



Research Article

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The Dark Triad and Early Maladaptive Schemas in a Sample of Undergraduate Women

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Abstract

“The line between good and evil is permeable and almost anyone can be induced to cross it when pressured by situational forces” [1]. In recent years, the media has presented coverage of various incidents that could be described as “evil acts” by “evil people,” but there is no biological or psychological test of evil. The comprehensive picture to explain these perpetrators of violent crime involves much deeper complexity, as the personality traits that influence the behaviors fall along a spectrum. The constellation known as the Dark Triad [2] consists of three dark personality traits: subclinical narcissism, Machiavellianism, and subclinical psychopathy. In consideration of “personality disorders and more complex, chronic and characterological difficulties,” Schema Therapy (ST) was developed by Jeffrey Young [3]. Although Schema Therapy has been effective in treating more complex psychological difficulties, it is reasonable to believe that treatment may be beneficial for patients in the “normal” range, who also endorse high levels of Dark Triad traits. The 18 Early Maladaptive Schemas (EMSs) indicated in ST are said to be enduring patterns of personality that remain relatively stable throughout adulthood [4]. The purpose of this study was to focus on females, while examining these traits in conjunction with the Early Maladaptive Schemas, to determine if the constellation of Dark Triad traits map onto 3 selected EMSs. Participants (n=63) were women from various American undergraduate universities who completed measures of Dark Triad traits and EMSs (SD-3 and YSQ-S3). It was expected that higher endorsement of the Dark Triad would be associated with higher scores on the Early Maladaptive Schemas of Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, and Abandonment/Instability. While extreme acts of violence and aggression are highlighted in the media, insidious acts and behaviors occur much more frequently in the subclinical population than we might like to consider. It was found that there were correlations between Dark Triad traits and selected Early Maladaptive Schemas. Correlations were discussed in terms of how the Early Maladaptive Schemas relate to the development of maladaptive personality traits such as Machiavellianism, narcissism, and psychopathy. Implications for individualizing psychotherapy taking these relationships into account were also offered. Limitations include the use of a WEIRD (Western, Educated, Industrialized, Rich, and Democratic) sample, as well as a significant assumption of heteronormative, binary, cisgender identity constructs that may have impacted the findings.

Keywords: Dark triad, Maladaptive schemas, Women

Introduction

“Hate in America is on the rise,” reports the Washington Post in a recent opinion piece [5]. According to this piece, a new FBI report indicated a 4.6 percent increase in hate crimes in the United States in 2016. About 58 percent of these crimes were motivated by racial bias, and half of them appeared to be perpetrated toward African Americans. Of the roughly 21 percent of crimes motivated by religion, more than half targeted Jews and one-fourth targeted Mu

slims; additionally, crimes targeting transgender individuals increased by about 44%. On a different note, sexual harassment has also become a focus of recent media attention, especially as high-profile figures are being accused of sexual harassment, spurring the “#Me-Too” movement [6]. Incidents such as these may be described as “evil acts” by “evil people,” but there is no biological or psychological test for evil. Instead, it may not be as extreme, and the capacity



for evil or darkness may be found in everyone, on a spectrum “the line between good and evil is permeable and almost anyone can be induced to cross it when pressured by situational forces” [1].

Dark personality traits have been a recent focus of personality and clinical psychology research [2]. The constellation known as the Dark Triad consists of three dark personality traits: subclinical narcissism [2], Machiavellianism, and subclinical psychopathy. Narcissism has typically been studied as a personality disorder [7] but can also be conceptualized as a part of subclinical or normative personality as well, encapsulating feelings of superiority, grandiosity, dominance, and entitlement [2,8]. Machiavellianism is not found in the DSM-5, but is a personality trait characterized by exploitation, low empathy, and emotional detachment [9]. It was developed to describe a manipulative personality from the writings of Niccolo Machiavelli by Richard Christie [2]. Elements of subclinical or normative psychopathy can be described as thrill seeking, impulsivity, and callousness [10,11].

Dark Triad traits have been traditionally viewed as primarily male characteristics, and thus research on Dark Triad traits focusing exclusively on female characteristics has been less established. Research suggests that there are gender differences, and that Dark Triad traits are more prominent in males [12,13]. It has been argued that the three traits may not be of equal importance; and in fact, that psychopathy may be in a superior position than the other two traits, even superseding the others at times [14]. Some studies discuss the Dark Triad as one unified construct, while others suggest in a uniqueness of traits perspective [15]. Some studies suggest that Dark Triad traits are consistently found to be maladaptive (in particular, psychopathy), but that the other two (Machiavellianism and narcissism) may be considered adaptive under different circumstances. For instance, studies [16,17] have found Dark Triad traits to be desirable in careers that require leadership and ambition, as well as in interpersonal relations such as mating even citing James Bond as a fictional persona who achieves success as the epitome of the Dark Triad [13]. Much of the research has been focused on the Dark Triad within males, and if females are included, they are cited primarily for comparison purposes, rather than as the focus of the study. To the author’s knowledge, until the present study, no studies have examined the Dark Triad and Early Maladaptive Schemas (EMSs) solely among women. Studies acknowledge gender differences within the Dark Triad, or within each of the individual traits, but do not examine behavioral expressions that may be more consistent with behavior among women.

