

Prevalence of Disinhibited Social Engagement Disorder among Iraqi Juvenile Delinquents: A Clinical Study

Hawraa Bassam Abdulwahab^{1*}, Ahmed Latif Jasim²

¹ Department of Psychology, College of Arts, University of Baghdad; Hawraa.Abd2204@coart.uobaghdad.edu.iq

² Department of Psychology, College of Arts, University of Baghdad; ahmed.l@coart.uobaghdad.edu.iq

*Corresponding Author: Hawraa.Abd2204@coart.uobaghdad.edu.iq

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ABSTRACT

The present study aims to examine Disinhibited Social Engagement Disorder (DSED) among juvenile delinquents in correctional institutions by identifying its prevalence rate, diagnosing its behavioral and psychological manifestations, and examining potential differences according to gender. The study adopted a descriptive methodology to describe and interpret the phenomenon. The sample consisted of 1,200 juvenile delinquents, including 779 males and 421 females, aged 16–21 years, drawn from six Iraqi governorates. A translated and culturally adapted instrument was used to measure Disinhibited Social Engagement Disorder in a manner appropriate to the Iraqi context. The results indicated that the disorder is present at a notable prevalence rate, reaching 20.17% of the total sample, with no statistically significant differences between males and females. The most common behavioral and psychological indicators were indiscriminate social behavior, poor awareness of personal boundaries, and rapid social engagement with strangers. These findings suggest that the institutional environment and social context play a more influential role in the development of the disorder than biological factors or gender-related differences. The study underscores the importance of adopting psychological and social intervention programs that consider cultural specificity, as well as strengthening rehabilitation services within correctional institutions to improve social interaction and reduce the likelihood of relapse during community reintegration.

Keywords: Disinhibited Social Engagement Disorder, juvenile delinquents.

INTRODUCTION

Exposure of children and adolescents to abuse and neglect is considered one of the most serious risk factors affecting psychological and social development, particularly among juveniles in correctional institutions, who often have a history marked by deprivation and a lack of familial security. The literature indicates a higher prevalence of mental disorders among juvenile delinquents compared to adolescents in normative environments (Moran et al., 2024, p. 2). It has also been shown that approximately **65%–70%** of juvenile delinquents have at least one diagnosed mental disorder, such as anxiety, depression, or related conditions, which increases the likelihood of engagement in risky or delinquent behaviors (Xie et al., 2024, p. 2).

Psychological and behavioral problems among this group are further exacerbated when their histories are associated with risk factors such as parental substance abuse, mental health disorders among caregivers, or recurrent familial absence, leading to emotional dysregulation and difficulties in social interaction (Talmón-Knuser et al., 2024, p. 2).

These early developmental disturbances are associated with the emergence of persistent behavioral problems during adolescence, including **Disinhibited Social Engagement Disorder**, which represents a disorder linked to a disrupted developmental trajectory resulting from emotional neglect or institutional deprivation (Ji, 2023, p. 227).

Disinhibited Social Engagement Disorder fundamentally arises from disturbances in early attachment patterns, particularly when children lack consistent caregiving during early childhood. This deficit reduces their ability to differentiate between safe and inappropriate social interactions (Zeanah & Gleason, 2015, p. 121). Neurobiological studies further confirm that early emotional deprivation is associated with changes in the functioning of brain regions responsible for emotional regulation and social interaction, including the amygdala and prefrontal cortex, which contributes to the persistence of maladaptive social behaviors (Tottenham, 2012, p. 220).

Given the scarcity of Arabic studies addressing Disinhibited Social Engagement Disorder and the absence of local data concerning juvenile delinquents in Iraqi correctional institutions, this study seeks to bridge this research gap by exploring the nature of the disorder within the Iraqi context. Accordingly, the research problem is formulated as follows: **What is the prevalence of Disinhibited Social Engagement Disorder (DSED) among juvenile delinquents in Iraqi correctional institutions? Are there statistically significant differences in the level of the disorder according to gender (male/female)?**

Based on the above, the present study aims to estimate the level of Disinhibited Social Engagement Disorder among juvenile delinquents in Iraqi correctional institutions and to identify potential gender differences, ultimately providing a psychological knowledge framework that supports the development of future psychological and social interventions aligned with the local context. The following section presents an analytical review of the literature related to Disinhibited Social Engagement Disorder in light of contemporary theories and approaches.

