity for students to relate personal growth subsequent to the events.

Educators should be prepared to consider the impact incomplete records may have upon students in the nursing program. Educators must determine how a record of arrest without a conviction will affect a student. If the student is “innocent until proven guilty” there is no proof

of guilt and the arrest should be disregarded. If the burden of proof rests upon the student, they may be required to provide additional documents. Retrieving these documents may be time consuming, have an associated financial cost, and expose the student to further stigmatization. Students should be informed that they may be required to repeat the process when they apply for licensure. Educators should inform students of these expectations, which should be clearly laid out in policy and consistently applied. These policies should align with those of partnered clinical agencies to reduce issues in clinical placement.

Partnership with Clinical Agencies

Nursing educators are not the only ones who will scrutinize student BGC findings. They will also be evaluated by clinical site administrators for approval. Clinical site policies will vary according to individual interpretation of site, state, and federal guidelines. Varied interpretations create opportunity for disparity, bias, and discrimination (Ewald, 2019). Employers are forbidden from discriminating against applicants with BGC findings which are not substantively related to the position. Unfortunately, the law does not define what constitutes a substantive relationship. These determinations are often left to administrators in human resources departments who may not be a nurse. These administrators must balance laws forbidding discrimination due to BGC findings against public risk and the threat of organizational negligence.

Differing clinical site interpretation of law and policy makes it difficult to advise to students. Educators should consult with partnered agencies to ensure a student with findings has a path to program completion. This is not as simple as it sounds. Clinical agencies may be reluctant to offer an opinion on student BGC findings prior to placement. Agencies which turn a student away due to a BGC finding could find themselves targeted with a discrimination lawsuit. Therefore, clinical sites will often evaluate BGC findings only for students assigned to the site. If

an agency rejects a student due to BGC findings it may be difficult to find an alternative placement. Cultivating a partnership with clinical agencies may provide insight into how they are likely to view findings. This may allow an educator to provide better advice to students in the clinical placement process. The educator should be cautious not to speak for the clinical site when advising students. Student BGC findings are considered individually, and students with similar findings may be adjudicated differently. Educators and clinical partners will benefit from well-documented BGC evaluation and consistent application of policy.

The role of the State Board of Nursing

State boards of nursing evaluate BGC findings for risk to the public as part of the licensure process (Tate & Moody, 2005). This occurs after the student has completed nursing education. Therefore, most state boards are not involved in the process of evaluating student background check findings in the admission or clinical placement process. Academic nurse educators should refer to their state's professional regulations as they craft organizational BGC policies. These policies should be informed by any regulatory guidance published by the board. Examples include findings which trigger a bar to licensure or a rehabilitation review. Educators should inform students of these regulations and discuss their impact on licensure. Students whose licensure may be barred or subject to rehabilitation review may need to consider other educational options.

Implications for Diversity, Equity, and Inclusion

Educators should not assume all misconduct has an equal chance of being detected, arrested, prosecuted, and convicted. Systemic racism in law enforcement places individuals from underrepresented communities under increased scrutiny. Persons of color are subjected to traffic stops, vehicle searches, and arrests more often than people who present as white (Hetey, et al.,

2016). These interactions with law enforcement are likely to result in BGC findings problematic for nursing education. This is another way that BGC policies may subject underrepresented students to structural barriers to entering nursing education.

The impact of disparate policing on communities underrepresented in nursing has not been directly studied. The presence of BGC questions on college applications has been shown to deter underrepresented students, who may quit the process (McGee et al., 2019; Stewart & Uggen, 2020). BGC in nursing education may have a similar deterrent effect for students from underrepresented communities. A recent study by Decoux Hampton et al. (2021) suggested that preconditions to admission, including background checks and drug screens, were hindering minority enrollment in nursing. Academic nurse educators have an obligation to implement admission policies which are racially just (Berry, 2010; Christensen & Simmons, 2020). These educators must also protect the public from undue risk. However, framing BGC policy as a choice between diversity or public protection should be rejected as a false dichotomy. Nursing must improve its representation of the communities we serve while protecting the public. Educators should use research to create the least exclusionary policies needed to protect the public. The prevalence and characteristics of BGC findings in this study should identify variables for future correlation with public risk.

