

Translation & Validation of Deception as Conflict Management Technique Scale in Urdu**Tehzeeb Sakina Amir***Bahria University, Karachi Campus***Anila Amber Malik***University of Karachi***Abstract**

The study endeavors Urdu translation and validation of Deception as a Conflict Management Technique Scale (DCMTS). A total of 545 respondents were engaged for the two phased study through convenience sampling. Phase 1 involved forward and backward translation of DCMTS, Phase 2 established its psychometric properties. The reliability & validity of the scale was established using test-retest method & between language validity (English and Urdu versions) of DCMTS, in addition to convergent & discriminant validity with selected sub-scales of Personality Assessment Questionnaire (Urdu adult version). EFA shown factor structure with five principal dimensions; besides confirmatory factor analysis, GFI confirmed good fit of model to data with good values appearing for internal consistency. The findings authenticate that DCMTS is an easy-to-use tool & can be used by counselors and HR professionals to determine the possibility of use of deception. The DCMTS Urdu version will be helpful in clear understanding of the construct regarding the items for Urdu populaces.

Keywords: Deception, Urdu translation, reliability and validity, factor analysis

‘The most common and known reason for the lie is the desire to deceive yourself.’ Leo Tolstoy

The virtues of deceiving, lying, dishonesty and mendaciousness has always been a matter of interest to behavioral scientists. Humans merit using these in their daily life in order to navigate through their personal & career goals. Though deception is contemplated as an antisocial act, it can be reflected as a skilled behavior which significantly establish autonomy in adolescents specially (Taylor & Gozma, 2011).

Cambridge dictionary illuminates deception as - “a statement or action that hides the truth, or the act of hiding the truth”. It can be an intentional act of withholding or hiding some information or truth with the purpose of gaining some benefit out of the situation or interaction. Deception is when people act in some illegal manner to attain some goals or to make people believe of something which is not true (Lee, Chung & Welker, 2018; Pettit, 2013). It could be making up some biased or false information (Triver, 2011); secreting or concealing some information (Mele, 1997); it could happen when there are conflicting beliefs between individuals (Conley, 1988); unconsciously seeing things in an optimistic light (Kurban & Aktipis, 2007); manipulating information for changing other’s beliefs (Masip, Garrido & Herrero, 2004).

Deception is a universal phenomenon: people lie/deceive in almost all social settings (Ekman, 2009). People tend to lie more when they believe that their coworkers are lying also (Chang, Max & Celse, 2021). On an average an American adult tells 6.5 lies in 24 hours (Serota, Levine & Boster, 2010; Chamorro-Premuzic, 2016). Feldman et al (2002) found that in a span of ten-minute people may tell two lies. Deception can be called scams, frauds and trickeries, individuals practice to achieve their goals (personal & social); the manipulation they do, the exaggerated claims they make, fraudulent techniques they use at work place as well as in their personal lives (Liong, 2015; Arafat, Rehman & Aslam, 2018). Deceivers and liars experience cognitive load which leads to higher level of anxiety, stress and negative thoughts (Carrion, Keenan, Sebanz, 2010; DePaulo, et al., 2003; Sporer & Schwandt, 2007; Vrij, Akehurst & Knight, 2006; Vrij, 2000).

Theoretical background***Freud Defense Mechanisms as deceptive acts***

The domains of social and cognitive psychology substantiate use of deceptive acts. Starting with Freudian concept of ‘defense mechanisms’ and its usage as deceptive tactics or

psychological strategies people employ for their mental wellbeing by distancing themselves from guilt or shame arising out of unwanted feelings or situations (Freud, 1894; as cited in Cramer, 2000; Cramer 2012). Horney (2013) had classified three broad categories of defense mechanisms: moving toward, moving against and moving away from people with deception being an underlying motive causing emotional anxieties (Heckel, 1955; Holland, 2019; Zhang, & Guo, 2017).

Roger's Personality Theory and Deception

Carl Rogers' real and ideal self-approach to personality outlines that an individual tends to deceive by portraying either a distorted self-image or an exaggerated one in order to strike balance (Barrios et al., 2008; Cramer, 1998; İsmail, Nik & Tekke, Mustafa, 2015; Lynch & Sheldon, 2020; Rogers, 2008). Rogers's ideal self is what one likes to be and real self is what one really is. Incongruence occurs when there is a difference between the ideal self and reality; person tends to portray himself as his ideal self through self-deception to achieve congruence which gives him a feeling of self-worth (The e-learning network, 2021).

Festinger's Cognitive Dissonance Theory and Deception

Cognitive Dissonance by Festinger (1957a, 1962b), outlines that when people experience dissonance they justify or align their beliefs or acts whichever seems workable (Matz & Wood, 2005; Telci, Maden & Kantur, 2011). People rationalize the acts of lying and deceiving to manage cognitive dissonance (O'Neill & Palmer, 2004; Perlovsky, 2013; Wood, 2000; Harmon-Jones & Mills, 2019).

Edwards Social Desirability Theory and Deception

Edwards (1953) coined social desirability theory and expounded that people adapt their acts/responses to appear socially acceptable. Specially in the domain of testing where self-reporting measures are used, people found to distort their responses intentionally or unintentionally (Furnham, 2012; Krumpal, 2013; Larson, 2019; Paunonen & LeBel, 2012; Uziel, 2010). Individuals tend to choose the socially appropriate responses and deceive themselves and others while doing so (af. Wahlberg, 2010; Grimm, 2010).

Deception in Marketing & Advertising and Social Media domains

Marketers & advertisers using deceptive ways to promote their product and exaggerating its efficacy claims (Astakhova, Swimberghe & Wooldridge, 2017). The brand image promoted on billboards has mostly found deceiving not to mention the misleading discounts they offer (Durkin, Caglar, Bonawitz & Shafto, 2015; Wallace, Buil & de Chernatony, 2017). Consumers do not necessarily be harmed by use of deceptive advertising but as a whole society is permitting its usage (Attas, 1999). Though on the other hand, consumers buying behavior is an outcome of a logic-based on evaluation between the product and its hedonic value (Rehman & Mian, 2021). Organizations encourage their personnel to use deceiving tactics to win customers' loyalty in service industry (Patwardhan, Noble & Nishihara, 2009; Quach & Thaichon, 2018). Social media has become another playground for deceiving acts (Park & Cho, 2012). From creating fake social media accounts to paid/fake reviews to their filtered pictures to suit their desired looks - online deception is on the rise (Peng, Cui, Zhuang & Li, 2016; Briscoe, Appling & Hayes, 2014; Zeitzoff, 2017).

Deception and its dimensions

Deception can be multi-faceted in relation to situations and relationships (Fleming & Zygliopoulos, 2008; Moran & Schweitzer, 2008). There was found only one scale of to measure the likelihood of deceiving and that was in English only; the scale has five dimensions of deception namely: self-deception, interpersonal deception, deception at work place and deception in conflict management (Amir & Malik, 2018). Paulhus work on self-deception in 1998 can be claimed as pioneer work where he also developed a scientific tool to measure it – 40-item Paulhus Deception Scale (Chance 2011a, 2015b; Paulhus, 2012). The deceiver makes sure that lies but supported and truth be kept secret, this increases the cognitive load and the higher the cognitive load, the greater the possibility of self-deception (Zengdan, Wenjie, Ling, Wei & Yiping, 2019).

