

Parental Attachment and Prosocial Behavior Predict Resilience among Adolescents of Incarcerated Parents

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Abstract

Parental incarceration has a negative impact on the psychosocial health and well-being of adolescents. Yet, some of them are able to adapt themselves to such adverse conditions positively. The resilience in adolescent children of incarcerated parents is little studied so far. Hence, the present study focuses on the factors predicting psychological resilience among this target population. One hundred fifty-five children of incarcerated parents (Males=48.4%, Female=51.2%) were recruited to participate in this study using the snowball-sampling technique. The data were collected from participants with self-report measures assessing psychosocial risk factors, psychosocial protective factors, emotion regulation, and resilience. The data were analyzed using regression analyses to identify predictors of psychological resilience among the participants. The results revealed that parental insecure attachment negatively and prosocial behavior positively predicted resilience among adolescents of incarcerated parents. The results also revealed that the negative impact of psychosocial risk factors on psychological resilience was mediated by emotion regulation strategies. Future research can focus on personality patterns, the role of school and community for the overall understanding of the target population.

Keywords: Adolescents of incarcerated parents, socio-ecological resilience, risk factors, protective factors, emotions

Psychological Resilience

Resilience can drive individuals to successfully adapt with adverse childhood experiences to reduce the negative effect of risky exposure (Zimmerman et al., 2013). Resilience is developed when individual and environmental promotive factors interrupt and negate the harmful effects of the risky condition. The active interactions of risk and protective mechanisms influence individuals' interpretation of the cause of stress, which in turn shapes their expectations, attitude formations and experiences (Annalakshmi, 2019). Several studies have attempted to understand resilience using various psychosocial factors (Coulombe et al., 2020). In this context, risk can be defined as the appraised likelihood of a negative outcome. Physical violence, substance abuse, parental imprisonment, neglect, economic hardships, bullying and discrimination, are a few adverse childhood experiences during of adolescents (Ross et al., 2020). Adolescents' exposure to adverse childhood experiences leads to subsequent emotional, behavioral, and physical health problems as they grow (Ross et al., 2020).

In the context of the risk, there is a wide range of protective factors which help individuals develop resilience. Resilience is developed through characteristics of the individuals, nurturing relationships with the family, supportive school, and cooperative communities (Kimple & Kansagra, 2018). When adolescents interact well with adults, positive interpersonal relationships and social skills build through family and community (Bellis et al., 2017). Moreover, individuals demonstrate resilience by managing their own emotions and others' emotions and relationships (Kay & Merlo, 2020). During adversity, individuals with a higher level of resilience demonstrate higher emotion regulation compared to the less resilient ones (Troy & Mauses, 2011).

Emotion regulation plays a significant role in adaptation, cognitive abilities, well-being, attention, and social interaction (Kay et al., 2020). Cognitive reappraisal is one such adaptive emotion regulation strategies to reduce negative emotional experiences (Gross & John, 2003).

Experiences of Parental Incarceration and Psychological Resilience

Adolescents experience difficulties when their parents face complications in basic family structure. Parental distress affects adolescents in an exaggerated manner because young ones are not equipped with personal resources to handle those complications in life. Some of the inconsistent family structures faced by the adolescents are having a single parent, divorced parents, and residing in an institution (Caprin et al., 2017). The difficulties faced due to these issues are severe. But the problems faced by them due to the incarceration of one or both the parents are more complex and long-term.

