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Research Paper



Attribution Styles of Antisocial Personality Disorder Prone Individuals and Normal Control

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ABSTRACT

The objective of this work to investigate the attributional style in terms of internal vs external, stable vs unstable, global vs specific used by antisocial personality disorder prone individuals and normal controls. It comprised 200 subjects (100 males and 100 females) within the age range of 18 to 25 years from a non clinical population. A total score equal to or greater than 3 on ASPD scale of IPDE (International Personality Disorder Examination) was suggestive of the presence of ASPD proneness and ASQ —Attributional Style Questionnaire (Peterson et al., 1982) was used to measure attributional styles. Results indicated that antisocial individuals were low on internality, stability and Globality i.e. they are more external, unstable and specific while evaluating good events. For bad events these individuals are more internal, stable and global as compared to normal controls.

Keywords: Personality, Antisocial Personality Disorder, Attributional Style

Normal personality is usually defined as (i) directly, using criteria of health ideals; (ii) indirectly, as the opposite to deviant personality or most frequently (iii) statistically, by behaviors that are most common in the given environment. The distinction between normal and abnormal personality is inherently relative, as it relies on arbitrary cut-off points on the continuum between two extremes (low and high) of any behavior. This distinction is also context dependent, as the same behavior, manifested in different situations, could be viewed as normal or maladaptive (e.g., invariant cautiousness, when danger is unlikely, and the same trait, when danger is likely).

A personality disorder is seen as a variant of character traits going far beyond the normative range found in most people. When these traits are extremely inflexible and maladaptive, and cause significant functional impairment or subjective distress, they constitute a personality disorder. Individuals characterized by a personality disorder exhibit deeply ingrained, rigid, inflexible, problematic and maladaptive patterns of relating to others and in perceiving themselves (Kaplan & Sadock, 2004) The DSM –IV noted ten personality disorders which are grouped into three clusters – A, B and C. Antisocial personality disorder falls in cluster B.

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The person with antisocial personality disorder is characterized by continual asocial or criminal acts; but being antisocial is not synonymous with criminality. These individuals tend to have a long and involved history of lying, theft, substance abuse, illegal activities, rejection of social norms, and lack of remorse for any hurtful actions directed towards others." In the distant past, this disorder was known as 'moral insanity' a name that hints at the fundamental aspect of this disorder" (Moore & Jefferson, 1996). These behaviors initially surface in childhood and intensify during adolescence. As antisocial personality disorder results in a variety of problems with law enforcement, the legal system, and within families, it has been the subject of more clinical interest and research than any other personality disorder (Wilson et al.1996). The essential features of this disorder include pervasive pattern of disregard for and violation of the rights of others, usually beginning in earnest after the age of 15, with evidence of conduct disorder before age 15 (APA, 2000).

Diagnostic Criteria 301.7 (F60.2)

- **A.** A pervasive pattern of disregard for and violation of the rights of others, occurring since age 15 years, as indicated by three (or more) of the following:
 - Failure to conform to social norms with respect to lawful behaviors, as indicated by repeatedly performing acts that are grounds for arrest.
 - Deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure.
 - Impulsivity or failure to plan ahead.
 - Irritability and aggressiveness, as indicated by repeated physical fights or assaults.
 - Reckless disregard for safety of self or others.
 - Consistent irresponsibility, as indicated by repeated failure to t work behavior or honor financial obligations.
 - Lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another.
- **B**. The individual is at least age 18 years.
- C. There is evidence of conduct disorder with onset before age 15 years.
- **D**. The occurrence of antisocial behavior is not exclusively during the course of schizophrenia or bipolar disorder.

According to the DSM-V, the annual prevalence of ASPD IS .02% to 3.3% when the criteria from prior DSM editions are applied (American Psychiatric Association, 2013). The prevalence of this disorder in the general population varies depending on the methodology used, and the countries studied. In India prevalence of antisocial personality disorder was 5.17% among study population (Gupta S, et al.) This disorder is seen much higher in men than women. In previous literature, the prevalence of APD is 2-3% in most Western societies, and is 4–5 times more prevalent among men than women (Coid, 2003). Compton et al., (2005) gave the ratio of 3:1 of men and woman for general population.

Attributional Styles: Attribution comes under the umbrella term of social cognition and refers to the assessments of the cause of an action, behavior or an event (Galvin & Cooper, 2006). To explain the behavior of other people and of ourselves every human being makes inferences about internal states which is called making causal attribution. This is the process by which people arrive at causal explanations of events in the social world, particularly for actions they and other people perform. People differ in the types of attributions they consistently make for the events in their lives. This consistent pattern of attributions across events is known as a person's Attributional style.

