

## Gambling, Alexithymia, Emotion Regulation, and Psychological Distress among Adults

T. Toihon Konyak and Lovika P. Shikhu  
Nagaland University, Kohima Campus, Meriema

Gambling behavior and its impact on mental health are akin to other non-substance addictions such as internet addiction, and gambling problems are highly associated with impaired emotional processes, mood, depression, anxiety and stress. The aim of the present study is to explore the relationship between gambling and alexithymia, emotion regulation and psychological distress such as depression, anxiety and stress among adults. Using purposive and snowball sampling method, data was collected from 100 adults and analyzed using Pearson Correlation to examine the association between gambling and the emotional constructs. The findings showed a significant positive correlation between gambling and psychological distress ( $r=.232$ ,  $p<0.05$ ). No significant association was noted between gambling and alexithymia and gambling and emotional regulation. However, a strong positive correlation was found between alexithymia and emotion regulation ( $r=.287$ ,  $p<0.01$ ), likewise a positive correlation was seen in alexithymia and depression, anxiety, and stress ( $r=.299$ ,  $p<0.01$ ) and a positive correlation between emotion regulation and depression, anxiety, and stress ( $r=.354$ ,  $p<0.01$ ). Simple regression indicated gambling significantly predicted depression, anxiety, and stress.

**Keywords:** Gambling, Alexithymia, Emotion Regulation, psychological distress, Adults.

Gambling has been one of the popular leisure time activities in most countries, with clear majority of adults having engaged in some form of gambling activity at least once in their life, where 40% to 80% have participated in some form of gambling in the last 12 months (Griffiths, 2010). It has long been present in Indian culture, literature, ancient scriptures, alluding its nature and impact (Bengal, 2013; Bhide, 2007). It is a form of entertainment for most individuals (Martin et al., 2011; MCNeilly and Burke, 2010) while some individual use gambling to escape their problems, commonly seen among problem gamblers (Nower and Blaszczynski, 2010). Gambling related problems have received increasing attention over the past decades with wide gambling opportunities spreading across the world. (Marchetti et al., 2019). Thus, problematic gambling and its related problems have been reclassified from

'Impulse Control Disorder' to 'Substance – related and Addictive Disorder' (APA, 2013). This reclassification indicates the commonalities between other addictions with gambling, implying common or similar etiological factors, similar criteria for diagnosis, impacts and treatments (Rash et al., 2016). Gambling disorders is a problematic gambling behavior that manifests itself persistently and recurrently, causing significant and pervasive impairment or distress (APA, 2013; 2022).

Gambling related problems can affect multiple domains of life (Browne et al., 2017) including health problems (Santangelo, 2013; Morasco et al., 2006), psychological and emotional distress (Lorains et al., 2011; Haydock et al., 2015) and impaired social and cultural relationships (Mathew and Volberg, 2013; Gonzales, 2003; Griswold and

Nicholas, 2006). Some of the risk factors that may predispose an individual to problem gambling may include gender; where men are more exposed than women (Dowling et al., 2017), socio-cultural background where gambling is accepted without stigma implications (Johansson et al., 2009), personality factor, uncontrolled temperament, and antisocial behavior (Dowling et al., 2017). Earlier studies have proved that gambling problems are highly associated with impaired emotional process (Oslen et al., 2015). The construct of alexithymia has gained a wide popularity in the last decades among various personality traits that have been underlying as emotional dysregulation (Marchetti et al., 2019). Alexithymia is characterized by a predominant focus on the external world rather than on internal emotions, it is a trait comprising of difficulty identifying one's own feelings, difficulty describing feelings, and an externally oriented thinking style (Preece et al., 2017). People with alexithymia have difficulty in being aware of and expressing their own feelings, representing their experience, behaviors, and mental state in themselves and others (Marchetti et al., 2019). Based on these perspective, alexithymia is similar to other psychological constructs that highlights deficits in the functioning of referential activity (Bucci, 1997), reflective functioning and emotional intelligence (Parker et al., 2001).

