

Gender, numbers and beyond: The case of criminology program in DOrSU, City of Mati, Philippines

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ABSTRACT

Access to and success in higher education is shaped by various factors, including, but are not limited to, gender, gendered identities, and gender-related subjectivities. While there has been rich literature in gender-higher education nexus, the utilization of gender analysis in specific gender-stereotyped degree programs such as Criminology, although widely offered in the entire country, remains understudied. Recognizing the impressive progress of enterprising and mainstreaming GAD norms in the Philippines compared to its peers in Asia, there remains a need to understand how gender sets in motion beyond rhetoric and how it entangles everyday practices. This study attempts to interrogate the Criminology program's temporal development and social determinants from the lenses of gender through trend analysis and in-depth interview methods. We found that Criminology in DOrSU is significantly male-dominated since the program commenced operations in 2009. Although unsurprising, it is worth noting that females record a higher survival rate than males. The latent gender issues and coping strategies contributing to the program's notable trend were also uncovered, providing a more comprehensive understanding of females and other non-masculine genders' narrowed access to the program. To tighten the existing gender gap in Criminology, we recommend a policy reform that encourages gender-inclusive opportunities.

Keywords: *Criminology, higher education, gender, Davao Oriental*

INTRODUCTION

Criminology, as a discipline, displayed a significant gender bias, being dominated by males (Chesney-Lind & Chagnon, 2016; Hearn, 2003; Becker & McCorkel, 2011). This fact is indicative of a perennial and temporal controversy of male dominance. Also, rich literature demonstrates the underrepresentation of women and under-emphasis of the importance of gender equality in the field (Painter & Farrington, 2004; Cook, 2016). Although feminist Criminologists have gradually influenced the discipline's mindscape, gender discrimination is still prevalent and victimizes both sexes (Kollyamer et al., 2016). Hence, there is a need to devise and strategize multiple approaches towards a more intellectually diverse, inclusive, and complete discipline.

Educational access for females and non-masculine males is tightened by traditional gender role orientation. They tend to oversubscribe disciplines like Education and Nursing, but not Criminology (Porter & Umbach, 2006). Severiens and Dam (2011) suggested that females tend to pursue and are successful in female-dominated programs. The very few females who enroll in Criminology are motivated by personal interests and career opportunities (Colico et al., 2015). These factors, however, do not sustain an adequate number of females in the field.

Davao Oriental State University (DOrSU), a state-funded higher education institution (HEI) located in the City of Mati, Davao Oriental, currently offers an

undergraduate program in Criminology. Since its opening in 2009, the program is male-dominated, although not verified by any gender study. This study is the first attempt to investigate the Criminology program's temporal development from 2009 until 2018. Both the enrollment and graduation trends are descriptively analyzed, comparing the figures of females and males who have access and become successful in the program.

This study explores the gender issues and coping strategies of pre-service Criminologists to provide insights into the program's access and success from the lenses of gender. In addition, the enrollment and graduation trends were analyzed in terms of sex as an approach to determine gender parity in the Criminology program.

METHODOLOGY

Research Locale and Duration

This study was conducted in the Davao Oriental State University (DOrSU), formerly known as Davao Oriental State College of Science and Technology (DOSCST) in Davao Oriental. DOrSU is a public Higher Education Institution (HEI) established through Republic Act No. 11033, catering to students from different parts of Davao Oriental and its neighboring communities. As an institution of science and technology, it offers Teacher Education, Agriculture and Life Sciences, Business and Public Affairs, and Computing and Engineering programs.

The data were gathered from the different campuses of DOrSU (main campus in the City of Mati, San Isidro Extension, Banaybanay Extension and Cateel Extension Campuses) within the period of November to January 2019.