Attributional styles or explanatory, style is defined as the pattern of explanations for the cause of events (Abramson, Seligman& Teasdale, 1978; Seligman, 1975). A person's characteristic tendencies when inferring the cause of behavior or events, may be based on three dimensions: the internal- external (whether they tend to attribute a given act to the self or to other factors), the stable- unstable dimension (whether they tend to attribute events to long- lasting or transient causes), and the global –specific dimension (whether they tend to attribute events to cause that affect many events or one particular event). Attributions are formed when people tend to be especially curious about causality when something unexpected or unusual happens. Unexpected events create a need for greater predictability (Lau and Russell, 1980). Bad, painful, unpleasant events also inspire a search for causal attributions. Holtzworth-Munroe & Jacobson, (1985) considered distressed couple for marital therapy and found that the most attributional thoughts were made about the most distressing events: their partner's frequent negative behaviors, or their infrequent positive behaviors.

On reviewing the literature, it was found that no direct studies addressed the attributional styles of antisocial personality disorder individuals. Though, some researchers have studied the attributions of individuals with other psychological disorders such as schizophrenia and depression. A number of studies have indirectly addressed the attributional styles in terms of cognitive biases / faulty evaluations of self and others, distorted perceptions and even emotional dysregualation. Johnsson. M. et. al., (2014) focused on the blame attributions and guilt feeling in 177 young male violent offenders. Results showed that individuals with ASPD and those with higher degrees of psychopathy tended to report significantly less guilt and higher degree of mental control than other subjects. Another finding was a weak relationship between ASPD, high scores on psychopathic traits and external attribution. These results may be explained by admitting poor mental control may be extra difficult for individuals belonging to either of these groups and that the external attribution items do not separate causal from moral responsibility. negative attributions about themselves and others effects the overall functioning and may lead to interpersonal problems, deficits in socialcognitive functioning, aggression, faulty thinking pattern, poor mental control, tendencies to blame others in ambiguous problem situations and thinking dichotomously are more common to individuals with personality disorders. There is paucity of research in the literature examining the gender differences regarding Attributional styles of individuals with ASPD. Whatever is available is mostly on general population and show inconsistent findings. Seligman and Peterson (1986) reported a trend for girls to make more internal attributions for negative events than boys, and found no such differences on the globality and stability dimensions. Cole and Turner (1993) found girls to make more external, unstable, and specific attributions for negative events than boys, and did not examine attributional style for positive events. Some investigators (Curry & Craighead, 1990; Gotlib et al., 1993; Spirito, Overholser, and Hart (1991) reported no gender differences in attributional style during childhood or adolescence.

METHODOLOGY

Design

To compare antisocial personality disorder and normal controls from a non –clinical sample on attributional style, a two-way ANOVA, with two levels of disease proneness (ASPD and normal controls) and gender (male and female) was applied. Main effects of disease proneness, gender as well as interaction between disease proneness and gender was also calculated.

Sample

The sample comprised 200 subjects (100 males and 100 females) within the age range of 18 to 25 years from a non clinical population. They were randomly selected from different departments of Punjabi University Patiala (Punjab) and were matched on gender, age and educational backgrounds i.e. the subjects were pursuing either bachelor or masters degree. Following criteria was used to select the subjects: Inclusion criteria for ASPD: A total score equal to or greater than 3 on ASPD scale of IPDE (International Personality Disorder Examination) was suggestive of the presence of ASPD proneness. Inclusion criteria for normal control group: A total score of less than 3 on ASPD scale of IPDE were included in this sample.

Measures

IPDE-International Personality Disorder Examination (Loranger, 1999). It is a multi-dimensional psychometric traits instrument intended for the clinical psycho-diagnostic assessment of personality disorders. It comprises both a paper – pencil self-report screening questionnaire and a separate semi structured diagnostic interview. It measures ten personality disorders- Paranoid, Schizoid, Schizotypal, Antisocial, Borderline, Histrionic, Naracisstic, Avoidant, Dependent and Obsessive-Compulsive Disorder. It comprises 77 true /false self-report items.

Reliability and Validity: The reliability coefficients for the IPDE scale ranged from 0.82 to 0.91. This has been successfully used on Indian population by Nath et al., (2008); Chandrasekaran et al., (2003). For the present study, this questionnaire was used only as a screening measure for Antisocial Personality Disorder from a non clinical sample.