Addictive behaviors are seen as psychopathology associated with mood, anxiety, and functional impairments (Bersani et al., 2022) studies have shown that gambling behavior has association with health problems, other addictive behaviors, and social problems (Bhatia et al., 2019), and emotional dysregulation can trigger behavioral addiction (Bersani et al., 2022). Studies have also been done among gambling, suicidality and attention-deficit hyperactivity disorder (ADHD) (George et al.,

2016). Several studies have noted certain specific demographic association with gambling problems such as age, male gender, substance abuse (Stucki and Rish-Middel, 2007; Nowak and Aloe, 2014). However gambling and alexithymia, emotional dysregulation and distress and their association among adults in Nagaland have not been reported so far in the literature. Existing research on gambling focuses mainly on global and urban areas with limited studies in regional context and there is a lack of region-specific data. Thus, the present study aims to explore the following objectives: -

### **Objectives**

- To study the relationship between gambling and alexithymia, gambling and emotion regulation and gambling and psychological distress such as depression, anxiety and stress among adults.
- To study and examine if gambling behavior predict alexithymia, emotion regulation and psychological distress such as depression, anxiety and stress

### **Method**

#### **Sample**

The sample comprised of 100 Naga adults (25 female and 75 males) age between 25 to 74 years. The targeted sample for this study was adults residing in Nagaland, who have experienced gambling or are into gambling either online or offline such as lotteries, poker, cards, ludo, online betting. The participants for this study were recruited through purposive and snowball sampling methods.

#### **Tools**

*DSM V Screen for Pathological Gambling* (2013) is a self-report assessment tool, and the tool consist of 9 items each to be responded with a 'yes' or 'no' response. The

internal consistency of the present study is ( $\alpha=.60$ ).

*The Perth Alexithymia Questionnaire* (PAQ; Preece et al., 2018): it is a 24-item self-report assessment tool to measure alexithymia. The items are rated on a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree) higher scores indicate higher level of alexithymia. The PAQ showed a good internal consistency in the present study ( $\alpha=.74$ )

*Difficulties in Emotion Regulation Scale* (DERS; Gertz and Roemer, 2004): it is a self-report assessment with 36 items that ask respondents how they relate to their emotions, and the items are rated on a five-point Likert scale from 1 (almost never) to 5 (almost always) with higher scores suggesting greater problems with emotion regulation. The present study showed a good internal consistency ( $\alpha=.75$ )

*Depression Anxiety Stress Scale* (DASS-10; Halford & Frost, 2021): it is a brief 10 item version of the full version of DASS-24. This self-report assessment helps to determine the overall level of distress as well as depression and anxiety, items are rated on a three-point Likert scale from 0 (never) to 3 (almost always). The internal consistency of the present study was ( $\alpha=.65$ ).

### Procedure

Individuals who agreed to participate in the study signed informed consent, and the participants completed four psychological tests which took them approximately 20 minutes. Participation in this study was voluntary, anonymous, and confidential.

### Results

In assessing gambling majority of the participants (82%) scored high on gambling and 18% scored low. In assessing alexithymia in 100 participants, 18% of the participants fell under the high level indicating that the participants have trouble in recognizing and

expressing their feelings and have difficulty describing their emotions to others. 42% of the participants fell under average level, while 40% of the participants scored low on alexithymia. In assessing emotion regulation, 18% of the participants scored high on emotion regulation and majority of the participants (82%) scored average on emotion regulation. Finally in assessing psychological distress: depression, anxiety and stress 28% of the participants fell under severe category while 6% fell under extremely severe category and half of the participants (51%) experienced depression, anxiety and stress moderately.

Table 1. Correlation between gambling, alexithymia, emotion regulation, and distress

Variables	Correlation
Gambling x Alexithymia	.677
Gambling x Emotion Regulation	.539
Gambling x Psychological Distress	.232*
Alexithymia x Emotion Regulation	.287**
Alexithymia x Psychological Distress	.299**
Emotion Regulation x Psychological Distress	.354**

\* $p < .05$ , \*\* $p < .01$

Table 1's analysis show that there is a significant positive correlation between gambling and psychological distress  $r(100) = .232$ ,  $p < 0.05$ , indicating that increase in gambling activity will lead to high level of depression, anxiety and stress. No correlation was observed between gambling and alexithymia, and gambling and emotion regulation.

Table 2. Regression Analysis summary for gambling predicting psychological distress.

Variable	B	Coefficient standard error	$\beta$	t	p
(constant)	4.354	1.482		2.937	.004
psychological distress	.011	.016	.072	.719	.474

$R^2$  adjusted = .005

Table 3. Regression Analysis summary for gambling predicting alexithymia.

Variable	B	Coefficient standard error	$\beta$	t	p
(constant)	4.705	1.426		3.300	.001
alexithymia	.007	.014	.050	.499	.619

R<sup>2</sup> adjusted = -.008

Table 4. Regression Analysis summary for gambling predicting emotion regulation.