Implications for Future Research

Future research on BGC findings in nursing education is required to advance inclusive policy which protects the public. Researchers should conduct quantitative studies which correlate specific BGC findings with unprofessional practice which harms the public. Published studies correlating any BGC finding with program completion, NCLEX success, and professional discipline have yielded mixed results. Researchers should propose and test specific theories of

risk prediction, e.g., student findings related to theft predict theft from patients. This will improve public protection by demonstrating specific BGC findings that predict public harm in practice.

Qualitative researchers should design studies which examine stakeholder perceptions of students with BGC findings. Stakeholders with important viewpoints to capture include educators, clinical site administrators, students, and the public. Studies could explore:

- The lived experiences of students with BGC findings
- Whether the BGC process discourages or deters students with findings
- Whether the BGC process has a disparate impact on underrepresented students
- How participants perceive students with BGC findings
- How participants equate findings with risk
- The congruence of school and clinical agency BGC policies

Chapter Conclusion

Academic nursing educators rely upon BGC to assess whether student behavior or character is likely to place the public at risk. Current methods of predicting public risk based on nursing student BGC findings are not supported by research. Instead, the current process is heavily influenced by the US criminal justice system philosophy and practice. Trained criminologists struggle to use BGC findings effectively in sentencing, and interpretation of factors which may contribute to recidivism varies (Johnston, 2013; Kalra et al., 2022). It is more difficult for educators in nursing programs who lack specific training to interpret BGC findings and apply the results.

Nursing education prepares diverse students with the knowledge, skills, and ethics necessary to become a professional nurse. Current BGC policies assume a student will behave in

the future as they have in the past. This is a logical fallacy and is contrary to the development of professionals through nursing education. It also propagates the false dichotomy that educators must choose public protection over inclusivity. The false dichotomy of inclusivity versus risk should be rejected. Nurse educators should evaluate students with BGC findings holistically. This requires continued study of BGC findings in nursing students to improve risk prediction, inclusivity, and public protection. Future research should correlate the BGC finding characteristics identified in this study with public risk. Qualitative researchers should explore the lived experiences of students with BGC findings and attitudes towards them. Future research can explore categorical risk prediction to better inform nursing school admission and clinical placement policies. Only students who can be shown to pose a risk to the public should be denied entry into the profession.

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Appendix: Determination of UWM IRB Submission

Determination of UWM IRB Submission

INSTRUCTIONS: Not all research involving humans will require UWM IRB submission or approval. Only activities meeting the regulatory definitions of **(a)** "**research**" and **(b)** "**human subjects**" and where **(c)** UWM is "**engaged**" in the conduct of human subjects research require UWM IRB review and approval.

This form may be used as **(1)** a tool to help you determine whether you may need to file a New Study Submission to the UWM IRB, and/or **(2)** documentation of formal notice that the UWM IRB is not "engaged" in "human subjects research" requiring UWM IRB review/approval.

SECTION 1: PROJECT TITLE AND RESEARCHER

Project Title:	Incidence and prevalence of nursing students with criminal background check findings		
Name:	Christopher C. Peters	**Department/ Institution:**	College of Nursing, UW-Milwaukee
Telephone:	414-460-5378	**Email:**	peterscc@uwm.edu

SECTION 2: STUDY INFORMATION

1. Describe the purpose of the proposed activities, including the overall objectives and specific aims.
   Determine the incidence and prevalence of students applying to nursing programs with findings in their criminal background checks

2. Describe the subject population, or the type of data and/or specimens to be studied.
   Subject population: Students in nursing programs from urban serving universities
   Type of data: De-identified data from national background check vendor

3. Describe the procedures, including how the data and/or specimens will be obtained.
   National vendor of background checks will compile data from urban serving universities with nursing programs. All data will be de-identified. Aggregate information as follows:
   - Years 2014, 2015, 2016, 2017, 2018, 2019
   - Number of students submitted for background check each calendar year.
   - Number of students with a background check "hit" of any type (any finding).
   - Number of students with convictions of any type.
   - Number of students with convictions for felonies.
   - Number of students with convictions related to violence.
   - Number of students with convictions related to property crimes.
   - Number of students with convictions related to substance abuse (DUI/OWI, drug related crimes).
   - Student demographic data for each institution (not individuals)

   Programs to be de-identified: named by region, i.e. "Midwest 1, Midwest 2, West 1, East 1," etc.

