Moral Resilience in Nursing Education: Exploring Undergraduate Nursing Students Perceptions of Resilience in Relation to Ethical Ideology

Ebin J. Arries-Kleyenstüber, PhD, RN

Abstract

Introduction: Moral resilience has recently been proposed as one strategy to address moral distress in nurses and nursing students. Central to nursing students’ capacity for moral resilience is how they understood and enact resilience with an element of realism, suggesting an ethical, ideological influence. Resilience is shown to differ significantly across students, and possibly because of a disconnect between a students’ perceived resilience and their ethical ideology. Yet, resilience seldom has been explored in relation to ethical ideology.

Objective: This study aims to explore self-reported resilience in relation to ethical ideology in undergraduate nursing students, compare differences in scores, and explore relationships between study variables and selected demographic characteristics.

Methods: A descriptive cross-sectional research design was followed. An online encrypted survey was conducted among a convenient sample of nursing undergraduates who met the eligibility criteria and provided implied informed consent. This study complied with ethical principles outlined in the Canadian Tri-Council Policy Statement for research with human subjects. Ethical approval was secured from the University’s Research Ethics Board. Data were analyzed using mean scores, standard deviations, independent sample t-test, variance analysis with post hoc–testing, and Pearson correlation to explore differences in perceptions and associations between study and selected demographic variables.

Results: Undergraduate students have a high level of self-reported resilience. Statistically significant differences in self-reported resilience across selected demographic variables were observed. The association between resilience and ethical ideology was not significant. Ethical relativism was significantly correlated with age and year of study.

Conclusion: Findings suggest that faculty cultivating resilience in nursing students pays attention to gender’s influence discourses in students’ perceptions of resilience and ethical ideology and provides students with opportunities for ethical self-reflection and dialogue to critically examine their ethical ideological perspectives and the influence these may have on moral resilience development. Implications for future research are discussed.

Keywords
nursing students, resilience, perceptions, ethical ideology, nursing education

Received 1 November 2020; accepted 20 April 2021

Introduction

Moral resilience has been proposed as one strategy to mitigate moral distress in nurses (Rushton et al., 2017; Sala Defilippis et al., 2019). Moral resilience enables nurses to respond to moral adversity situations in ethically competent ways to sustain their moral integrity. Moral resilient nurses are shown to positively influence ethical care and mitigate moral distress (Lachman, 2016; Faculty of Nursing, University of Regina, Regina, Saskatchewan, Canada

Corresponding author:
Ebin J. Arries-Kleyenstüber, Faculty of Nursing, Research and Innovation Center, University of Regina, Room 508, 3737 Wascana Parkway, Regina, Saskatchewan S4S 0A2, Canada.
Email: ebin.arries@uregina.ca
Rushton, 2016b; Rushton et al., 2017). Ethics education is among many strategies that can help cultivate nurses’ moral resilience (Lachman, 2016; Monteverde, 2013; Monteverde, 2016; Rushton, 2016a). Therefore, nursing education is tasked with the responsibility to develop this competency in students.

Stress and potentially moral distress in nursing students, coupled with its adverse impacts on their learning, well-being, and ability to care, reinforce the significance of developing moral resilience in nursing students to prevent moral distress and build moral courage (McMechan et al, 2019; Sassco et al., 2016; J. Thomas et al., 2012). Nursing students’ propensity for moral resilience appeared to depend on how they perceive and understood resilience (Pines et al., 2012; Reyes et al., 2015a). Moreover, resilience in nursing students’ can differ across factors like time, context, age, and life circumstances (Sigalit et al., 2017; Taylor & Reyes, 2012).

Differences could be attributed to a disconnect between students’ perceived resilience and personal moral philosophy. As a representation of a moral viewpoint, the latter guides a person’s ethical reflection and actions (Grace & Milliken, 2016; Hoskins et al., 2018).

Additionally, there is a strong belief that a realistic worldview is an antecedent of nursing students’ resilience (Gillespie et al., 2014; Stephens, 2013). Similarly, a realistic perspective is considered essential for moral resilience in nursing because it enables nurses to adapt to situations of moral adversity by (i.e., moral distress) using humour and finding harmony (Lachman, 2016). Studies on resilience in students showed that they enact resilience with intentionality and an element of realism (Gibbons, 2010; K. Turner & McCarthy, 2017) suggesting a personal moral philosophical orientation is pertinent to their understanding of resilience.

Although much is known about resilience in students, and attention is devoted in the Canadian undergraduate nursing curriculum to cultivate it, the holistic and evolving nature of moral resilience in nursing education suggests that factors influencing its development in students are far from complete (Amsrud et al., 2019; Sigalit et al., 2017; Taylor & Reyes, 2012). Nurse educators studying resilience in nursing students have yet to show which factors in moral philosophy influence resilience. Ethical ideology is one such factor that could influence nursing students’ resilience.

Understanding nursing students’ resilience in relation to their ethical ideology is vital for several reasons. Firstly, ethical ideology might explain differences in nursing students’ perceptions of resilience and ethical behaviour. Secondly, paying attention to students’ perceptions of resilience and ethical ideology can guide the selection of student-centred ethics resources and resilience-building strategies to support students to critically reflect on the impact of such perceptions on their thinking and actions. Thirdly, moral development studies in nursing education show that when students learn to become ethical-reflective and competent clinicians, they relate conventions (i.e., rules, norms, and expectations) about good care and practice to nursing’s theory and its moral philosophical foundations (McLeod-Sordjan, 2014; Numminen & Leino-Kilpi, 2007; Park et al., 2012). Thus, this study intends to explore how nursing students perceived resilience and explore it in relation to ethical ideology. This study is part of a project examining factors influencing students’ ethical practice development in contemporary educational settings.

**Review of Literature**

**Resilience in Nursing Education and Nursing Students: Moral Resilience**

Resilience in nursing has been examined extensively and conceptualized as a trait, process, and moral virtue (Hart et al., 2014; Young & Rushton, 2017). Resilience has also been examined in nursing students (Amsrud et al., 2019; Reyes et al., 2015a; Taylor & Reyes, 2012). Nursing student resilience traditionally was defined as a developmental process based on personality-specific attributes (Gillespie et al., 2009; Stephens, 2013) to navigate adversities, leading to enhanced coping and well-being (Wagnild & Young, 1993). Self-efficacy, hope, and coping define students’ understanding of resilience (Gillespie et al., 2014).