REVIEW OF RELATED LITERATURE

This section reviews the most significant contributions in the literature related to **Disinhibited Social Engagement Disorder (DSED)**, including its definition and diagnosis, theoretical, developmental, and neurobiological foundations, as well as prevalence rates in institutional settings and populations most at risk, with a particular focus on juvenile delinquents as the applied model of the current study.

First: Definition and Diagnostic Classification

Disinhibited Social Engagement Disorder is classified as a disorder associated with neglect or deprivation during early childhood. It is characterized by socially inappropriate behavior, including excessive familiarity with strangers and failure to adhere to culturally recognized personal and social boundaries. The *Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR)* classifies this disorder under attachment-related disorders resulting from insufficient caregiving (American Psychiatric Association, 2022, pp. 299–301).

Second: Developmental Framework and Its Relationship to Attachment

The literature indicates that DSED results from disruptions in the formation of early attachment patterns with caregivers due to the absence of stable caregiving relationships during childhood. This disruption leads to impaired perceptions of social and psychological safety and a failure to distinguish between appropriate and inappropriate relationships, thereby facilitating the emergence of impulsive and socially inappropriate affiliative behaviors (Zeanah & Gleason, 2015, p. 121).

Third: Neurobiological Basis and Its Relationship to Social Behavior

Neuroscientific research demonstrates that children exposed to early emotional deprivation and neglect exhibit structural and functional brain changes, particularly in the amygdala and the prefrontal cortex—regions responsible for emotional regulation and social responsiveness. These changes contribute to difficulties in regulating social interactions and interpreting social cues (Tottenham, 2012, p. 220).

Fourth: Prevalence of DSED in Institutional Settings

The prevalence of Disinhibited Social Engagement Disorder is higher in institutional environments due to the lack of stable emotional relationships and individualized care. Such environments are among the most influential factors in the emergence and persistence of the disorder's symptoms, especially when deprivation extends across critical developmental periods (Ji, 2023, p. 227).

Fifth: Global Prevalence Estimates

Studies indicate that prevalence rates of DSED reach **30%–40%** among individuals exposed to institutional neglect or unstable caregiving, compared to significantly lower prevalence rates among children raised in supportive family environments (Gleason et al., 2011, p. 219).

Sixth: DSED Among Juvenile Delinquents

Recent empirical evidence suggests that juvenile delinquents are among the populations most vulnerable to psychological disorders associated with experiences of abuse and neglect. Research findings reveal elevated symptoms of Disinhibited Social Engagement Disorder among this group compared to peers in typical environments (Moran et al., 2024, p. 2).

Seventh: Gender Differences

Available evidence does not support the existence of substantial differences between males and females in their vulnerability to DSED, indicating that the disorder is more closely associated with developmental experiences and environmental context than with gender-related biological factors (Seim, 2021, p. 2).

METHODOLOGY

Sample

The study sample was selected using the **simple random sampling** method to ensure adequate representation of Iraqi governorates, namely **Nineveh, Sulaymaniyah, Baghdad, Babil, Basra, and Nasiriyah**, representing northern, central, and southern Iraq, as well as gender representation. The total sample size comprised **1,200 juvenile delinquents** aged **16–21 years**, including **779 males** and **421 females**.

Instrument

The study employed the **Disinhibited Social Engagement Disorder (DSED) Scale** developed by **Liu (2020)**. The scale was linguistically translated and culturally adapted to the Iraqi context in accordance with established psychometric adaptation standards. The instrument consists of **26 items** rated on a **five-point Likert scale** (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree), with scoring weights ranging from **1 to 5**.

Translation and Cultural Adaptation of the Instrument

Given that the DSED scale was originally developed within a different cultural context, it underwent a systematic translation and cultural adaptation process to ensure its suitability for the Iraqi environment and the target age group of juvenile delinquents. The translation procedure followed the guidelines proposed by **Brislin (1970)**. The scale was first translated from English into Arabic and then reviewed by specialists in translation and psychology to verify linguistic accuracy and cultural relevance. Subsequently, a **back-translation** into English was conducted, revealing a high degree of equivalence with the original version, thus confirming both linguistic and conceptual equivalence. Minor modifications were made to the wording of certain items to align with the cultural and social context of Iraqi society, without compromising the conceptual structure of the scale.

