

## Chapter 7

# Family Functioning, Aggression and Hope in Young Male Adult Offenders in Hong Kong

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According to the departmental statistics of the Hong Kong Correctional Services, young adults aged 21 to 29 accounted for around one-fifth of the total adult penal population. They are sentenced to prisons while adolescent offenders under age 21 were incarcerated in training centre. While there are researches highlighting the importance of family relationship in reducing aggression and promoting resilience for adolescent male offenders, young male adult offenders are largely ignored in the literature. Young adults aged 21 to 29 were argued by some scholars as undergoing emerging adulthood who were continuing with role experimentation from their adolescence (Arnett, 2000). On the other hand, some scholars understood offenders' lower performance in pro-social skills as social-cognitive developmental delay (Spenser, Betts & Das Gupta, 2015), which was influenced by quality of family relationships (Gutman & Eccles, 2007). Therefore, the quality of their family relationships may partly explain young adults' existing problems, and would

continually impact their psychological states during adulthoods. Hence, the present study aimed at filling this research gap by empirically examining the need of family interventions for young male adults in the prison settings.

### Family Influence on Young Male Adult Offenders

According to the Risk and Need Assessment protocol of CSD in 2019, more than 45% of offenders were being assessed to have some to considerable levels of needs in the family domain. Existing literature reveals that family relationship was associated with criminal behaviours and re-offending (Klinterberg, Almquist, Beijer, & Rydelius, 2011). Strong family support is argued to be effectively inhibiting criminal behaviours. Empirical data on male offenders showed that improvements in family relationship could lead to significantly lower re-offending rate, better employment status and reduced drug use post-release (Brunton-Smith & McCarthy, 2017).

### Reduces Anger, Hostility and Recidivism

Research showed that offenders with a better family relationship during their incarceration presented with fewer disciplinary problems (Bayse, Allgood, & van Wyk, 1991; Klein, Bartholomew, & Bahr, 1999). They engaged in less rule-breaking behaviour, such as arguments, fights or physical violence with others. In contrast, a wealth of evidence suggests that poor family functioning is associated with aggressive and delinquent behaviours at an early age (Farrington, 2010). Improved family relationships, in the form of a tighter family cohesion and better interactions among family members, could help youths to change their aggressive behaviours. This association is well-established across studies (e.g. Henneberger, Varga, Moudy, & Tolan, 2016; Stewart & Rapp, 2017). Many incarcerated young male adults have a

strained familial relationship before their incarceration (Brunton-Smith & McCarthy, 2017). When they are incarcerated at an early age and serving long sentences, they could not mend their family relationship. When they are stepping into adulthood, aggression and disciplinary problems may persist.

Also, regular prison visits improve strength of attachment between offenders and their family members, which could lead to a reduction of recidivism (Rocque, Bierie, Posick, & MacKenzie, 2013). This effect was found significant after controlling for past criminal records (Brunton-Smith & McCarthy, 2017). It was argued that an improvement in family bonds during incarceration could have an impact on one's behaviours after release (Rocque, Bierie, Posick, & MacKenzie, 2013). Correctional programmes for maintenance or rebuilding social ties could protect offenders from engaging in aggression and reoffending.

## Promotes Hope and Positive Outlook of Life

A strengthened and stable family relationship is found to be associated with resilience (Born, Chevalier, & Humblet, 1997). Being incarcerated means being deprived of personal freedom and social connections. It was a time of adversity that bore a lot of psychological distress. Therefore, it is of importance that the person could uphold hope and positive outlook of life. According to Snyder (1991), **hope is a positive cognition that consists of three components: 1) goals; 2) pathway thinking, that produces plausible routes to achieve goals; and 3) agency thinking, which provides motivation to meet goals.** In forensic settings, it was proposed that individuals who have lower levels of hope are at greater risks for involvement in offending behaviours such as committing crimes and abusing drugs (Martin & Stermac, 2010). Feeling less hopeful for the future also contributes to the maintenance of such behaviours. Martin and Stermac (2010) conceptualized offending as choosing inappropriate pathways and having a lower sense of agency for desired outcomes.

Besides hope, offenders could also reflect on their experiences and harbour growth from their adversity (Joseph, 2009). **Having positive changes in future outlook after adversity could be viewed as post-traumatic growth**, whereas having negative changes in future outlook may lead to more negative thinking, and subsequently more psychological distress.