Currently, in the field of psychology, more women are entering the workforce than men. As such, it is valuable to further understanding of the mechanisms of female behavior and personality. An implication drawn from dark female behavior and personality (as defined by Dark Triad traits) may be an insidious competitiveness among females that serves to exacerbate, rather than ameliorate the current gender hierarchy. This may be evidenced in women in the workforce as “the queen bee phenomenon” [18], or with fema-

les of various ages in the form of gossip or relational aggression. Benevolent sexism may also play a part in the marginalization of women, and drive women to compete for limited roles in leadership [18,19].

The identification of EMSs has been helpful within psychotherapy treatment such as Schema Therapy it is possible the Dark Triad maps onto specific EMSs, and knowledge of these patterns could be valuable toward psychotherapeutic work with women and female empowerment [4].

Schema Therapy was developed by Young as a response to the failures of Cognitive Behavioral Therapy to effectively treat personality disorders and more complex, chronic, and characterological difficulties. Although Schema Therapy has been effective in treating more complex psychological difficulties, it is reasonable to believe that it may be beneficial for individuals in the normal range, who are high in Dark Triad traits as well. Schema Therapy is often considered the bridge between CBT and psychodynamic approaches that encourage further investigation into the complexities of the human psyche originating from early life experiences. The 18 Early Maladaptive Schemas (EMSs) developed by Jeffrey Young are said to be enduring patterns of personality that remain relatively stable throughout adulthood [4]. Additionally, some researchers believe that they can be understood as the very underpinnings of psychopathology, perhaps further mediating pathological behavior into adulthood.

Statement of the Problem

To understand health and wellness, one must study disorders and disease. Similarly, light cannot exist without darkness. Thus, it is important to understand dark personalities and constructs such as the Dark Triad. Not much exists in the literature that is focused primarily on female behavioral expressions of the Dark Triad. Furthermore, to the best of this author’s knowledge, this unique concept also has not been associated with Early Maladaptive Schemas (EMSs). It has been proposed that there is a generational shift toward Americans becoming more focused on self-centered pursuits that highlight values such as achievement and power, and less concerned with empathy and the welfare of others [20]. Additionally, they find that there is a greater sense of less cohesion in society, with more and more individuals feeling a sense of isolation and loneliness [20]. With the current political landscape, and the experience of a divided nation, further media attention has been placed on reports of the growing number of hate crimes, protests, police-involved shootings; all of which, serve to further fan the flames of prejudice and bias with exclusionary behavior of out-group members. Times such as these, with reduced societal empathy, reveal emergent interest in social value trends that resonate with the changing climate [20]. Investigation of Dark Triad traits associated with EMSs in female behavior is fitting, in consideration of the growing movement toward gender equality and female empowerment. Women are just as capable as men of committing acts of manipulation, aggression, and violence against others [12].

The current study was comprised of a sample of 63 female undergraduate students from various educational institutions throughout the United States. The purpose of this study was to quantitatively examine whether there is a relationship between selected Early Maladaptive Schemas (Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, and Abandonment/Instability) and the Dark Triad among women. It is the intent of this study to add to the sparse literature regarding the female manifestation of Dark Triad traits and the relationship to selected Early Maladaptive Schemas that may be a part of the foundation of the development of Dark Triad characteristics. Establishing the existence of such a connection would permit clinicians to focus on these issues in treatment of female patients with the use of Schema Therapy.

Methods

Participants

The following inclusionary criteria were necessary for participants to be included in the study. It was required for participants to be over the age of 18 at the time of the study. Additionally, it was necessary for participants to identify as female, as the study was also focused exclusively on behavior and expressions of Dark Triad traits and EMSs among women. Also, it was important that participants did not have previous experience taking the YSQ-S3 or SD-3, as familiarity with these instruments could have potentially influenced results. On the demographic questionnaire, participants indicated yes or no, regarding their familiarity with the two measures.