Self-deception could be the blown-up self-portrayal or overstated responses put people in a more favorable light, facilitating romantic relationship though people differ in their capacity to deceive (Anderson, Brion, Moore, & Kennedy, 2012; Ashley, & Holtgraves, 2003; Murphy et al., 2015; Schwardmann, Peter & Weele, 2019; Smith, Trivers & Hippel, 2017). The probability of deceiving others increases when people could easily deceive themselves and justify it too though its residue could be guilt (Duran, Dale, Kello, Hirsh & Kang, 2016; Street, & Richardson, 2013; Talley, 2016; Trivers, 2010a, 2011b). Interpersonal deception requires cognitive control and emotional maneuvering (Dana, 2001; Fulmer, Barry & Long, 2009). Studies have found that deceiving practices is common and it has a positive impact on relationship with strangers and intimate partners (Baumgartner et al., 2009; Duffield & Grabosky, 2001; Scott, 2012; Sip et al., 2012).

Deception at work place is real though organizations demand honest & truthful behavior from their employees (De Dreu, Van Dierendonck, & Dijkstra, 2004; Jenkins & Delbridge, 2017; Leavitt & Sluss, 2015). It can be manipulating or hiding information in order to influence others known as political skill (Ferris et al., 2007). Detecting deception can be difficult (Carlson, J. R., Carlson, D. S., & Ferguson, 2011; Douglas et al, 2008; Levine, 2014) making it significant for a manager to manage deceptive practices in an organization where work inconsistencies can create sense of being manipulated among employees (Robie, Tuzinski & Bly, 2006; Shulman, 2011; Contreras-Pacheco & Claasen, 2018; Arshad & Malik, 2021). Workplace manipulation and bullying results in negative emotions amongst employees (Humair & Ejaz, 2019). Lying at workplace has some hidden costs as well; it impacts negatively on organizational climate, workers' morale, loss of trust among them, and overall productivity (Hart, 2019). Ethical climate and authentic leadership have found to negatively influence deviant work place behaviors, decreasing the likelihood of the use of deceptive practices (Qureshi & Hassan, 2019).

Deceptive & manipulative tactics are used in conflicting situations especially when the outcome is significant (Amir & Malik, 2016; Schweitzer, Brodt & Croson, 2002). Constructive conflict results in organizational growth (Gruenfeld & Tiedens, 2010) so one should learn to manage conflicts (Kaur, 2014; Schweitzer, DeChurch & Gibson, 2005; Tjosvold, 2006). They are valued in decision-making process, encouraging innovative ideas/approaches and team building (Purvanova, 2017; Rahim, 2017; Longe, 2015; Prause & Mujtaba, 2015; Wertheim, 2011; Hart 2014). Workplace incivility increases when employees perceive politics in the organization and it obstructs their creativity levels (Faiz, 2018). Deceiving enemy/opponent is always taken as an important strategy in war time (Alund, 2021). Deception has found to conjure conflict monitoring (Hein & Leue, 2021).

Rationale of the study

One of the greatest challenges in human behavior studies is selecting the right scale/instrument to study the construct of interest. A researcher attempts to find out measures which are reliable and valid in addition to whether these instruments are culturally-adapted too (Menon & Praharaj, 2019). The current study was undertaken with the main objective to develop the Urdu version of the DCMTS for its larger usage with Pakistani population having difficulty comprehending English language. The need of availability of reliable and valid instruments in our native language Urdu will improve the overall research and also provide these scientifically developed tools to be used by recruiters and counselors in the fields of HR and psychology.

Deception, lying and other counter-productive behaviors need to be identified and corrected to minimize their negative impact. Thus, the significance of detecting the probability of deceiving in a person establishes itself in every aspect of life. An early detection would limit the negative outcomes and also create a more positive environment socially as well as vocationally. Managers at work place are devising new ways to reveal the liars/deceivers so to take them to task and not pollute the organization climate (Kislik, 2021). A detection of the possibility of deceiving others would lead to manage the behavior (Burns, & Christiansen, 2011; Hinkin, 1995; Zumbo, Gelin, & Hubley, 2002). Learning about the negative consequences of the use of deception in various social settings, the need to develop a reliable tool to measure the probability of deception usage was felt. DCMTS has been the first ever scientifically developed tool to measure the construct of deception and its five dimensions. Though it was available in English language and the need to translate it into Urdu was felt to broaden its usage. The current study undertook this task and followed the WHO protocol of translation & adaptation of instruments (WHO, 2019).

Further with globalization and the rising need for cross-cultural research, requires cross-culturally validated measures. Researchers must have access to reliable & valid instruments and that too in the language of the population of interest (Sousa, Valmi & Rojjanasrirat, Wilaiporn, 2011). Translation and validation of instruments in local languages enhances the scope of the studies done with bilingual people and even the findings of such studies can be considered highly generalizable without any standardization of translation techniques (Cha, EunSeok & Kim, Kevin & Erlen, Judith, 2007). Scales' translation facilitate researchers in time and cost reduction of developing a new test (Melikyan, Agranovich, & Puente, 2019).

Research Objectives

1. Translation and Validation of DCMTS in Urdu language for usage on Pakistani population.
2. To enable research fraternity for cross cultural studies on deception by making DCMTS available in English as well as Urdu languages.

Research Methodology

Participants

The study engaged a sample of 545 participants in different phases; in addition to 20 participants for the pilot testing of the DCMTS-Urdu. Convenience sampling technique was used; 331 participants were administered with DCMTS-Urdu. The reliability was established using test-retest method on a sample of 198 participants (out of the 331). Validity of the scale was established with additional 214 participants.

Sample size justification: for scale development, the rule of thumb is 10 respondents for each scale item. It is suggested that sample size of 100 is considered poor, 200 = fair, 300 = good, 500 = very good and more than 1000 is considered an excellent sample size for scale development studies (Comrey & Lee 1992 as cited by Kyriazos, 2018).

Participants were assured of confidentiality of the information and were briefed about their right of withdrawal. They were requested to give their true and honest responses with the assurance of total anonymity.

Instruments

Instruments used were following:

Adult PAQ. Personality Assessment Questionnaire Urdu (PAQ) by Munaf, Hussain, and Kamrani (2009). Four subscales each having 9-items and a 4-point Likert scale response category (Likert, 1932). The subscales used and their reported Cronbach's alpha values are: Hostility & Aggression (H&A) $\alpha = .851$; Self Adequacy (SA) $\alpha = .854$; Emotional Responsiveness (ER) $\alpha = .802$; World View (WV) $\alpha = .885$. The subscales were selected on the grounds of the description of the construct provided by the scale authors and researcher understanding of its relevance with the construct of deception.

DCMTS (English version). DCMTS (English version) developed by Amir & Malik (2019). It is a 35-item scale with 5-point Likert scale a popular response category (Sung & Wu, 2018). The reported Cronbach alpha value was .896.

Procedure

The present study was directed in two phases. Phase 1 comprised of translation of DCMTS in Urdu and Phase 2 included instituting the psychometric properties of the DCMTS-Urdu.

After the assurance of confidentiality, the participants were briefed about the scope of the study and a consent form was obtained in written. After every data collection phase, participants were thanked and debriefed about the study. Some of the forms were discarded on the grounds of incomplete data.