Research Design

This study utilized both quantitative and qualitative research designs. It involves the quantitative-descriptive analysis of females' and males' enrollment,

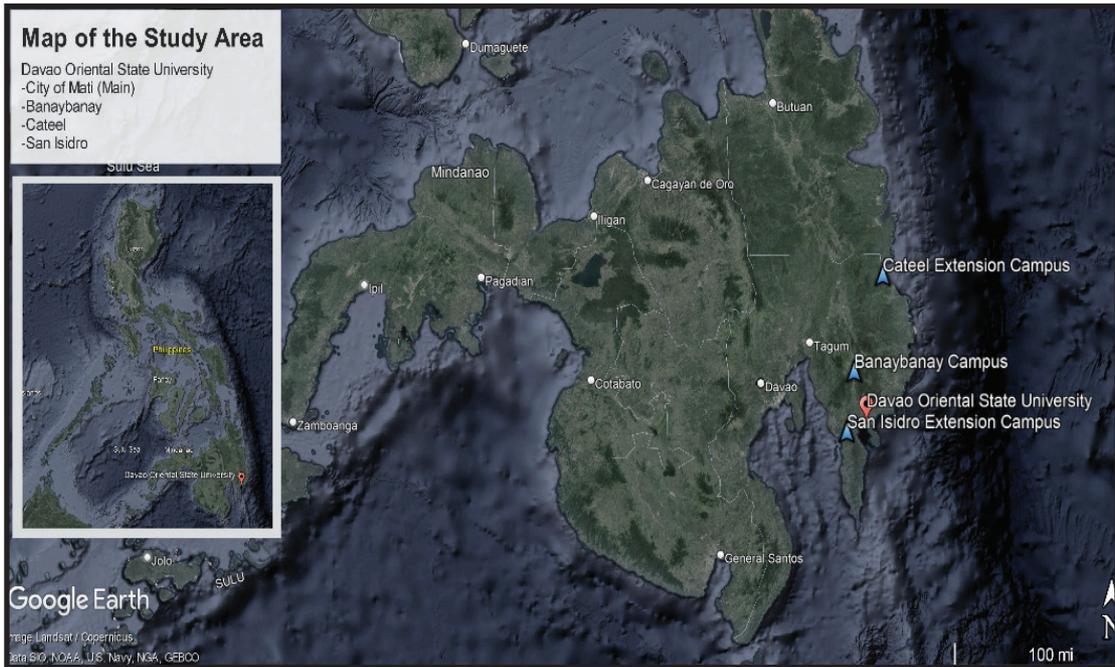


Figure 1. Location of Davao Oriental State University (DOrSU) campuses in Davao Oriental, Philippines.

graduation, and survival trends in the Criminology program. The trend was analyzed from the enrollment and graduation data. Also, a qualitative inquiry was conducted to investigate the gender issues and coping mechanisms of pre-service Criminologists in the university.

Source of Data

The study utilized both primary and secondary sources of data. Primary data are retrieved by conducting in-depth interviews with eight pre-service

Criminologists representing different gender groups (i.e., female, male, gay, bisexual, & transgender). Their responses focused on gender-related issues and coping mechanisms. On the other hand, to determine the enrollment, graduation trends, and survival rate of the BS in Criminology from 2009 until 2018, secondary data were collected from the DOrSU Registrar's Office (2020). This office is responsible for keeping students' records, including enrollment and graduation.

Sampling Technique

A purposive sampling technique was employed in this study to identify the participants in the in-depth interview. A total of eight participants representing different gender groups: one male, one female, one gay, two lesbians, and three bisexuals were interviewed. It is worth noting that some gender orientations are difficult to find, especially in a male-dominated program like the BS in Criminology. As such, the researchers also employed snowball sampling. This technique involved identifying a participant who freely expresses his gender orientation and is personally acquainted with others who may qualify as participants in this study. The researchers started interviewing one lesbian who named other individuals.

In-Depth Interviews

This study employed in-depth interviews with eight students who are presently enrolled in the BS Criminology program of the university. The researchers interviewed one male, one female, one gay, two lesbians, and three bisexual students. Full-length interviews were recorded and transcribed verbatim to ease the data analysis.

Data Analysis

Gender Parity Index

Gender Parity Index (GPI) refers to a socioeconomic measure to determine females' and males' relative access to

education (Gadoth & Heyman, 2020). The enrollment and graduation data were categorized by sex, noting the frequency of females and males who enrolled and graduated in the BS in Criminology program from SY 2009 to 2018. The GPI was calculated by dividing the number of females by the number of males. A zero GPI indicates no participation or representation of females. The GPI value of 1.00 indicates equal participation among females and males. Also, >1.00 GPI value indicates that females record higher participation compared to males.