Recent conceptualizations of nursing students’ resilience by Reyes et al. (2015b) showed students’ understood resilience as a dynamic, action-oriented process of “pushing through.” The latter comprises a set of “temporally sequenced phases” of “stepping into” a challenging situation while “staying the course” using strategies to navigate challenges, and which culminated in “acknowledging” personal growth and transformation (p. 2626-2628). Students’ capacity for resilience is shaped by how they perceive adversity as temporary setbacks and opportunities to learn from, with intentionality and an element of realism, to attain personal goals (Gibbons et al., 2011; L. J. Thomas & Revell, 2016; K. Turner & McCarthy, 2017).

Nursing students’ resilience has also been described as a social-affective factor (Hwang & Shin, 2018) and a “socially transient” process of engagement-disengagement as students interact with their environment (L. J. Thomas & Revell, 2016). Resilience differs among nursing students in interaction with their social environment. Differences have been attributed to personal and contextual factors such as education, context, time, age, and life circumstances (Gibbons et al., 2011; Sigalit et al., 2017; K. Turner & McCarthy, 2017; Van Hoek et al., 2019).
Personal factors such as self-efficacy, self-esteem, optimism, mastery, critical thinking, and year of study significantly influence nursing students’ resilience (Sigalit et al., 2017; Stewart & Yuen, 2011). Resilience in students is significantly positively correlated to religion and academic success. Academic success in students was also significantly associated with spiritual well-being, empowerment, and retention (Beauvais et al., 2014; Sigalit et al., 2017). Higher resilience is shown to predict academic success in nursing students. Lower resilience levels were significantly associated with higher intentions to leave (Van Hoek et al., 2019).

Good interpersonal relationships, high academic grades, having a role model, and student satisfaction with their major are characteristics of students with high academic resilience levels (Hwang & Shin, 2018). Emerging studies on moral resilience in nursing students demonstrated significant associations with moral courage, age, and previous degrees (Gibson et al., 2020).

Contextual factors such as social support, social encouragement, friendships, time, and empowerment, significantly influence nursing students’ resilience (Pines et al., 2012; Taylor & Reyes, 2012; L. J. Thomas & Revell, 2016). Personal and group resilience in nursing students positively correlates with social networking use and character strength (Sigalit et al., 2017). Resilience and character strength in students’ can be cultivated through resilience-building strategies such as self-efficacy, social support, mindfulness, spiritual well-being, narrative storytelling, interactional justice, and ethical competency. Students’ self-efficacy can be built through learning activities such as critical self-reflection on one’s beliefs, values; asking prompting questions; realistic goal setting, and positive self-talk, self-motivation, and self-evaluation (Lachman, 2016; L. J. Thomas & Revell, 2016). In a meta-synthesis study, Amsrud et al. (2019) also identified strategies like demonstrating caring relationships, recognizing resources and power, acknowledging uncertainty, reframing burdensome experiences, and adjusting frames for learning as essential to support nursing students’ resilience. Lately, nurse scholars have begun to examine moral factors influencing nursing students’ ethical orientations and moral resilience (Şen et al., 2017). However, no study could be found that empirically explored resilience in nursing students in relation to ethical ideology. Ethical ideology, as a concept in moral philosophy, may influence resilience in nursing students.

**Overview of Literature on Moral philosophy and Ethical ideology in Nursing**

Ethical ideology accounts for differences in individual moral reasoning and behaviour because it determines the ethical standards a person will use to judge morally concerning situations and evaluate the ethicality of human actions and practices (Forsyth et al., 2008; Sivadas et al., 2003; Valentine & Bateman, 2011). Ethical ideology is defined as an integrated system of personal ethics, encompassing beliefs, attitudes, and values that, in context, set the standard for behaviour (Abou Hashish & Ali Awad, 2019). Forsyth (1980) classified ethical ideologies broadly as ethical idealism and ethical relativism. According to Forsyth, the difference in the mean scores between the latter two ethical viewpoints denotes the degree to which an individual is either idealistic or relativistic (Barnett et al., 1994; Eastman et al., 2001). Accordingly, an individual who scores either high or low on either of the two dimensions (ethical idealism and ethical relativism), ethical ideology can be categorized further, either as “absolutists,” “situationists,” “subjectivists,” or “exceptionist” (Forsyth, 1980).

Forsyth and Nye (1990) contend that ethical idealists tend to avoid harmful actions towards others and believe that an act is either good or bad. Highly idealistic individuals believe in moral absolutes and use universal ethical principles (i.e., autonomy, justice, beneficence, respect, and dignity) standards to make value judgments about behaviours (Forsyth et al., 2008; Sivadas et al., 2003). Ethical relativists violate social norms for self-interest and do not believe in universal ethical principles for judging behaviours in context. Ethical relativists often rely on personal values but occasionally view some moral absolutes as desirable and are willing to make exceptions for them (Forsyth, 1992; Sivadas et al., 2003).

Ethical ideology in non-nursing students has been attributed to differences in ethical thinking and behaviours (Barnett et al., 1994). Caswell and Gould (2008) show that athletic training students and educators reported higher idealism scores than relativism scores. Education levels and gender account for significant differences in their idealism and relativism scores. Male athletic students compared to female students reported significantly higher relativism scores, whereas educators possess lower idealism and relativism but score higher in their ethical decision-making (Şen et al., 2017).

Ethical ideology has been explored among nurses in clinical practice (Hartranft, 2009; Ulrich et al., 2003) nurse educators (Abou Hashish & Ali Awad, 2019) and lately, nursing students (Şen et al., 2017; White et al., 2019). Among clinical practice nurses, ethical ideology influences professional values and nurse’s intentions to act accountably. In clinical practice, ethical idealism significantly affects professional values and the completion of a critical incident report related to patient care by nurses’ (Hartranft, 2009). An idealistic philosophy in nurse practitioners significantly predicts autonomy and is associated with autonomous practice
(Ulrich et al., 2003). Ethical ideology in nursing faculty is significantly related to moral judgement and ethical decision-making (Abou Hashish & Ali Awad, 2019).