### The Present Study

The present study aimed at examining the effects of improved family functioning on reducing aggression and promoting hope for young male offenders. Key hypotheses are as follows:

1. Improved family functioning would promote more positive changes and less negative changes in outlook, which subsequently lead to a decrease in general aggression in the young male offenders.
2. Improved family functioning contributes to an increase in the positive changes and decrease in the negative changes in outlook, which would both promote the cognitions of hope in the young male offenders.

The findings of the present study would provide empirical support to the development of family-based interventions for young male adults in prison settings. Moreover, the potential mediation mechanisms may help clinicians to gain insights on the idiosyncratic needs of young male offenders, which could be a possible entry-point of intervention.

## METHOD

### Participants and Procedure

Ethics approval for our study was obtained from the Hong Kong Correctional Services. The current study sampled forty-five local male offenders aged 21 - 29 from a male correctional institution in Hong Kong. All male offenders within the above age range in June 2020 in the institution were approached with no exclusion criteria applied. Informed consent was collected from each participant. They were briefed with their rights and responsibilities before deciding to participate in the study. Consented participants were invited to complete a battery of questionnaires before or after intervention.

### Measures

#### Family functioning.

**The Family Assessment Device – General Functioning Subscale** (FAD - GF; Epstein, Bishop, & Levin, 1978) is a 12-item assessment tool to capture a person's general family functioning. Participants rank each item on a four-point Likert scale. The sum of the scores reflects an overall pathology of the family, with a higher score indicating an unhealthier family functioning. The scale is established based on the McMaster Model (Epstein, Bishop, & Levin, 1978). It is argued that family functioning constitutes of the following six dimensions: Problem solving, communication, roles, affective responsiveness, affective involvement and behavioural control. Psychometric studies showed that the General Functioning Subscale is reliable (Cronbach's  $\alpha = 0.92$ ) (Epstein et al., 1983) and valid (Byles, Byrne, Boyle, & Offord, 1988).

#### Aggression.

**Aggression Questionnaire** (AQ; Buss & Perry, 1992) was adopted to assess participants' tendency to aggress. AQ is a 29-item questionnaire that measures four aspects of anger, namely physical aggression (behavioural aspects, e.g. hitting others, destroying things), verbal aggression (behavioural aspects, e.g. arguing with others, scolding others), anger (emotional aspects, e.g. easily getting angry, throwing tantrum), and hostility (cognitive aspects, e.g. suspicious of others, being jealous of others). Higher scores mean poorer emotion regulation and therefore greater aggression.

#### Hope.

**The Chinese version of the Adult Hope Scale** (AHS) (Ho et al., 2010) is used to assess an individual's level of hope (Snyder et al., 1991). It is a 12-item measure on an eight-point Likert scale. Four items of the measure constitute the agency subscale while the four other items sum up to give the pathway subscale scores. The remaining four items are filler items. A total hope score could be computed by adding the agency and pathway subscale scores, which reflect an overall hope in the present study. The higher scores reflect a higher level of hope. The Chinese version of the measure demonstrated good internal consistencies (Cronbach's  $\alpha$ : Agency = 0.70; Pathway = 0.76; Total = 0.81).

**Changes in Outlook.**

The 10-item Changes in Outlook Questionnaire – Short version (CiOQ-S; Joseph, Linley, Shevlin, Goodfellow, & Butler, 2006) assesses the positive changes, as well as the negative changes, experienced following adversity. The CiOQ-S consists of five items measuring positive changes (CiOP-S), and five items measuring negative changes (CiON-S). Items are rated on a six-point scale from (1) strongly disagree to (6) strongly agree, with a range of scores from 5 to 30 for both CiOP-S, and CiON-S. Higher scores indicate greater positive and negative changes following the experience of severely stressful events respectively. It is a valid and reliable measure which is especially useful in crisis situations. Satisfactory internal consistency is shown for the positive and negative change subscales (.83 and .90, respectively) (Joseph et al., 2006). The CiOQ-S was translated into a simplified Chinese version (CiOQ-SCS) by Zang, Hunt, Cox, & Joseph (2012). Good internal consistency was reported: .87 for the positive change subscale (CiOP-SCS) and .82 for the negative change subscale (CiON-SCS) among Chinese earthquake survivors. In addition, high internal consistency and convergent validity with measures of anxiety and depression were found (Zang et al., 2012).

