

## **Urdu Translation and Adaptation of Short Dark Tetrad**

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In recent years, extensive research has been conducted on the dark personality traits. The term dark tetrad refers to a group of four interconnected traits: Machiavellianism, narcissism, psychopathy, and everyday sadism. The primary objective of the current investigation was to adapt and translate the recently introduced Short Dark Tetrad (SD4; Paulhus et al., 2021) into Urdu, as Urdu translation of this measure is not yet available. This study was divided into two distinct phases. Phase I focused on translation and adaptation of the scale. Phase II was dedicated to determining the scale's psychometric properties. The sample comprised 280 individuals, including 140 males and 140 females, who were selected using the purposive sampling technique and fell within the age range of 17-30 years ( $M = 24.43$ ,  $SD = 2.79$ ). The reliability coefficient of the translated scale is .73. The inter-scale correlation revealed a moderate to high levels of significant correlation between the four subscales. Confirmatory factor analysis was performed to confirm the factors associated with SD4. The results indicated that the translated SD4 is a reliable and valid scale. Given the rising number of individuals, particularly youth, displaying unfavorable personality characteristics, this measure can be used in a variety of settings especially in research and clinical settings. Additionally, it will aid future Pakistani researchers in improving Urdu translation, if needed, or translating it into any other regional language.

*Keywords.* Dark tetrad, narcissism, Machiavellianism, sadism, psychopathy

Personality refers to a unique blend of distinctive traits and characteristics that contribute to an individual's enduring behavior and help to distinguish them from others. According to Roberts and Mroczek (2008), traits are the underlying characteristics that make each person unique and provide stability to their behavior. These traits

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can also be shared by a group of individuals. Additionally, characteristics are personal attributes that make individuals stand out, such as their physical appearance, intelligence, and other distinctive features (Feist et al., 2018).

The topic of dark personality traits has received considerable attention from researchers in recent times. These personality characteristics are socially aversive in nature (Paulhus & Jones, 2015). According to Zeigler-Hill and Marcus (2016), these unpleasant traits can be found in everyday normal life and may not require clinical supervision, in fact, such individuals can manage to succeed in everyday society. The term dark triad was introduced by Paulhus and Williams (2002) and is commonly used in literature to refer to three distinct constructs: psychopathy, narcissism, and Machiavellianism. While they are separate, they also intersect with one another (Muris et al., 2017). These constructs can be found in a variety of sources, including books and the internet.

The origin of narcissism can be traced back to Greek mythology, where the character Narcissus became captivated with his own reflection and ultimately perished. Narcissism is portrayed by grandiosity (Greitemeyer, 2015). Narcissists think highly of themselves, and they feel they are superior to others (Rogoza & Ciecuch, 2019). They are self-entitled and believe they deserve great things. They crave for attention (Lyons, 2019). They want others to admire them, and they want to look dominant (Matosic et al., 2017).

Psychopathy involves having reckless and impulsive behavior. Psychopaths have disregard for others and exhibit criminal behavior which can lead to serious harm to self and others (Lyons, 2019). It is a multidimensional construct having lack of empathy (Pailing et al., 2013). They have no emotions, no guilt and remorse, they are manipulative, irresponsible and enjoy thrill seeking behavior (Knight, 2016; Paulhus, 2014; Smith & Lilienfeld, 2013). It is also referred to as disorder of empathy (Soderstrom, 2003). Sub-clinical psychopathy is the variant that is being studied more these days. It is different from clinical psychopathy in a way that it is less intense and different in frequency of the actions (LeBreton et al., 2006). They have low empathy (Hodson et al., 2009). Depending on the way it is measured, it may have two, three or four factors (Lyons et al., 2020). Most mentioned factors are primary psychopathy and secondary psychopathy. Primary psychopathy shows callousness (Jonason et al., 2014), shallow affect (Osumi & Ohira, 2017) and manipulation (Lyons et al., 2020). Secondary psychopathy shows criminal behavior (Jonason et al., 2014), are hostile (Osumi & Ohira, 2017) and are noticed to be juvenile delinquent (Ashton et al., 2000).