Survival Rate

Survival refers to the rate at which a student succeeds in the Criminology program. It pertains to the number of individuals, either female or male, who enrolled and graduated in the program. Since Criminology is a four-year program, the survival rate is determined by dividing the number of graduates by the number of enrollees using a 4-year interval (i.e., graduate data in SY 2012-2013 divided by the enrollment data in SY 2009-2010) (Gropello, 2003). In this study, different survival rates were computed for females and males.

Simple Thematic Analysis

The use of simple thematic analysis for the responses of the eight (8) participants was also employed. The participants' responses were audio-recorded and transcribed verbatim. Next, the transcriptions were carefully reviewed to identify different codes. These codes

are repeating participants' responses that correspond to this study's problem (i.e., gender-related issues and coping mechanisms). The codes were then clustered to identify emerging themes.

Ethical Consideration

The research permit was secured from the DOrSU's Office of the University President, approving the collection of secondary data and qualitative interviews. Under the Data Privacy Policy of the institution, all personal data collected are confidential. Also, the participants were asked about their Free and Informed Consent, indicating their voluntary and willful participation in this study.

RESULTS AND DISCUSSION

BS in Criminology

The Davao Oriental State University (DOrSU) is currently offering a Bachelor of Science in Criminology program under the Institute of Business and Public Affairs (IBPA). BS in Criminology is a 4-year undergraduate degree program intended for individuals who wish to have a career in the fields of law enforcement, security administration, crime detection, and prevention of correctional administration. The offering of the said program in DOrSU commenced in 2009 and is still offered up to date. This study included students who enrolled and graduated in the program from its birth year until 2018.

Enrollment

The BS Criminology program records a significantly male-dominated enrollment since the program's inception in 2009. From 2009 to 2018, female enrollment is 52.50% lower compared to males (GPI=0.52). These data agree with the Commission on Higher Education (CHED) (2019), ranking Criminology as the Top 2 male populated program in SY 2018-2019, next to Information Technology.

The Sex-Disaggregated Data in Davao Region reveals that Criminology, Engineering, Information Technology, and Computer Science remain male-dominated (CHED, 2020). Previous studies pointed out that Criminology presents a significant gender bias globally. Recent efforts put females and males at relatively equal bars, although it is far from egalitarian, noting other factors such as race (Chesney-Lind & Chagnon, 2016). The enrollment of both females and males in DOrSU increased across the years, indicating students' expanding access and interest in pursuing the program (Table 1).

However, at the start of SY 2016-2017, a sudden decrease in enrollment was observed due to the implementation of the country's K-12 Basic Education Curriculum. Instead of directly proceeding to college education, students need to undergo Senior High School education. The enrolled students are college returnees during this school year and those who finished secondary school before the K-12 implementation. The figures are expected to recover after a 2-year gap.

Graduation

The first batch of Criminology graduates was recorded in 2012. In this study, the graduation trend from 2012 to 2017 was analyzed, constituting six batches (Table 2). Of the 660 criminology professionals produced by DOrSU as of SY 2017-2018, 60.45% are males, representing more than half of the population. In contrast, females record a GPI value of 0.65, implying that the program is still male-dominated. The results conform with other universities in the Philippines, noting that males have a higher likelihood to graduate in BS Criminology (Guadamor & Eusebio, 2017; Aydinan, 2019). The curriculum, faculty, student services, and organization significantly impact their present careers (Pacatang, 2016).

The graduation data for both females and males gradually increased over the

years (Table 2). However, slight decreases in 2014 and 2016 were recorded. This downward trend is due to the increase in dropout cases, failure to complete the program in four years, among other factors that may be investigated in further studies.

