Dark Triad of Personality, Social Desirability, and Ambivalent Sexism in Young Adults

Sehrish Rafique

Lahore School of Behavioral Science University of Lahore, Mindspark Consultants CEO and Lecturer
Srafique401568@gmail.com

Kainaat Yousaf

Lecturer at the department of applied psychology, school of professional psychology, university of management and technology
 kainaat.yousaf@umt.edu.pk

Saba Ishfaq

MS health psychology from the Institute of Applied Psychology, University of the Punjab, Lahore
Saba.riaz92@gmail.com

Noor Yaseen

Lahore School of Behavioral Science University of Lahore
noor.yaseen114@gmail.com

Maarab Zaheer

BS Applied Psychology, Department of Applied Psychology, School of Professional Psychology University of Management and Technology, f2021141028@umt.edu.pk

Abstract

The correlational study aims to analyze the association between the Dark Triad of Personality, Social Desirability, and Ambivalent Sexism in Young Adults. It was hypothesized that there would be a relationship between study variables. Quantitative research was conducted using a cross-sectional research design. Data was collected from the sample of 300 adults using non-probability convenient sampling through Dark Triad (Jones & Paulhus, 2014). Marlowe Crowne Social Desirability Scale (Crowne & Marlowe, 1960) Ambivalent Sexism Inventory (Glick & Fiske, 1996). Results indicated, there was no relationship between the Dark Triad of Personality, Social Desirability, and Ambivalent Sexism in Young Adults. The results will be significantly applied in the areas of social psychology, sociology, and gender studies.

Keywords: Ambivalent sexism, Dark trait, social desirability, Adult population

Introduction

Traditional gender roles that are strongly ingrained are the reason behind Pakistan's high rates of crimes against women. Sexism is pervasive and is frequently excused by society by placing the
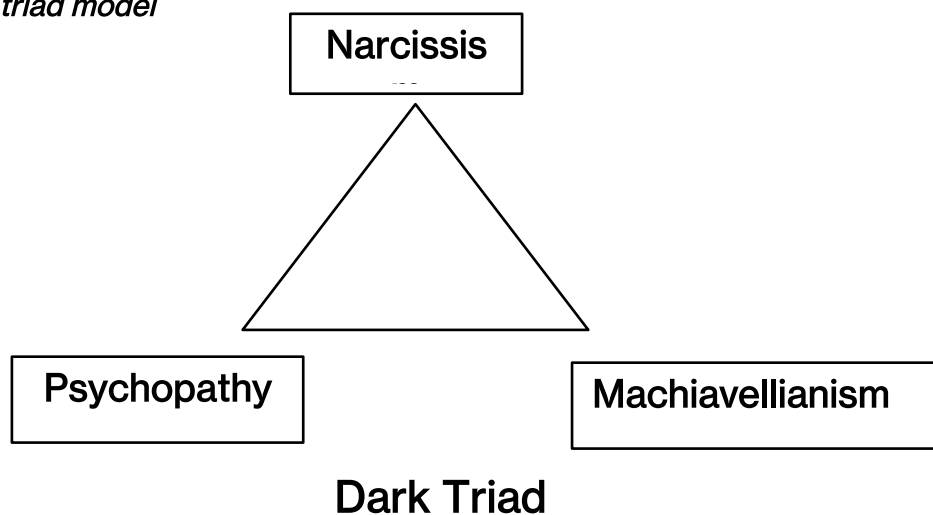
blame on the victims. This study investigates the relationship between sexism and dark triad qualities, which is important to comprehend and eliminate abuses stemming from conservative myths. For defining the concept of the dark triad these traits are called dark because of their malevolent qualities that are dark traits are also called dark tirade because of the presence of a triangular group of traits these are the personality triad named narcissism, Machiavellianism, and psychopathy these all are characterized by the presence of deviating behaviors (Paulhus et al., 2002). The dark triad comprises narcissism, Machiavellianism, and psychopathy, named for their malevolent qualities. These traits involve megalomania, exploitation, lack of ethics, and deviant behavior. While distinct, they often combine, creating a ruthless and misleading interaction approach characterized by arrogance, selfishness, and avarice (Paulhus et al., 2002; Skeem et al., 2011; Kaufman et al., 2019).