Sixty-three participants were recruited through purposive and convenience sampling. The participants were comprised of a community sample, and not recruited from a clinical setting, and thus considered a subclinical or "normal" sample of participants. However, this is a limitation, as the researcher did not determine whether any of these participants have been diagnosed with and/or are being treated for any clinical disorders. Students from various undergraduate programs were informed about the study by word of mouth, through email, and in person. The researcher first approached female friends who were enrolled in undergraduate programs, and these prospective participants were either emailed a statement (Appendix A), or informed of the study via recruitment script, and then some of these female friends contacted their other female college friends who they thought might wish to participate in the study with the recruitment script provided. Upon agreement, each participant was provided with a preassembled packet either handed directly to her in person or via USPS mail. Each packet contained an informed consent form detailing the purpose of the study, her role in the study, and the potential benefits and risks involved, as well as a demographic questionnaire (Appendix D), the measures, and debriefing statement. Completed packets were collected via USPS mail or in person by the researcher. Participant packets that met inclusionary criteria with completed informed consent forms and measures were retained for the study. Those that did not meet inclusion criterion were destroyed. The researcher retained a sample of 63 subjects out of 70 packets that were returned. Participants were informed that they could participate in a raffle at the conclu-

sion of a study for a chance to win one of 20 Amazon gift cards worth \$25.00 each. They indicated their desire to be in the raffle by including their email address on the demographic questionnaire. At the conclusion of the study, 20 participants were randomly chosen via the use of random number generator and received their gift card from Amazon.com through email.

Measures

This study utilized a demographic questionnaire and two measures to collect the necessary data for analysis. The two self-report measures are the Young Schema Questionnaire 3 - Short Form (YSQ-S3) and the Short Dark Triad (SD-3).

Demographic Questionnaire: Demographic information included age, ethnicity, and field of study, as well as a question regarding familiarity with the measures, and a line to include email address for raffle drawing participation. Information was de-identified and coded for identification and anonymity of the individual.

Young Schema Questionnaire-Short Form 3 (YSQ-S3): The Young Schema Questionnaire-Short Form 3 (YSQ-S3; [3]) is a 90-item self-report measure designed to assess Early Maladaptive Schemas (EMSs) (Appendix E). The potential score range is 90 to 540, based on the minimum and maximum scores one may attain based on Likert scale responses in the YSQ-S3. Of all the 18 EMSs available in the questionnaire, 3 EMSs were selected for this study: Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, and Abandonment/Instability. Participants were asked to report (on a Likert Scale, 1=Completely untrue of me; 6=Describes me perfectly) best self-descriptions with statements such as "I have a lot of trouble accepting "no" for an answer when I want something from other people," (Entitlement/Grandiosity) "I have a very difficult time sacrificing immediate gratification or pleasure to achieve a long-range goal," (Insufficient Self-Control/Self-Discipline) and "When someone I care for seems to be pulling away or withdrawing from me, I feel desperate," (Abandonment/Instability).

Short Dark Triad (SD-3): The Short Dark Triad (SD-3; [21]) was used in the study to determine Dark Triad trait endorsement among participants (Appendix F). The SD-3 is a 27-item self-report measure that assesses the antisocial personality traits of narcissism, psychopathy, and Machiavellianism, which collectively make up the Dark Triad. Participants were asked to report agreement (on a Likert Scale, 1=Strongly disagree; 5=Strongly agree) with statements measuring narcissism (e.g., "I like to get acquainted with important people"), and psychopathy (e.g., "It's true that I can be mean to others"), and Machiavellianism (e.g., "Most people can be manipulated"). According to Paulhus, the psychometrician of the SD-3, "Personality traits lie on a continuum from low to high [21]. There are no cutoff scores that indicate a sudden change (personal communication, November 5, 2017)." In terms of interpretation, It is suggested that suggested the use of a single composite score instead of subscale scores, as subscales may reduce the reliable variance [22]. As such, a total composite score yields the presence of Dark Triad traits. The potential score range is from 27 to 135, which is

determined by the minimum and maximum scores one may attain based on Likert scale responses in the SD3. A low score indicated a low probability of the presence of these traits, or indicated a weak presence, while a high score indicated the likelihood of a strong presence of the characteristic.

Procedures

Following approval by the university Institutional Review Board (IRB), the YSQ-S3 license was purchased, and inventories were printed and prepared for administration. Each participant who agreed to participate was provided with a study packet. The packet began with the Informed Consent form. After completing the Informed Consent form, the participant then completed the Demographic questionnaire, the YSQ-S3, and then the SD-3. After completing the last questionnaire, the participant saw the Debriefing statement and either chose to participate in the drawing for gift card or not. The \$25 Amazon gift cards were made possible through the generosity of the Society of Personality Assessment's student research grant award.

Following completion of the measures, the data was collected (either returned immediately in person to the researcher or mailed back in self-addressed stamped envelopes). The researcher then assigned a number to each of the completed packets, which were then written at the top of each of the contained forms for that participant. To participate in the drawing, participants provided their email address on the demographic form, to be eligible for the gift card drawing. Once the data was received, data from each packet was entered into an Excel spreadsheet designed for the study. The completed packets and included forms were then secured in a lockbox in the researcher's personal possession. All physical and electronic data will be destroyed after 5 years.