Machiavellianism is taken from the name of Niccolò Machiavelli who was counselor to the family of Medici (Furnham et al., 2013). In his book called *The Prince*, he offered guidance to kings and nobles on strategic planning and eliminating obstacles in their path (as cited in Muris et al., 2017). Christie and Geis (1970) were the first to introduce a questionnaire based on the principles of Machiavelli. According to Bereczkei (2018), Machiavellians show indifferent behavior where they are not concerned about feelings of others, they are skeptic of others (cynicism) and they assume people to be liars and hypocrites. They are not concerned about moral aspects, and they can use deception for personal gain (Ramos-Villagrasa et al., 2020). They influence decision making process by playing political games.

Recent research by Paulhus (2014) suggested that there is another factor called sadism that has common trait of callousness, and it was suggested that it should be added to dark triad and studied together. It was then known as 'dark tetrad' which meant that it studied four factors all together namely Machiavellianism, psychopathy, narcissism and sadism (Furnham et al., 2013; Paulhus, 2014). These four factors are theoretically different, but they interrelate to each other (Book et al., 2016). There are many researchers that have been interested in studying dark tetrad and they supported the inclusion of sadism in dark triad (Buckels et al., 2013, 2014; Chabrol et al., 2009, 2015). It has been found that sadism has significant correlations with these dark personality traits (Chabrol et al., 2015). All four factors of dark tetrad show significant correlations (Book et al., 2016; Lyons et al., 2020; Paulhus et al., 2021) even though they are distinct in nature but they show overlap because they have common factor of callousness (Paulhus, 2014).

Sadism is when individuals find pleasure in inflicting pain on others (Buckels et al., 2013). It adds unique aspect to dark triad which explains the pleasure that is gained by hurting others (Nell, 2006). They like to humiliate others, assert their dominance and are cruel in their interactions with others which can be seen in everyday life (O'meara et al., 2011). It exists in clinical and non-clinical form (Meera & Egan, 2017). Non-clinical form is also known as everyday sadism which explains why people take pleasure in hurting others, and not enjoying the cruelty (Porter et al., 2014). There is another sexual form where people gain pleasure by making others suffer sexually (American Psychiatric Association, 2013).

Those who are high in dark tetrad show behavior that goes against the norms and ethics. They are exploitative and selfish who do not hesitate to take advantage of others. They deceive others by lying, cheating and stealing. They can be heartless and lack empathy (Lyons,

2019). The trait that is common between all is manipulation and callousness (Jones & Figueredo, 2013). At workplace, such individuals can be very successful as they utilize manipulation (Jonason et al., 2012). Individuals have these four personality traits can have features such as they can enjoy cruelty and harming others, they can be callous, they can be impulsive and show law-breaking behavior (Paulhus, 2014).

Researchers in Pakistan have investigated the dark triad in diverse contexts and with different variables including relational aggression (Riaz et al., 2018), bodily concerns, emotional intelligence (Khan & Imran, 2019) and bullying, victimization (Gul-e-Sehar & Fatima, 2016) and counterproductive work behavior (Li et al., 2020). Since the inclusion of Sadism and making it dark tetrad (Buckels et al., 2013), not many research have been conducted in Pakistan to study the concept of dark tetrad. One of the study that is worth noting in this context is a study conducted by Akhtar et al. (2022) who investigated the effectiveness of a short dark tetrad in a predominantly Muslim society, specifically in Pakistan. Short Dark Tetrad has only been translated into Chinese language (C-SD4) with excellent test-retest reliability and internal consistency (Liu et al., 2023) whereas the measure was not found in any other language. The absence of an Urdu translation of Short Dark Tetrad (SD4) has been identified. As a relatively new topic, the current research endeavors to investigate the dark tetrad and its translation into Urdu, while simultaneously assessing its psychometric properties. Hence, it is the highlight of this research and helps in filling the gap. Research objectives that were articulated for this research is to translate and adapt the Short Dark Tetrad and to establish descriptive properties of newly translated measure. In addition, to establish confirmatory factorial validity of Short Dark Tetrad Urdu Version.

## Method

The present study consisted of two phases. Phase 1 dealt with the translation and adaptation of SD-4 and Phase 2 focused on establishing psychometric properties and validity of the newly translated scale.