Narcissism is characterized by megalomania, involving intense self-involvement, arrogance, and selfishness. Those with narcissistic traits often exhibit a lack of consideration for others, being oblivious to their concerns. Megalomaniacs, in particular, habitually ignore others and lack awareness of the impact of their actions. Selfish personalities commonly display traits of megalomania, privilege, domination, and supremacy, alongside proactive personality, receptivity, and weak social competence. (Paulhus et al., 2015).

Machiavellianism A phenotypic expression that signifies ingenuity, deceitful capability, as well as a desire to obtain supremacy by any lawful means. Morality and ethics norms are of little importance to Machiavellians. They prioritize revenue, strength, and contestability over creating and sustaining, consciousness, and kinship involvement; they strive to win every single game. Machiavellians use charm, deception, compulsion, and can even be nasty in the jo (Navas, 2021).

Lack of remorse as well as a greater level of reactivity and rush of excitement. Psychopathy is a psychiatric problem marked by a lack of consideration and a dampening of other emotive emotions. People with this disorder are very persuasive due to their lack of humanity, indifference, and lack of decency. People with this disorder can pass for ordinary people, even appealing. They are devoid of any appearance of concern just below the surface. Their antagonistic disposition typically leads to illegal activity. Sadists are a source of public curiosity as well as psychological and emotional pain: Although encourage treating cynical, emotionally detached youths to deter them from turning into criminals, adult psychopathy is typically refractory to treatment. (Tariq et al., 2021)

Dark triad model

Dark Triad

The preponderance of investigation into people's environmental behavior, as well as its concomitants, is done by collecting data in which people self-report their activities, opinions, dispositions, as well as other psychological and environmental factors. People may respond in a fundamentally meaningful way, such as pro-environmental conduct, to improve their social image. (Kowalski, 2018) It has been

observed that this tendency to mislead is more noticed in responses to sensitive nature topics like racism, sexual activities, etc., where individuals report in contradiction with their actual true desires/urges. Social desirability or socially desirable responses tend to give an answer that makes the respondent good concerning current social norms and standards. There are different methods to minimize this cofound giving socially desirable responses that drastically affect conclusions I increasing or decreasing the average cores, the variability of responses, and moderating correlations between variables (Međedović, 2015).

Sexism is discrimination or biased treatment against a person due to that person's gender or sex. The term sexism was coined in 1960 or 1980. It originated from feminist movements. Sexism is the assumption that one gender or sex is better than another makes rigid gender roles for males and females. It was used to let people know about the oppression of females. But now it also indulges discriminatory or violent attitudes against men. (Miller et al., 2010)

Ambivalent sexism is defined as a coordinated system of control that promotes male supremacy while restricting women's authority in the personal, economic, and political arena. (Kaufman et al., 2019)

Literature Review

A meta-analytic review concluded that the dark triad features were substantially associated with one another since the existence of one trait increases the likelihood of the development of another. They also concluded that narcissism, psychopathy, and Machiavellianism are more common among men than women (Patrick et al., 2009).

Another study indicated that narcissism was positively correlated with social desirability. Whereas Machiavellianism and psychopathy were negatively correlated with social desirability. Psychopathy and Machiavellianism were more in Men and social desirability was more in women. However, there was no difference between men and women in terms of narcissistic features. Age was shown to be inversely associated with narcissism, psychopathy, and Machiavellianism. (Kowalski et al., 2018).

Another research indicated Machiavellianism and psychopathy were adversely connected with social desirability. There was no association established between narcissism and social desirability. According to the regression model, persons who have high degrees of Machiavellianism and psychopathy are less familiar with what is and isn't socially acceptable, whereas narcissistic people are more familiar with what is and isn't socially desirable. (Kay & Saucier, 2020) similarly study revealed that people with psychopathy and Machiavellianism traits were not more concerned with social desirability while people with narcissistic personality traits were more concerned with social desirability (Gluck et al., 2020).