Phase 1: Urdu Translation of DCMTS. Urdu translation of DCMTS was done from the source (English) to target language (Urdu) with the help of three bilingual experts (one professor, one assistant professor and one lecturer). They were asked to perform literal translation of the 35-item DCMTS (Afzal, Malik & Atta, 2021; Worthington & Whittaker, 2006). The second step of Phase 1 was an intense evaluation of the translation by three subject experts from the field of psychology (one professor, two assistant professors) who were to examine the translations with emphasis on grammar, style, choice of words that appear closer to the original scale (Randrianarivony, Ravelomanantsoa & Razanamihaja, 2020). Using Brislin (1976) method, for the backward translation, one lecturer each of English, Urdu and psychology were asked to translate the Urdu version to English without any prior exposure to the English version. The final product was then tested on a small sample of 20 adolescents; they were asked to respond with Yes or No whether the item has any ambiguity. Findings reported that all items were stated as clear and logical. The DCMTS-Urdu was then ready for psychometric testing.

Phase 2: Psychometric Testing of DCMTS-Urdu. To assess the psychometric properties of DCMTS-Urdu, internal consistency was established using Cronbach alpha (Cronbach, 1951; Tavakol & Dennick, 2011). To examine the factors of DCMTS-Urdu, EFA & CFA were carried out (Furr, 2010; Pasquali, 2010; Revelle, 2012; Rozental et al., 2019). Reliability of the Urdu version was established using test-retest reliability where participants were retested with DCMTS-Urdu after a gap of three weeks (Marx et al., 2003; Merson et al., 2021). Validity of the scale was established in two ways: 214 participants were administered with DCMTS-Urdu along with selected subscales of Urdu version of Personality Assessment Questionnaire (PAQ) – Adult version. The subscales namely Hostility & Aggression, Self- Adequacy, Emotional Responsiveness and Worldview of PAQ-Urdu were used and significant correlation values were found with the scores of DCMTS-Urdu. Validity was further tested out through between-language versions of DCMTS on the same participants (DeVellis, 2016).

Results

The study came up with the following results:

Reliability of DCMTS-Urdu. The Cronbach alpha value was .812 which established a significant reliability of the Urdu version of the scale.

Correlation analysis to establish between-language validity came up with $r = .792$ revealed that Urdu version has a significant positive correlation with its English counterpart ($p < .01$); so both the versions of DCMTS are statistically significant with each other.

The correlation coefficient value was .841 for the two administrations of DCMTS-Urdu using test-retest reliability technique.

Validity of DCMTS-Urdu. EFA was used for factor analysis and principal dimensions of the scale and CFA was used to assess the factors of DCMTS-Urdu (Singh, Junnarkar, & Kaur, 2016). All the observed factors showed acceptable regression values that is $< .35$ (Field, 2009). The factor loadings of CFA for the five dimensions of DCMTS-Urdu were above .35. The graphical representation supports the findings. GFI, AGFI, CFI, IFI and RMSEA were used as the test indexes of the fitting degree (Feng et al., 2020).

Figure 1 depicted the factor models of five dimensions of DCMTS-Urdu. The values are greater than .35 except one which is .32.

Table 1 showed demographic characteristics of the participants.

Table 2 indicated extraction values of all items of DCMTS-Urdu. It showed all of the items have satisfactory value above 0.5 which is acceptable in behavioral sciences (Kellow, 2006; Bibi & Kazmi, 2021).

Table 3 showed factor loading of five factors of DCMTS-Urdu. KMO & Bartlett's values indicated the suitability of the data for EFA.

Table 4 showed regression weights and Cronbach's values for the five factors of DCMTS-Urdu.

Table 5 showed CFA for goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI) and incremental fit (IFI) are .80 or greater which is considered significant findings of the study. The values obtained were between .816 and .892.

Table 6 showed DCMTS-Urdu has significant positive correlation with PAQ.

Table 7 showed positive correlation value between the English and Urdu versions

Table 8 exhibited Test-retest reliability analysis with significant correlation value.

Table 1. Demographic details of the total sample of different phases of study

Demographic Variables	Scale translation & reliability analysis N = 331		Validity analysis N = 214	
	Frequency	(%)	Frequency	(%)
Gender				
Male	186	(56.19)	133	(62.15)
Female	145	(43.81)	81	(37.85)
Age (in years)				
15-25	184	(55.59)	135	(63.08)
26-35	126	(38.07)	59	(27.57)
36-45	11	(3.32)	12	(5.61)
< than 46	10	(3.02)	8	(3.74)
Education				
Under Graduate	149	(45.02)	116	(54.21)
Graduate	108	(32.63)	78	(36.45)
Post Graduate	74	(22.36)	20	(9.35)
Marital Status				
Single	189	(57.1)	121	(56.54)
Married	106	(32.02)	84	(39.25)
Divorced/separated/widow	36	(10.8)	9	(4.21)
Total Household Income in PKR				
< than 50K	41	(12.39)	24	(11.21)
51 – 100K	102	(30.82)	88	(41.12)
101-150K	146	(44.11)	81	(37.85)
> than 151K	42	(12.69)	21	(9.81)

Table 2. Using Principal Components Analysis of DCMTS –Urdu communalities Values of Extraction Method (N = 331).

S.#	Item	Value
1	میری رائے میں لوگ ذاتی مفاد کیلئے دھوکہ دیتے ہیں۔ In my opinion people deceive to gain personal rewards	.74
2	میرے خیال میں جو لوگ دھوکہ دیتے ہیں انکو ذہین تصور کیا جاتا ہے۔ I think people who deceive are considered intelligent.	.70
3	میرے خیال میں لوگ جب زیادہ دھوکہ کرتے ہیں جب انہیں پکڑے جانے کا ڈر نہ ہو۔ I think people tend to deceive more if they do not have fear of getting caught.	.82
4	میرے خیال میں لوگ اپنے افعال میں دھوکہ زیادہ تر تضاد کی صورتحال میں کرتے ہیں I think people tend to deceive more in their actions in a conflict situation.	.69
5	میرے خیال میں لوگ اپنی نیتوں میں دھوکہ زیادہ تر تضاد کی صورتحال میں کرتے ہیں۔ I think people tend to deceive more in their intentions in a conflict situation.	.68
6	میرے خیال میں لوگ خود تو دھوکہ کھانا پسند نہیں کرتے مگر جب انہیں موقع ملے تو ضرر کیجئے۔ کسی بھی سوال کو نہور دھوکہ کرتے ہیں۔ I think people do not like to be deceived but they do so when they get an opportunity.	.77
7	میرے خیال میں تضاد کی فضا میں دھوکہ زیادہ ہوتا ہے۔ I think deceiving is higher in conflict situations.	.71
8	میرے خیال میں جو لوگ رشتوں میں دھوکہ دیتے ہیں انہیں برا سمجھا جاتا ہے۔ I think people who deceive in relationships are considered bad.	.74
9	میرے خیال میں دھوکہ رشتوں کیلئے نقصان دہ ہوتا ہے۔ In my opinion deception can be harmful for relationships.	.81
10	میرے خیال میں جو لوگ خود کو دھوکہ دیتے ہیں وہی دوسروں کو بھی زیادہ دھوکہ دیتے ہیں۔ I think people who use self-deception tend to deceive others more.	.69
11	میرے خیال میں لوگ تضاد کی فضا میں دھوکہ دیتے ہیں کہ وہ ایک مثبت طور پر دیکھے جائیں۔ I think people deceive in a conflict situation to appear in a positive light.	.80
12	میرے خیال میں دھوکہ ایسی تضاد کی فضا میں زیادہ ہوگا جب دونوں طرفین علم والے ہوں۔ I think deception would be high in a conflict situation when both the concerned parties are knowledgeable.	.77
13	میرے خیال میں دھوکہ ایسی تضاد کی فضا میں زیادہ ہوگا جب دونوں طرفین ایک دوسرے سے مقابلے میں ہوں۔ I think deception would be high in a conflict situation when both the concerned parties are competing with each other.	.73
14	میرے خیال میں لوگ جب زیادہ دھوکہ کھاتے ہیں جب انہیں تضاد کی فضا میں کوئی مقتدر مقام حاصل نہ ہو۔ I think people are more likely to be deceived if they do not have any authority in the conflict situation.	.79
15	میرے خیال میں دھوکہ تضاد کی فضا میں ایک چھوٹے وقت کے منصوبے کا درجہ رکھتا ہے۔ In my opinion deception is a short term strategy in conflict situations.	.88
16	میرے خیال میں جو لوگ دھوکہ دیتے ہیں وہ خود احمق ہیں۔ I think people who deceive themselves are fools.	.79
17	میرے خیال میں دھوکہ ردعمل کا درجہ رکھتا ہے۔ جو لوگ خود دھوکہ کھاتے ہیں بعد میں وہی دھوکہ دیتے ہیں۔ In my opinion deception is reactive, once deceived people tend to deceive more.	.64
18	میرے خیال میں دھوکہ دہی انسانی اصولوں کے بنیاد سے انحراف ہے۔	.74