In nursing students, ethical ideology is associated with professional values (Arries, 2019) self-identified culture, and intrinsic religiosity (White et al., 2019). In their study, White et al. (2019) found that students whose parents were not born in the United States scored higher on ethical idealism. Also, if English is not their primary language spoken at home, students scored higher on ethical idealism and relativism, suggesting a cultural link between ethical ideology, language, and birthplace. Şen et al. (2017) examine students’ ethics positions. They found no significant differences in the mean scores for ethics position between the field of study and the study year. However, in means scores for idealism, observed significant differences between years of study. Ethical ideology in nursing students is shown to influence moral reasoning, attitudes, and behaviours (Şen et al., 2017).

However, to the author’s knowledge, nursing students’ resilience has seldom been explored in relation to ethical ideology. No study could be found that has done so. Nursing students’ resilience is shown to differ across the individual. How and to what extend resilience differs in nursing students may be related to their ethical ideology. Therefore, to cultivate moral resilience in nursing education, it could be of interest to explore resilience in nursing students in relation to ethical ideology.

Aim of the Study

This study aimed to compare differences in scores of self-reported resilience and ethical ideology in undergraduate nursing students and explore possible relationships in the data and selected demographic characteristics.

Conceptual and Theoretical Model

Conceptually, this study is guided by theoretical underpinnings in Neuman’s Systems Model (Meleis, 2018; Neuman & Reed, 2007) and the grounded work of Wagnild and Young (1993, 1990) on resilience. Neuman’s Systems Model was chosen because of its holistic focus on the types of survival factors and interacting variables (i.e., developmental, spiritual) that can influence a person’s level of stability and integrity, in turn, health (Meleis, 2018; S. B. Turner & Kaylor, 2015). Wagnild and Young (1993, 1990) were chosen because of their focus on the concept of resilience. In this study, Neuman’s idea of survival factors will be measured as “resilience” and spiritual variables as “ethical ideology.” This study adopts Wagnild and Young’s (1993) definition of resilience and Forsyth’s (1980) definition of ethical ideology, respectively.

Wagnild and Young (1993) defined resilience as “a personality characteristic that moderates the negative effects of stress and promoted adaptation” (p. 165) and operationalized and measured it as self-reliance, meaningfulness, equanimity, perseverance, and existential aloneness (Wagnild, 2009). Self-reliance is a belief in oneself and one’s capabilities and finding the inner resources and confidence to manage life despite adversity. Meaningfulness was defined as having a sense of meaning or purpose in life and valuing one’s contributions that convey the sense of having something to live for. Equanimity refers to a balanced perspective of one’s life and experiences that enable a person to consider a range of experiences and his/her ability to moderate extreme responses to adversity. Perseverance was defined as the act of persistence despite adversity or discouragement that signified a willingness to reconstruct one’s life despite hardship. Existential aloneness was defined as the realization that each person’s life path is unique, which connotes aloneness, confers a feeling of freedom, self-acceptance, and a sense of uniqueness (Wagnild & Young, 1993). Ethical ideology is operationally defined by Forsyth (1980) as the degree to which an individual rejects universal moral rules (ethical idealism) in favour of ethical relativism. In this study, the author proposed that differences in nursing students’ self-reported resilience could be attributed to their ethical ideology. Students with high resilience will score higher on a measurement of ethical relativism rather than ethical idealism.

Methods

Design and Sample

A descriptive cross-sectional study was conducted among nursing students at a university bachelor’s degree nursing program in a western Canadian province. This design is appropriate to describe observations in data on the perceptions of resilience and ethical ideology, compare scores among participants on these two variables sets of data, explore relationships in the data sets and participants’ demographic variables.

An online encrypted survey questionnaire was administered to prospective participants during the 2016/2017 academic year. Prospective participants were recruited via an in-house nursing student communication portal. Convenient sampling was used to survey nursing students who met the following study inclusion criteria is register student in the undergraduate nursing program; who voluntary and without coercion, chose to participate and completed the survey after they read information about the study purpose, design elements, and their rights as participants; and have completed a recent clinical rotation in practice. The completion of a
current clinical practice rotation was a prerequisite for participation since stressors in clinical placement encounters can elicit emotional and physical experiences, which can impact perceived resilience. Undergraduate students who were not registered in the nursing program and did not have a clinical rotation were excluded from the study. A minimum sample of 80 participants was calculated a priori and could be sufficient under ideal circumstances. Estimates were based on bivariate correlation with a moderate effect size of 0.3, power of .80, and alpha ($\alpha$) = .05. The chosen alpha-level of .05, and a medium effect size of 0.3 with the two variables resilience and ethical ideology to reduce type II error, was deemed appropriate (Cohen, 1992). Given the exploratory nature of the research problem in this study, drawing conclusions about differences and relationships, based on an alpha level of significance of .05, which indicate a 5% risk of committing a to make a Type II error, but a 95% probability that the findings will be reliable and not spurious, was deemed acceptable. A chosen level of significance compares well to levels in similar studies in nursing education (Van Hoek et al., 2019).

**Instrument**

Resilience was measured using the 25-item Likert type Resilience Scale™ (Wagnild, 2009), developed from a grounded theory study on resilience in older women (Wagnild & Young, 1990). The researcher had permission for the non-commercial use of the 25-item Resilience Scale. This study adopts Wagnild and Young’s operational definition of resilience as defined elsewhere in this article (Wagnild & Young, 1993). Resilience was judged on a 5-point Likert scale (1=strongly disagree, and 5=strongly agree). This study’s internal consistency analysis yielded a Cronbach’s alpha of $\alpha=0.88$, which compares favourably to reliability scores in other published studies ranging from 0.85 to 0.94 (Wagnild & Young, 1993).

Ethical ideology was measured using Forsyth’s (1980) Ethics Position Questionnaire (EPQ), consisting of two domains, ethical idealism and ethical relativism, each measured based on ten items. Subjects rate their agreement or disagreement with the 20 items of the EPQ using a 5-point Likert scale of 5 (strongly agree) to 1 (strongly disagree). The internal consistency for this study yielded a Cronbach alpha of $\alpha=0.75$. This study adopts Forsyth’s operational definition of ethical ideology as defined elsewhere in this article (Forsyth, 1980). Permission to use the EPQ scale for non-commercial purposes was granted under the Creative Commons attribution non-commercial 3.0 licence.