Negative outcomes are inevitable for adolescents whose parents are incarcerated (Siegal, 2011). However, despite adverse experiences, some adolescents incarcerated parents adapt themselves and achieve positive outcomes demonstrating resilience. Understanding resilience requires a socio-ecological approach focusing on the characteristics of the individual, his/her environment, the processes of individual-environment interactions, and their development over time (Schoon, 2021). The experiences of parental incarceration result in negative or positive behavioral outcomes at various socio-ecological levels (Ungar, 2013). presence of learning platforms, the capacity for collective action and experimentation

Socio-ecological resilience refers to the capacity of individuals to navigate their resources to sustain well-being during adverse conditions. It includes the

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capacity of individuals' physical and social ecologies to provide those resources and effectively negotiate in culturally meaningful ways (Ungar, 2013). The socio-ecological resilience helps to understand individuals and multiple relationships between elements of an individual's environment (Rutter, 2012). Meanwhile, focusing on the processes by which adolescents with incarcerated parents and their families, teachers, peer groups, and communities utilize the psychological, social, and physical resources for secure human development during adversity gives a wider perspective on their psychological resilience. Hence, the present study tries to understand resilience among adolescents with incarcerated parents focusing on psychosocial factors and emotion regulation strategies to adapt in stressful situation, based on Bronfenbrenner's (1979) framework of human development from the individual to the multiple systems and their interactions. The present study aims to understand the predictors of psychological resilience among adolescents with incarcerated parents. The study examines whether psychosocial risk factors, psychosocial protective factors, and emotion regulation strategies predict psychological resilience among adolescents with incarcerated parents.

Method

Sample

The sample for this study included 155 adolescents whose parents are incarcerated (Males=48.4%; Females=51.6%). The age of the participants ranged between 11 to 17 years (Mean=14.06, SD=1.8). Only those who had their fathers imprisoned for a minimum of six months for criminal offenses were included in the sample. The incarcerated parents of the participants in the study were convicted for crimes like murder (83.2%), sexual abuse on child/adult (7.7%), and financial crimes related to extortion of property (9%).

Tools

A brief description of the self-report measures used in the study to assess predictors of resilience among the participants is given below.

Adolescent Psychosocial Risk and Protective Factors Scale (Ashmitha & Annalakshmi, 2022). The 48-item tool measures the risk and protective factors for psychosocial development among adolescents. The risk factor scale has four subscales, namely, disengagement at school, insecure attachment with parents, maternal distress, and neglect by guardians. The protective factors scale has seven subscales, namely, prosocial behavior, paternal responsiveness, maternal responsiveness, support from teachers, support from a peer, support from the community, and emotional support from extended family. The participants responded to statements on a five-point Likert scale from 5 (*strongly agree*) to 1 (*strongly disagree*). The internal consistency coefficients for psychosocial risk factors subscales, viz., disengagement, insecure attachment with

parents, maternal distress, and neglect, are .91, .80, .84, and .98, respectively, in this study. The internal consistency coefficients for psychosocial protective factor subscales, viz., prosocial behavior, paternal responsiveness, maternal responsiveness, support from teachers, support from a peer, support from the community, and emotional support from extended family subscales are .80, .87, .73, .84, .85, .75, and .91 respectively.

Emotion Regulation Questionnaire (Gross & John, 2003). The 10 item scale measures respondents' tendency to regulate their emotions in two methods as Cognitive Reappraisal and Expressive Suppression. The participants responded to each item on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The internal consistency coefficients for cognitive reappraisal and expressive suppression subscales are .91 and .86, respectively, in this study on the present sample.

Bharathiar University Resilience Scale (Annalakshmi, 2009). The 30-item scale measures resilience of individuals in terms of duration, reaction to negative events, response to disadvantaged environment and reaction to past negative events. The participants responded to each item on a 5-point Likert scale ranging from 1 (*not at all appropriate*) to 5 (*most appropriate*). The Cronbach's alpha coefficient of the total scale is .84 in this study on the present sample.

Procedure

The permission to conduct research on adolescents of incarcerated parents was obtained from the Additional Director General of Police, Prison Department, of Tamil Nadu State. Institutional approval was also obtained from various NGOs that take care of the welfare of adolescents of incarcerated parents. The information on the availability of the adolescents of incarcerated parents was obtained and confirmed with the help of staff and managers from non-governmental organizations (NGOs). The participants were recruited based on the information received from NGOs on the availability of the adolescents of incarcerated parents, using the snowball sampling technique. The data were collected from the adolescents of incarcerated parents by visiting the home/or residential institutions where they resided. Before collecting data, oral informed consent was obtained from the parents/guardians of the adolescents of incarcerated parents. Before commencing the data collection, written informed consent was also obtained from the participants after explaining them their right to decline, right to withdraw, privacy, confidentiality, disclosures, storage of data, and who to reach if needed. The data were collected using self-report measures from the participants. The measures were translated into the Tamil language for easy understanding of the participants.