	I believe deceiving violates basic rules of human interactions.	
19	میرے خیال میں دھوکہ اعتماد کا قتل ہے۔	.66
	I believe deceiving is breaking trust.	
20	میرے خیال میں تضاد کی فضا میں حقائق کی غلط تشریح بھی دھوکے کی قسم ہے۔	.69
	I think misinterpretation of facts in conflict situation is kind of deception.	
21	میرے خیال میں تضاد کی فضا میں حقائق کو چھپانا بھی ایک نوع کا دھوکہ ہے۔	.76
	I think hiding information in conflict situation is a kind of deception.	
22	میرے خیال میں اپنی اہلیت کا مبالغہ آمیز تصور خود کو دھوکہ دینے کے مترادف ہے۔	.74
	In my opinion self-deception is over estimating one's capabilities.	
23	ایک حد سے بڑھی ہوئی انا بھی خود کو دھوکہ دینے کے مترادف ہے۔	.72
	In my opinion self-deception is having an inflated ego.	
24	میرے خیال میں جھوٹ بولنا دھوکے کی سب سے عام شکل ہے۔	.78
	I think telling lies is the most common kind of deception.	
25	میرے نزدیک دھوکہ ایک عہد شکنی ہے جو کہ جو کہ رشتوں کو توڑ ڈالتا ہے۔	.62
	I believe deception is betrayal which damages relationships.	
26	میرے خیال میں ایک بار کے دھوکے کو بعد اعتماد کا دوبارہ قیام مشکل ہے۔	.64
	I believe it is difficult to build trust once one is deceived.	
27	میرے خیال میں جب کوئی ہمیں دھوکہ دیتا ہے تو ہم اپنی خود توقیری کھو دیتے ہیں۔	.63
	I think when someone deceives us, we tend to lose our self-respect.	
28	میرے خیال میں دھوکہ خود غرضی ہے۔	.61
	In my opinion deception is being selfish.	
29	میرے خیال میں لوگوں کو اپنے قریبی لوگ ہی دھوکہ دیتے ہیں۔	.71
	I believe people are usually deceived by their closed ones.	
30	میرے خیال میں لوگوں کو عموماً وہی لوگ دھوکہ دیتے ہیں جن سے اسکی سب سے کم توقع ہوتی ہے۔	.75
	I believe people are usually deceived by the ones they least expected.	
31	میرے خیال میں عہد شکنی ایک نوع کا دھوکہ ہے۔	.82
	In my opinion breaking promises is a kind of deception.	
32	میرے خیال میں دھوکے کا مطلب قول اور فعل کا تضاد ہے۔	.73
	I think deception is the difference between what you say and how you act.	
33	میرے خیال میں دھوکے کا مطلب کے کسی فرد کا جعلی ہونا۔	.63
	I believe deception is being fake.	
34	میرے خیال میں دھوکے کا مطلب ہے لوگوں کو استعمال کرنے والا ہونا۔	.61
	I believe deception is being manipulative.	
35	میرے خیال میں دفتری فضا میں افواہ سازی بھی دھوکے کی ایک قسم ہے۔	.77
	I think grapevine at work place is a form of deception.	

Table 3. Using Varimax Rotation Analysis Factor Loading for EFA (N = 331).

Item No.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
19	.93				
16	.77				
26	.73				
14	.71				

25	.70						
24		.85					
28		.82					
18		.78					
31		.72					
12		.71					
7			.88				
11			.86				
22			.85				
3			.82				
13			.81				
21				.87			
5				.85			
4				.80			
10				.75			
35				.74			
30					.85		
29					.82		
2					.81		
34					.80		
% variance							14.51
Cumulative variance							69.51
Kaiser-Meyer-Olkin measure							.869
Bartlett's test of sphericity							6882.5
	<i>df</i>						595
	Sig.						.000

Table 4. *Regression Weights*

Item	Factor	Estimate	SE	CR	<i>p</i>	Cronbach's α ($>.70$)
19	1	1.000				
16		.904	.080	11.280	.000	.74
26		.783	.069	11.360	.000	
14		.800	.077	10.388	.000	
25		.926	.068	13.654	.000	
24	2	1.000				.72
28		1.000	.071	13.983	.000	
18		.889	.059	15.031	.000	
31		.931	.065	14.402	.000	
12		.617	.076	8.159	.000	
7	3	1.000				.81
11		.969	.103	9.402	.000	
22		.925	.103	8.939	.000	
3		1.163	.106	10.961	.000	
13		1.105	.102	10.870	.000	
21	4	1.000				.71
5		.933	.077	12.086	.000	
4		.733	.070	10.535	.000	
10		.575	.092	6.223	.000	
35		.451	.080	5.616	.000	
30	5	1.000				.85
29		.921	.107	8.622	.000	
2		.154	.123	1.249	.212	
34		1.110	.115	9.664	.000	

Table 5. Model Fit Indices for DCMTS-Urdu (N = 331).

Models	χ^2 (df)	χ^2/df	Goodness-of-fit indices				
			GFI	AGFI	CFI	IFI	RMSEA
DCMTS-Urdu (Five factors)	21.07	2.814	.875	.892	.816	.818	.021

Note. GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; IFI = incremental fit index; RMSEA = root mean square error of approximation.

Table 6. Correlation values among DCMTS-Urdu and subscales of PAQ-Urdu (N = 214).

Scales	1	2	3	4	5
1. DCMTS-U	-	.684*	-.598*	-.699*	.890*
2. H&A		-	.514*	.415*	.694*
3. SA			-	.587*	.609*
4. ER				-	.502*
5. WV					-

Note. Subscales of Adult PAQ-Urdu version used: H&A=Hostility & Aggression; SA= Self Adequacy; ER=Emotional Responsiveness; WV=World View. * $p < .05$,

Table 7. Between-language validity analysis: correlation between the English and Urdu versions of DCMTS (N = 214)

	DCMTS-Urdu version	Sig.
DCMTS-English version	.792*	.000

* $p < .01$

Table 8. Test-retest reliability analysis: correlation between the two administrations of DCMTS (N = 198).