**Statistical Analyses**

Descriptive statistics of the socio-demographic data of the participants were reported. Pearson's correlation analyses were conducted to examine the relationship among the variables of interest. The casual step approach in regression analysis (Baron & Kenny, 1986) was applied to establish the hypothesized mediation relationship among the variables. Sobel's test (Sobel, 1982) was used to statistically test the significance of the mediation relationship. All statistical analyses were conducted in SPSS version 23 (IBM Corp., 2013).

**RESULTS****Descriptive Statistics and Correlations**

All participants completed the study. The sample consisted of 45 male offenders with a mean age of 23.18 (SD = 1.23). Their mean sentence length was 80.27 months (SD = 36.94). Most of them are single (n = 42). Prior to their present incarcerations, 84.5% of them had engaged in illegal work or were unemployed. Thirty-two participants reported a history of drug use. Independent sample t tests showed that all questionnaire scores between the drug users and non-drug users were comparable ( $p > .05$ ). Considering their family characteristics, the majority of the offenders come from two-parent families (n = 32). Seven of the participants reported their family members having a criminal record(s). The summary of their socio-demographic characteristics could be found in Table 1.



Table 1

**Socio-demographic Characteristics of the Offenders**

Variables	M	SD
Age	23.18	1.23
Sentence length	80.27	36.94
No. of previous offence	2.38	2.05
No. of children	0.11	0.38

  

Variables	n	%
<b>Education level</b>		
Below primary	0	0
Primary	0	0
Secondary	45	100
Tertiary	0	0
Above tertiary	0	0
<b>Employment status</b>		
Full-time	4	8.9
Part-time	2	4.4
Unemployed	26	57.8
Full-time student	1	2.2
Illegal work	12	26.7
<b>Marital status</b>		
Unmarried	42	93.3
Married	1	2.2
Cohabitant	1	2.2
Divorced / Separated	1	2.2
<b>Family characteristics</b>		
Two-parents family	32	71.1
Single-parent family	10	22.2
Parent(s) passed away	3	6.7
<b>History of drug use</b>		
Yes	32	71.1
No	13	28.9

  

Variables	n	%
Recidivist <sup>a</sup>	4	8.9
<b>Type of primary index offence<sup>b</sup></b>		
Theft	1	2.2
Riot	1	2.2
Trafficking in Dangerous Drug	42	91.3
Burglary	1	2.2
Common Assault	1	2.2

Note. M and SD are used to represent mean and standard deviation, respectively.

<sup>a</sup> Reflects the number and percentage of participants being sentenced to prison before

<sup>b</sup> Participants may have one or more offences in index offence

Pearson's correlations coefficients were calculated for their questionnaire scores and family functioning, hope, changes in outlook and aggression. Family functioning scores were found weakly to moderately correlate with all other measures at  $p < .05$  level. Hope total scores were moderately associated with both positive ( $r = 0.54, p < .05$ ) and negative ( $r = -0.58, p < .05$ ) changes in outlook. Besides family functioning, aggression total scores were moderately associated with negative changes in outlook ( $r = 0.48, p < .05$ ). The correlation matrix, together with the ranges, means and standard deviations of the measures are summarized in Table 2.

Table 2  
Means, Standard Deviations, and Correlations of the Scale Scores

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. FAD - GF	24.56 [12 - 39]	6.83										
2. AHS	47.58 [27 - 60]	7.01	-0.54**									
a. Agency	25.07 [13 - 32]	3.99	-0.51**	0.92**								
b. Pathway	22.51 [11 - 28]	3.68	-0.48**	0.91**	0.67**							
3. CiOQ - Positive	23.71 [17 - 30]	3.03	-0.38**	0.54**	0.49**	0.49**						
4. CiOQ - Negative	11.56 [5 - 22]	3.93	0.48**	-0.58**	-0.46**	-0.60**	-0.55**					
5. AQ	80.58 [33 - 123]	18.08	0.44**	-0.24	-0.23	-0.21	-0.29	0.47**				
a. Physical Aggression	24.36 [9 - 43]	6.71	0.36*	-0.07	-0.09	-0.04	-0.17	0.27	0.91**			
b. Verbal Aggression	15.00 [6 - 21]	3.16	0.30*	-0.14	-0.16	-0.09	-0.15	0.40**	0.81**	0.66**		
c. Anger	17.40 [7 - 29]	5.34	0.44**	-0.27	-0.27	-0.22	-0.33*	0.36*	0.90**	0.87**	0.60**	
d. Hostility	23.82 [8 - 34]	5.94	0.37*	-0.34*	-0.29	-0.34*	-0.33*	0.60**	0.78**	0.50**	0.63**	0.53**