**Procedures**

Survey information included a cover letter containing study and participant consent information and a two-part survey. The encrypted password-protected survey was conducted using Qualtrics, an online survey software program. In a non-teaching and non-nursing supervisor role, an E-learning coordinator independently distributed the encrypted password-protected survey to prospective participants via an in-house undergraduate nursing student communication portal. Interested participants clicked on the available link, which took them to the survey. After reading the study information, consenting participants voluntarily initiated and completed the survey, which lasted between 15 to 20 minutes. All participants who completed the survey were eligible to receive a $10 gift voucher to a local coffee shop.

**Ethical Considerations**

The study was ethically approved by the institutional Research Ethics Board (#2015-046) at the University. The research complied with ethical principles (i.e., respect for persons, concern for welfare, justice) as articulated in the Tri-Council Policy Statement (TCP-2) Ethical conduct for research involving humans (Canadian Institutes of Health Research et al., 2018). Prospective participants apprised themselves of the study information, consented and proceeded voluntarily, without coercion, to initiate and complete the survey. Before providing the researcher access to the data, the E-learning coordinator removed all identifiable participant information and assigned each participant a unique ID number. This was done to protect participants’ identity and privacy. Data sets contained only aggregated demographic information and participants’ raw scores for each study variable. Also, operational approval was secured from the undergraduate Operations Program Team (OPT), who manage and coordinate everyday operations of the undergraduate program to ensure that students learning time during a semester are not disproportionately overwhelmed by multiple requests to participate in surveys across the program.

**Data Analysis**

The Statistical Package for Social Sciences (SPSS) 2017 version 24.0 for Windows was used to analyze the data. Frequencies, percentages, means, and standard deviations summarised the demographic characteristics of participants. Participants’ mean scores for ethical idealism and ethical relativism were used to classify their ethical ideologies as either absolutist, exceptionist, subjectivist, or situationist (Forsyth, 1980). Independent t-test and one-way analysis of variance were calculated to explore differences in resilience and
ethical ideology scores and selected demographic characteristics. Pearson’s product-moment correlations were calculated to assess the relationships between dimensions of resilience and ethical ideology. Statistical significance of associations was defined by an alpha level using $p < 0.05$ as the cut-off point.

**Results**

**Sample Characteristics**

Based on sample size estimates, a minimum sample of 80 participants would have been deemed sufficient to be recruited to participate in this exploratory study. From a target population of 1,197, 105 participant surveys were returned, sixteen surveys were incomplete, containing some demographic data but no scale data. Incomplete surveys were excluded from the final sample. Completed data surveys containing both demographic and scale data were returned by 89 nursing students, which constituted the study’s sample size (see Table 1). Demographic characteristics of undergraduate nursing students surveyed are reflected in Table 1. Participants were predominantly female (89%) and between the ages 20 to 24 years. The gender distribution between female participants (89%) and male participants (11%) in the sample was not different from most nursing schools found in the study’s geographic area. The gender distribution also corresponds to local and national demographic norms for students in most undergraduate nursing programs. In terms of year of study, most students were in their second year of study (41.6%), followed by students in their first year (26%). Most students completed a clinical rotation in long-term care (31.5%) and lasted 1 to 4 weeks (70%) in duration. Ethical relativism characterized the dominant ethical ideology among 53.9% (n = 48) of respondents in the sample. In the ethical relativist sub-group, moral subjectivists constituted the dominant pattern among 32.6% (n = 29) of respondents.

**Self-Reported Resilience and Ethical Ideology in Undergraduate Nursing Students**

Table 2 reflects a summary of participants’ mean scores and standard deviations for self-reported resilience and ethical ideology. On a measure of self-reported resilience, the overall mean for the group on a measure of resilience (M = 4.05): self-reliance (M = 4.26), meaning (M = 4.25), equanimity (M = 3.80), perseverance (M = 4.16), and aloneness (M = 3.77), respectively. On a measurement of self-reported resilience, the mean score for students among the different age groups was relatively similar. The mean score for students, age group 19 years and younger (M = 4.07 ± SD = 0.39) was relatively higher compared to students in group 20 to 24 years (M = 4.05 ± SD = 0.46) and those 25 years and older (M = 4.03 ± SD = 0.39), respectively. However, the mean score for students in the age group 25 years and older (M = 3.74 ± SD = 0.55) on the resilience sub-scale item for equanimity, was the lowest among the other age groups. In terms of gender, the mean score for female students on a measure of self-reported resilience (M = 4.08 ± SD = 0.40) was higher than for male students (M = 3.76 ± SD = 0.45). Similarly, male students on average (M = 3.40 ± SD = 0.57) the mean scored lower on the resilience sub-scale item for equanimity compared to female students (M = 3.85 ± SD = 0.50). Based on year of study, students in their first year (M = 3.90 ± SD = 0.42) compared those in their second (M = 4.15 ± SD = 0.44), third year (M = 4.04 ± SD = 0.33), and fourth year (M = 4.03 ± SD = 0.40) respectively, had the lowest score on a measure of resilience.

On a measure of self-reported ethical ideology, the overall scale means for ethical idealism (M = 4.02) and ethical relativism (M = 3.18), respectively. The mean score on the sub-scale ethical relativism for students in the age group 20 to 24 years (M = 3.01 ± SD = 0.67) was the lowest compared to students 19 years and younger (M = 3.52 ± SD = .56) and 25 years and older (M = 3.11 ± SD = 0.68), respectively. Similarly, in terms of gender, male students (M = 3.13 ± SD = 0.68) scored lower on the subscale ethical relativism than did female students (M = 3.38 ± SD = 0.43). In terms of year of

**Table 1. Background Characteristics of Undergraduate Nursing Students (n = 89).**

| Demographics      | Frequency (n) | Percentage (%) |
|-------------------|---------------|----------------|
| **Age**           |               |                |
| 19 and younger    | 25            | 28.1           |
| 20 to 24 years    | 37            | 41.6           |
| 25 years and older| 27            | 30.3           |
| **Gender**        |               |                |
| Female            | 79            | 89             |
| Male              | 10            | 11             |
| **Year of study** |               |                |
| First             | 23            | 25.8           |
| Second            | 37            | 41.56          |
| Third             | 15            | 16.9           |
| Fourth            | 14            | 15.7           |
| **Ethical ideology** |              |                |
| **Idealism**      |               |                |
| Absolutist        | 15            | 16.9           |
| Exceptionist      | 26            | 29.2           |
| **Relativism**    |               |                |
| Subjectivist      | 29            | 32.6           |
| Situationist      | 19            | 21.3           |

M: mean; SD: standard deviation.