First Administration	Pearson Correlation	Second Administration
		.841
	Sig. (2-tailed)	.000

* $p < .01$

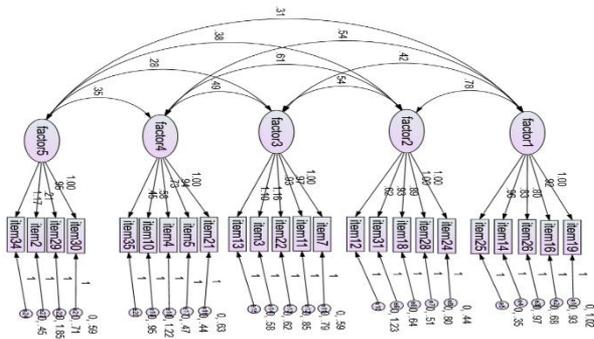


Figure 1. Graphical presentation of five dimensions of DCMTS-Urdu

Discussion

The study was carried out to translate and validate the DCMTS in Urdu language. EFA analysis results are indicative that a factor structure with five dimensions (Ahorsu et al., 2020). The cumulative variance is 69.51 which is greater than the least accepted (60%) variance. The KMO measure was .869 and Bartlett's test of sphericity values were .6882.5 (df 595 sig. .000); these values established that the data is good for EFA. CFA was carried out to analyze the five factors, showing good level of model fit indices for the five factors of DCMTS-Urdu (Peláez et al., 2021). The Cronbach's alpha values for the five factors were .74, .72, .81, .71 and .85 respectively; which were all statistically significant (Galeoto et al., 2019)

The analysis revealed satisfactory GFI levels on all five dimensions of DCMTS-Urdu. χ^2 value reported was 21.07 with $\chi^2/df = 2.814$ (which is less than 3 the accepted value). The value of χ^2/df 1 is considered perfect value with regard to chi-square test (Martinez-Rodriguez et al., 2016). The values of GFI, AGFI, CFI and IFI were .875, .892, .816 and .818 respectively. These values are indicative of relatively fit model with all values nearing perfect 1 value (Lomax, 2010). The RMSEA value was .021 which is standard acceptable value for RMSEA i.e. less than .05. RMSEA value further indicated good model fit of the scale. The main advantage of calculating RMSEA is that it provides 90-95% assurance that model is in the acceptable range (Winkens et al., 2018).

The Urdu version showed good test-retest reliability coefficient which was .841 which is highly reliable and establishes the consistency of the scale. The validity analysis was undertaken in two ways: convergent and divergent validity with the selected sub scales of PAQ-Urdu and secondly with DCMTS-English (Ruscio, 2014). The between-language validity of DCMTS-Urdu was established with its English version and correlation coefficient was .792 significant at 0.01 level. The convergent validity was established with the selected subscales Hostility & Aggressions, World View of PAQ-Urdu Adult version. The correlation coefficients were .684 and .890 respectively established a positive correlation exist between Hostility & Aggression and World View with our main construct i.e. Deception. The higher the Hostility & Aggression and World View, the higher the probability of deceiving. Discriminant validity was established through another two sub scales of PAQ-Urdu Adult version namely: Self-adequacy and Emotional Responsiveness it was assumed that people with higher self-adequacy and high emotional responsiveness, the probability of deceiving will decrease (Wong, Shea, Wang, & Cheng, 2019). The correlation coefficients were -.598 and -.699 depicting strong negative relationship.

Limitations and Implications

Non availability of Urdu versions of any honesty, morality, lying cheating scales was the biggest limitation on the way to establish direct convergent and discriminant validity. Secondly, the sample mostly belong to urban cities of Pakistan the limit of generalizability could be there for rural populace which could be the main user of DCMTS-Urdu version.

The DCMTS-Urdu version can be useful for the counselors, recruiters and therapists to determine the probability of deceiving when dealing with native people. Further DCMTS Urdu would be helpful for researchers conducting cross-cultural research and looking for reliable & valid Urdu instruments.

Conclusion

It was concluded that DCMTS-Urdu is an easy to use tool and has established itself as a reliable and valid measure for broader usage. The results' analysis indicated that DCMTS-Urdu can be used by counselors & therapists in order to determine the likelihood of deception usage. The recruiters can use the tool in the jobs where honesty and truthfulness is required as part of the job; in addition to researchers who aim to conduct relevant studies on Urdu population.

Conflict of Interest

The authors declare no conflict of interest with this study.

References

- Af Wählberg, A. E. (2010). Social desirability effects in driver behavior inventories. *Journal of Safety Research*, 41(2), 99-106.
- Afzal, A., Malik, N. I., & Atta, M. (2021). Translation and Adaptation of Identity Style Inventory for Pakistani Adolescents. *Pakistan Journal of Psychological Research*, 36(2), 301-317.
- Ahorsu, D. K., Lin C. Y., Imani V., Saffari M., Griffiths M. D., & Pakpour, A. H. (2020). The Fear of COVID-19 Scale: Development and Initial Validation. *Int J Mental Health Addiction*, pp1-9. DOI:

- Alund N., (2021), The Importance of deception in modern conflicts. <https://www.saab.com/newsroom/stories/2021/october/the-importance-of-deception-in-modern-conflicts>.
- Amir, T. S., & Malik, A. A. (2016). Machiavellianism and counterproductive behaviors at workplace. *Journal of Education & Social Sciences*, 4(1), 14-29.
- Anderson, C., Brion, S., Moore, D. A., & Kennedy, J. A. (2012). A status-enhancement account of overconfidence. *Journal of Personality and Social Psychology*, 103(4), 718-735.
- Arafat Y., Rehman M., & Aslam U. (2018). How Destructive Organizational Parameters Affect Work Engagement: Investigating the Role of Abusive Supervision. *Abasyn Journal of Social Sciences*, 11(2), 295-311.
- Arshad M., & Malik A. R. (2021). Workplace Deviance – A Move towards the Social Constructivist Perspective. *Abasyn Journal of Social Sciences*, 14(2), 170-183. DOI: 10.34091/AJSS.14.2.01
- Ashley, A., & Holtgraves, T. (2003). Repressors and memory: Effects of self-deception, impression management, & mood. *Jr of Research in Personality*, 37(4), 284-296.
- Astakhova, M., Swimberghe, K. R., & Wooldridge, B. R. (2017). Actual and ideal-self congruence and dual brand passion. *Jr of Consumer Marketing*, 34(7), 664-672.
- Attas, D. (1999). What's Wrong with "Deceptive" Advertising?. *Journal of Business Ethics* 21, 49–59. <https://doi.org/10.1023/A:1005985723779>
- Barrios, V., Kwan, V. S., Ganis, G., Gorman, J., Romanowski, J., & Keenan, J. P. (2008). Elucidating the neural correlates of egoistic and moralistic self-enhancement. *Consciousness and cognition*, 17(2), 451-456.
- Baumgartner, T., Gianotti, L. R., & Knoch, D. (2013). Who is honest and why: Baseline activation in anterior insula predicts inter-individual differences in deceptive behavior. *Biological Psychology*, 94(1), 192-197.
- Bibi, H., & Kazmi, S. F. (2021). Urdu translation and validation of 11-item measure to assess borderline personality features in Pakistani adolescents. *SAGE Open*, 11(1), 2158244020986157.
- Briscoe, E. J., Appling, D. S., & Hayes, H. (2014). Cues to deception in social media communications. 47th Hawaii international conference on system sciences (pp. 1435-1443). IEEE.
- Burns, G. N., & Christiansen, N. D. (2011). Methods of measuring faking behavior. *Human Performance*, 24(4), 358-372.
- Carlson, J. R., Carlson, D. S., & Ferguson, M. (2011). Deceptive impression management: Does deception pay in established workplace relationships? *Journal of Business Ethics*, 100(3), 497-514.
- Carrión, R. E., Keenan, J. P., & Sebanz, N. (2010). A truth that's told with bad intent: An ERP study of deception. *Cognition*, 114(1), 105-110.
- Chamorro-Premuzic, T. (2016). *Personality and individual differences*. John Wiley & Sons.
- Chance, Z., Gino, F., Norton, M. I., & Ariely, D. (2015). The slow decay and quick revival of self-deception. *Frontiers in psychology*, 6, 136-148.
- Chance, Z., Norton, M. I., Gino, F., & Ariely, D. (2011). Temporal view of the costs and benefits of self-deception. *Proceedings of the National Academy of Sciences*, 108(Supplement 3), 15655-15659.
- Cha, EunSeok & Kim, Kevin & Erlen, Judith. (2007). Translation of scales in cross-cultural research: Issues and techniques. *Journal of advanced nursing*. 58. 386-95. 10.1111/j.1365-2648.2007.04242.x
- Chang, K., Max, S. and Celse, J. (2021), "Employee's lying behavior and the role of self-awareness", *International Journal of Organizational Analysis*, <https://doi.org/10.1108/IJOA-12-2020-2513>
- Contreras-Pacheco, O. E., & Claasen, C. (2018). Mired in deception: escalating an environmental disaster in Colombia. *Journal of Business Strategy*, 39(2), 39-46.
- Cramer, P. (1998). Defensiveness and defense mechanisms. *Journal of Personality*, 66(6), 879-894.
- Cramer, P. (2000). Defense mechanisms in psychology today: Further processes for adaptation. *American Psychologist*, 55(6), 637-646.
- Cramer, P. (2012). *The development of defense mechanisms: Theory, research, and assessment*. Springer Science & Business Media.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.