Hostile and benevolent sexism were associated with Machiavellianism and psychopathy in perpetrators of sexual assault against women, but only narcissism and Machiavellianism among community males. (Holden, 2021). Another study indicated Among males, a hia gh level of narcissistic personality trait was linked to a hia gh level of benevolent sexism while among females, those with a hia gh level of psychopathy had more hostile sexism (Sanchez et al., 2021). Benevolent sexism was highly correlated with narcissism, then with psychopathy and Machiavellianism. How easily participants could imagine making a false claim was positively related to witoachiavellianism and psychopathy (Grossman, 2017).

The dark triad was not directly connected with ambivalent sexism, but the association was entirely mediated by moral disengagement mechanisms (Gala et al., 2020). These findings of a study indicate that people with high levels of psychopathic traits regard women as less than human and that this

dehumanizing assessment is encouraging attitudes and behaviors that support the idea that females are lower animals and deserve bad (Muris et al., 2017). Machiavellianism and social desirability have a pact on anxiety, and the interaction between social desirability and Machiavellianism is high in people with greater social desirability who have a greater amount of Machiavellianism have significantly greater levels of anxiety than people with minute levels of Machiavellianism (Holden & Passey, 2009).
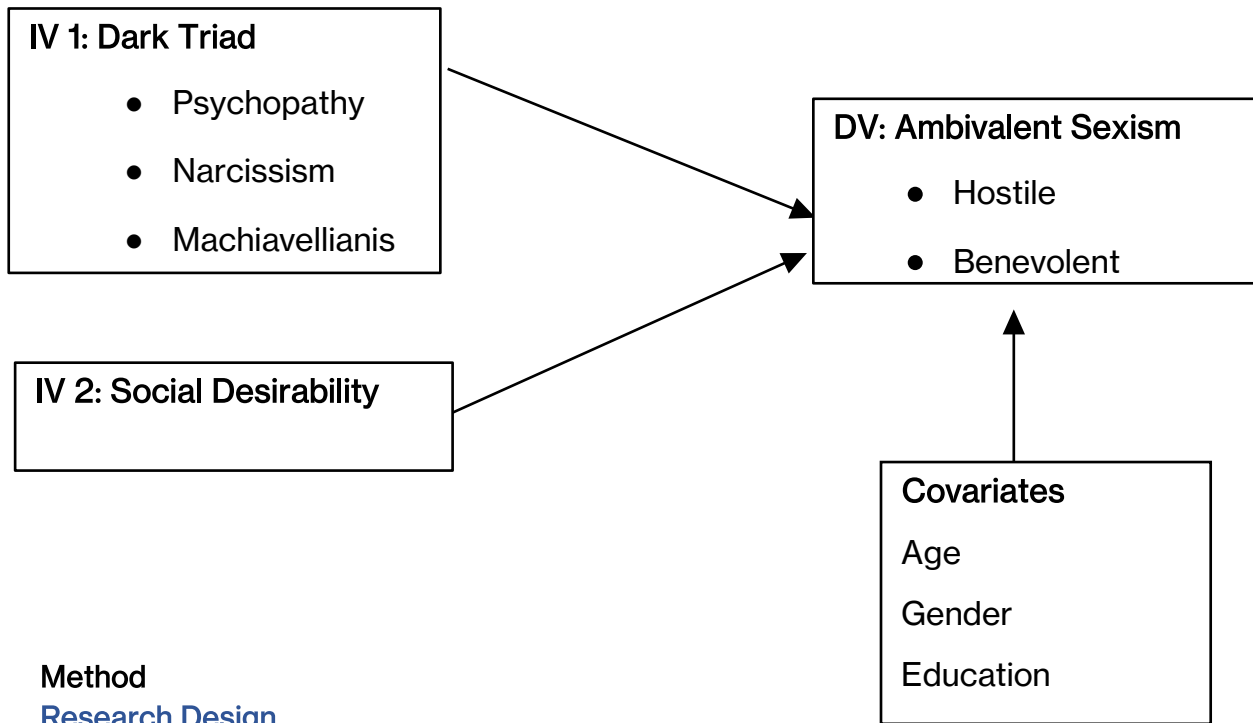
The rationale of the Study