ASQ –Attributional Style Questionnaire (Peterson et al., 1982). It is a self-report measure and assesses an individual's tendency to make internal, stable and global attributions for 12 hypothetical events (6 positive and 6 negative). Respondents are asked to vividly imagine each situation happening to them and to write down major cause of the event. On a rating scale respondents are asked to indicate the degree to which the cause is perceived to be internal factors (related to the individual) or external factors (related to the other people or circumstances), stable (will always be present) or unstable (short term), global (affects all areas of life) or specific (is only specific to the present situation). The mean scores of both good and bad events for internality, stability, globality, and composite score can be used for the analyses. An individual score can be computed by summing the scores for each dimension.

Reliability: The reliability of the ASQ for each dimension is 0.46 for internality, 0.59 for stability and 0.69 for globality (Golin, Seweeney, and Schaeffer, 1981; Peterson et al.,1982). It has been used by Singh (2016), Kanwar. R, (2017) and Shaheen & Alam (2010) on Indian population.

Procedure

For the present research subjects were contacted personally and initial rapport building was done. Instructions were given related to the tests and subjects were requested to cooperate and answer the questions given in various testing schedules accurately and truthfully. They were assured that their personal information would keep confidential.

RESULTS

For Good Events

I. Internality-Analysis of variance for good events on internality revealed significant main effects of disease proneness [F (1,196) = 31.88**, p<0.01], gender [F (1,196) = 5.284**, p<0.01], as well as interaction between disease proneness and gender [F (1,196) = 6.93*, p<0.05]. The total mean scores reveal that normal controls (mean=5.43) scored higher than ASPD individuals (mean =4.54). Females in ASPD group obtained higher mean scores than males. These results indicate that attributions for good events in case of ASPD individuals are less internal as compared to normal controls indicating that they attribute to external factors for only good events that happens in their life, whereas looking at the gender differences, females show more internality i.e. for good events they attribute causes to internal factors.

II. Stability- Table -2a shows significant main effect of only disease proneness [F(1,196) = 52.08**, Table -2a shows significant main effect of only disease proneness <math>[F(1,196) = 52.08**, p<0.01] while gender [F(1,196) = 2.58] and interaction between disease proneness and gender [F(1,196) = 1.96] were not found to be significant. The total mean scores reveal that ASPD individuals were lower on stability (mean=4.25) than normal controls (mean = 5.53) suggesting that ASPD individuals have less stability in their attributions towards good events i.e. they think positive events happen by chance or luck (unstable) in their lives. Though females show higher stability (mean=4.51) than males (mean=3.98) indicating more stability in their attributions for good events than males.

Globality- Significant main effects were obtained for disease proneness [F (1,196) = 20.10**, p<0.01] and gender [F (1,196) = 3.81*, p<0.05]. However, interaction of disease proneness with gender [F (1,196) = 1.20] was not found to be significant. The mean scores revealed that ASPD individuals (mean=4.46) scored lower than normal controls (mean=5.21). This is indicates that they think that positive events in their lives are limited to certain circumstances (specific) only. ASPD females showed higher trend towards Globality than males.

Composite- Significant main effect of only disease proneness [F(1,196) = 12.19**, p<0.01] was obtained for good events (Table 2a). However, the main effects of gender [F(1,196) = 1.21] and interaction of disease proneness with gender [F(53) = 0.36] were not found to be significant. The total mean scores show the differences between ASPD (mean=5.17) and normal controls (mean =5.67) indicating that ASPD individuals are more external, unstable and specific in their attributions for good events than normal controls. Overall ASPD individuals make more negative judgments about, others and the world.

For Bad Events

I. Internality- Table 2a reveals significant main effect of only disease proneness [F (1,196) =50.13**, p<0.01] for bad events. The main effects of gender as well as the interaction of gender with disease proneness were not found to be significant. The total mean scores show differences between ASPD (mean = 5.03) and normal controls (mean=3.76) suggesting that ASPD individuals have more internal attributions towards bad events i.e. they think that they are responsible for every negative event which happens in their lives and give reasons for failures to their own self. This is in contradiction to previous literature.