### Phase I: Translation of Short Dark Tetrad

For measuring dark personality traits, the Short Dark Tetrad was used (Paulhus et al., 2021). It is a 5-point Likert type scale with options of 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*,

and 5 = *strongly agree*. SD4 consists total of 28 items. The measure has four subscales including Machiavellianism, Narcissism, Psychopathy and Sadism which includes 7 items for each construct. The tool evaluates each subscale individually instead of using composite score for whole scale. The minimum score achieved on a subscale is 7, while maximum score that can be achieved on a subscale is 35. A high score indicates that a person possesses a high level of each dark traits, while a low score suggests that they have low level of dark traits present. There are no reverse coded items in this measure. According to the authors of "Short Dark Tetrad," the measure has achieved an acceptable level of reliability, with the following scores: Machiavellianism (.75), sadism (.81), psychopathy (.81), and narcissism (.80). After obtaining permission from the original author, the SD4 was translated and adapted into Urdu through series of steps listed below:

#### ***Step 1: Forward Translation of SD4***

Keeping in view of the popularity and increased research in the field of dark personality, new measurement had been introduced to measure dark tetrad. Due to the recent introduction, the scale has not been previously translated in Urdu. Thus, the present study aimed at translating SD4 in Urdu. After asking permission from original author, the next step was to continue with forward translation process. For this, three bilinguals were selected who had expertise in both English and Urdu languages. They were acquainted with the cultural prospect of the process of translation, and they were also linked with the field of Psychology. For this task, the bilinguals were offered small monetary compensation as an appreciation for their valuable time, knowledge, and expertise. The forward translation was received from all three bilinguals. The translations were not done word-for-word, but rather in a manner that conveyed the sense and meaning of the statement in a more straightforward and understandable way.

#### ***Step 2: Committee Approach***

This procedure proceeded with committee formation. The committee members involved experts including a forensic psychologist, psychometrician, and a clinical psychologist. All members reviewed all three translations and selected most appropriate translations for all items by putting a tick on the statement that was most appropriately translated.

### ***Step 3: Back Translation***

The committee recommended a newly translated measure to go through backward translation procedure. For this, three bilinguals were provided incentives for their time and expertise and were asked to translate the Urdu version back to English. These three bilinguals were different individuals and not same as the ones who participated in forward translation. Committee overviewed and completed the process of translation. Committee members carefully reviewed and they found no such vagueness in the items. The researcher was asked to proceed with pilot study to first try the measure on 30 individuals only.

### ***Step 4: Pilot Study***

The Urdu version of translated SD4 was then tested to evaluate if the items could be easily comprehended by respondents.

**Sample.** The sample consisted of 30 individuals (19 women and 11 men) from students of different colleges and universities in Quetta. Their age ranged from 17 to 30 years ( $M = 24.43$ ,  $SD = 2.79$ ). The participants had diverse educational backgrounds, including intermediate ( $n = 1$ , 3.3%), bachelor's/associate degrees ( $n = 7$ , 23.3%), graduation ( $n = 18$ , 60%), and postgraduate degrees ( $n = 4$ , 13.3%).

**Procedure.** The participants were reached out using purposive sampling keeping in view the inclusive criteria of age. A total of 45 individuals were reached out, out of which only 30 responded. The data was collected using Google form. Link for the google form was sent out to the participants using Whatsapp. Their contact details were obtained with their consent from the class teachers and heads of departments of their respective departments. They were informed about the purpose of the study and informed consent was taken from them. It was made sure that the participation was voluntary and not forced. They were told that if at any point during filling the questionnaire, participants experience discomfort, they are free to stop and discontinue their participation. It was made sure confidentiality was maintained. They were asked to fill the questionnaire and share their views if they find any difficulty when they read an item. They were told that no answer is right or wrong and there is no time limit so they had to make sure no question is left unanswered.