People with more dark triads tend to manifest more ambivalent sexism. People scoring high on dark triads exhibit more prejudice against others. Psychopaths tend to hold more negative attitudes and cognition toward their partners and it's a risk factor for sexual aggression. They have more acceptance of rape myths and have a pro-rape attitude. They tend to use more coercive tactics. Similarly, Machiavellians also have hostile sexual attitudes and use them to manipulate others. In literature, it is also seen that dark traits of personality are associated with ambivalent sexism.

Pakistan is ranked as the third worst country in terms of gender equality worldwide. So, there is a need to explore the attitudes and beliefs or personality traits that are leading towards this kind of sexism. As feminist movements have been picking up the pace for the last few years there is a kind of social rigidity, The majority of people get comfort in conforming to the traditional school of thought and thus display gender stereotypical attitudes and show more bias in multiple dimensions of life. This research is aimed at exploring the indigenous factors that are causing ambivalent sexism. It will explore the combination of dark traits with social desirability in predicting ambivalent sexism. It will investigate all three facets of dark traits to ambivalent sexism. It will also explain which facet of dark traits is prevalent among youth and a stronger predictor of ambivalent sexism. It will also explore which individuals with specific dark traits of personality are likely to show more socially desirable responses. It will also give an idea of the prevalence of dominant dark personality traits specifically in this society that can be considered as a risk factor for sexism. This research will also investigate the relationship of these variables with demographics i.e., age and socioeconomic status. People belonging to different age groups and socioeconomic backgrounds can have different kinds of beliefs regarding sexism and can also have different dark personality traits. Gender differences will also be explored in terms of a combination of these variables. This study will help to fill the existing research gap in multiple ways and can have great implications for the future. This study is a great addition to existing indigenous literature regarding these variables.

Research Hypothesis

- There is likely to be a positive relationship between the dark triad of personality, social desirability, and ambivalent sexism in young adults.
- The dark triad of personality (Machiavellianism, Narcissism, and Psychopathy) and social desirability are likely to predict ambivalent sexism in young adults.

Proposed Hypothetical Model

Method
Research Design
A correlational research design was used in the current investigation.
Sample and Sampling strategy
In this study, a sample size of N=300 young adults. Strategy sampling was used to collect data from different universities in Lahore (n=120 young adults from Government College University n=90 young adults from Johar Institute of Professional Study and n=90 young adults from Lahore Leads University).
Inclusion Criteria
- Young Adults with the age range of 18-25 years.
- Young Adults belong to different universities in Lahore.
- Both male and female students were included in the study.
Exclusion Criteria
- Young Adults with any physical disability.
- Young Adults with any type of diagnosed psychiatric disorder like depression, schizophrenia, etc.
- Young Adults with any chronic physiological illness, including hypertension, etc.

Demographic information
Table 1
Demographics Showing Sample Characteristics N = (300)

Characteristics	M	SD	f	%
Age	1.41	.49		
18-25	21.3	2.62		
Gender	1.50	.50		

	M	SD	f	%
Male			151	50.3
Female			149	49.7
Education	1.70	.69		
Bachelors			130	43.3
Masters			130	43.3
Other			40	13.3
Department	2.56	1.14		
Psychology			73	24.3
Medicine			69	23.0
Business			74	24.7
Education			84	28.0

Note. M=Mean; SD=Standard Deviation; f=frequency; %=percentage

Assessment Measures
Demographic Information Sheet

The demographic information sheet was self-built and used to gather information from adolescents. This will include age, gender, education, and department.

Dark Triad (Jones & Paulhus, 2014).