Survival

Survival rate refers to the number of enrolled students who successfully graduated from the Criminology program. In this study, the survival rate of students from 2012 to 2018 was examined (Table 3.A and 3.B). It is worth noting that males dominate in terms of enrollment and graduation (Table 3.B). However, females record a higher mean survival rate of 37.50% compared to males with 11.64% (Table 3.A). These data suggest that females have a higher tendency to graduate in the program than males. As Paqueo and Orbeta (2019)

Table 1. Population of pre-service criminologists in Davao Oriental State University (DOrSU) from 2009 to 2019.

School Year	Male	Female	Gender Parity Index
2009-2010	93	42	0.45
2010-2011	247	110	0.45
2011-2012	384	178	0.46
2012-2013	490	258	0.53
2013-2014	493	286	0.58
2014-2015	554	300	0.54
2015-2016	707	441	0.62
2016-2017	567	310	0.55
2017-2018	525	241	0.46
2018-2019	485	220	0.45
TOTAL	4545	2386	0.52

positioned, males are now lagging behind females in tertiary education success in the Philippines.

There are significant improvements in tertiary education access in the last four decades, with females being the principal beneficiaries. Factors such as social mobility, an increase in economic opportunities, and the international movement to reduce gender gaps contribute to this. More female graduates are in the social sciences, business, law, and life sciences (Fiske, 2012). Ullah and Ullah (2019) propounded that females demonstrate higher education performance in developed and developing countries. However, based on recent reports, the gender parity index remains at 0.95, noting that females are still challenged to attain gender equality in education (United Nations Educational, Scientific, and Cultural Organization, 2018).

Gender Issues

Educational institutions often serve as hotspots for gender issues. Recognizing the Criminology program as male-dominated, non-masculine gender identities and orientations (i.e., females, gays & bisexual males) are the primary victims of stereotyping, discrimination, and bullying (Table 4). The qualitative interviews reveal that students stereotype Criminology to be a discipline for males. Consequently, females and other non-masculine gender identities have narrowed access to the Criminology program, as evidenced in the previously presented enrollment and graduation data (Table 1 & 2). Tam et al. (2020) reported that increasing students' self-efficacy in a male-dominated program such as ICT can reduce gender stereotyping. Hence, empowering females and other non-masculine gender identities to perform masculine tasks is a probable solution to widen their access to the program. Gender discrimination is also rampant among pre-service Criminologists, victimizing mostly females and members of the LGBTQ+

Table 2. Frequency of students by sex and gender parity index in terms of graduation in the BS Criminology Program of DOrSU.

School Year	Male	Female	Gender Parity Index
2012-2013	22	9	0.41
2013-2014	54	42	0.78
2014-2015	46	35	0.76
2015-2016	78	55	0.71
2016-2017	68	51	0.75
2017-2018	131	69	0.53
TOTAL	399	261	0.65

Table 3.A. The survival rate of female students in the BS Criminology program of DOrSU from 2012 to 2018.

Graduation	Enrollment	Survival Rate	Percentage
22	42	0.5238	52.38
54	110	0.4909	49.09
46	178	0.2584	25.84
78	258	0.3023	30.23
68	286	0.2378	23.78
131	300	0.4367	43.67
AVERAGE		0.3750	37.50

(Lesbian, Gay, Bisexual, Transexual, & Queer) community. Most discrimination cases are due to one’s physical and behavioral traits.

Non-masculine gender identities are considered weak and soft and perceived as incapable of doing physical tasks such as running around the soccer field. They are often left out in groupings and are teased to choose programs like Education and Nursing. The masculinity of one’s voice, especially during tactical formations, is also a factor for discrimination within the program. Although these are often undocumented and unreported in the

Table 3.B. The survival rate of male students in the BS Criminology program of DOrSU from 2012 to 2018.

Graduation	Enrollment	Survival Rate	Percentage
9	93	0.0968	9.68
42	247	0.1700	17.00
35	384	0.0911	9.11
55	490	0.1122	11.22
51	493	0.1034	10.34
69	554	0.1245	12.45
AVERAGE		0.1164	11.64

university, these forms of gender discrimination are not isolated cases. Even in other countries, educational institutions provide fewer health protection measures for bisexual adults, especially bisexual females (Zhang et al., 2020). Consequently, the discriminated people have lower health, happiness, and job satisfaction indices (Dong et al., 2020). A more gender - inclusive student development framework should be promulgated to ensure that gender issues are reduced in the educational setting.