Results

The following statistical analyses were conducted using the SPSS software package (IBM SPSS Statistics, version 23.0). Descriptive statistics were run on all demographic variables.

Sixty-three female undergraduate students participated in the present study (participants all identified as female).

Age

Participant age consisted of range=12, M=20.10, SD=1.84, median=20.

Ethnicity

Ethnicity reported included: "Asian" (n=14, 22.22%), "Chinese" (n=14, 22.22%), "Vietnamese" (n=12, 19.05%), "Filipino" (n=4, 6.35%), "Vietnamese and Chinese" (n=4, 6.35%), "Asian-American" (n=2, 3.17%), "Cambodian" (n=1, 1.59%), "Cantonese" (n=1, 1.59%), "Chinese and Filipino" (n=1, 1.59%), "French and American" (n=1, 1.59%), "Hmong" (n=1, 1.59%), "Korean" (n=1, 1.59%), "Taiwanese" (n=1, 1.59%), "White" (n=1, 1.59%), did not include ethnicity information (n=5, 7.94%).

Field of Study

Field of study included: "Biology" (n=8, %), "Psychology" (n=6, %), "Business" (n=5, 7.94%), "Media and Cultural Studies" (n=3, %), "Biochemistry Cellular Biology" (n=2, %), "Public Health" (n=2, %), "Pre-Nursing" (n=2, %), "Sociology" (n=2, %), "Accounting" (n=1, 1.59%), "Biochemistry" (n=1, 1.59%), "Business Accounting" (n=1, 1.59%), "Business Administration" (n=1, 1.59%), "Business Management & Political Science" (n=1, 1.59%), "Chemistry" (n=1, 1.59%), "Child Development" (n=1, 1.59%), "Cog. Sci in Neuroscience" (n=1, 1.59%), "Communication Studies" (n=1, 1.59%), "Computer Science & Psychology" (n=1, 1.59%), "Econ/Math" (n=1, 1.59%), "Global Studies" (n=1, 1.59%), "Graphic Design" (n=1, 1.59%), "Hospitality" (n=1, 1.59%), "Human Biology" (n=1, 1.59%), "Information Sciences & Technology" (n=1, 1.59%), "Kinesiology- Physical Therapy" (n=1, 1.59%), "Math CS" (n=1, 1.59%), "Nutrition" (n=1, 1.59%), "Physiology and Neuroscience" (n=1, 1.59%), "Political Science/Human Rights" (n=1, 1.59%), "Pre-Business" (n=1, 1.59%), "Public Relations & Film" (n=1, 1.59%), "Studio Art & Literature/ Writing" (n=1, 1.59%), "Undeclared" (n=1, 1.59%), "Veterinary Medicine", did not include field of study information (n=7, 11.11%).

Marital Status

Marital status identified included: "Single" (n=54, 85.71%), and did not include marital status information (n=9, 14.29%). Most participants were recruited from Southern California institutions; as such, it is possible that the findings may not be generalizable to other geographic locations, or female age groups that are younger or older than the target participant group.

Correlations of the Dark Triad Traits With Each Other

Pearson correlations were computed on the three subversive personality traits of the Dark Triad: Machiavellianism, Narcissism, and Psychopathy. The correlation coefficients and p levels are reported in Table 1. It can be seen from Table 1 that all the intercorrelations were statistically significant, ranging from .385 to .443. However, the magnitude of the correlations indicates that a small percentage of the variance was accounted for by the overlap in the correlations (14.8% to 19.6% of the variance). Thus, a large part of the factors accounting for the Dark Triad scores that participants received remains undetermined by these correlations (Table 1).

Table 1: Correlations and p levels of the Dark Triad Traits with Each Other (n=63).

	Machiavellianism	Narcissism	Psychopathy
Machiavellianism	--		
Narcissism	r=.385 p=.002	--	
Psychopathy	r=.443 p=.000	r=.442 p=.000	--

Correlations of the EMSs With Each Other

Correlations were computed on the three selected Early Maladaptive Schemas (EMSs) that were used in this study: Abandonment/Instability, Insufficient Self-Control/Self-Discipline, and Entitlement/Grandiosity. The correlation coefficients and p levels are reported in Table 1. It can be seen from Table 2 that all the inter-correlations were statistically significant, ranging from .335 to .568. However, this indicates that a small percentage of the variance was accounted for by the overlap in the correlations (11.2% to 32.2% of the variance). Thus, a large part of the factors accounting for the Early Maladaptive Schemas scores obtained by the participants remains undetermined (Table 2).

Table 2: Correlations of the Three EMSs with Each Other (n=63).