Dark Triad Scale (DTS) measures the extent to which dark traits in an individual. It was a self-reported scale for individuals designed by Jones and Paulhus. Permission was obtained from the concerned author. The scale has three subscales including Machiavellianism, narcissism, and psychopathy. The Cronbach's alpha coefficient of Machiavellianism $a = 0.80$ and narcissism $a = 0.80$, but modest for psychopathy $a = 0.64$ was reported for this scale by the author. It is a 41-item questionnaire in which the average of the response scores from the summation of items by computing an average score. The individual items listed measures of traits like ltraitsachiavellianism, narcissism, and sympathy, the dark traits. Participants responded on a 5 point5-point scale of 1 (strongly disagree) to 5 (strongly agree). The range for the scale score is 41 to 205.

Marlowe Crowne Social Desirability Scale (Crowne & Marlowe, 1960)

Marlowe Crowne Social Desirability Scale (MCSDS) measures the extent to which an individual confirms society and the responsible way that is demanded by society and responsrespondsocial desirable way. It was a self-reported scale for individuals designed by Crowne and Marlowe. Permission was obtained from the concerned author. It is a 13-item questionnaire in which the average of the response scores from the summation of items by computing an average score. The individual items listed measure social desirability where a high score reflects the high level of social desirability. Participants responded on a 2-point Likert scale that is dichotomous. The range for the scale score is 0 to 13.

Ambivalent Sexism Inventory (Glick & Fiske, 1996)

The Ambivalent Sexism Inventory (ASI) measures the extent to which an individual has a sexist

attitude and the type of sexist attitude a person has regarding to other gender. It was a self-reported scale for individuals designed by Glick and Fiske. Permission was obtained from the concerned author. It is a 22-item questionnaire in which the average of the response scores from the summation of items by computing an average score. Scale has two sub-scales including hostile sexism measures hostility towards the opposite or repressed gender and benevolent sexism measuring Benevento attitude towards the other gender where hostile sexism has 11 items and benevolent sexism has 11 items. The individual items listed measure ambivalent sexism where a high score reflects the high level of ambivalent sexism and vice versa. Participants responded on a 6-point Likert scale that ranged from 0 (disagree strongly) to 5 (agree strongly). The range for the scale score is 0 to 132.

Results

Reliability Analysis

The data mentioned below is reliability and descriptive analyses for each measure used for assessment, the ranges include the actual range and potential ranges.

Table 2

Descriptive Statistics, Psychometrics Properties and Reliability of Study Variables (N=300)

Variable	M	SD	Range	α	Skewness
Dark triad	144.43	17.67	99-186	.83	-.60
Machiavellianism	48.74	8.12	15-63	.83	-.49
Narcissism	47.08	7.58	27-62	.76	-.26
Psychopathy	48.61	9.79	23-71	.78	.05
Social desirability	10.92	1.40	5-13	.64	-.83
Ambivalent sexism	57.73	8.82	32-87	.25	.03
Hostile sexism	28.06	5.94	12-44	.14	-.04
Benevolent sexism	29.67	5.46	14-45	.65	.03

Note. M=Mean; SD=Standard Deviation; value; α = Cronbach alpha, k=Number of Items.

The alpha reliability of the Dark Traits Scale turned out to be high-reliability Dark Triad Scale has three subscales including Machiavellianism, Narcissism, and Psychopathy, keeping in view the limited items of each subscale alpha reliability is .83, .76, and .78 respectively for Social Desirability Scale turned out too low-reliability Ambivalent Sexism Inventory has two subscales including Hostile sexism and benevolent sexism keeping in view the limited items of each subscale alpha reliability is .14 and .65 respectively leads to use only benevolent sexism.