Results

The aim of the present study is to examine whether psychosocial risk factors, psychosocial protective factors, and emotion regulation strategies predict resilience among adolescents of incarcerated parents. The collected data from the participants were analyzed with the help of various forms of regression analyses like multiple regression and mediation analysis in order to examine the predictors of the

analysis showed that parental insecure attachment ($\beta = .31, p < .01$) negatively predicted resilience. Psychosocial risk factors explain 9% of variance in resilience among participants.

The multiple regression analysis for psychosocial protective factors produced $R^2 = .13, F(155) = 3.04, p < .01$. The analysis showed that prosocial behaviour ($\beta = .18, p < .05$) positively predicted resilience. Psychosocial protective factors explain 13% of

Table 1 Psychosocial risk factors predicting resilience (n=155)

Model 1	Unstandardized Coefficients		Standardized Coefficients	t
	B	S. E.	β	
(Constant)	131.79	3.45		38.23 ***
Disengagement	-.26	.28	-.07	-.91 ^{ns}
Parental insecure attachment	-1.07	.42	-.31	-2.55 **
Maternal distress	.40	.40	-.12	.100 ^{ns}
Neglect	-.25	.19	-.11	-1.34 ^{ns}

Note: $R^2 = .09, Adj R^2 = .07, F(155) = 3.71, p < .01$; *** $p < .001, **p < .01, ^{ns}$ not significant

resilience of the participants herein. The statistical analyses of the data were carried out using SPSS process macro developed by Hayes (Hayes & Rockwood, 2017) in IBM-SPSS software version 21 for Windows.

variance in resilience among participants. The multiple regression analysis for emotion regulation factors produced $R^2 = .11, F(155) = 9.23, p < .00$. The analysis showed that cognitive reappraisal ($\beta = -.06, p < .05$) negatively predicted resilience.

Table 2 Psychosocial protective factors predicting resilience (n=155)

Model 2	Unstandardized Coefficients		Standardized Coefficients	t
	B	S.E.	β	
(Constant)	76.33	14.82		5.15 ***
Prosocial Behaviour	.96	.42	.18	2.26*
Paternal responsiveness	.27	.44	.06	.61 ^{ns}
Maternal responsiveness	.20	.72	.03	.28 ^{ns}
Teachers' support	.24	.44	.05	.54 ^{ns}
Peer support	.62	.45	.15	1.40 ^{ns}
Community support	-.30	.42	-.08	-.71 ^{ns}
Emotional support from extended family	.55	.29	.18	1.91 ^{ns}

Note: $R^2 = .13, Adj R^2 = .08, F(155) = 3.04, p < .01$; *** $p < .001, *p < .05, ^{ns}$ not significant

Study Variables Predicting Resilience

Multiple regression analyses were carried out to examine whether psychosocial risk factors,

Factors of emotion regulation explains 11% of variance in resilience among participants.

Mediating roles of emotion regulation strategies

Table 3 Factors of emotion regulation predicting resilience (n=155)

Model 3	Unstandardized Coefficients		Standardized Coefficients	t
	B	S.E.	β	
(Constant)	130.65	2.31		56.49 ***
Cognitive reappraisal	-.47	.22	-.28	-2.12*
Expressive suppression	-.17	.36	-.06	-.47 ^{ns}

Note: $R^2 = .11, Adj R^2 = .10, F(155) = 9.23, p < .00$; *** $p < .001, *p < .05, ^{ns}$ -not significant