Psychometric Properties of the Instrument (Reliability and Validity)

Face and construct validity were established through expert evaluation by a panel of specialists in psychology and psychiatry. The results of **confirmatory factor analysis** supported the stability of the scale's factor structure. Reliability analysis indicated high internal consistency, with a **Cronbach's alpha coefficient of 0.95**, while test-retest reliability over a two-week interval yielded a coefficient of **$r = 0.92$** , demonstrating that the instrument possesses strong reliability and is suitable for use within the Iraqi context.

Ethical Considerations

The study was conducted in accordance with ethical principles governing scientific research in the human sciences, following the acquisition of the necessary approvals from the **Ministry of Justice** and the relevant authorities within the correctional institutions included in the study. Participants were provided with a clear explanation of the study's objectives, response procedures, and the principle of voluntary participation without coercion. They were informed of their right to withdraw at any time without consequences. No identifying information was collected, and all data were treated with strict confidentiality and used exclusively for scientific research purposes, in compliance with established ethical standards and the **Declaration of Helsinki** concerning research involving vulnerable populations (WMA, 2013).

RESULTS

1. Prevalence of Disinhibited Social Engagement Disorder

To determine the prevalence of Disinhibited Social Engagement Disorder among the study sample, raw scores obtained on the DSED scale were converted into **T-scores**. **Table (1)** presents the distribution of participants according to levels of the disorder.

Table (1) Distribution of Disinhibited Social Engagement Disorder Levels in the Study Sample

Sample Size	Mean	SD	Level of Disorder	T-Scores	Equivalent Raw Scores	Number of Participants	Percentage
1200	52	14.36	High	60 and above	67–78	242	20.17%
			Moderate	40–60	38–66	711	59.25%
			Low	40 and below	26–37	247	20.58%

The results presented in Table (1) indicate that the proportion of individuals exhibiting a **high level of Disinhibited Social Engagement Disorder** (20.17%) is approximately equal to the proportion of those exhibiting a **low level** (20.58%) within the total sample. It should be noted that a **T-score of 60 or higher** represents a value exceeding the overall sample mean by one standard deviation, whereas a **T-score of 40 or lower** represents a value one standard deviation below the mean.

2. Gender Differences in Disinhibited Social Engagement Disorder

To examine differences in Disinhibited Social Engagement Disorder according to **gender (male/female)**, an **independent-samples t-test** was employed to compare male and female juvenile delinquents diagnosed with DSED. **Table (2)** presents the results of this analysis.

Table (2) Independent-Samples t-Test for Gender Differences in Disinhibited Social Engagement Disorder

Sample	Gender	N	Mean	SD	Calculated <i>t</i>	Tabulated <i>t</i>	Significance
242	Females	75	71.81	3.43	0.15	1.96	Not significant
	Males	167	71.89	3.51			

The results presented in Table (2) indicate that there is **no statistically significant difference** in Disinhibited Social Engagement Disorder among juvenile delinquents diagnosed with the disorder according to **gender**, as the calculated *t* value is lower than the tabulated *t* value (1.96) at the **0.05 significance level** with **241 degrees of freedom**.

DISCUSSION

The prevalence rate of Disinhibited Social Engagement Disorder (DSED), which reached 20.17% among juvenile delinquents in Iraqi correctional institutions, can be interpreted within the theoretical framework proposed by Zeanah and Gleason (2015, p. 121). This framework emphasizes the association between the disorder and early childhood neglect or maltreatment, as well as the absence of secure attachment. These characteristics are frequently observed among populations exposed to family deprivation and unstable caregiving. DSED represents a pattern of socially inappropriate interaction characterized by diminished concern for social or cultural boundaries, which is consistent with the behavioral features observed in the sample of juvenile delinquents.

The current findings are consistent with the results reported by Zeanah et al. (2005, p. 1019), who documented prevalence rates approaching nearly half of the sample among children raised in Romanian orphanages as part of the Bucharest Early Intervention Project. In that context, early institutional deprivation exerted a direct impact on the emergence of the disorder. The findings are further supported by Gleason et al. (2011, pp. 219–221), who reported prevalence rates ranging from 30% to 40% among children exposed to prolonged neglect or institutional care, compared with substantially lower rates among children raised in stable family environments.