Correlation analysis

Table 3

Pearson product-moment Correlation of Study Variables Lifestyle (N=300)

	1	2	3	4	5	6	7	8

Gender	-.06	-.07	-.07	-.05	-.05	-.04	-.05	-.01
Age	.28	.22	.21	.37	.35	.43	.36	.75
Education	-	.64**	.05	-.02	.06	.04	-.12*	.02
Dark triad			-.03	.04	.01	-.09	-.02	-.09
Machiavellianism			-	.72**	.74**	.63**	.10	-.07
Narcissism				-	.52**	.05	.08	-.09
Psychopathy					-	.13*	.06	-.09
Social desirability						-	.08	.01
Benevolent sexism								
M	1.50	1.41	1.70	144.43	48.74	47.07	48.61	10.92	57.73
SD	.50	.49	.69	17.68	8.12	7.59	9.79	1.40	8.82

Results indicate that gender is non-significantly associated with benevolent sexism. Age is also a non-significantly associated with benevolent sexism. Education is non-significantly associated with benevolent sexism. The department is insignificantly associated with benevolent sexism. Dark triad, Machiavellianism, Narcissism, and Psychopathy were non-significantly associated with benevolent sexism. Social desirability was not significantly associated with benevolent sexism.

Regression Analysis

Table 4

Multiple linear Regression Analysis of benevolent sexism (N = 300)

	B	SE	β	95% C.I		p
				LL	UL	
(Constant)	31.68	4.19		23.42	39.94	.00
Gender	-.15	.64	-.01	-1.42	1.11	.87
Age	-.43	.85	-.04	-2.12	1.25	.61
Education	-.11	.64	-.01	-1.37	1.15	.85
Department	.23	.28	.04	-.33	.79	.42
Machiavellianism	.01	.04	.02	-.07	.10	.72
Narcissism	-.04	.05	-.03	-.14	.05	.34
Psychopathy	.00	.03	.01	-.05	.07	.86
Social desirability	.02	.23	.007	-.42	.48	.90

F	.54
R^2	.02

Note*p<.05, **p<.01, ***p<.001,, *β=Standardized Coefficient*

Multiple Linear Regression analysis was run to find whether dark traits including three subscales of Machiavellianism, narcissism psychopathy, and social desirability are the predictors of benevolent sexism. Dark triad, Machiavellianism, Narcissism, and Psychopathy were non-significant predictors of benevolent sexism. Social desirability is a non-significant predictor of benevolent sexism. The model explained a 54% variance in internalizing behavioral problems.

Table 5
Table for hypothesis, concerned table, and health status

Hypothesis Number	Hypotheses	Hypotheses status
1. H$_1$	There is likely to be a significant relationship between the dark triad, social desirability, and sexism	Not-Supported
2.H$_1$	Dark triad is likely to be a positive predictor of sexism	Not-Supported
3.H$_1$	Social desirability status is likely to be a positive predictor of sexism	Not-supported

Discussion

This study aims to find the relationship between dark triads, social desirability, and ambivalent sexism in youth. This study is important in many aspects as it explores the prevalence of dark traits in Pakistani society and their role in exacerbating ambivalent sexism. Everyday newspaper and social media are full of news comprising crimes and violations committed against females. They are compelled to be bound within the four walls of the house. If they speak for their rights in the form of marches, then a strong resistance and reaction come from the patriarchal society as people tend to manifest socially desirable responses in conformity with patriarchal norms and values of their society.

The results of our analysis revealed that dark triads are negatively and non-significantly related to benevolent sexism. This is somehow in synchrony with our literature. One research on dark triads and ambivalent sexism revealed a weak relationship between benevolent sexism and dark triads but only in men. (Gluck et al., 2019). It means that a high score on dark triads reduces benevolent sexism because dark traits are more related to hostile attitudes so maybe this can be a reason for weak and negative relationships. These results are not in synchrony with our hypothesis.

It was hypothesized that social desirability and sexism have a positive and significant relationship with each other. Social desirability and ambivalent sexism are positively but non-significantly related to each other according to the findings of our research. It means that an increase in social desirability enhances the chance of adopting sexist attitudes but there is a weak relationship. This finding is somehow consistent with literature that indicates that social desirability has a weak

direct effect on prejudice. There was a positive relationship between social desirability with prejudice. (Backstrom et al, 2005) It can be justified by the fact that as more people conform to traditional gender roles there are more chances for them to indulge in sexist practices. As they follow the gender roles established by patriarchal society the chance of sexism enhances in this manner. So the findings somehow contradict our hypotheses.