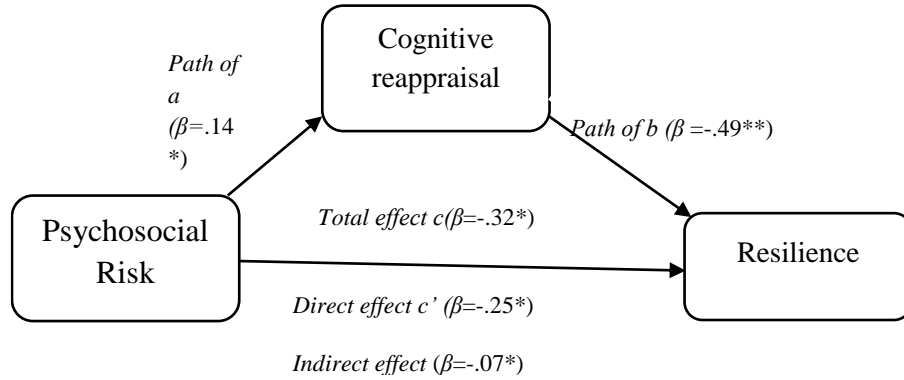
psychosocial protective factors, and emotion regulation strategies predicts resilience.

The multiple regression analysis for psychosocial risk factors produced $R^2 = .09, F(155) = 3.71, p < .01$. The

Mediation analysis was carried out to examine the mediating role of emotion regulation on the relationship between psychosocial risk factors and resilience among children of incarcerated parents.

According to the mediation analysis, overall psychosocial risk factors was positively related to there is a negative indirect effect of overall psychosocial risk factors on resilience through

Fig.1 Simple mediation model to explain the association between psychosocial risk factors and resilience in the presence of cognitive reappraisal.



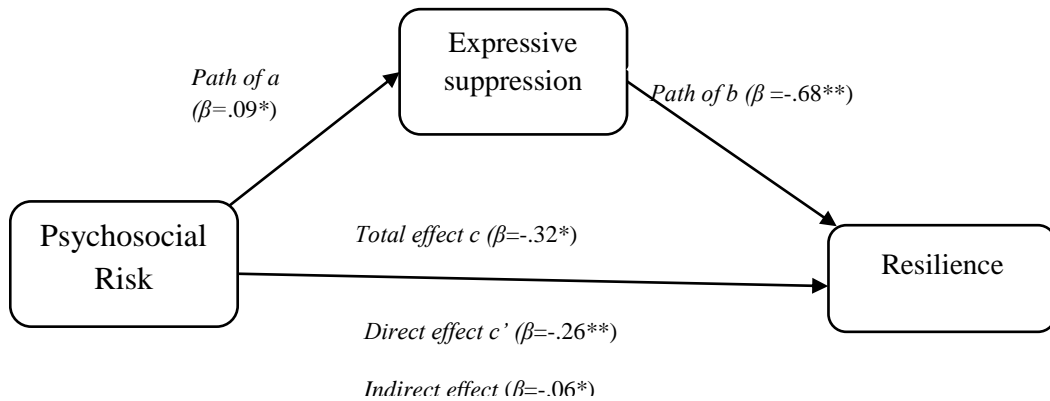
cognitive reappraisal ($\beta = .14$, $SE = 0.06$, $p = 0.02$), which was negatively associated with resilience ($\beta = -.25$, $SE = 0.09$, $p = 0.008$). There was a negative association between cognitive reappraisal and resilience ($\beta = -.49$, $SE = 0.13$, $p = 0.002$). The mediation model shows that there is a negative indirect effect of overall psychosocial risk factors on resilience through cognitive reappraisal ($\beta = -.07$, $SE = .03$, 95% confidence interval $[-.14, -.00]$) which supports the hypothesis. Hence, the result shows that cognitive reappraisal partially mediated the

expressive suppression ($\beta = -.06$, $SE = .03$, 95% confidence interval $[-.13, -.002]$) which also supports hypothesis. Hence, the results show that expressive suppression partially mediated the relationship between psychosocial risk factors and resilience. The model was significant ($p < 0.001$) and accounted for 10.9% of the variance in resilience.