Comparisons with international patterns reveal relative convergence with the findings of Kay et al. (2016, p. 512), who reported a prevalence rate of 49% among children adopted from out-of-home institutional care in the United Kingdom, highlighting the substantial influence of environmental factors in the development of the disorder.

Moreover, the results align with those reported by Moran et al. (2024, p. 2), who identified a high prevalence of DSED among juvenile delinquents aged 12–23 years, reaching 53.6%, with a substantial history of abuse or neglect documented in 74.5% of the sample. These trends are further corroborated by Jorjadze et al. (2023), who demonstrated that children with a history of institutional care exhibited higher rates of DSED symptoms compared to children raised in family-based care, reinforcing the association between the severity of institutional experiences and disinhibited social behaviors (Jorjadze et al., 2023, p. 139).

With regard to the absence of statistically significant gender differences, the findings suggest that gender is not a decisive factor in the manifestation of Disinhibited Social Engagement Disorder. This result is consistent with theoretical perspectives emphasizing that early developmental and environmental factors exert a greater influence

on the disorder than demographic characteristics such as gender (Seim, 2021, p. 2). This interpretation is further supported by the notion that histories of neglect and early trauma constitute the most salient predictors of the onset and persistence of the disorder, regardless of the individual's sex.

Accordingly, the present findings contribute to confirming that Disinhibited Social Engagement Disorder represents a psychosocial phenomenon deeply rooted in early deprivation and neglect. Its notable prevalence among juvenile delinquents underscores the need to develop developmentally informed psychological intervention programs within correctional institutions, with particular emphasis on enhancing social interaction skills and fostering alternative secure attachment patterns. Furthermore, these findings open avenues for future research aimed at examining contextual factors associated with the disorder in the Iraqi setting and evaluating the effectiveness of rehabilitation programs in reducing its symptoms.

CONCLUSION

The present study concludes that Disinhibited Social Engagement Disorder (DSED) manifests at a considerable rate among juvenile delinquents in Iraqi correctional institutions. This finding reflects the presence of interconnected developmental and environmental factors related to histories of neglect, emotional deprivation, inadequate caregiving, and the broader consequences of war and socio-political instability experienced by the country, all of which contribute to the emergence and persistence of the disorder. The results also indicate no statistically significant differences based on gender, suggesting that the disorder is more closely associated with early life experiences than with biological sex.

These findings highlight the necessity of developing comprehensive programs that address psychological, educational, and social support needs both within and beyond correctional institutions, with the aim of improving social adjustment and reducing symptoms associated with the disorder.

RECOMMENDATIONS

1. Intensifying psychological support sessions within correctional institutions to enhance social interaction and emotional regulation skills among juvenile delinquents.
2. Training staff and researchers in effective approaches for managing attachment-related disorders and early neglect, and implementing individualized psychological assessment plans for each juvenile upon admission, with regular follow-up.
3. Involving families—when circumstances permit—in post-release counseling and support programs, and strengthening coordination among governmental agencies to ensure continued therapeutic and rehabilitative follow-up after discharge from the institution.

Conflict of Interest

The researcher confirms that there were **no conflicts of interest** with any party during the conduct of this study. No commercial or financial agreements were established with any governmental or non-governmental institutions that could be interpreted as constituting a potential conflict of interest.

Financial Disclosure

The research expenses were funded **exclusively by the researcher**, and no financial support or funding was received from any organization or institution inside or outside Iraq.

Informed Consent

Prior to data collection, approvals were obtained from the **Ministry of Justice**, followed by the Social Research Divisions of both the Iraqi Correctional Directorate and the Juvenile Reform Directorate. The measurement instruments were reviewed to ensure their suitability for the target population, and informed consent was obtained from the participants themselves prior to administration.

Ethical Statement

In the absence of a specialized ethics committee at the level of the Department of Psychology, the College of Arts, or the University of Baghdad, formal written ethical approval was obtained through official facilitation letters issued by the Graduate Studies Division to the Ministry of Justice and the relevant correctional directorates (Iraqi Correctional Facilities and Juvenile Reform Institutions) included in the research population, within which the study instruments were administered.

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