**Results.** The item-total statistic was checked. The results have been presented in [Table 1](#).

**Table 1**

*Corrected Item-Total Correlations for SD4-Urdu Version*

Items #	<i>r</i>	Items #	<i>r</i>	Items #	<i>r</i>	Items #	<i>r</i>
1	.21	8	.23	15	.52	22	.54
2	.63	9	.15	16	.52	23	.28
3	-.04	10	.31	17	.34	24	.52
4	.25	11	.37	18	.31	25	.44
5	-.29	12	.49	19	.44	26	.53
6	.12	13	.04	20	.37	27	.46
7	.02	14	.37	21	.31	28	.34

As per [Streiner and Norman \(2003\)](#), items with a value greater than 0.2 are considered to have a good level of correlation. [Table 1](#) shows the measure was well translated except for item 3, 5, 7 and 13, out of which two items showed negative corrected item-total correlation value. The committee suggested to re-arrange the wordings of item 5 and add the word ‘manipulation’ in parenthesis next to its Urdu translation as the word was mostly misunderstood, while the other items were asked to be kept as it is. It was suggested that as the sample size and variability of responses increase, the item statistic will improve. It was then asked to consider SD4 as ready to be used for main study.

**Phase II: Establishment of Psychometric Properties of SD4 (Urdu)**

During this phase, the aim was to assess the improvements in the item statistics after making the suggested changes, evaluate the functioning of the translated scale, and establish the psychometric properties of the Urdu translation of SD4.

***Sample***

The sample included 280 participants from three different public universities of Quetta. The data was collected by giving out questionnaires to the participants using purposive sampling. The age range consisted of 17 to 30 years ( $M = 22.12$ ,  $SD = 2.73$ ). It included 140 men (50%) and 140 women (50%). The participants had diverse educational backgrounds including 46 matric/intermediate (16.4%), 92 bachelors/associate degree (32.9%), 108 graduation (38.6%) and 34

post-graduation (12.1%). They were inquired about their marital status which showed that 247 of the participants were unmarried (88.2%) and 33 were married (11.8%). They were from different areas including 227 from urban (88.1%), 12 from sub-urban (4.3%) and 41 from rural (14.6%). They lived in different family settings including 146 in joint family settings (52.1%), 115 were living in nuclear setups (41.1%); while, 19 were residing on individual basis (6.8%).

### ***Instrument***

To check psychometric properties, the Urdu version of The Short Dark Tetrad (SD4) which was finalized in Phase I was used.

### ***Procedure***

For the determination of psychometric properties of SD4-Urdu, the data was collected using two approaches that included sending google form link to the participants as well as giving hard copies of the questionnaire. To collect data using google form, the participants were reached out using Whatsapp whose details were obtained from their departments and were contacted only after their consent. To collect data using hard copies of questionnaire, permission was taken from the university authority to conduct the research. The students were approached when they were available during university timings and after confirming the age criteria, the objectives of the study were explained, and they were provided with informed consent. They were assured that their data would be kept confidential and they will remain anonymous. It was made understood that they have the right to quit at any given time. When the questionnaires were filled in and returned, they were thanked for their participation.

## **Results**

To check if the scale that was recently translated was properly understood by local sample, appropriate analysis including descriptive statistics, item-total correlation, intercorrelation of subscales and confirmatory factor analysis were run using SPSS (ver. 20) and AMOS.

Table 2 shows that the total reliability of SD4 Urdu is .73 which is high whereas narcissism has acceptable reliability with .56, psychopathy with moderate reliability of .61, sadism with moderate reliability of .63 and Machiavellianism with reliability of .41 which is not satisfactory (Taber, 2018).



**Table 2***Descriptive Statistics for SD4 and Subscales*

Scale	No. of Items	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	$\alpha$
SD4	28	84.85	11.76	-.05	-.47	.73
Mach.	7	25.77	4.04	-.38	-.43	.41
Narc.	7	22.60	4.27	-.15	-.02	.56
Psych.	7	20.10	4.82	-.05	-.31	.61
Sad.	7	16.38	4.65	.25	-.41	.63

*Note.* Mach = Machiavellianism; Narc = Narcissism; Psych = Psychopathy; Sad = Sadism.

Item-total correlation was calculated to determine internal consistency ( $N = 280$ ).