Discussion

The present study examined whether psychosocial risk factors, psychosocial protective factors and emotion regulation strategies, predicted resilience among adolescents of incarcerated parents. We also

Fig.2 Simple mediation model to explain the association between psychosocial risk factors and resilience in the presence of expressive suppression.



relationship between psychosocial risk factors and resilience. The complete model was significant ($p = 0.003$) and accounted for 10.8% of the variance in resilience.

According to the mediation analysis, overall psychosocial risk factors was positively related to expressive suppression ($\beta = .09$, $SE = 0.03$, $p = .02$), and negatively associated with resilience ($\beta = -.26$, $SE = .09$, $p = .007$). There was negative direct effect of expressive suppression on resilience ($\beta = -.68$, $SE = 0.21$, $p = 0.001$). The mediation model shows that

examined whether emotional regulation strategies mediated the effect of psychosocial risk factors on resilience.

Among the psychosocial risk factors, parental insecure attachment negatively predicted resilience among adolescents of incarcerated parents in the present study. Adolescents are anxious when the availability and accessibility of the parents or caregivers are doubtful due to distressful events or experiences (Bowlby, 1973). This creates an insecure

attachment with them. Individuals with insecure attachment styles avoid maintaining relationships, adopt ineffective coping strategies, most importantly, create vulnerability for risk during adversity. Phull (2019) also reported that adolescents who had an insecure attachment with family members possess low resilience.

Among psychosocial protective factors, prosocial behavior positively predicted resilience among adolescents of incarcerated parents. The desire to help others originates from individual's innate motivation, emotional process of empathy, society's approval of helping behavior, motivation to help others by witnessing others' prosocial behavior, or understand others' expectations, and many other factors (Moore et al., 2020). This desire is usually driven by prosocial goals, triggered by supportive environments that provide opportunities to help others, as these are cues of social competence, which results in prosocial behavior (Moore et al., 2020; Wentzel et al., 2007). Through the sense of social competence and purposeful goal-directed behavior, it appears that prosocial behavior may encourage in optimum development of cognitive and behavioral assets to minimize the negative effect of adversities.

Adolescents of incarcerated parents are exposed to a large number of stressors that elicit strong and frequent arousal of negative emotions (Coyle et al., 2020). Hence, they are vulnerable to symptoms of depression, anxiety and posttraumatic stress and have disrupted emotion regulation competencies. On the other hand, emotion regulation strategies eliminate the impact of stressful situations and redirect the individual to goal-oriented behavior in adolescents (Fried & Chapman, 2012). These emotion regulation strategies are used to reappraise the meaning of the stimulus of any negative or positive situations occurring in the life of participants. The results of multiple regression analysis revealed that cognitive reappraisal negatively predicted resilience. Similarly, the results of mediation analysis indicated that, cognitive reappraisal was found to mediate the relationship between psychosocial risk factors and resilience among the participants. At times, when adolescents with social anxiety try to evaluate negative experiences, they tend to overestimate the likelihood of negative outcomes by using cognitive reappraisal strategies that hinder psychosocial well-being (Coyle et al., 2020). Similarly, adolescents with incarcerated parents may find it difficult to pay attention to and regulate negative emotions. As a result, reinterpreting potential psychosocial risks from emotional triggers of the event and redirecting how they think about the negative effects of risks in positive terms can cause distress (Gross & John, 2003; Ray et al., 2010; Zhou et al., 2014).

Expressive suppression is another emotion regulation strategy that negatively predicted resilience in the present study. According to the results of mediation analysis, expressive suppression was found to

partially mediate the relationship between psychosocial risk factors and resilience among the participants. The adolescents of incarcerated parents tend to suppress their emotional expression to others when they are exposed to adverse conditions, like social isolation in the community (Ashmitha & Annalakshmi, 2020). Expressive suppression is a form of inhibiting emotional response that helps an individual to avoid undesirable consequences that might follow while expressing negative emotions (Gross & John, 2003). It may be noted that emotional expression can be difficult in situations where individuals are unaware of interpersonal consequences of expressing emotions with others (Chiang, 2012). When adolescents suppress emotions frequently, they tend to experience psychological distress, which negatively impacts their psychological resilience (Balan et al., 2017). In sum, it is evident that, participants who use cognitive reappraisal or expressive suppression to regulate their emotions appear to have lower resilience.