- Dana, D. (2001). *Managing differences: How to build better relationships at work and home*. MTI publications.
- De Dreu, C. K., Van Dierendonck, D., & Dijkstra, M. T. (2004). Conflict at work and individual well-being. *Int. Journal of Conflict Management*, 15(1), 6-26.
- DePaulo, B. M., Lindsay, J. J., Malone, B. E., Muhlenbruck, L., Charlton, K., & Cooper, H. (2003). Cues to deception. *Psychological Bulletin*, 129(1), 74-118.
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). Sage publications.
- Dictionary, C. (2015). Cambridge dictionaries online.
- Douglas, S. C., Kiewitz, C., Martinko, M. J., Harvey, P., Kim, Y., & Chun, J. U. (2008). Cognitions, emotions, and evaluations: An elaboration likelihood model for workplace aggression. *Academy of Management Review*, 33(2), 425-451.
- Duffield, G. M., & Grabosky, P. N. (2001). *The psychology of fraud* (Vol. 199). Canberra: Australian Institute of Criminology.
- Duran, N. D., Dale, R., Kello, C. T., Street, C. N., & Richardson, D. C. (2013). Exploring the movement dynamics of deception. *Frontiers in Psychology*, 4, article 140.
- Durkin, K., Caglar, L. R., Bonawitz, E. B., & Shafto, P. (2015). Explaining Choice Behavior: The Intentional Selection Assumption. *In CogSci*.
- Edwards, A. L. (1953). The relationship between the judged desirability of a trait and the probability that the trait will be endorsed. *Jr of Applied Psychology*, 37(2), 90.
- Ekman, P. (2009). Lie catching and micro-expressions. *The Philosophy of Deception*, 1(2), 118-133.
- Faiz, S. (2018). Perception of Politics and its Dual Outcomes: The Moderating Role of Psychological Hardiness. *Abasyn University Journal of Social Sciences*, 11(1).
- Feldman, R. S., Forrest, J. A., & Happ, B. R. (2002). Self-presentation and verbal deception: Do self-presenters lie more? *Basic and Applied Social Psychology*, 24(2), 163-170.
- Feng, L. S., Dong, Z. J., Yan, R. Y., Wu, X. Q., Zhang, L., Ma, J., & Zeng, Y. (2020). Psychological distress in the shadow of the COVID-19 pandemic: Preliminary development of an assessment scale. *Psychiatry Research*, 291, 113202.
- Ferris, G. R., Treadway, D. C., Perrewé, P. L., Brouer, R. L., Douglas, C., & Lux, S. (2007). Political skill in organizations. *Journal of Management*, 33(3), 290-320.
- Festinger, L. (1962). *A theory of cognitive dissonance* (Vol. 2). Stanford university press.
- Festinger, L. (1957). *A theory of cognitive dissonance* (Vol. 2). Stanford university press.
- Fleming, P., & Zyglidopoulos, S. C. (2008). The escalation of deception in organizations. *Journal of Business Ethics*, 81(4), 837-850.
- Fulmer, I. S., Barry, B., & Long, D. A. (2009). Lying and smiling: Informational and emotional deception in negotiation. *Journal of Business Ethics*, 88(4), 691-709.
- Furnham, A. (2012). Lay understandings of defense mechanisms: The role of personality traits and gender. *Psychology, Health & Medicine*, 17(6), 723-734.
- Furr M. R. (2010). *Scale construction and Psychometrics for Social & Personality Psychology*. SAGE Publications Ltd.
- Galeoto, G., Scialpi, A., Grassi, M. L., Berardi, A., Valente, D., Tofani, M., & Paoloni, M. (2019). General Sleep Disturbance Scale: Translation, cultural adaptation, and psychometric properties of the Italian version. *CRANIO*®.
- Grimm, P. (2010). *Social desirability bias*. Wiley international encyclopedia of marketing. DOI:10.1002/9781444316568.wiem02057
- Gruenfeld, D. H., & Tiedens, L. Z. (2010). Organizational preferences and their consequences. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of Social Psychology* (pp. 1252–1287). John Wiley & Sons, Inc.. <https://doi.org/10.1002/9780470561119.socpsy002033>
- Harmon-Jones, E., & Mills, J. (2019). *An Introduction to Cognitive Dissonance Theory and an Overview of Current Perspectives on the Theory*. In E. Harmon-Jones (Ed.), *Cognitive Dissonance: Reexamining a Pivotal Theory in Psychology* (2nd ed., pp. 3-24). Washington DC: American Psychological Association. <https://doi.org/10.1037/0000135-001>
- Hart, J. (2014). Toward an integrative theory of psychological defense. *Perspectives on Psychological Science*, 9(1), 19-39.
- Hart L. C., (2019). Lies in the Workplace - The effects of honesty and dishonesty on the job. *Psychology Today*.
- Heckel, R. V. (1955). *A factor analysis of Horney's concepts of moving toward, away from and against others*. The Pennsylvania State University.