4. Describe how the results will be shared.
   Poster at UWM
   Poster at external conference
   Publication in peer reviewed journal

5. Is the project funded? Please provide the funding source, if applicable.
   No funding

6. Is this a multi-site project? Please list the collaborating institutions or organizations, if applicable. Please indicate whether you have obtained any non-UWM IRB approval, or whether the project is being reviewed by any non-UWM IRB.
   CastleBranch, a national vendor of background checks to colleges, universities, healthcare settings, etc.
   No non-UWM IRB submission has been made.
   Preliminary project plan under review by CastleBranch legal department to ensure existing contracts allow sharing de-identified data.

SECTION 3: DETERMINATION OF "RESEARCH"

Research – "a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge."

RESEARCH

The project may be "research" if:
- it intends to advance general knowledge in the academic, scientific, or professional community;
- it's conducted using a research design that will lead to scientifically valid findings;
- the subjects are not expected to benefit personally from the knowledge gained;
- it's completed to obtain a Master's degree or PhD.

NOT RESEARCH

The project may be systematic but not "research" if:
- it's a classroom project solely to fulfill course requirements and intention is to not share the results beyond the University community;
- it's a QI/QA, EBP, or program evaluation designed to improve the quality or performance of a department or program where it is not the intention to share the results beyond the local community; ***see QI/Eval questions below;
- most project participants are expected to benefit from the knowledge gained and the project's main goal is to improve services.

Additionally, the following activities are deemed NOT to be "research:"
- Scholarly and journalistic activities (e.g., oral history, journalism, biography, literary criticism, legal research, and historical scholarship), including the collection and use of information, that focus directly on the specific individuals about whom the information is collected;
  - If activities are designed to develop or contribute to generalizable knowledge, they would be considered "research;" e.g., an oral history project interviewing individuals to create a record of a historical event would not be research, but it would be considered research if the investigator plans to draw general conclusions or answer a particular question from the interviews;
- Public health surveillance activities, including the collection and testing of information or biospecimens, conducted, supported, requested, ordered, required, or authorized by a public health authority.
- Collection and analysis of information, biospecimens, or records by or for a criminal justice agency for activities authorized by law or court order solely for criminal justice or criminal investigative purposes;

- Authorized operational activities (as determined by each agency) in support of intelligence, homeland security, defense, or other national security missions.

Use the information above to answer the following questions.

1. Do the proposed activities involve a systematic approach? A "systematic" approach involves a predetermined method or a plan for studying a specific topic, answering a specific question, testing a specific hypothesis, or developing theory. A systematic approach incorporates collection of data, either quantitative or qualitative, or specimens; and analysis.

   [X] YES **[__] NO**

   If NO, please explain why the proposed activities do not involve a systematic approach:
   <Type Here>

2. Is the intent of the proposed activities to *develop or contribute to generalizable (scholarly) knowledge****? Activities 'designed to develop or contribute to generalizable knowledge' are those activities designed to draw general conclusions (i.e., knowledge gained from a study may be applied to populations beyond the specific study population), inform policy, or generalize findings.

   [X] YES **[__] NO**
   If NO, please explain the intent of proposed activities and explain how the proposed activities are not intended to contribute to generalizable knowledge:
   <Type Here>

***If you think your project may be considered *a Quality Improvement / Evidence-Based Practice project or Program Evaluation ONLY and WILL NOT contribute to generalizable knowledge* please confirm by answering either the QI/EBP or Evaluation questions below. Either ALL QI/EBP or ALL Evaluation questions must be YES to be considered a Quality Improvement / Evidence-Based Practice Project or a Program Evaluation.