Variable	B	Coefficient standard error	$\beta$	t	p
(constant)	8.038	1.365		5.892	.000
Gambling	.561	.273	.232	.364	.020

R<sup>2</sup> adjusted = .044

Simple regression was used to examine the predictive relationship between gambling and alexithymia, gambling and emotion regulation, gambling and psychological distress. The analysis showed that gambling behavior of the participants significantly predicted the psychological distress  $F(1,89) = 5.589$   $p = .020$  where  $p < 0.01$  as seen in Table. The result indicates that the gambling behavior of the participants makes a significant contribution to predicting psychological distress.

### Discussion

A good number of the participants (82%) in the present study scored high on gambling scale, an evidence in a regional study suggests that life time gambling prevalence is as high as 46%, and problem gambling prevalence is around 7.4% (Bhatia et al., 2019). The figure in the present study is found to be higher than the previous study (Bhatia et al., 2019; Gori and Topino, 2024). Gambling has been typically considered a male predominant activity; however, recent prevalence surveys have shown greater numbers of female are now gambling (McCormack et al., 2014). Women's

estrangement from a conventional lifestyle and integration into a social world of gambling appeared to help explain their problem gambling (Harba and Lee, 1996). The finding of the study reflects that there are many in the target population who engage in gambling to the extent that it might be hazardous for them. In assessing alexithymia, the study found 18% of the participants fell under the high level, 42% fell under average level and 40% of the participants scored low on alexithymia. People with alexithymia have trouble differentiating emotions from bodily sensation, restricted imaginative processes, and impaired introspective thinking (Taylor et al., 1991; Taylor 2000).

The findings of the study also indicated that a good number of the participants have difficulties in emotion regulation and had high level of psychological distress. A significant correlation was observed between gambling and psychological distress (depression, anxiety and stress) indicating that high scores of gambling behavior corresponds to high level of psychological distress. Pathological gambling has been associated with experiential avoidance (Riley, 2014), in the same way as other addictions that have also been related to experiential avoidance (Levin et al., 2012), or lower distress tolerance (Howell et al., 2010; Hsu et al., 2013). The study also observed a significant correlation between alexithymia and emotion regulation, and alexithymia and psychological distress, similar findings were observed by Pandey et al., (2011) where participants with alexithymia showed greater emotion regulation difficulties as compared to non-alexithymic. Finally the results also showed that difficulties in emotional regulation score positively correlates with psychological distress. Similar findings were observed in a study with pathological gambling and its association with emotion regulation, and anxious- depressive symptomatology (Jauregui et al., 2016). Studies have proven

that individuals with alexithymia try to regulate their emotions through compulsive behavior and the inability to modulate and tolerate negative affect can drive them to seek emotional regulation through behavioral actions and external objects (Taylor et al., 1991; Caretti et al., 2018; Pellerone et al., 2017). Earlier study also show evidence that pathological gamblers exhibited greater difficulties of emotion regulations, anxiety and depression, emotion regulation difficulties correlated with and predicted pathological gambling (Jauregui et al., 2016) and the findings of the present study also supports this.

The simple regression result indicates that the psychological distress such as depression, anxiety and stress of the participants was positively and significantly predicted by gambling behavior. Relative to non-gamblers, pathological gamblers exhibits greater difficulties of emotion regulation, more anxiety, depression (Jauregui et al., 2016). This finding supports pervious theories that points to difficulties in emotion regulation as a transdiagnostic factor that may predict numerous psychological disorders (Kring & Sloan, 2009; Trost et al., 2009). The present study reports the improving in the emotional distress by employing interventions can reduce and prevent severity of pathological gambling.

This study has some limitations. First, due to the sample size constraint, findings cannot be generalized; secondly, there can be a self-report data bias where responses may be influenced by social desirability and subjective misinterpretations. Finally the sample of the present study did not have data that represent equal number of male and female. Future studies can include mixed-method approach that can provide deeper insights and with larger sample size and equal data representation for gender should be included.

## Conclusion

Despite the limitations of the limited sample size, the present study could show that overall gambling behavior and addiction are issues that are largely overlooked in Nagaland. The present study also contributed to understanding that being unable to tolerate negative affect or having difficulties in understand ones' own emotions as well as others' can increase pathological gambling behaviors. Furthermore, the present study also sheds light on the prevalence of pathological gambling behavior among adults with psychosocial factors such as emotion regulation, alexithymia, depression, anxiety and stress in Nagaland. In conclusion, pathological gamblers may present emotion regulation difficulties and psychological distress which may also constitute a common predictor of pathological gambling and comorbid disorders.

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- T. Toihon Konyak**, Research Scholar, Department of Psychology, Nagaland University, Kohima Campus, Meriema
- Lovika P. Shikhu**, Assistant Professor, Department of Psychology, Nagaland University, Kohima Campus, Meriema
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