Scoring: Likert-type scale from 1 = strongly disagree to 5 = strongly agree.
study, the mean for fourth-year students on the sub-scale ethical relativism (M = 2.93 ± SD = 0.78) compare to all the other year groups was among the lowest.

**Differences in Resilience and Ethical Ideology and Selected Demographic Variables**

Table 3 presents an analysis of differences in resilience and ethical ideology scores based on gender. The results of the independent sample t-test (2-tailed) indicated a significant difference in the overall mean scores between male students (M = 3.76 ± SD = 0.45) and female students (M = 4.08 ± SD = 0.40) on a measure of self-reported resilience. Similarly, a significant difference in the mean score for male students (M = 3.40 ± SD = 0.57) compare to female students (M = 3.85 ± SD = 0.50) were observed. Male students compared to their female counterparts scored significantly lower on a measure of self-reported resilience. Similarly, a significant difference in the mean self-reliance scores in this cohort was explained by their age. Post-hoc analyses using Tukey’s HSD procedure revealed the mean scores across the different year of study subgroups on a measure of the resilience sub-scale was not statistically significantly different.

In terms of ethical ideology and selected demographic variables, a significant difference was detected in the mean scores between ethical relativism and age (F (2, 86) = 4.817, p < .010, η²_p = .101). This finding suggests that their age explained 10.1% of the variability in nursing students' self-reliance scores in this cohort was explained by their study year. Post-hoc analyses using Tukey’s HSD procedure revealed significant differences between the mean ethical relativism scores among students in different age groups, with students, 19 years and younger (M = 3.52 ± SD = 0.56) was demonstrating significantly higher scores (p = .009), than students in group 20 to 24 years (M = 3.01 ± SD = 0.67) and those 25 years and older (M = 3.11 ± SD = 0.68).
This finding suggests that younger students in this cohort are ethically more relativistic than their older counterparts. Similarly, a significant difference was detected in the mean scores between ethical relativism and year of study ($F(3, 85) = 3.784, p < .013, \eta^2_p = .118$). This finding suggests that 11.8% of the variability in nursing students' ethical relativism scores was explained by their study year. Post-hoc analyses indicated that the mean for students in their first year of study ($M = 3.52, SD = 0.63$) compared to students in their second year ($M = 3.02, SD = 0.63$) scored significantly higher on a measure of ethical relativism ($p = .023$). Similarly, the mean ethical relativism score for students in their first year of study compared to those in their fourth year of study ($M = 2.93, SD = 0.78$) demonstrated significantly ($p = .042$) higher scores. This finding suggests that senior students in this cohort, compared to their junior counterparts, are more ethically idealistic from an ethical viewpoint.

**Table 3. Results of the Independent t-Test.**

| Parameter     | Female M (SD) | Male M (SD) | t(df) | p   | Hedges' g |
|---------------|---------------|-------------|-------|-----|-----------|
| Resilience    | 4.08 (.40)    | 3.76 (.45)  | -2.327 (87) | .022 | -.780     |
| Self-reliance | 4.29 (.45)    | 4.00 (.65)  |       |     |           |
| Meaning       | 4.29 (.55)    | 3.92 (.65)  |       |     |           |
| Equanimity    | 3.85 (.50)    | 3.40 (.57)  | -2.625 (87) | .010 | -.881     |
| Perseverance  | 4.18 (.46)    | 4.06 (.50)  |       |     |           |
| Aloneness     | 3.82 (.67)    | 3.46 (.60)  |       |     |           |
| Ethical ideology |          |             |       |     |           |
| Idealism      | 4.04 (.47)    | 3.92 (.61)  | -2.743 (87) | .010 | .101 .118 |
| Relativism    | 3.58 (.43)    | 3.13 (.68)  | 1.972 (87)  | .052 |           |

M: mean; SD: standard deviation.
Scoring: Likert-type scale from 1 = strongly disagree to 5 = strongly agree.
p < .05.

**Table 4. Means, Standard Deviations, and One-way Analysis of Variance.**

| Parameter/variable | Age M (SD) | Year of study M (SD) | ANOVA | F | df | p | \eta^2 |
|--------------------|------------|----------------------|--------|---|----|---|-------|
| Resilience         | 4.05 (.42) | 4.05 (.42)           | 1.676  | 3 | .178 | .056 |
| Self-reliance      | 4.26 (.48) | 4.26 (.48)           | 3.741  | 3 | .014 | .117 |
| Meaning            | 4.25 (.57) | 4.25 (.57)           |        |   |     |     |
| Equanimity         | 3.80 (.52) | 3.80 (.52)           |        |   |     |     |
| Perseverance       | 4.16 (.46) | 4.16 (.46)           |        |   |     |     |
| Aloneness          | 3.77 (.67) | 3.77 (.67)           |        |   |     |     |
| Ethical ideology   |            |                      |        |   |     |     |
| Idealism           | 4.02 (.49) | 4.02 (.49)           | 4.817  | 86 | .010 | .101 |
| Relativism         | 3.18 (.67) | 3.18 (.67)           | 3.784  | 85 | .013 | .118 |

M: mean; SD: standard deviation.
Scoring: Likert-type scale from 1 = strongly disagree to 5 = strongly agree.
p < .05.

Finally, Table 5 introduces the correlations between dimensions of resilience, ethical ideology, and participant demographic data. The data were subjected to inferential statistical analysis using the Pearson correlation coefficient to analyze the association between resilience and ethical ideology. Correlations between study variables resilience and ethical ideology were not significant. However, when study variables were correlated with selected demographic variables (i.e., gender, age, and year of study), four coefficients were statistically significant (see Table 3 for a summary of correlational values). Resilience was positively correlated with gender ($r = .242, p < .022$). A weak correlation was found between the resilience subscale equanimity and gender ($r = .271, p < .010$), which was statistically significant. Ethical relativism was significantly inversely correlated...
with age \((r = .227, p < .033)\) and year of study \((r = -.216, p < .042)\) respectively.