	Abandonment	Insufficient	Entitlement
Abandonment/Instability	--		
Insufficient Self-Control/Self-Discipline	r=.452, p=.000	--	--
Entitlement/Grandiosity	r=.335, p=.007	r=.568, p=.000	--

Note*: "Abandonment" refers to Abandonment/Instability, "Insufficient" refers to Insufficient Self-Control/Self-Discipline, and "Entitlement" refers to Entitlement/Grandiosity.

Intercorrelations of the Three Dark Triad Traits with Each of the EMSs

Intercorrelations were computed on the three Dark Triad traits and the three EMSs. The correlation coefficients and p levels are reported in Table 3. It can be seen from Table 3 that five of the nine correlations reached conventional levels of statistical significance with a range of .234 for the lowest significant correlation, to .284 for the highest. Thus, the null hypothesis that there would not be positive correlations between any of the Dark Triad traits and any of the 3 EMSs can be rejected regarding 5 of the 9 relationships. However, once again, little of the variances in the relationships are accounted for by the correlations. Thus, the variances accounted for a range from 5.5% to 6.6%. This indicates the significance for these participants of the linear relationships between the three Dark Triad traits and these three EMSs is largely undetermined (Table 3).

Table 3: Correlations of Dark Triad Traits with Each of the EMSs (n= 63).

	Abandonment	Insufficient	Entitlement
Machiavellianism	0.259, p=.02	0.172, p=.089	0.284, p=.012
Narcissism	0.09, p=.241	0.132, p=.152	0.426, p=.00
Psychopathy	0.255, p=.022	0.19, p=.068	0.234, p=.032

Note*: "Abandonment" refers to Abandonment/Instability, "Insufficient" refers to Insufficient Self-Control/Self-Discipline, and "Entitlement" refers to Entitlement/Grandiosity.

Dark Triad Total Scores Split into Levels of Low, Medium, and High

To determine whether there are different relationships between different levels or degrees of the Dark Triad traits, participants were divided into categories of equal size groups (n=21 in each classification) of low, medium, and high scoring categories on each of the three traits on the SD-3 measure. Means and standard deviations are provided for each category on each of the three Dark Triad traits in Table 4.

Table 4: Means and Standard Deviations for Low, Medium and High Splits on Each of the Three Dark Triad Traits (n=21 in each group).

SD-3 Level	Machiavellianism	Narcissism	Psychopathy
Low			
M	19.8	19.2	13.35
SD	5.634	5.073	4.095
Medium			
M	25.95	24.86	17.95
SD	3.5	3.864	4.5
High			
M	29.86	29.19	24.77
SD	4.931	4.458	4.73

ANOVAs were then computed to determine if the three levels of Low, Medium, and High were statistically different from each other on each of the three Dark Triad traits. This was done to ensure that the means for each level (low, medium, and high) were not just numerically different, but that each level's meaning was significantly different from every other level. The results were significantly different for each of the three traits, indicating that overall, the three levels differed for each of the Dark Triad traits (Machiavellianism: F(2,66)=23.666, p=.000; Narcissism: F (2,66)=26.224, p=.000; Psychopathy: F(2,66)=36.039, p=.000. To determine if all three levels/classifications of the Dark Triad differed from each other on each of the three Dark Triad traits, post hoc LSD analyses were conducted. As can be seen in Table 5, the p levels indicate that all three levels (low, medium, and high) were different from each other on all three Dark Triad traits (Table 5).

Table 5: LSD p Levels for Comparisons of High, Medium and Low Classifications for Each of the Dark Triad Traits (n=21 in each classification).

	Machiavellianism	Narcissism	Psychopathy
Low vs Medium	p=.000	p=.000	p=.002
Low vs High	p=.000	p=.000	p=.000
Medium vs High	p=.024	p=.002	p=.002

These analyses indicate that it is legitimate to classify participants as low, medium, and high on the Dark Triad Total Score, as those classifications are significantly different from each other on all three components. Thus, low, medium, and high classifications can be used to determine the relationship of each of these three levels to the Early Maladaptive Schemas of Abandonment/Instability, Insufficient Self-Control/Self-Discipline, and Entitlement/Grandiosity.

Dark Triad Total Scores Split into Levels of Low, Medium, and High as an Independent Variable

ANOVAs were computed using three levels of the Dark Triad Total scores as an independent variable with scores on the three EMSs as dependent variables. The means and standard deviations are found in Table 6. Significant overall effects were found for Insufficient Self-Control/Self-Discipline ($F(92, 63)=2.827, p=.041$) and for Entitlement/Grandiosity ($F(2,63)=5.398, p=.007$). Abandonment/Instability failed to reach conventional levels of statistical significance ($p=.067$). P levels for the post hoc LSD analyses are presented in Table 7.

Table 6: Means and Standard Deviations for Each Level of the Dark Triad for Each of the EMSs.