Quality Improvement/ Evidence-Based Practice	***Program Evaluation***
QI1. The project is being initiated/conducted based on the request and needs of a department, institution, or organization for internal purposes only. [__] YES [__] NO	**E1.** The evaluation is being initiated based on the request and needs of a partner organization or department for internal purposes only. [__] YES [__] NO
QI2. The study is NOT designed to expand knowledge of a scientific discipline or scholarly field of study. [__] YES [__] NO	**E2.** The intent of the evaluation is to improve a specific program and/or to meet funder requirements. [__] YES [__] NO
QI3. All activities are "routine care," "standard practice," or "evidence based" and conducted by staff where the project will take place. Untested methods and/or interventions are NOT being evaluated. [__] YES [__] NO	**E3.** The program being evaluated is evidence based (already shown to be effective). Untested services, programs and/or interventions are NOT being evaluated. [__] YES [__] NO
QI4. The project does NOT involve a control group or randomization or blinded interventions. [__] YES [__] NO	**E4.** The evaluation does NOT involve randomization of participants, but may involve comparison of variations in programs. [__] YES [__] NO
QI5. The project is NOT externally funded. [__] YES [__] NO	

QI6. NO drugs, biologics and/or devices without FDA approval are being used in the project or being used for a non-FDA approved purpose. [__] YES [__] NO	

If YES to 1 & 2 these activities constitute research. Go to Section 4.

If NO to any of the QI/EBP or Program Evaluation Questions, these activities constitute research. Go to Section 4.

Otherwise, the criteria for research are not met. Go to Section 5.

SECTION 4: DETERMINATION OF "HUMAN SUBJECT"

Human subject - a *living individual* about whom an investigator (whether faculty, student, or staff) conducting research: (1) obtains information or biospecimens through *intervention or interaction* with the individual, and uses, studies, or analyzes the information or biospecimens, or (2) obtains, uses, studies, analyzes, or generates *identifiable private information or identifiable biospecimens*.

(1) Intervention includes both physical procedures by which information or biospecimens are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes.

(1) Interaction includes communication or interpersonal contact between researcher and subject.

(2) Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information that has been provided for specific purposes by an individual and that the individual can reasonably expect will not be made public (for example, a medical or educational record information). Private information must be *individually identifiable* through use of identifiers (name, dob, SSN) or through use of a code.

(2) Identifiable private information is private information for which the identity of the subject is or may readily be ascertained by the investigator or associated with the information.

(2) An identifiable biospecimen is a biospecimen for which the identity of the subject is or may readily be ascertained by the investigator or associated with the biospecimen.

Use the definitions above to answer the following questions.

1. Are the human subjects *living individuals*? This also applies to charts reviews and datasets.

   [__] YES [X] NO

   If NO to 1, the criteria for human subjects are not met. Go to Section 5.

2. Do the activities involve UWM personnel obtaining information or biospecimens through *intervention* or *interaction* about the individuals (i.e., prospective collection of data/specimens; online interactions or surveys; etc.)?

NOTE: If you are asking only questions about a program, product, or policy (and no questions specifically about the individual), this answer should be "NO."

[__] YES [X] NO

 **If YES to 1 & 2, the activities involve human subjects. Go to Section 5.**

3. Do the activities involve UWM personnel accessing *individually identifiable* (e.g., names, medical record numbers, social security numbers, study ID codes, etc.) **and** *private* information about living individuals? This applies to charts, records, datasets, and specimens. **Even if you are not recording identifiers, if the source of the data contains identifiers, then mark this question as a "yes."

[__] YES [X] NO

 **If YES to 1 & 3, the activities involve human subjects. Go to Section 5.**

4. Do the activities involve UWM personnel obtaining or receiving *individually identifiable* (e.g., names, medical record numbers, social security numbers, study ID codes, etc.) **and** *private* information about living individuals? This applies to charts, records, datasets, and specimens.
***If you are receiving a coded dataset, and a key exists somewhere to link the data to the original participant, even if you do not have access to the key, mark this question "Yes".

[__] YES [X] NO

 **If Yes to 1 & NO to 4 the criteria for human subject are not met. Go to Section 5.**

4a. **If yes to #4**, will your dataset contain direct identifiers such as name, date of birth, social security number or medical record number?

[__] YES [X] NO

 **If YES to 1 & 4 & YES to 4a, the activities involve human subjects. Go to Section 5.**

4b. **If yes to #4 and No to #4a,** you appear to be using coded data. Is there:

- a written agreement that prohibits the UWM researcher and his/her research team from having access to the key linking the study ID number to personal identifiers, OR
- are there legal requirements or written policies in place restricting release of the key until the participant is deceased, OR
- is it extremely unlikely that the UWM researcher will ever be able to access the key?