Table 4. Gender issues experienced by pre-service criminologists in DOrSU, City of Mati, Davao Oriental.

Graduation	Enrollment	Survival Rate
Stereotyping	Criminology is for males	<i>"Gitan-aw nila nga ang Criminology is for male. Maong ilang maingon sa society, nganung naay mag crim nga bayot."</i> (They perceived that Criminology is for males. They keep on asking why a gay man like me chooses to enroll in the program).
Discrimination	Non-masculine behavior of males	<i>"Isip bayot, akong biggest discrimination jud kay kadtong ROTC. Pag bilang man gud sa amoang platoon, akong tingokayyaya."</i> (As a gay man, my biggest discrimination is when we had our ROTC class. Upon count off in our platoon, I shouted with a feminine voice).
	Exclusion in group tasks and activities	<i>"Naay higayon kung mag-piniliy ug ka grupo, dili ko nila pilion kay babae ko og dili ko kakaya sa tasks ilabina kung physical."</i> (There are instances that I will not be chosen to be a member of the group because I am a female, especially if the tasks at hand require physical strength).
Bullying	Bisexuals are double blades	<i>"Usahay gina-bully ko sa mga lalaki naku nga classmates kay ingon sila 'double blade' daw ko. Maong pag naa koy kauban nga babae, mo-ingon sila nga di mag-kumpanyansa sa akoa kay mupatul ko sa babae ug lalaki."</i> (Sometimes, my male classmates would bully me by saying that I'm a 'double blade.' They would tease me every time I accompany girls because they think that I will engage with males and females in relationships).
	Name-calling	<i>"Gina-tawag ko nila ug 'Yors', 'Maya', ug 'Yotmi' tungod sa akoang sexual preference. Bisan naa sa sulod sa klase, tawagon ko nila ana unya mangatawa dayon ang tibuok klase."</i> (They would call me names such as 'Yors', 'Maya', or 'Yotmi' because of my sexual preference. Even inside the class, they would call me inappropriate names, then all of them will laugh).

Table 5. Coping strategies of pre-service criminologists in DOrSU, City of Mati, Davao Oriental.

Coping Strategies	Sub-Themes	Participant's Statement
Adaptation	Acting masculine	<i>"Mas mosabay man gud sila sa imoha kung lakin-on ka ug lihok, maong magpaka-lalaki jud ko. Kung unsa ang binuhatan sa lalaki, akoo pud ginabuhat."</i> (They will let me join their groups if I am masculine. This is why I act like a man. I also perform manly activities.)
	Performing physical tasks	<i>"Naga-exercise ko, sir, like jogging ug push up. Ginabuhat naku ni para mokusog akoang stamina ug makaya naku ang mga physical tasks nga e hatag sa amoa."</i> (I do physical exercises like jogging and push-up so my stamina will be improved and perform the physical tasks given to us.)
Avoidance	Disregarding the gender issues	<i>"Dili nalang naku ginapansin ug ginapasagdan na lang. Tupal ang akoo bitaw pag-paningkamot ang mag matter para molampus ko. Kay kung permi ko magpadala sa storya sa uban, ako ang agrabyado."</i> (I ignore the gender issues raised at me. Besides, my perseverance will determine my success. I will be the one to suffer if I let their stories disturb me.)
Confrontation	Disclosing true feelings and emotions	<i>"Kung naay mang-bully sa akoo, mosukol ko oyy. Dili man pwede nga mang-daug-daug sila sa ilang kapwa. Ginapahibalo naku nga dili ko comfortable sa ilang ginabuhat para sa sunod dili na nila buhaton."</i> (If someone is bullying me, I will get back at them. I will let them know that I am not comfortable so they will avoid doing it next time.)
Concealment	Hiding real gender identity	<i>"Gamay ra ang naka balo nga bayot ko, sir. Dili naku ginaingon kay basin unsa pa lang ilahang maingon ba nga bayot ko unya Crim. Ang akong gina-sultihan kato ra jud mga suod kayo naku."</i> (Only a few students know that I am gay. I hide my real gender identity as I am afraid to be told that I am gay in the Criminology program. Those who are close to me know my identity.)
	Not showing weakness	<i>"Bisan lisod na ang tasks, akoo ginapaningkamotan nga makaya naku. Dili pwede nga magpakita ka og kahinaan kay para dili ka kantiyawan ug dako pud imong grado."</i> (Even if the tasks are complex, I make sure that I can perform them. I cannot show my weaknesses, so they will not tease me, and I can obtain higher grades.)