Dark Triad	Abandonment	Insufficient	Entitlement
Low			
M	12.29	12.48	11.71
SD	5.506	5.741	3.951
Medium			
M	14.19	16.19	14.43
SD	6.353	4.936	3.558
High			
M	16.86	16.29	16
SD	6.843	5.635	6.196

Note*: "Abandonment" refers to Abandonment/Instability, "Insufficient" refers to Insufficient Self-Control/Self-Discipline, and "Entitlement" refers to Entitlement/Grandiosity.

Table 7: Post-hoc LSD Comparisons for All Three Levels of Dark Triad on Each of the 3 EMSs.

	Abandonment	Insufficient	Entitlement
Low vs Medium	--	$p=.031$	$p=.045$
Low vs High	$p=.021$	$p=.027$	$p=.002$
Medium vs High	--	--	--

Note*: "Abandonment" refers to Abandonment/Instability, "Insufficient" refers to Insufficient Self-Control/Self-Discipline, and "Entitlement" refers to Entitlement/Grandiosity.

Discussion

In this study, the researcher found that there was a significant relationship between the Dark Triad traits of subclinical narcissi-

sm, subclinical psychopathy, and Machiavellianism and the selected Early Maladaptive Schemas of Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, and Abandonment/Instability. However, the results also indicated that a large part of the factors accounting for both the Dark Triad and the EMSs remains undetermined as the relationships were statistically significant, but little variance was shared among these variables. The purpose of this exploratory study was to quantitatively examine the Dark Triad traits and Early Maladaptive Schemas among women, as to the best of the researcher's knowledge, no other study has yet studied these components together exclusively nor focused on women.

The primary goal was to determine whether the Dark Triad traits of narcissism, psychopathy, and Machiavellianism, map onto the Early Maladaptive Schemas of Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, and Abandonment/Instability. The results indicate that there is some mapping of the three Dark Triad traits onto these three selected schemas, partially supporting the hypothesis of positive correlation between the Dark Triad traits (narcissism, psychopathy, and Machiavellianism) and the selected EMSs of Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, and Abandonment/Instability. The Dark Triad thrives within society and produces a broad-ranging maladaptive impact on individuals and interpersonal relations within various settings [2,21-25].

The results obtained here support the proposal by Lang that there is a relationship of Machiavellianism to EMSs in a sub-clinical population, which was specifically supported by the relationships found between all 3 traits of the Dark Triad to Early Maladaptive Schemas chosen for this study: Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, and Abandonment/Instability [26]. These findings support conducting further research as to the relationships of the Dark Triad Traits to other EMSs. These relationships may help further understanding with dark personalities and socially aversive behavior, especially as they relate to aggression in women and antagonistic competition.

EMSs and Dark Triad Traits

The presence of the Early Maladaptive Schemas of Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, and Abandonment/Instability in childhood, may be associated with an inability to appropriately cope with or address these schemas. Such a combination may cause an individual to develop a personality structure with components of the Dark Triad, as suggested by Lang [26]. Moreover, the Dark Triad is associated with an unpredictable childhood environment and may be a context-specific adaptation to socioecological unpredictability [27].

These personality traits are considered subclinical Paulhus & Williams [2] and can be seen as desirable characteristics of a successful and ambitious leader [2,16]. In sub-clinical levels, these traits can be successful characteristics in mating strategies accor-

ding to one source [17]. Thus, it is important to understand that the presence of certain EMSs in conjunction with the Dark Triad do not necessarily result in a full-blown personality disorder or a significantly malevolent individual.

Additionally, the Dark Triad has persevered, even while society has attempted to remove evil and darkness from humanity, and these characteristics likely exist in everyone to varying degrees. The relationship between the Dark Triad and EMSs as being potentially positive is further supported by the proposal that each Dark Triad trait represents a different coping strategy [28].

Entitlement/Grandiosity

It was found that the Early Maladaptive Schema of Entitlement/Grandiosity was associated with each of the 3 Dark Triad traits. It appears that developing a schema in early life of being entitled or grandiose contributes to developing a combination of personality characteristics. In this study, focus was on three personality characteristics that comprise what has been termed the Dark Triad. Thus, it was found that the EMS of Entitlement/Grandiosity was associated with developing all three characteristics of Machiavellianism, narcissism, and psychopathy. It should be noted that these are sub-clinical levels of these characteristics. Thus, participants with some degree of an EMS of Entitlement/Grandiosity tended to exhibit characteristics of superiority, callousness, impulsivity, manipulateness, which are similarly reflected in the Dark Triad [3,21]. Female undergraduate students of Asian descent might experience familial and/or cultural pressure to perform and achieve academically [29], and this pressure may lead to activation of Dark Triad traits and EMSs, which then lead to maladaptive aspects of personality such as impulsivity, which may then lead to impulsive behaviors, such as binge-drinking, which is predicted by sensation-seeking [LaBrie, et al., [30]. Future studies can research these implications.