II. Stability- Significant main effects were obtained for disease proneness [F(1,196) = 47.79**, p<0.01], gender [F(1,196) = 4.28*, p<0.05], as well as the interaction of gender

with disease proneness [F (1,196) = 9.95**, p<0.01]. Comparing the total mean scores, it was found that ASPD individuals (mean= 4.63) scored higher than normal controls (mean= 3.49) on stability. Also, comparing ASPD males and females, it was found that males (mean=5.08) showed more stability in their attributions towards negative events as compared females.

III. Globality- Table 2a reveals significant main effects of disease proneness [F (1,196)] =37.33**, p<0.01], as well as the interaction of gender with disease proneness [F (1,196) = 4.33**, p< 0.05]. Though the main effect of gender [F (1,196) =0.13] was not found to be significant. The total mean scores were higher for ASPD (mean=4.84) than for normal control individuals (mean = 3.88). Whereas gender analysis indicates that males are more global i.e. they perceive negatively in all situations.

IV. Composite- Table 2a revealed a significant main effect for composite score in case only of disease proneness [F (1,196) = 31.34**, p< 0.01]. However, the main effects of gender [F (1.196) = 0.23 as well as the interaction of gender with disease proneness [F (1.196) = 0.05] were not found to be significant. The total mean scores reveals ASPD individuals (mean= 5.58) to be higher on this domain than normal control individuals (mean=4.73) i.e. they are more internal, stable and global in their attributions for bad events.

Figure I: A x B Interaction Group for Internality for good events

Gender (B)	1	Disease Proness (A)	
	ASPD (a ₁)	Normal Controls (a ₂)	
MALES(b1)	4.14	5.46	
FEMALES(b2)	4.93	5.41	
TOTAL	4.54	5.44	

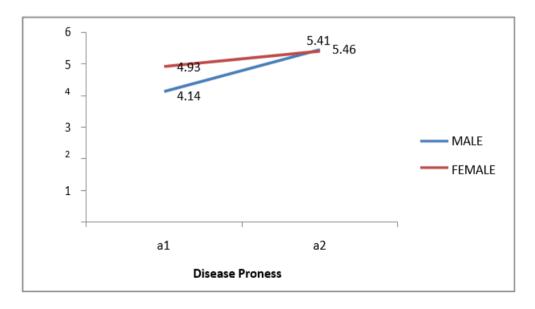


Figure II: A x B Interaction for Stability for Bad events

Gender (B)	Disease Proness (A)		
	ASPD(a ₁)	NORMAL CONTROLS(a2)	
MALES(b ₁)	5.28	3.41	
FEMALES(b ₂)	4.21	3.59	
TOTAL	4.64	3.40	

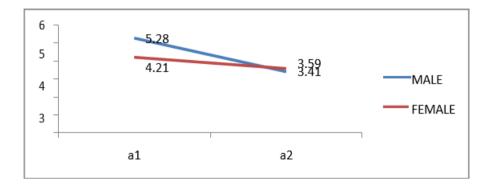
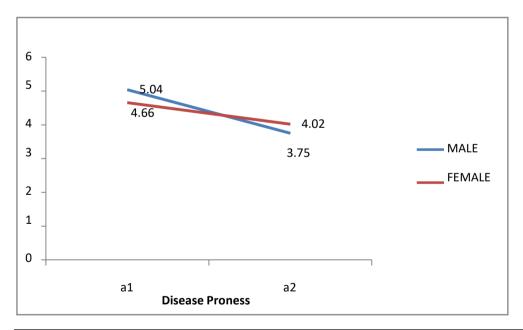


Figure III: A x B Interaction for Globality for Bad Events

Gender (B)	Disease Proness (A)		
	ASPD(a ₁)	NORMAL CONTROLS(a2)	
MALES(b ₁)	5.04	3.75	
FEMALES(b ₂)	4.66	4.02	
TOTAL	4.85	3.89	



DISCUSSION

The Attributional styles of both antisocial prone individuals and normal controls were assessed and compared on the basis of a situational test for good and bad events.

The attributions for *good events* of antisocial prone individuals were evaluated and compared with normal controls in terms of internality, stability and Globality. Results revealed that antisocial individuals were low on internality, stability and Globality i.e. they are more external, unstable and specific while evaluating good events. They tend to place

blame on misfortune for external, malevolent forces and think that positive events happen by chance (unstable) and restricted to certain situations (specific). They have more negative Attributional styles and beliefs about self, others and the world, also pay greater attention to negative stimuli. Their assessments even to neutral or ambiguous stimuli are not only negatively biased but also are overly sensitive. Examining gender differences, males were found to be significantly lower on internality and globality than females i.e. they attribute cause of good events to more external factors than females. These findings indicate that overall antisocial prone individuals do not evaluate good events positively.