Note.

M and SD are used to represent mean and standard deviation, respectively. Values in square brackets indicate the range for each variable. FAD - GF: Family Assessment Device – General Functioning Subscale; AHS: Adults Hope Scale; CiOQ: Changes in Outlook Questionnaire; AQ: Aggression Questionnaire. \*\* indicates  $p < .01$ .



Mediation with Regression Analysis

Consistent with the hypothesized mediation effects, a poor family functioning was found to have positively predicted negative changes in outlook ( $\beta = 0.48, p = .001$ ). On the other hand, a poor family functioning negatively predicted positive changes in outlook ( $\beta = 0.38, p = .010$ ).

**Predicting aggression.** Further linear regression analyses showed that a poor family functioning positively predicted more aggression ( $\beta = 0.44, p = .003$ , Model 1). When negative changes in outlook were added as predictor (Model 2), the new model was significant ( $F_{change}(1, 42) = 5.33, p = .026$ ). The two predictors accounted for 25.0% of the variance of overall aggression. Besides, negative changes in outlook ( $\beta = 0.34, p = .026$ ) fully mediated the relationship between family functioning and aggression ( $\beta = 0.27, p = .073$ ). The result of the Sobel's test suggested that the observed mediation effect was marginally significant ( $z = 1.94, p = .052$ ).

**Predicting hope.** Three regression models were constructed to further examine the potential mediating effects of changes in outlook on the relationship between family

functioning and hope. The first linear regression analysis (Model 3) revealed that a poor family functioning was inversely associated with hope ( $\beta = -0.54, p < .001$ ). When positive and negative changes in outlook were considered as predictors respectively with family functioning, both new models were found to be significant when compared to the original model (Model 4 - Positive:  $F_{change}(1, 42) = 9.13, p = .004$ ; Model 5 - Negative:  $F_{change}(1, 42) = 9.69, p = .003$ ).

Comparing Model 3 and Model 4, positive changes in outlook ( $\beta = 0.38, p = .004$ ) partially mediated the relationship between family functioning and hope ( $\beta = -0.40, p = .003$ ). Family functioning and positive changes in outlook accounted for 39.3% of the variance of hope. The result of the Sobel's test suggested that the observed partial mediation effect was significant ( $z = -2.35, p = .019$ ). Comparing Model 3 and Model 5, negative changes in outlook ( $\beta = -0.41, p = .003$ ) also partially mediated the relationship between family functioning and hope ( $\beta = -0.35, p = .013$ ). The two predictors accounted for 40.0% of the variance of hope. The result of the Sobel's test suggested that the partial mediation effect with positive changes in outlook was significant ( $z = -2.01, p = .044$ ). The statistical outputs of the mediation models could be found in Table 3.

## DISCUSSION

### Improved Family Functioning Reduces Aggression and Strengthens Hope

Consistent with our hypotheses, **a better family functioning in male offenders was found to be a protective factor in reducing overall aggression.** In line with previous research on adolescence, strained family relationships were associated with aggressive and delinquent behaviours (Farrington, 2010). A tighter family cohesion and better interactions among family members were found to help youth in changing their aggressive behaviours (Henneberger, Varga, Moudy, & Tolan, 2016). For offenders, family could provide them with the resources to deal with life challenges, such as maintaining their connections with the outside world and helping them to settle their life problems even though their freedom was restricted. The offenders may harbour less irritability and frustration throughout their incarceration and thus rely less on aggression to solve problems.