[__] YES [__] NO

 **If YES to 1 & 4, NO to 4a and NO to 4b, the activities involve human subjects. Go to Section 5.**

 **If YES to 1 & 4, NO to 4a and YES to 4b, the activities DO NOT involve human subjects. Please explain your response to 4b below and then go to Section 5.**

SECTION 5: DETERMINATION OF "ENGAGED"

Engaged: An institution is considered to be engaged in research if certain federal criteria are met and may be subject to IRB review/approval.

UWM Auspices: UWM personnel (student, faculty, or staff) who: (1) act on behalf of the institution; (2) exercise institutional authority or responsibility; or (3) perform institutionally designated activities.

Non-UWM researchers wishing to conduct human subjects research using UWM personnel as subjects or its facilities are not considered to be engaged. This document is for the determination of UWM IRB review only and you are expected to obtain other permission as necessary. For example, the UWM IRB does not have authority to grant the release or use of UWM listservs, equipment, or facilities.

ENGAGED	NOT ENGAGED
UWM is considered to be engaged in human subjects research if UWM or UWM personnel are involved in **any** the following activities under UWM auspices: • direct awardee of a federal grant, award, or contract; • obtaining informed consent; • performing invasive or noninvasive procedures with subjects; • intervening for research purposes with any subjects by manipulating the environment; • interacting for research purposes with any subject; (e.g., conducting research interviews or administering questionnaires); or • obtaining private identifiable information.	UWM is considered to not be engaged in human subjects research if UWM or UWM personnel are **solely** involved in the following activities: • performing commercial/service where: (a) the services performed do not merit professional recognition or publication privileges; (b) the services performed are typically performed by those institutions for non-research purposes; and (c) the institution's employees or agents do not administer any study intervention being tested or evaluated under the protocol; • inform (e.g., provide a copy of informed consent document, information about contacting the investigator, seek or obtain the prospective subjects' permission for investigators to contact them) prospective subjects about the availability of the research but do not obtain subjects' consent for the research or act as representatives of the investigators; or • releasing identifiable private information/specimens pertaining to the subjects of the research.

Use the information above to answer the following question.

1. Are you conducting this research project as part of your role as a UWM faculty, staff, or student?

   [X] YES **[__] NO**

   If YES or NO, please explain:
   PhD student in the College of Nursing

2. Are you conducting this project as a consultant with no plans to publish or present the results under your UWM credentials?

[__] YES **[X] NO**

If YES, please explain:
<Type Here>

 **If YES to 1, UWM is engaged. Go to Section 6**  **Otherwise, UWM is not engaged Go to Sec. 6.**

SECTION 6: IS YOUR PROTOCOL HUMAN SUBJECTS RESEARCH, AND UWM IS ENGAGED?

If based on your responses in Section 3 the activities constitute research; **and** per your responses in Section 4 the activities involves human subjects; **and** per your responses in Section 5 UWM is engaged then IRB review and approval of your study is required before study activities can begin. Please complete and submit the appropriate documents for a New Study Submission and submit them through IRBManager. All forms are available on the IRB website under the Forms section. If you have questions, contact the IRB office at irbinfo@uwm.edu**.**

If your responses indicate that UWM is **not engaged** in **human subjects research**, you are **not required** to submit an IRB application. If you would like confirmation and documentation from the IRB staff that your proposed activities do not constitute UWM being engaged in human subjects research, or if you are uncertain if your study meets the definition of human subjects research, please complete this form and submit the MS Word document to irbinfo@uwm.edu. You will receive a response from the IRB staff within 5 working days.

UWM IRB DETERMINATION OF UWM ENGAGEMENT IN HUMAN SUBJECTS RESEARCH

Researchers do not complete this section. **For IRB staff only**

[_X_] The activities as described **DO NOT** constitute UWM being engaged in Human Subjects Research. Submission of an IRB Application to UWM is not required.

[__] The activities as described **DO** constitute UWM being engaged in Human Subjects Research. Submission of a UWM IRB Application **IS REQUIRED**. IRB Approval must be obtained before the research can begin.

Leah Stoiber IRB Staff	12/10/2019 Date