Abandonment/Instability: Abandonment/Instability was related to Machiavellianism and Psychopathy but not Narcissism. The EMS of Abandonment/Instability not being correlated with a sense of narcissism ("I'm Special") seems to be consistent with the results of this study, as a sense of abandonment would not foster a sense of uniqueness in a positive way or that one is special (seen in the trait of narcissism). An EMS of Abandonment/Instability involves "an exaggerated fear that people one relies on most for security, connection, and help will suddenly abandon [one] forever "and includes an expectation that other people will not be available to provide consistent, ongoing support [3]. As such, an individual with an EMS of Abandonment/Instability, may believe and agree with statements such as "whatever it takes, you must get the important people on your side," "make sure your plans benefit yourself, not others," or "I'll say anything to get what I want" [21].

A young woman in college of Asian descent, particularly one who has some degree of the EMS of Abandonment/Instability and who is a first-year student, or enrolled in a large undergraduate in-

stitution, and may be away from home may have difficulty trusting people and deciding with whom to form friendships and build alliances. If these women have a degree of the EMS of Abandonment/Instability, then for the purpose of retaining an adequate support system, might eschew attempts to attain leadership roles or opportunities to be the center of attention [21]. Consequently, even though they are "sub-clinical," they are impeded in taking advantage of the positive aspects of Dark Triad traits.

Insufficient Self-Control/Self-Discipline: It appears that there are no significant relationships of Insufficient Self-Control/Self-Discipline and the 3 Traits (Table 3). However, Tables 6 and 7 indicate that this is since those with medium and high Dark Triad scores have relatively high scores on Insufficient Self-Control/Self-Discipline and are not different from each other, but differ from those with low scores, who have significantly less of this characteristic. Thus, the linear correlations are insensitive to the relationship between Insufficient Self-Control/Discipline and Dark Triad traits. Because the linear relationship is not strong enough, the correlations approach, but do not reach conventional levels of significance. Thus, there is a relationship of Dark Triad Total scores and Insufficient Self-Control/Self-Discipline, but that relationship is masked in a linear correlation. An EMS of Insufficient Self-Control/Self-Discipline involves "pervasive inability or refusal to exercise sufficient self-control, self-discipline, and frustration tolerance to achieve one's personal goals, or to restrain the inappropriate expression of one's emotions and immediate desires" [3].

As seen in Table 6, those women who were low in Dark Triad scores were differentially low on this trait indicating that scoring low on this early life maladaptive schema was not likely to make the woman vulnerable to developing Dark Triad traits. The situation appears to be much different for those women who reported a moderate or high level of this EMS of a lack of self-discipline and/or lacking in self-control. Although the Dark Triad, particularly the trait of psychopathy, involves a component of thrill-seeking and impulsivity, the other two traits of narcissism and Machiavellianism seem to require a calculated sense of control. Individuals endorsing traits of Machiavellianism and narcissism might agree with the statements "I like to use clever manipulation to get my way," "you should wait for the right time to get back at people," "I like to get acquainted with important people" [21].

As such, if one is too impulsive, it could prevent the long-term success of delayed rewards and gratification seen in high Machiavellianism and narcissism, particularly as narcissism suggests an overarching goal of "exploitation and dominance" [31]. If a female student of Asian descent was motivated to pursue success academically and professionally, it would be reasonable then, that she would need to have sufficient self-control and self-discipline to pursue her long-term goals. Thus, if such a woman reports a moderate or high level of the EMS of Insufficient Self-Control/Self Discipline, she is understandably at risk for developing into a Dark Triad female and have impediment in pursuing her goals.

Clinical Implications

The personality characteristics that make up the Dark Triad reflect maladaptive traits and behaviors such as relational aggression. These behaviors and attitudes are often devalued for women, and can even evoke disapproval, particularly as they do not fit in with traditional gender perspectives of what a law-abiding, productive female member of society should be [19]. Although these characteristics have been seen as adaptive in the workplace, this is primarily so concerning Dark Triad men, rather than women [16,17]. Of course, in more extreme manifestations, these characteristics can lead to difficulties. The use of these measures of Dark Triad traits in clinical settings could help sub-clinical populations, specifically those who identify as female exhibiting some degree of characteristics of dark personalities. These measures can be used in a diagnostic manner to identify the presence and degree of these characteristics and how they might be problematic for the person. Objective identification of these characteristics can enable therapists to help these women feel more comfortable within the psychotherapy setting if they are able to feel validated in understanding their aversive personality traits, and how they may be manifesting in their relationships. Treatment could involve Schema Therapy addressing the two EMSs implicated in the correlations of Entitlement/Grandiosity and Abandonment/Instability and Dark Triad characteristics in these college women of Asian descent. One therapeutic approach would be utilizing an integrative approach, tailored to the individual patient's needs regarding how these traits are being manifested.