**Table 3***Item-Total Correlation ( $N = 280$ )*

Items No.	<i>r</i>	Items No.	<i>r</i>
1	.04	15	.43**
2	.34**	16	.35**
3	.30**	17	.44**
4	.32**	18	.30**
5	.15*	19	.38**
6	.42**	20	.40**
7	.37**	21	.42**
8	.19**	22	.44**
9	.38**	23	.41**
10	.33**	24	.48**
11	.40**	25	.38**
12	.27**	26	.42**
13	.22**	27	.33**
14	.46**	28	.38**

\* $p < 0.5$ , \*\* $p < 0.1$ .

Table 3 shows all items are significantly correlated with total score except for item no. 1. The committee was approached, and the experts stated that the items were already well translated in Urdu having clear meaning with proper cultural context. It was assumed that since most of the participants were locals of Balochistan whose native language is other than Urdu, it was considered that few of the words were not understood by them even if the translation is appropriate. They recommended to retain the items as it is as the item statistic will get better with heterogeneous sample and variability of response.

Intra-correlations of the subscales as well as the total was checked to determine the internal consistency of SD4-Urdu (see Table 4). The correlations between the subscales and the total score of the scale are significant, as demonstrated in results ( $p < .01$ ). This shows the internal consistency of the scale.

**Table 4**  
*Intra-Scale Correlations of SD4 Urdu (N = 280)*

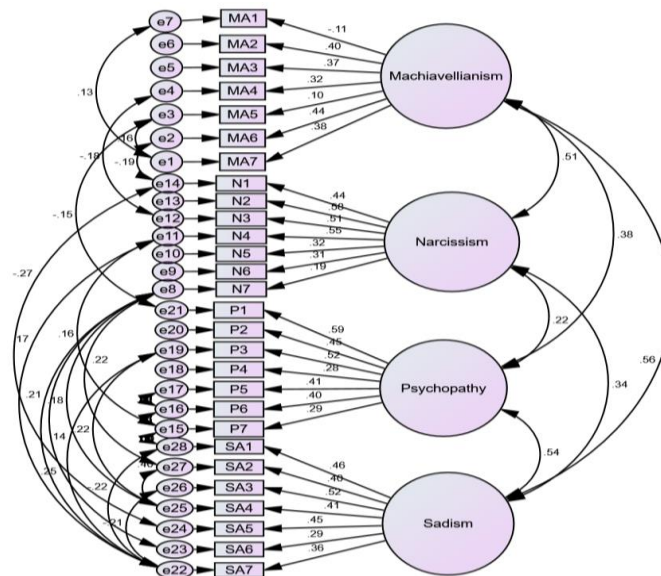
Subscales	1	2	3	4
1. Machiavellianism	-			
2. Narcissism	.21**	-		
3. Psychopathy	.19**	.22**	-	
4. Sadism	.22**	.25**	.40**	-
Total	.58**	.62**	.71**	.72**

\*\*  $p < .01$ .

**Confirmatory Factor Analysis**

Researchers typically provide various suggestions for suitable values of goodness-of-fit indicators, yet they generally agree on the same set of values. The ideal values for RMSEA should be lower than 0.08,  $\chi^2/df$  should be lower than 3 and for CFI, TLI and IFI, it should be greater or equals to .90 (Byrne, 2010; Hair et al., 2006; Kline, 2005).

Figure 1. Measurement Model of SD4



The CFA was executed on the Urdu translation of the 28-item SD4, and the results indicated that the model meets the recommended values (relative chi-square = 1.21, CFI = .92, TFI = .90, IFI = .92 and RMSEA = .03). According to research, factor loadings more than 0.7 should be accepted (Hair et al., 2011). Looking at Figure 1, all factors have loading more than 0.7 except for item 1. This is the same item from Table 4 which was not significantly correlated to the total, hence causing low reliability of subscale Machiavellianism.