Consequently, the discriminated people have lower health, happiness, and job satisfaction indices (Dong et al., 2020). A more gender - inclusive, student development program must be in place to cater to the needs and demands of all gender groups. Lastly, bisexuals are common subjects of bullying in the program. They are termed to be 'double blades,' referring to their sexual preference regardless of gender. For instance, bisexual males are ridiculed by straight males as they may engage in intimate relationships with either females or males. As such, straight males are not comfortable with their girlfriends befriending bisexuals. On the other hand, given that only a few gays are enrolled in the program, they often become subjects of teasing, name-calling, and inappropriate sexual comments. They are mockingly called 'Yors,' 'Maya,' and 'Yotmi.' This bullying victimization has to be addressed as they increase depressive symptoms and other mental health concerns among adolescents (Glassner, 2020). As the first study to report gender issues in the university's Criminology program, this may be used as a baseline in developing appropriate intervention programs to reduce gender issues and foster an inclusive social environment significantly.

Coping Strategies

While this study revealed the gender issues in Criminology, students demonstrate several coping strategies contributing to their survival in the program (Table 5). Pre-service Criminologists in DOrSU exhibit

adaptation, avoidance, confrontation, motivation, and concealment as coping mechanisms based on the qualitative interviews. Amemiya and Wang (2018) posited that gender and school climate perceptions influence academic coping and achievement. Their coping strategy includes problem-solving for academic achiever males, while low achiever females demonstrate comfort-seeking. Likewise, Matinez et al. (2019) asserted that engagement precedes performance and satisfaction through problem-focused and avoidance coping. Therefore, coping strategies are essential tools to ensure one's success in the Criminology program despite gender issues.

As Criminologists are expected to be masculine, females and other non-masculine gender identities cope through adaptation. They choose to act masculine to get a sense of belonging with their peers. They even conduct physical training like jogging and push-ups to perform better in the physical tests. Another coping strategy is avoidance, with students disregarding the gender issues that they encounter. For them, dealing with hurtful words only leads to more stereotyping, discrimination, and bullying. However, some opt to confront gender issues by disclosing their true feelings and emotions. Confrontation also involves disclosing their true gender identity so others would stop bullying them.

Lastly, concealment is another coping strategy. Some pre-service Criminologists, especially those who are members of the LGBTQ+ community, conceal their true gender identities and physical weaknesses.

McDavitt et al. (2008) reported that emotion regulation is an essential coping against gender stigma. Mara et al. (2020) furthered that coping may be internal, external, reactive, and proactive. These coping mechanisms provide insights into how pre-service Criminologists deal with the different forms of gender issues confronting them.

CONCLUSION

The BS Criminology program in DOrSU is significantly male-dominated since 2009. Since then, more males have enrolled (GPI = 0.52) and graduated (GPI = 0.65) in the program. There is a need to increase access to females by providing inclusive opportunities such as scholarships. Interestingly, females record a higher survival rate ($x = 37.50\%$) than males ($x = 11.64\%$) based on the graduation trends (Table 2). Females' higher survival implies their strong commitment and dedication once given wider access to education. While this is interpreted as a gender gap, educational administrators must devise mechanisms to increase the program's survival rates significantly, especially among males. In addition, this study reveals various gender issues affecting pre-service Criminologists, including stereotyping, discrimination, and bullying. The students demonstrate multiple strategies such as adaptation, avoidance, confrontation, and concealment to cope with these issues. The university must implement inclusive opportunities to attain gender equality in the Criminology program, such as scholarships and other academic support.

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