**Discussion**

This study explored undergraduate nursing students’ perceptions of resilience and ethical ideology and explored the influences between these study variables and selected participant demographic variables. The results show that undergraduate nursing students have a high level of perceived resilience. Significant differences in self-reported resilience across selected demographic variables were found. Differences in self-reported resilience in undergraduate nursing students might be attributed to personal factors (i.e., differences in personal values and beliefs, self-perceptions of relatedness, balanced perspective), inter-personal and contextual factors (i.e., gender dynamics, social supports). However, the results do not support the supposition that differences in resilience scores were related to students’ ethical ideology. No significant associations were found between resilience and the ethical ideology subscales, ethical idealism, and ethical relativism.

In this study, nursing students scored high on perceived resilience. This finding is consistent with previous studies reporting high resilience levels among nursing undergraduates (Chow et al., 2018). Higher levels of resilience are shown to predict academic success, intention-to-leave, and dropout (Van Hoek et al., 2019) and are associated with reflecting on situations and emotional reactions (Gillespie et al., 2014). Resilience enables students to navigate interpersonal relationships, cope with stressors (Pines et al., 2014) and develop moral character (Lachman, 2016).

In this study, high levels of self-reported resilience in students may reflect their determination, maturity, learning experiences, and an emphasis on resilience in their curriculum. Studies (Pines et al., 2012, 2014; Reyes et al., 2015b) showed that nursing students’ resilience allows them “push through” situations of adversity while balanced competing demands (i.e., family responsibilities vs. academic responsibilities) to overcome challenging situations and persevere in accomplish their goals. Resilient students can “stay the course” and, with relevant faculty support, enact effective resilience-building strategies (i.e., mindfulness, reflection, moral sensitivity) to overcome adversity, leaving them with a sense of self-reliance and empowerment.

Furthermore, in this study, students on average, scored higher on three of the five factors on the resilience subscale, including self-reliance, meaning, and perseverance. Studies (Van Hoek et al., 2019) have demonstrated that people with higher resilience have an essential quality in common. That is, they can safeguard their stress balance through enacting stress reduction activities.
Optimism, positive coping, and firmness, as characteristics of resilient people, are associated with improved mental health (Connor & Davidson, 2003); and positive adaptive behaviours (Pines et al., 2012; Taylor & Reyes, 2012).

Good interpersonal relationships, high academic grades, and having a role model are associated with increased academic resiliency (Hwang & Shin, 2018; Van Hoek et al., 2019). In turn, high resilience and low emotional exhaustion are shown to be predictors of psychological health in nursing students (Rios-Risquez et al., 2016). Students with higher resilience levels are less likely to engage in self-destructive behaviours, experience burnout and moral distress but more likely to experience well-being (Chow et al., 2018). In this present study, higher student resilience student levels might be attributed to their sense of self-determination and self-efficacy, which corresponds to previous studies’ findings (Reyes et al., 2015a; Taylor & Reyes, 2012). Self-determination is associated with high skill recognition, confidence, and competence (Pines et al., 2012). Thus, self-reliant and self-directed individuals have confidence in their resilience capabilities. Their internal locus of control helps them focus on the positive aspects of a situation and achieve goals, persevere, and flourish.

This study shows that resilience varies according to demographic characteristics. In this study, male students’ mean resilience scores were significantly lower than their female counterparts. Notably, male nursing students scored significantly lower on the equanimity dimension of the resilience scale. A lower equanimity score might suggest some unrealistic expectations in the individual to consider a broader range of experiences to respond and adapt to situations of adversity, and in turn, could affect male student’s mean resilience score.

The self-reported nature of resilience scores in this study, while recognizing the uniqueness of nursing students as individuals, gender differences in resilience and equanimity scores might be attributed to the gender dynamics in the nursing discourse, unrealistic expectations, differences in experiences of vulnerability, and coping strategies. Previous studies in nursing students’ (Chen & Hung, 2014) have shown that such reactions can differ statistically significantly between students of different genders. Furthermore, nursing students across genders employed different resilience adaptive strategies to respond to emotional stress (McCarthy et al., 2018; Zhang et al., 2016), which can positively affect their readiness to care, learn from painful experiences, and develop resilience, or lead to moral distress in students (Amsrud et al., 2019; J. Thomas et al., 2012). Differences in responses to stressors or relatively lower scores of resilience in male students might also be attributed to their minority status in nursing and the nursing curriculum’s feminine nature (Christensen & Knight, 2014; McCarthy et al., 2018). Studies demonstrated that male students are more likely to experience exclusion, marginalization, feeling scrutinized, or is expected to perform at a higher level, and experience more pressure to be assertive and take on leadership roles (Dyck et al., 2009; Koch et al., 2015; Smith et al., 2020). Hence, such experiences can leave male students to feel at-risk and vulnerable and, in turn, negatively affect their stress adaptation, well-being and learning. After all, gender role conflict, coupled with academic stress coping ability and social support, are shown to significantly affect male students’ adaptions to college life (Jeon & Yeom, 2014; Pulido-Martos et al., 2012). However, the holistic and evolving nature of resilience suggests that lower equanimity scores in male nursing students might be transient rather than permanent. Lower equanimity scores can be improved and strengthened through resilience capacity-building strategies such as positive role modelling, ethics education, self-efficacy, and mindfulness. In this vein, Cuadra and Famadico (2013) found significant correlations between emotional intelligence and resilience and caring behaviour in male nursing students.

In terms of age and year of study, this study found no significant differences between self-reported resilience scores for age and year of study in this study’s cohort. Analysis of variance showed a significant difference between the year of study and the resilience subscale self-reliance; however, posthoc analysis revealed that the observed difference among the subgroups was not significant. These findings are consistent with results from previous studies. For example, in their research, Pitt et al. (2014) also found that resilience scores do not statistically differ over time. Conversely, Taylor and Reyes (2012) in their study examining influences between resilience and test scores in undergraduate nursing students between the beginning and end of a semester, found a statistically significant difference. These researchers show that over time, median rankings scores on resilience subscales perseverance and existential aloneness increase significantly (L. J. Thomas & Revell, 2016).