- Hein, F. E., & Leue, A. (2021). Concealing Untrustworthiness: The Role of Conflict Monitoring in a Social Deception Task. *Frontiers in psychology*, 12, 3579. <https://doi.org/10.3389/fpsyg.2021.718334>
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21(5), 967-988.
- Hirsh, J. B., & Kang, S. K. (2016). Mechanisms of identity conflict: Uncertainty, anxiety, and the behavioral inhibition system. *Personality and Social Psychology Review*, 20(3), 223-244.
- Horney, K. (2013). *Our inner conflicts: A constructive theory of neurosis* (Vol. 17). Routledge.
- Humair, S., & Ejaz, S. S. (2019). Effect of Perceived Bullying at Workplace on Emotions Related to Job Commitment. *Abasyn University Journal of Social Sciences*, 12(1).
- Ismail, N. A. H., & Tekke, M. (2015). Rediscovering Rogers's self-theory and personality. *Jr of Educational, Health and Community Psychology*, 4(3), 28-36.
- Jenkins, S., & Delbridge, R. (2017). Trusted to deceive: A case study of 'strategic deception & the normalization of lying at work. *Org. Studies*, 38(1), 53-76.
- Jian, Z., Zhang, W., Tian, L., Fan, W., & Zhong, Y. (2019). Self-Deception Reduces Cognitive Load: The Role of Involuntary Conscious Memory Impairment. *Frontiers in psychology*, 10, 1718.
- Kaur, J. (2014). Organizational citizenship behaviors: Managing interpersonal conflict at workplace. *IUP Journal of Organizational Behavior*, 13(4), 19-37.
- Kellow, J. T. (2006). Using principal components analysis in program evaluation: Some practical considerations. *Journal of Multi-Disciplinary Evaluation*, 5, 89-107.
- Kislik L., (2021). Why People Lie at Work and What to Do About It – *SHRM Executive Network*.
- Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: a literature review. *Quality & Quantity*, 47(4), 2025-2047.
- Kyriazos, T. A. (2018). Applied psychometrics: sample size and sample power considerations in factor analysis (EFA, CFA) and SEM in general. *Psychology*, 9(08), 2207.
- Larson, R. B. (2019). Controlling social desirability bias. *International Journal of Market Research*, 61(5), 534-547.
- Lee, C. C., Chung, T., & Welker, R. B. (2018). Behavioral genetics of deception detection performance. *Journal of Managerial Psychology*, 33(1), 106-120.
- Levine, T. R. (2014). Truth-default theory (TDT) a theory of human deception and deception detection. *Journal of Language and Social Psychology*, 33(4), 378-392.
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*.
- Liong, M. (2015). In the shadow of deception: Ethical dilemma, positionality & reflexivity in ethnographic fieldwork. *Qualitative Research Jr*, 15(1), 61-73.
- Longe, O. (2015). Impact of Workplace Conflict Management on Organizational Performance: A Case of Nigerian Manufacturing Firm. *Journal of Management and Strategy*, 6(2), 83-92.
- Lynch, M. F., & Sheldon, K. M. (2020). Conditional Regard, Self-Concept, and Relational Authenticity: Revisiting Some Key Rogerian Concepts Cross-Culturally, Through Multilevel Modeling. *Journal of Humanistic Psychology*, 60(2), 168-186. <https://doi.org/10.1177/0022167817696842>
- Martínez-Rodríguez, S., Iraurgi, I., Gómez-Marroquín, I., Carrasco, M., Ortiz-Marqués, N., & Stevens, A. B. (2016). Psychometric properties of the leisure time satisfaction scale in family caregivers. *Psicothema*, 28(2), 207-213.
- Marx, R. G., Menezes, A., Horovitz, L., Jones, E. C., & Warren, R. F. (2003). A comparison of two time intervals for test-retest reliability of health status instruments. *Journal of Clinical Epidemiology*, 56(8), 730-735.
- Masip, J., Garrido, E., & Herrero, C. (2004). Defining deception. *Anales de Psicología/Annals of Psychology*, 20(1), 147-172.
- Matz, D. C., & Wood, W. (2005). Cognitive dissonance in groups: the consequences of disagreement. *Journal of Personality and Social Psychology*, 88(1), 22-37.
- Mele, A. R. (1997). Real self-deception. *Behavioral and Brain Sciences*, 20(1), 91-102.
- Melikyan, Z. A., Agranovich, A. V., & Puente, A. E. (2019). Fairness in psychological testing. In *Handbook of psychological assessment* (pp. 551-572). Academic Press.
- Menon, V., & Praharaj, S. K. (2019). Translation or development of a rating scale: Plenty of science, a bit of art. *Indian journal of psychological medicine*, 41(6), 503-506.
- Moran, S., & Schweitzer, M. E. (2008). When better is worse: Envy and the use of deception. *Negotiation and Conflict Management Research*, 1(1), 3-29.
- Merson, F., Newby, J., Shires, A., Millard, M., & Mahoney, A. (2021). The temporal stability of the

- Kessler psychological distress scale. *Australian Psychologist*, 56(1), 38-45.
- Munaf, S., Huassain, S., & Kamrani, F. (2012). Urdu translation, reliability and validity of personality assessment questionnaire-adult version. *International Journal of Business and Social Science*, 3(7), 121-132.
- Murphy, S. C., von Hippel, W., Dubbs, S. L., Angilletta Jr, M. J., Wilson, R. S., Trivers, R., & Barlow, F. K. (2015). The role of overconfidence in romantic desirability and competition. *Personality and Social Psychology Bulletin*, 41(8), 1036-1052.
- O'Neill, M., & Palmer, A. (2004). Cognitive dissonance and the stability of service quality perceptions. *Journal of Services Marketing*, 18(6), 433-449.
- Park, H., & Cho, H. (2012). Social network online communities: information sources for apparel shopping. *Journal of Consumer Marketing*, 29(6), 400-411.
- Pasquali, L. (2010). Instrumentação psicológica: Fundamentos e práticas [Psychological instrumentation: Bases and practices] Porto Alegre. *RS: Artmed*.
- Patwardhan, A., Noble, S. M., & Nishihara, C. M. (2009). The use of strategic deception in relationships. *Journal of Services Marketing*, 23(5), 318-325.
- Paulhus, D. L. (2012). *Paulhus Deception Scales (PDS)*.
- Paulhus, D. L., & John, O. P. (1998). Egoistic and moralistic biases in self-perception: The interplay of self-deceptive styles with basic traits and motives. *Journal of Personality*, 66(6), 1025-1060.
- Paunonen, S. V., & LeBel, E. P. (2012). Socially desirable responding and its elusive effects on the validity of personality assessments. *Journal of Personality and Social Psychology*, 103(1), 158-175.
- Peláez Zuberbühler, M. J., Coó Calcagni, C., Martínez, I. M., & Salanova, M. (2021). Development and validation of the coaching-based leadership scale and its relationship with psychological capital, work engagement, and performance. *Current psychology*, 1-22.
- Peng, L., Cui, G., Zhuang, M., & Li, C. (2016). Consumer perceptions of online review deceptions: an empirical study in China. *Jr of Consumer Marketing*, 33(4), 269-280.
- Perlovsky, L. (2013). A challenge to human evolution—cognitive dissonance. *Frontiers in Psychology*, 4, 179.
- Pettit, M. (2013). *The science of deception: Psychology and commerce in America*. University of Chicago Press.
- Prause, D., & Mujtaba, B. G. (2015). Conflict management practices for diverse workplaces. *Journal of Business Studies Quarterly*, 6(3), 13-22.
- Purvanova, R. K. (2017). The Role of Time in Virtual Teams: Development and a Meta-Analytic Test of a Temporal Model. In *Academy of Management Proceedings*, 2017(1), p. 17757. Briarcliff Manor, NY 10510: Academy of Management.
- Quach, S., & Thaichon, P. (2018). Dark motives-counterfeit selling framework: An investigate on the supply side of the non-deceptive market. *Marketing Intelligence & Planning*, 36(2), 245-259.
- Qureshi, M. A., & Hassan, M. (2019). Authentic Leadership, Ethical Climate & Workplace Incivility: How Authentic Leadership Prevents Deviant Work Behavior-A Case from Pakistan. *Abasyn University Journal of Social Sciences*, 12(1).
- Rahim, M. A. (2017). *Managing Conflict in Organizations*. Routledge.
- Randrianarivony, J., Ravelomanantsoa, J. J., & Razanamihaja, N. (2020). Evaluation of the reliability and validity of the Early Childhood Oral Health Impact Scale (ECOHis) questionnaire translated into Malagasy. *Health and Quality of Life Outcomes*, 18(1), 1-11.
- Rehman, W., & Mian, A. K. (2021). Towards Female Buying Behavior in Beauty and Grooming Industry of Pakistan: Modeling the mediating role of Purchase intentions. *Abasyn University Journal of Social Sciences*, 14(1).
- Revelle W. (2012). *Psychometric theory: scale construction*. Illinois, USA.
- Robie, C., Tuzinski, K. A., & Bly, P. R. (2006). A survey of assessor beliefs and practices related to faking. *Journal of Managerial Psychology*, 21(7), 669-681.
- Rogers, C. (2008). Carl Rogers. New World Encyclopedia online.
- Rozental, A., Kottorp, A., Forsström, D., Månsson, K., Boettcher, J., Andersson, G., & Carlbring, P. (2019). The Negative Effects Questionnaire: psychometric properties of an instrument for assessing negative effects in psychological treatments. *Behavioural and cognitive psychotherapy*, 47(5), 559-572.
- Ruscio, J. (2014). Rational/theoretical approach to test construction. *The encyclopedia of clinical*