The EMS of Insufficient Self-Control/Discipline seems to be more complicated regarding development of Dark Triad traits. Based on the results obtained in this study, or at least for this sample of college women, primarily of Asian descent, experiencing higher levels of this EMS is associated with developing moderate and high levels of Dark Triad traits. Thus, if a clinician is aware of the patient having experienced moderate or high levels of this EMS, the clinician can be especially alert to the possibility that issues to be addressed in therapy are these traits, their manifestation, and an underlying EMS of Insufficient Self-Control/Discipline.

Limitations and Future Directions

There were several limitations in this study. The primary limitation is the significant assumption of heteronormative, binary, cisgender identity constructs implemented throughout the paper. During the review of existing literature, the researcher did not come across any explorations of these personality constructs (The Dark Triad and Early Maladaptive Schemas) within a discussion of LGBTQ+, non-binary, or gender fluidity. A comprehensive investigation and exploration of gender identity was beyond the scope of this paper. However, these identities and communities are important facets of our increasingly diverse and ever-evolving society. Therefore, research should include these demographic groups to add richness to studies that ideally lead to assessments and tar-

geted treatment that reflect the growing needs of today's world. The study relied exclusively on self-report data. Thus, there is no data regarding participants' scores and observed behavior. Therefore, a large part of the data endorsed by participants, and to what degree each item was endorsed, must bring into consideration positive impression management and social desirability. Dark Triad traits do not express themselves in any sort of behavior that would be considered socially appropriate. As such, if people have awareness of, and self-insight into, their personal qualities, it is reasonable to imagine that most people might be hesitant to self-disclose what are generally perceived to be socially undesirable traits, especially a sub-clinical sample. Therefore, participants may not have answered completely honestly. Furthermore, in the demographic questionnaire, prospective participants are asked to indicate whether they have familiarity with the YSQ-S3 and SD3; however, it is likely that participants would not be familiar with these names, even if they have seen the questionnaires in the past. As participants were recruited via snowballing method, friends contacted their other female friends who were also college students, and this may have created a potential validity issue.

Although several packets were mailed out to those who agreed to participate, many were not returned. At the end of data collection, there were 63 participants in the study, which is a relatively small sample size, considering all variables and details. The sample consisted of 89% of participants identifying as being of Asian or Pacific Islander (Filipino) descent; however, the researcher neglected to ask about nationality, acculturation to American culture (if not an American citizen), and other possibly related demographic factors that could impact the findings. Most participants were recruited from Southern California institutions; as such, it is possible that the findings may not be generalizable to other geographic locations, or female age groups that are younger or older than the target participant group. Moreover, like many psychological studies, this study utilized a WEIRD (Western, educated, industrialized, rich, and democratic) sample, which may lead to a skewed understanding of human behavior, as WEIRD populations only represent 12% of the world population, but are 80% of usual participants [32].

Additionally, the researcher was unable to determine whether a cultural component may have had an impact on the results; for example, level of acculturation if not born in the United States, and numerous other complex factors that play a role in personality and behavior. The participants were comprised of a community sample, and not recruited from a clinical setting, and thus considered a subclinical or "normal" sample of participants. However, this is a limitation, as the researcher did not determine whether any of these participants have been diagnosed with and/or are being treated for any clinical disorders. The latest research conducted on dark personalities includes a fourth trait of sadism, with its inclusion creating a new reference of the "Dark Tetrad" [33]. Obviously, future research will have to assess the extent to which that characteristic applies to the sample that participated in this study.

Conclusion

The focus of this study was the associations of the Dark Triad and Early Maladaptive Schemas. It called attention to the potential gender-specific differences of not only dark personality traits but also Early Maladaptive Schemas regarding women. Diverse gender differences are an important facet of various disorders and characterological conditions, and the conceptualization of the Dark Triad would benefit from further research on how these diverse gender differences are expressed in different gender identities and regarding various EMSs. Furthermore, the study emphasized the gaps in the literature on antisocial cisgender, heteronormative female behavior (as well as antisocial behavior in gender fluid and non-binary individuals, as it relates to the Dark Triad. In summary, this study found a relationship between the Dark Triad and the Early Maladaptive Schemas of Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, and Abandonment/Instability. Despite several limitations in the study, this study was able to identify a relationship of these EMSs and Dark Triad traits in a sub-clinical sample. It is this researcher's belief that this data provides a basis for further study of the phenomenon of socially aversive personality traits, and how individuals with these subclinical traits may benefit from psychotherapy. Future research should focus on how dark personalities manifest within a more diverse and widely encompassing gender spectrum, being more inclusive of non-binary and gender-fluid individuals, which may then lead to creation of approaches to enhance existing therapeutic assessment tools.

Acknowledgments

None.

Conflict of Interest

None.

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