Social desirability and dark triads subscales i.e., narcissism, Machiavellianism, and psychopathy are positively but non-significantly related to each other according to the findings of our research. This finding is consistent with literature that suggests a positive relationship between social desirability and three subscales of dark triad i.e., psychopathy, Machiavellianism, and narcissism. (Silvia et al., 2011) In the literature, we found a significant association between these variables, but our research findings revealed a non-significant association. It is inconsistent with the literature to some extent.

It was further hypothesized that social desirability is likely to predict benevolent sexism among adults. Multiple linear regression analysis was applied to seek the predicting relationship among the study variables assessed through SPSS version 21.00. The findings revealed that dark triads including Machiavellianism, narcissism, and psychopathy are not a significant predictor of social desirability among adults indicating those individuals having an adequate level of dark triad do not indicate the causation of social desirability. According to empirical evidence, findings are inconsistent with the existing literature in the research revealed that there was a significant prediction of social desirability for benevolent sexism indicating that individuals who exhibit social desirability display benevolent sexism due to it (Aoswad et al., 2009). The reason for deviating from literature is that individuals having mischievous traits often are not concerned about the norms and demands of society as they find it pleasurable to deviate from them which leads to less desire to conform to the norms of society.

Conclusion

The findings of the study revealed interesting identifications for the relationship among study variables in the context of Pakistani culture. All the main study variables were not found to be related to sexism where the dark triad is not significantly associated with ambivalent sexism including its sub-domains including benevolent and hostile sexism because of being habitual of viewing women in a submissive role where social desirability is not significantly association to ambivalent sexism including the subdomains of benevolent and hostile sexism in adults. Moreover, dark triads including Machiavellianism, narcissism, and psychopathy are not a significant predictor of ambivalent sexism and social desirability is not a significant predictor of ambivalent sexism including benevolent and hostile sexism in adults. This evidence can be useful to realize the basis of the provocation of the feminist inclination of Pakistani adults and applying efforts to these variables can improve the progress and development of a safe environment in the region of Pakistan controlling these factors may enhance the developmental, physical and mental health and progress of both genders of society by contribution overall in psychopathology, social psychology, gender study, and sociology.

Limitations and Suggestions

Scales need to be constructed based on our local parameters. Scale development is beyond our scope due to the limitations of resources in terms of time, money, and expertise of researchers. Generalization of the findings could be limited because this study was cross-sectional. Longitudinal research could probably help in unveiling better evidence on this phenomenon. Only educated adults were made a part of the study. The impact of illiteracy should be addressed in further studies.

Implications

The findings are significantly implicated for social psychologists, counseling psychologists, management, gender studies, sociologists, and psychopathologists. The present study adds to the literature of ambivalent sexism including benevolent and hostile sexism in Pakistani adults. Further studies can be conducted on this research, strengthening its reliability. The present study will

uncover the attitude of Pakistani adults regarding ambivalent sexism including benevolent and hostile sexism

References

Bäckström, M., Björklund, F., Larsson, M. R. (2009). Five-factor inventories have a major general factor related to social desirability which can be reduced by framing items neutrally. *Journal of Research in Personality, 43*, 335-344.

Gluck, M.; Heesacker, M.; Choi, H.D. (2020) Should we trust Web-based studies? A comparative analysis of six preconceptions about Internet questionnaires. *American Psychologist, 59*, 93-104.

Holden, R. R., Starzyk, K. B., Mcleod, L. D., & Edwards, M. J. (2000). Comparisons among the Holden Psychological Screening Inventory (HPSI), the Brief Symptom Inventory (BSI), and the Balanced Inventory of Desirable Responding (BIDR). *Assessment, 7*, 163-175.