Other than reducing aggression, **the present findings showed that a more stable family relationship could promote overall hope.**

These findings are consistent with the existing literature, which suggested that a stable family relationship could strengthen a person's cognitions of hope (Born, Chevalier, & Humblet, 1997). The experience of living in a prison is stressful and frustrating. One could easily forfeit their existing life goals, lacking the ways or motivations to pass through this aversive period. Echoing with the hope theory (Synder, 1991) - "hope as a positive motivational state derived by a sense of successful planning (i.e. pathway thinking) and energy to meet goals (i.e. agency thinking)" (Synder, 2002), members in a tighter family may serve as role models to stimulate the offender in identifying their concrete goals. The offenders could also learn

and practice problem solving skills with the guidance from the family, developing their own sense of confidence to execute plans to achieve goals. Moreover, members in a well-functioned family would believe in the offender and encourage him to practice his behavioural changes and readjust his life goals. The offender would be motivated by their family. With both plausible plans and improved motivations, young male offenders are more able to actualize his life goals in spite of adversity.

### Improved Family Relationship Provides Basis for Changes in Outlook

Instead of a direct association, **our present findings argued that the relationship between family functioning and aggression was fully mediated by negative changes in outlook.** The results further highlighted that the relationships between family functioning and cognition of hope was partially mediated by changes in outlook: **A well-functioned family could trigger offenders' post-traumatic growths (Tedeschi & Calhoun, 1995), and prevent them from developing negative changes after incarceration.**

These findings extend current knowledge by exploring the potential mechanisms of family in reducing an offender's aggressive behaviours and promoting cognitions of hope. Incarceration is viewed as traumatic for many people. Offenders have to undergo the suffering of being separated from the outside world and others for a long period of time. Without the process of reflecting and searching for meaning from their traumatic events, it was difficult for the people to learn, grow and change their maladaptive behaviours during incarceration (Joseph and Linley, 2005). They may resort to previous maladaptive life values, remain distant from others and feel incompetent in facing future challenges.

Table 3

### Summary of Regression Analysis of the Mediation Models

Predictors	Direct effect on AQ			Mediation effect on AQ		
	B	SE	95% C.I.	B	SE	95% C.I.
FAD - GF	1.16**	0.36	[0.43, 1.89]	0.73	0.39	[-0.07, 1.52]
CiOQ - Negative				1.58*	0.68	[0.20, 2.96]

$R^2 = 0.28, F(1, 42) = 5.33, p = .026$

Predictors	Direct effect on AHS			Mediation effect on AHS		
	B	SE	95% C.I.	B	SE	95% C.I.
FAD - GF	-0.56**	0.13	[-0.82, -0.29]	-0.41**	-0.40	[-0.67, -0.14]
CiOQ - Positive				0.89**	0.29	[0.30, 1.48]

$R^2 = 0.42, F(1, 42) = 9.13, p < .01$

Predictors	Direct effect on AHS			Mediation effect on AHS		
	B	SE	95% C.I.	B	SE	95% C.I.
FAD - GF	-0.56**	0.13	[-0.82, -0.29]	-0.35*	0.14	[-0.63, -0.08]
CiOQ - Negative				-0.74*	0.24	[-1.22, -0.26]

$R^2 = 0.43, F(1, 42) = 9.69, p < .01$

Note.

B and SE are used to represent unstandardized coefficients and standard error of unstandardized coefficients, respectively. 95% C. I. gives the 95% confidence intervals of the coefficients. FAD - GF: Family Assessment Device - General Functioning Subscale; AHS: Adults Hope Scale; CiOQ - Positive: Positive Changes in Outlook Subscale; CiOQ - Negative: Negative Changes in Outlook Subscale; AQ: Aggression Questionnaire. \* indicates  $p < .05$ ; \*\* indicates  $p < .01$

On the other hand, some offenders could successfully accommodate the trauma of incarceration with post-traumatic growth. Previous literature argued that social support is critical for a person undergoing trauma to successfully accommodate the adversity (Joseph & Linley, 2005; 2006). **Family could be a catalyst for post-traumatic growth.** Family which functions better possesses the ability to openly communicate and collaboratively solve problems when facing adversity. The family could make necessary changes together, alter their family culture, reduce behavioural controls, express their affections and rebuild their relationship. Offenders are therefore more able to fulfil their basic psychological needs of autonomy, competence and relatedness through family (Deci & Ryan, 1985; 2000). They could better acknowledge their law-violating behaviours and incarceration experiences. This helps them to search for meaning of incarceration and uphold a more positive view towards the future.