psychology, 1-5.

- Sakina, T., & Malik, A. A. (2018) Deception as a Conflict Management Technique Scale: A Preliminary Analysis. *Journal of Education & Social Sciences*, 6(1), 123-142.
- Schwardmann, Peter, and Joel Van der Weele. (2019) "Deception and self-deception." *Nature Human Behaviour* 3(10), 1055-1061.
- Sporer, S. L., & Schwandt, B. (2007). Moderators of nonverbal indicators of deception: A meta-analytic synthesis. *Psychology, Public Policy, and Law*, 13(1), 1-34.
- Schweitzer, M. E., Brodt, S. E., & Croson, R. T. (2002). Seeing and believing: Visual access and the strategic use of deception. *International Journal of Conflict Management*, 13(3), 258-375.
- Schweitzer, M. E., DeChurch, L. A., & Gibson, D. E. (2005). Conflict frames and the use of deception: Are competitive negotiators less ethical? *Journal of Applied Social Psychology*, 35(10), 2123-2149.
- Scott, S. (2012). *Intimate deception in everyday life. Studies in Symbolic Interaction* (pp. 251-279). Emerald Group Publishing Limited.
- Serota, K. B., Levine, T. R., & Boster, F. J. (2010). The prevalence of lying in America: Three studies of self-reported lies. *Human Communication Research*, 36(1), 2-25.
- Shulman, D. (2011). Deception in the workplace: recent research and promising new directions. *Sociology Compass*, 5(1), 52-64.
- Singh, K., Junnarkar, M., & Kaur, J. (2016). Norms for test construction. In *Measures of Positive Psychology* (pp. 17-34). Springer, New Delhi.
- Sip, K. E., Skewes, J. C., Marchant Augustus, J. L., McGregor, W. B., Roepstorff, A., & Frith, C. D. (2012). What if I get busted? Deception, choice, and decision-making in social interaction. *Frontiers in Neuroscience*, 6, 58.
- Smith, M. K., Trivers, R., & von Hippel, W. (2017). Self-deception facilitates interpersonal persuasion. *Journal of Economic Psychology*, 63, 93-101.
- Sousa, Valmi & Rojjanasrirat, Wilaiporn. (2011). Translation, adaptation and validation of instruments or scales for use in cross-cultural health care research: A clear and user-friendly guideline. *Journal of evaluation in clinical practice*. 17. 268-74. 10.1111/j.1365-2753.2010.01434.x
- Sung, Y. T., & Wu, J. S. (2018). The visual analogue scale for rating, ranking and paired-comparison (VAS-RRP): a new technique for psychological measurement. *Behavior research methods*, 50(4), 1694-1715.
- Talley, R. (2016). *Lies we tell ourselves*. Harlequin.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55.
- Taylor, R., & Gozna, L. (2011). *Deception: A young person's life skill?* Psychology Press.
- Telci, E. E., Maden, C., & Kantur, D. (2011). The theory of cognitive dissonance: A marketing and management perspective. *Procedia-Social and Behavioral Sciences*, 24, 378-386.
- Tjosvold, D. (2006). Defining conflict and making choices about its management: Lighting the dark side of organizational life. *International Journal of Conflict Management*, 17(2), 87-95.
- Trivers, R. (2010). Deceit and self-deception. In *Mind the gap* (pp. 373-393). Springer, Berlin, Heidelberg.
- Trivers, R. (2011). *The folly of fools: The logic of deceit and self-deception in human life*. Basic Books (AZ).
- Uziel, L. (2010). Rethinking social desirability scales: From impression management to interpersonally oriented self-control. *Perspectives on Psychological Science*, 5(3), 243-262.
- Veronica (2021). Humanistic Theory by Psychologist Carl Rogers, The e-learning network. <https://www.eln.co.uk/blog/humanistic-theory-by-psychologist-carl-rogers>
- Vrij, A., Akehurst, L., & Knight, S. (2006). Police officers', social workers', teachers' and the general public's beliefs about deception in children, adolescents and adults. *Legal and Criminological Psychology*, 11(2), 297-312.
- Wallace, E., Buil, I., & de Chernatony, L. (2017). Consumers' self-congruence with a "liked" brand: Cognitive network influence and brand outcomes. *European Journal of Marketing*, 51(2), 367-390.
- Watson, D. (2012). Objective tests as instruments of psychological theory and research.
- Wertheim, E. H. (2011). Conflict management styles. *The Ency. of Peace Psychology*.
- WHO (2019), Process of translation and adaptation of instruments; [Last cited on 2019 Oct12. https://www.who.int/substance_abuse/research_tools/translation/en/

- Winkens, L. H., van Strien, T., Barrada, J. R., Brouwer, I. A., Penninx, B. W., & Visser, M. (2018). The Mindful Eating Behavior Scale: Development and psychometric properties in a sample of Dutch adults aged 55 years and older. *Journal of the Academy of Nutrition and Dietetics, 118*(7), 1277-1290.
- Wong, Y. J., Shea, M., Wang, S. Y., & Cheng, J. (2019). The Encouragement Character Strength Scale: Scale development and psychometric properties. *Journal of Counseling Psychology, 66*(3), 362-374.
- Worthington, R.L., & Whittaker, T.A. (2006). Scale development research a content analysis and recommendations for best practices. *The Counseling Psychologist, 34*, 806–838.
- Zeitsoff, T. (2017). How Social Media Is Changing Conflict. *Journal of Conflict Resolution, 61*(9), 1970-1991.
- Zhang, W., & Guo, B. Y. (2017). Resolving defense mechanisms: A perspective based on dissipative structure theory. *The International Journal of Psychoanalysis, 98*(2), 457-472.
- Zumbo, B. D., Gelin, M. N., & Hubley, A. M. (2002). *The construction and use of psychological tests and measures*. Encyclopedia of life support system.