Kaufman, Scott Barry; Yaden, David Bryce; Hyde, Elizabeth; Tsukayama, Eli (12 March 2019). . FrontiersinPsychology. 10:467. doi:10.3389/fpsyg.2019.00467. PMC 6423069. PMID 30914993

Navas, M.P., Maneiro, L., Cutrín, O., Gómez-Fraguela, J.A., & Sobral, J. (2021). Sexism, Moral Disengagement, and Dark Triad Traits on Perpetrators of Sexual Violence Against Women and Community Men. *Sexual abuse: a journal of research and treatment*, 10790632211051689 .

Sanchez-Ruiz, M., El Ahmad, P., Karam, M.L., & Saliba, M.A. (2021). Rape myth acceptance in Lebanon: The role of sexual assault experience/familiarity, sexism, honor beliefs, and the Dark Triad. *Personality and Individual Differences, 170*, 110403.

Tariq, F., Amad, M., & Lingjie, L. (2021). A review of the bright side of dark triad and a road to career success. *Liberal Arts and Social Sciences International Journal (LASSIJ), 5*(2), 61–78. https://doi.org/10.47264/idea.lassij/5.2.5

Kowalski, Christopher & Rogoza, Radosław & Vernon, Philip & Schermer, Julie. (2018). The Dark Triad and the self-presentation variables of socially desirable responding and self-monitoring. Personality and Individual Differences. 120. 10.1016/j.paid.2017.09.007.

Grossman, M. (2017). *Study of social media users: The relationship between online deception, Machiavellian personality, self-esteem, and social desirability* (Doctoral dissertation, Alliant International University).

Gala, P. B., Chauhan, R. S., & King, R. A. (2020). Narcissism Versus Machiavellianism And The Role Of Self Control Towards Social Desirability. *Marketing Management Journal, 30*(1).

Muris, P., Merckelbach, H., Otgaar, H., & Meijer, E. (2017). *The Malevolent Side of Human Nature. Perspectives on Psychological Science, 12(2), 183–204.* doi:10.1177/1745691616666070

Holden, R. R., & Passey, J. (2009). Social desirability. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 441–454). The Guilford Press.

Kaufman, Scott Barry; Yaden, David Bryce; Hyde, Elizabeth; Tsukayama, Eli (12 March 2019). "The Light vs. Dark Triad of Personality: Contrasting Two Very Different Profiles of Human Nature". *Frontiers in Psychology*. **10**: 467. doi:10.3389/fpsyg.2019.00467. PMC 6423069. PMID 30914993.

Skeem, Jennifer L.; Polaschek, Devon L. L.; Patrick, Christopher J.; Lilienfeld, Scott O. (15 December 2011). "Psychopathic Personality". *Psychological Science in the Public Interest*. **12** (3): 95–162. doi:10.1177/1529100611426706. PMID 26167886. S2CID 8521465

Paulhus, D. L., Neumann, C. S., & Hare, R. D. (2015). Manual for the Self-Report Psychopathy scales (4th ed.). Toronto, Canada: Multi-Health Systems.

Međedović, Janko; Petrović, Boban (November 2015). "The Dark Tetrad: Structural Properties and Location in the Personality Space". *Journal of Individual Differences*. **36** (4): 228–236. doi:10.1027/1614-0001/a000179

Miller, Joshua D.; Dir, Ally; Gentile, Brittany; Wilson, Lauren; Pryor, Lauren R.; Campbell, W. Keith (October 2010). "Searching for a Vulnerable Dark Triad: Comparing Factor

2 Psychopathy, Vulnerable Narcissism, and Borderline Personality Disorder". *Journal of Personality*. **78** (5): 1529–1564. doi:10.1111/j.1467-6494.2010.00660.x. PMID 20663024. S2CID 7923414

Silvia, Paul J.; Kaufman, James C.; Reiter-Palmon, Roni; Wigert, Benjamin (October 2011). "Cantankerous creativity: Honesty–Humility, Agreeableness, and the HEXACO structure of creative achievement". *Personality and Individual Differences*. **51** (5): 687–689. doi:10.1016/j.paid.2011.06.011