Furthermore, Pitt et al.’s (2014) study on student personal qualities of resilience shows that more senior students scored higher on resilience measurement than their younger counterparts (L. J. Thomas & Revell, 2016). The higher level of perceived resilience in more senior students than their younger counterparts may reflect their personal growth and maturity from prolonged experience in courses and clinical practice exposure. Studies show that with age and years of study experience, resilience in undergraduate nursing students not only enables them to overcome obstacles and persevere but allows them to successfully achieve personal and academic goals (Reyes et al., 2015b).
study, high levels of self-reported resilience in this cohort of students may be attributed to an emphasis on resilience in their undergraduate nursing education curriculum. Studies show that students can learn resilience, and as individuals can resist adversity and respond to it in positive and constructive ways (Stephens, 2013).

A concept analysis study by Gillespie et al. (2007) identified that a realistic worldview or ideology is an important antecedent of resilience in nursing students. With the intent to cultivate moral resilience in nursing students, this current study was interested in examining the supposition that differences in resilience scores among undergraduate nursing students could be attributed to their ethical ideology. However, the association between self-reported resilience and ethical ideology in undergraduate nursing students was found not to be statistically significant. The study also found that junior students tend to be more ethically relativistic than their senior counterparts, who are more ethically idealistic.

Strengths and Limitations

Some limitations of this study should be noted. Firstly, it used a convenient sample based on self-reported cross-sectional data, making inferences about causality and generalizations less feasible. Secondly, the unequal number of individuals in separate gender groups suggests that statistical findings related to gender differences should be interpreted cautiously. Survey results may have been influenced by events (i.e., negative or positive) a participant might have experienced that coincided with the time they completed the survey but unknown to the researcher.

Implications for Nursing Education, Practice and Research

Findings from this study can be helpful to inform the curriculum revisions and help guide the selection of supportive and resilience strategies to help students cope with stressors while remaining mindful of the influence of gender dynamics on coping abilities of students, cultivate moral resilience, and empower nursing students to navigate situations of ethical stress and difficulty to preserve their integrity, and perhaps, in turn, prevent moral distress. Resilience and ethical ideology are valuable resources in cultivating moral reasoning and moral resilience in nursing students. The latter are necessary competencies for ethical decision-making in nursing that enable students to respond to adversity situations and strengthening their well-being and moral integrity. Implementing supportive strategies like mindfulness, value clarification, ethical competence, and narrative storytelling can help accomplish the outcomes mentioned above (Lachman, 2016; K. Turner & McCarthy, 2017). Also, paying attention to the cognitive and moral determinants of resilience might help inform the conceptual development and measurement of moral resilience in nursing education. This requires a comprehensive understanding and clear distinction about the associated variables of resilience in nursing students and how this might influence ethical reasoning and decision-making outcomes in future practice.

Conclusion

This study aimed to explore perceived resilience and ethical ideology among undergraduate nursing students, compare differences in scores among participants, and explore relationships between study variables and selected demographic characteristics. The author hypothesized that differences in undergraduate nursing students’ resilience patterns could vary as a function of their ethical ideology. Students with higher self-reported resilience scores will score higher on a measurement of ethical relativism than ethical idealism. In this current study, the association between self-reported resilience and ethical ideology was found not to be statistically significant. This present study shows that undergraduate nursing students have a high capacity for resilience and that resilience patterns vary among students due to age, gender, and year of study, not their ethical ideology. Furthermore, this study shows that although male and female students scored high on resilience, that lower scores on equanimity in male students, resilience might be at risk, which might negatively affect their health and well-being. Thus, while cultivating moral resilience in nursing students, nurse educators should also pay attention to gender dynamics and how it may influence male students’ understanding and enactment of resilience.