### Positive Post-traumatic Growth Leads to Actual Changes

The present findings give support to the idea that a well-functioning family provides an environment for an individual to safely explore his values and goals (Joseph & Linley, 2005), to bring out actual behavioural changes. When a person shares a more positive view towards the future (or vice versa, a negative view), he is more able to find meaning for life and the future. Even though he is incarcerated, he could set goals according to his values and try to pursue them using various means. This post-adversity growth turns into a source of pathways thinking under the cognition of hope (Snyder, 2002). The offender could be more decisive thinking about ways to achieve goals despite obstacles. For example, to fulfill his goal of being a construction worker upon release, an offender may actively engage

in vocational training programmes to acquire relevant job skills and gain accredited qualifications during his incarceration.

Not only does post-traumatic growth encourage setting more plausible goals, but it also contributes to a better agency thinking under the cognitions of hope (Snyder, 2002). The offender who can find meaning from his incarceration is more able to make sense of the incarceration experience. He could conceptualise his experience in prison as shouldering his responsibilities to replace past wrongdoings. He could develop such a sense of trust for himself that he could live as a responsible man, with the motivation to work to his abilities, preventing reoffending upon release. He would thus be more hopeful about himself, his future and environment. This would enable him to realise his goals. Therefore, he would be more motivated to engage in hands-on training in prison, and work after release. Offenders with positive post-traumatic growth are more able to build and achieve their personal goals and values.

Interpersonally, a person with a positive view towards the future would show greater tolerance and understanding of other people. These qualities are crucial in making a person less hostile towards the world and others. A person would feel less bitter about the events in his life, and gradually learn that he can choose alternative ways for protection other than through violence. This echoes the results that show a less negative change in outlook is necessary for reducing the overall aggression in young male offenders.

### Alternative mediation models

Alternative models, where mediators (positive and negative changes in outlook) and outcome variables (aggression or hope) switch their places, were statistically supported. It is

important to address whether these alternative models were theoretically plausible.

Behaviours were often seen as outcome variables in the research of psychopathology. Similarly, reoffending is also defined by the behaviours of discharged prisoners. Cognitions were thought of preceding behaviours concerned. In AQ, three out of four subscales measured the behaviours and emotional expression of participants. Therefore, the alternative model where aggressive behaviours mediated the changes in outlook was theoretically not supported.

### Limitations

Still, the findings of the present study should be interpreted with cautions. First, the present study had a small sample size. Second, the sample population had a narrow age range. Both characteristics of the sample population affected the generalizability of the present

findings. It was questionable that whether the examined relationships could be seen in larger samples with different gender and age in other settings. Previous literature identified female offenders could pose a different perceptions towards the support from family of origin (Casey-Acevedo & Bakken, 2001). Older adults may also be less influenced by family of origin.

Future studies could explore the role of family functioning on aggression and hope with different samples to enhance the understanding of family interventions in facilitating offenders' integration.

Lastly, the current study employed only cross-sectional data in exploring possible mediations. Stringent causal relationships could not be established as the casual directions among variables could not be identified. Longitudinal data in observational or intervention studies should be collected and examined in future studies to address the issue.

## CLINICAL IMPLICATIONS

**Results in this study suggested that interventions targeting to improve family functioning and outlook of life might serve as potential treatment in reducing aggression and enhancing hope among young male adult offenders in correctional settings.** These provide a clear direction for clinical psychologists in designing and implementing family interventions in the prison settings. With family interventions, impaired family functioning could be restored throughout the sentence, with an aim to build families with more respect, recognition and affective support. Focus should also be placed on **helping young male offenders to demonstrate resilience and post-traumatic growth with family resources during this adverse period and review their outlook of life through family, in order to bring out behavioural changes and foster cognitions of hope.** After applying such programmes, further research would be conducted to verify the proposed mediating relationships among family functioning, changes in outlook, aggression and cognitions of hope. Further studies employing qualitative research method in understanding the changes in cognitions and behaviours of the offenders throughout their participation of such programmes would also be considered. Together, a more thorough understanding on the changes of offenders through family intervention could be depicted.

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