Parental incarceration results in the low socio-economic status of the family (Johnson, 2009), where adolescents may engage in more health compromising behaviors and experience sense of deprivation compared to others (Repetti et al., 2002). Further, as a result of parental incarceration, adolescents are subjected to increased vulnerability to abuse and neglect, which in turn has detrimental effects on mood and positive outlook of life with an increase in anxiety, depression and suicidal ideation (Norman et al., 2012). Hence, we hypothesized risk factors, namely, disengagement, maternal distress and neglect to negatively predict resilience among the participants. The result of regression analysis in the present study revealed that risk factors such as maternal distress, disengagement at school, and neglect by guardians did not predict resilience. Since resilience is a process through which positive outcomes are achieved in adversity (Masten, 2014), resilient adolescents of incarcerated parents might tend to focus more on the factors with positive outcomes than factors challenging for adaptation under stress.

Further, protective factors such as paternal responsiveness and maternal responsiveness did not predict resilience among the participants. Parental incarceration significantly affects parental responsiveness for children which results in disruption of emotional well-being (Burnson & Weymouth, 2019). In addition, support from extended family, teachers, peer, and community did not predict resilience. Adolescents of incarcerated parents did not choose to access social support to develop resilience due to stigmatization (Bocknek et al., 2009). Stigmatization makes the adolescents of incarcerated parents be vulnerable to emotional and social problems. Adolescents tend to manage their emotions and other problems without telling anybody else when they are stigmatized (Manby et al., 2015).

Conclusion

The adolescents of incarcerated parents exhibit strength despite the adverse conditions that are brought about by parental incarceration. On examining the factors affecting psychological resilience among adolescents of incarcerated parents, the cognitive reappraisal and expressive suppression were identified to be negative predictors of resilience in them. Insecure attachment with parents negatively affected the resilience of these adolescents. The adolescents' use of prosocial behavior seems to nurture their healthy psychosocial development. Despite the presence of family risk factors which are high for the adolescents of incarcerated parents, other factors like internal factors, school factors, and community factors may be contributing to resilience in different domains.

Limitations

The limitations of the present study are to be duly considered when one draws inferences from the findings of the present study. The present study used a small representation of 155 adolescents of incarcerated parents because of difficulties in reaching them. A part of data was collected using a non-random sampling technique, viz., exponential non-discriminatory snowball sampling, where there is a chance of sampling bias. The present study was limited only to quantitative data, which calls for qualitative and/or mixed methods evaluation to examine experiences of the adolescents with incarcerated parents from a broader and deeper perspective. The present study is restricted only to understanding adolescents of incarcerated fathers, whereas understanding adolescents of incarcerated mothers will help us to understand the population from a different perspective.

Implications

The present study highlights the fact that the adolescents of incarcerated parents are at-risk for healthy psychosocial development. Future research on these adolescents should focus on understanding appropriate intervention strategies to build resilience in this target population. Future research on the study population may focus on variables related to personality, school, and community factors. The study emphasizes the challenges caused by parental insecure attachment and emotion regulation process of adolescents with incarcerated parents. Training programs for adolescents may focus on educating them about the way to respond to adversity by using positive emotions and the need to develop healthy attachment styles. The present study has highlighted the importance of prosocial behavior that can effectively contribute to resilience. The training programs promoting prosocial behaviors can also be useful in positive adaptation among adolescents of incarcerated parents. Providing counseling and support outside the family can help them cope with stigmatization and other distressful problems. Government can develop rehabilitation programs for

the families of incarcerated parents just after incarceration. The results of the present study recommend the importance of the urgent need for attention to promote resilience among adolescents with incarcerated parents via early intervention.

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