On the other hand, normal control individuals are more internal, stable and global in comparison to antisocial prone individuals i.e. they attribute cause of good events to internal factors such as to themselves, which are likely to present always (stable) and such attributions affects all areas of life (global). In brief, they tend to have positive evaluations regarding themselves, others and world.

The results for *bad events* revealed that attributions of antisocial prone individuals are more internal, stable and global as compared to normal controls i.e. they assume that they are responsible for every negative event that happened in their lives (internal) and it will not change over time (stable) and it will happen in every situation (global). Except for other findings high internality is in contradiction to the previous researches. Gender differences indicated that antisocial prone males' attributions for negative events are more stable than females. This suggests that their perceptions of bad events are more consistent than females. They also tend to be more unstable and specific in their attributions than females.

In both males and females, such negative attributions may promote feeling of loneliness (or perceived lack of support), anger, eventually increasing depressive symptoms, self-injurious behavior, low self -esteem and dysfunctional behavioral patterns.

Though, the depression and schizophrenic patients and even BPD tend to blame themselves for all the negative events. Moritz et. al. (2011) found that depressed patients attribute the causes for negative attributions on themselves and believe that such events will occur again in the future and also in different situations in their lives. Similar kind of attributions were found in schizophrenic patients i.e. tendency to blame the causes of negative events to internal and stable style. They make negative evaluations of themselves over positive or neutral in evaluations. But ASPD react opposite to this. They are more external in their attributions. This can be supported by Johnsson, M. et. al., (2014) found that ASPD individuals and those with higher degrees of psychopathy tended to report significantly less guilt and higher degree of mental control than other subjects. Also, there was weak relationship between ASPD, high scores on psychopathic traits and external attributions. These results may be explained by admitting poor mental control may be extra difficult for individuals belonging to either of these groups and that the external attributions items do not separate causal from moral responsibility. This attribution bias interferes with their ability to effectively function in social and occupational settings.

Mark, R. Fondacaro & Heller, K. (1990) found that aggressiveness among offenders is associated with an Attributional style that is characterized by the tendency to attribute blame for problems in ambiguous interactions to global, dispositional characteristics of others.

Antisocial individuals tend to show more anger and hostility. To support this view Lobbestael, Cima, and Arntz (2013) found that hostile attribution bias was specifically

related to reactive aggression in patients with ASPD. Granic, Isabela and Stephen Butler (1998) indicated that aggressive youth also tend to be angrier and more antisocial in their thinking than their non-aggressive peers. They consistently reported a higher number of antisocial beliefs or negative attributions i.e. the police are unfair and the courts pander to rich people to the notions that criminals are sometimes justified in their acts and breaking the law is rewarding. In short, they are blaming others.

Some researchers compared the cognitive biases of BPD and ASPD believing that ASPD also have cognitive biases. Sharp and Sieswerda (2013) found that both deficits and distortions in social-cognitive functioning were associated with BPD and ASPD. Jones et al. (2007) found that young offenders were poor at recognizing the facial expression of anger, regardless of intellectual ability. They could not accurately identify the direction of another's eye gaze.

ASPD also tend to have cognitive distortions such as inaccurate thoughts, attitudes, or beliefs. Supporting this view, Liau et al., (1998) conducted a study to see the relationships between cognitive distortions and antisocial behavior that is either overt/confrontational (fighting) or covert/ non confrontational (stealing). They found that cognitive distortion related specifically to overt and covert antisocial behavior in both samples. In particular, cognitive distortion having overt antisocial behavior as its referent (e.g., "People need to be roughed up once in a while") evidenced a significant path to overt but not covert antisocial behavior. Conversely, covert-referential cognitive distortion (e.g., "If someone is careless enough to lose a wallet, they deserve to have it stolen") evidenced a significant path to covert but not overt antisocial behavior. Johnstone and Cooke (2004) suggested that antisocial behavior and eocentricism are more characteristic in younger individuals than adults due to transient development states, which would line with adolescents exhibiting more self- serving cognitive distortions than adults.

The root causes of these negative attributions may be due to traumatic experiences in childhood. The home environment of such individuals is unfit for e.g. poor parenting, family history of antisocial behavior or experiencing different kinds of child abuse (sexual, physical, verbal, emotional).

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Conflict of Interest

The author(s) declared no conflict of interest.

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