## Discussion

Dark tetrad is cluster of four factors including Machiavellianism, sadism, psychopathy and narcissism which are unique and distinct in their own way but they overlap with each other and show correlations (Book et al., 2016; Buckels et al., 2013, 2014; Chabrol et al., 2009, 2015; Paulhus, 2014). They are known as socially aversive in nature (Zeigler-Hill & Marcus, 2016) that has common core of callousness (Paulhus, 2014). The present study was carried out in an effort to translate and adapt Short Dark Tetrad (SD4) into Urdu. SD4 is an instrument used to measure dark tetrad that has recently been introduced and become popular (Paulhus et al., 2021). It was done so while keeping cultural context in the view. For this purpose, forward and backward translation was carried out process (Brislin, 1978). Pilot study was carried out on a small sample of 30 participants which showed good reliability, but two items showed negative item statistic, out of which only one was revised by putting the English word in parenthesis next to its Urdu word so it is easily understandable and the other was kept as it is after committee recommendation. It was suggested to proceed with the study as according to the committee members, the translation was done accurately keeping in view the cultural and psychological concept.

The translated test was then conducted on a sample of 280 individuals. The researcher computed alpha coefficient which was .73, that is considered as high reliability (Taber, 2018) but if we look at the reliabilities of subscales, it ranges from .41 to .63, these are not so high as it should be. Low reliability of Machiavellianism subscale has already been reported in previous researches that shows that it did not perform so well but its poor performance can be accepted as it is 7-item subscale and does not impact the reliability of whole SD4 (Akhtar et al., 2022; Paulhus et al., 2021) Inter-scale correlations showed significant correlations among all four sub-constructs of dark tetrad and it is supported by the finding that there are consistent positive inter-correlations in the dark personality traits (Jonason et al.,

2009). This is consistent with the findings of many studies (Book et al., 2016; Lyons et al., 2020; Paulhus et al., 2021). Item total correlations for internal consistency were calculated and it was found that except one item, all others had significant item total correlations. Even though it was discussed that the item was properly translated, it still caused a problem. The word wise was translated into *danishmandi*. The committee was of the view that since Urdu is not native to most of the people in Quetta, it is believed that they may have felt difficulty in understanding the sense of the word in Urdu. It was suggested to keep item as it is as heterogenous responses and large sample will help to improve the value. Confirmatory factor analysis was carried out to confirm factors of dark tetrad. After using modification indices, the model was fit according to recommended values (Byrne, 2010; Hair et al., 2006; Kline, 2005). The same item that caused problem during item total correlation showed poor loading during CFA. The item was kept as it is as removing it did not significantly improve reliability of the subscale or overall scale, in fact, it lowered the reliability of the subscale of Machiavellianism further. The final decision was taken to retain all 28 items of SD4-Urdu. It was found that the Urdu version overall had sound reliability and validity.

### **Limitations and Recommendations**

The study included taking data from participants using Google form. It is possible that due to online data collection, the participants may have filled in the form without proper understanding. Many individuals show hesitance in asking questions or clarifying anything that they do not understand, so it is possible that most of the participants went with the flow without clearing confusion about phrases that were not understood by them. It is possible that such factors may have some influence on study resulting in problematic items. The study was conducted on a small sample to establish the psychometric properties of the translated and adapted scale. It is recommended that the studies should be conducted using larger samples. The study used purposive non-probability sampling. It is recommended to future researchers to use probability sampling, if possible. The sample consisted of participants from Balochistan province only. Therefore, it is suggested that study is conducted using participants from all provinces of Pakistan. This will help in increasing the generalizability of the scale as well as it will help with getting heterogenous responses and will create variability. This will also help in improving the reliability of the subscale which was

comparatively low in this study. Future studies can determine convergent validity of SD4.

### **Implications**

The findings of the present study show that it can be utilized in various settings including educational, organizational, clinical, forensic and research. The Urdu version measure can be used to help people know if they have the tendency for dark traits. As there is rise in population of individuals especially youth showing aversive personality traits, the measure can help such individuals getting proper interventions. It can be used by not only students but also by the employees. This tool will also help future Pakistani researchers to translate it into regional languages.

### **Conclusion**

The study helped in understanding the concept of dark traits and the measure SD4 to study these dark traits. The research objective of this study was achieved by translating SD4 in Urdu, as well as explaining descriptive characteristics and establishing confirmatory factorial validity. The study shows that Urdu translated SD4 is a good measure which is valid and reliable except for one item. The item is not removed from scale as it is equally important and it is expected that future researchers will evaluate it thoroughly. Keeping in mind the short duration and small sample, we can say that Urdu SD4 is equivalent to original scale.

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