Acknowledgments

The author is grateful to nursing students who have participated in this survey study. The author is also thankful to R.K. for his assistance and support in setting up the online survey.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported through start-up funding by the Office of the Vice-President (Research) Fund at the University of Regina, amounting to $5,000.
References
Abou Hashish, E. A., & Ali Awad, N. H. (2019). Relationship between ethical ideology and moral judgment: Academic nurse educators’ perception. Nursing Ethics, 26(3), 845–858. https://doi.org/10.1177/0969733017722825
Amsrud, K. E., Lyberg, A., & Severinsson, E. (2019). Development of resilience in nursing students: A systematic qualitative review and thematic synthesis. Nurse Education in Practice, 41, 102621. https://doi.org/10.1016/j.nepr.2019.102621
Arries, E. J. (2019). Professional values and ethical ideology: Perceptions of nursing students. Nursing Ethics, 27(3), 726–740. https://doi.org/10.1177/096973301989396
Barnett, T., Bass, K., & Brown, G. (1994). Ethical ideology and ethical judgement regarding ethical issues in Business. Journal of Business Ethics, 13, 469–480.
Beauvais, A. M., Stewart, J. G., DeNisco, S., & Beauvais, J. E. (2014). Factors related to academic success among nursing students: A descriptive correlational research study. Nurse Education Today, 34(6), 918–923. https://doi.org/10.1016/j.nedt.2013.12.005
Caswell, S. V., & Gould, T. E. (2008). Individual moral philosophies and ethical decision making of undergraduate athletic training students and educators. Journal of Athletic Training, 43(2), 205–214. https://doi.org/10.4085/1062-6050-43.2.205
Chen, Y., & Hung, C. (2014). Predictors of Taiwanese baccalaureate nursing students’ physio–psycho-social responses during clinical practicum. Nurse Education Today, 34(1), 73–77. https://doi.org/10.1016/j.nedt.2013.02.021
Chow, K. M., Tang, W. K. F., Chan, W. H. C., Sit, W. H. J., Choi, K. C., & Chan, S. (2018). Resilience and well-being of university nursing students in Hong Kong: A cross-sectional study. BMC Medical Education, 18(1), 13. https://doi.org/10.1186/s12909-018-1119-0
Christensen, M., & Knight, J. (2014). “Nursing is no place for men”-A thematic analysis of male nursing students experiences of undergraduate nursing education. Journal of Nursing Education and Practice, 4(12), 95–104. https://doi.org/10.5430/jnep.v4n12p95
Cohen, J. (1992). Quantitative methods in psychology: A power primer. Psychological Bulletin, 112(1), 155–159.
Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). Depression and Anxiety, 18(2), 76–82. https://doi.org/10.1002/da.10113
Cuadra, D. S., & Famadico, L. F. (2013). Male nursing students’ emotional intelligence, caring behavior and resilience. International Journal of Arts & Sciences, 6(3), 243. https://search.proquest.com/docview/1496695576
Dyck, J. M., Olliffe, J., Phinney, A., & Garrett, B. (2009). Nursing instructors’ and male nursing students’ perceptions of undergraduate, classroom nursing education. Nurse Education Today, 29(6), 649–653. https://doi.org/10.1016/j.nedt.2009.02.003
Eastman, J. K., Eastman, K. L., & Tolson, M. A. (2001). The relationship between ethical ideology and ethical behavior intentions: An exploratory look at physicians’ responses to managed care dilemmas. Journal of Business Ethics, 31(3), 209–224.
Forsyth, D. R. (1980). A taxonomy of ethical ideologies. Journal of Personality and Social Psychology, 39(1), 175–184.
Forsyth, D. R. (1992). Judging the morality of business practices—The influence of personal moral philosophies. Journal of Business Ethics, 11(5), 461–470.
Forsyth, D. R., & Nye, J. L. (1990). Personal moral philosophies and moral choice. Journal of Research in Personality, 24(4), 398–414. https://doi.org/10.1016/0092-6566(90)90030-A
Forsyth, D. R., O’Boyle, E. H., Jr., & McDaniel, M. A. (2008). East meets West: A meta-analytic investigation of cultural variations in idealism and relativism. Journal of Business Ethics, 83(4), 813–833.
Gibbons, C. (2010). Stress, coping and burn-out in nursing students. International Journal of Nursing Studies, 47, 1299–1309. https://doi.org/10.1016/j.ijnurstu.2010.02.015
Gibbons, C., Dempster, M., & Moutray, M. (2011). Stress, coping and satisfaction in nursing students. Journal of Advanced Nursing, 67(3), 621–632. https://doi.org/10.1111/j.1365-2648.2010.05495.x
Gibson, E., Duke, G., & Alfred, D. (2020). Exploring the relationships among moral distress, moral courage, and moral resilience in undergraduate nursing students. The Journal of Nursing Education, 59(7), 392–395. https://doi.org/10.3928/01484834-20200617-07
Gillespie, B. M., Chaboyer, W., & Wallis, M. (2009). The influence of personal characteristics on the resilience of operating room nurses: A predictor study. International Journal of Nursing Studies, 46, 968–976. https://doi.org/10.1016/j.ijnurstu.2007.08.006
Gillespie, B. M., Chaboyer, W., & Wallis, M. (2014). Development of a theoretically derived model of resilience through concept analysis. Contemporary Nurse: A Journal for the Australian Nursing Profession, 25(1-2), 124–135. https://doi.org/10.5172/conu.2007.25.1-2.124
Gillespie, B. M., Chaboyer, W., Wallis, M., & Grimbeek, P. (2007). Resilience in the operating room: Developing and testing of a resilience model. Journal of Advanced Nursing, 59(4), 427–438. https://doi.org/10.1111/j.1365-2648.2007.04340.x
Grace, P., & Milliken, A. (2016). Educating nurses for ethical practice in contemporary health care environments.
S¸en, E., Dal, N. A., Sasso, L., Bagnasco, A., Bianchi, M., Bressan, V., & Thomas, J. (2012). Resilience to stress and anxiety among nursing students. Nursing Ethics, 20(5), 457–469. https://doi.org/10.1177/0969733012442284

Thomas, K., & McCarthy, V. L. (2017). Stress and anxiety among nursing students: A review of intervention strategies in literature between 2009 and 2015. Nurse Education in Practice, 22, 21–29. https://doi.org/10.1016/j.nepr.2016.11.002

Turner, S. B., & Kaylor, S. D. (2015). Neuman systems model as a conceptual framework for nurse resilience. Nursing Science Quarterly, 28(3), 213–217. https://doi.org/10.1177/0894318415585620

Ulrich, C., Soeken, K., & Miller, N. (2003). Predictors of nurse practitioners’ autonomy: Effects of organizational, ethical, and market characteristics. Journal of the American Academy of Nurse Practitioners, 15(7), 319–325. https://doi.org/10.1111/j.1745-7599.2003.tb01315.x

Valentine, S. T., & Buteman, C. R. (2011). The impact of ethical ideologies, moral intensity, and social context on sales-based ethical reasoning. Journal of Business Ethics, 102(1), 155–168. https://doi.org/10.1007/s10551-010-9789-5

Van Hoek, G., Portzky, M., & Franck, E. (2019). The influence of socio-demographic factors, resilience and stress reducing activities on academic outcomes of undergraduate nursing students: A cross-sectional research study. Nurse Education Today, 72, 90–96. https://doi.org/10.1016/j.nedt.2018.10.013

Wagnild, G. (2009). A review of the resilience scale. Journal of Nursing Measurement, 17(2), 105–113.

Wagnild, G., & Young, H. M. (1990). Resilience among older women. Journal of Nursing Scholarship, 22(4), 252–255. https://doi.org/10.1111/j.1547-5069.1990.tb00224.x

Wagnild, G., & Young, H. M. (1993). Development and psychometric evaluation of the Resilience Scale. Journal of Nursing Measurement, 1(2), 165–178. https://www.ncbi.nlm.nih.gov/pubmed/7850498

White, J. H., Peirce, A. G., & Jacobowitz, W. (2019). The relationship amongst ethical position, religiosity and self-identified culture in student nurses. Nursing Ethics, 26(7-8), 2389–2412. https://doi.org/10.1177/0969733018792738

Young, P. D., & Rushton, C. H. (2017). A concept analysis of moral resilience. Nursing Outlook, 65(5), 579–587. https://doi.org/10.1016/j.outlook.2017.03.009

Zhang, P., Li, C., Zhao, Y., Xing, F., Chen, C., Tian, X., & Tang, Q. (2016). The mediating role of emotional intelligence between negative life events and psychological distress among nursing students: A cross-sectional study. Nurse Education Today, 44, 121–126.