Dataset of parenting practices, self-control and anti-social behaviors: Meta-analytic structural equation modeling

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Abstract

This dataset is used to clarify the nexus between effective parenting practices, low self-control, and anti-social behaviors in Gottfredson and Hirschi’s General Theory of Crime (GTC). The analysis included 72 articles reporting 255 effect sizes (N=94,604). We used the method of Meta-Analytic Structural Equation Modeling (MASEM) to test the assumptions of GTC. In this regard, we employed Two-Stage Meta-Analytic Structural Equation Modeling (TSSEM) and One Stage Meta-Analytic Structural Equation Modeling (OS-MASEM) to perform MASEM and its moderators. The findings of the MASEM revealed that low self-control is a positive and in magnitude modest determinant of anti-social behaviors. The effective parenting practice is negative, of small size, and also a statistically significant determinant of low self-control. We observed that effective parenting practice is statistically significant and, in magnitude, shows small size negative direct and indirect effects on anti-social behaviors. That is, low self-control partially mediated the relationship between effective parenting practices and anti-social behaviors. Consistent with the construct of aggregated effective parenting practices, we found uniform patterns for models performed across the elements of effective parenting practices.

Keywords:
General theory of crime
Parenting
Self-control
Meta-analytic structural equation modeling
Two-stage meta-analytic structural equation modeling
One stage meta-analytic structural equation modeling
(i.e., emotionally supportive practices, monitoring, recognition, and effective discipline) with low self-control and anti-social behaviors. The findings of moderator analyses showed that the association between low self-control and anti-social behaviors tended to be stronger when the individualistic score of countries improved.

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### Specifications Table

| Subject                          | Social Sciences (General), Law, Social Psychology |
|---------------------------------|---------------------------------------------------|
| Specific subject area           | Criminology, Parenting practices, Self-control, Anti-social behavior |
| Type of data                    | 4 Tables, 3 Figures                               |
| How data were acquired          | The electronic search                             |
| Data format                     | Analyzed secondary data                           |
| Parameters for data collection  | Only research was included that reported correlation among the constructs of this research quantitatively (i.e., parenting practices, self-control, and anti-social behavior), theoretical reviews, conceptual articles, or qualitative researches were excluded. No restriction regarding the language of publication was applied in the selection of the primary research. |
| Description of data collection  | Data were collected through the electronic search of ProQuest, PsycINFO, Scopus, and Web of Science, and also the American Society of Criminology, National Criminal Justice Reference Service [NCJRS], Criminal Justice Abstracts. |
| Data source location            | Allameh Tabataba’i University                     |
| Data accessibility              | Dabiriyan Tehrani, Hossein; Yamini, Sara (2020), “Parenting Practices, Self-Control and Anti-Social Behaviors: Meta-Analytic Structural Equation Modeling”; Mendeley Data, v4
  http://dx.doi.org/10.17632/82vxgs8t7n.4
  https://data.mendeley.com/datasets/82vxgs8t7n/4 |
| Related research article        | “Parenting Practices, Self-Control and Anti-Social Behaviors: Meta-Analytic Structural Equation Modeling”
  https://doi.org/10.1016/j.jcrimjus.2020.101687 |

**Value of the data**

- This dataset also allows researchers to reproduce this meta-analysis. It permits to re-analyze data with novel statistical techniques that will be developed in the future.
- This dataset will facilitate future updates of this meta-analysis. It contributes to improving the credibility of meta-analytic conclusions and cumulative scientific knowledge.
- Access to the data will make better interpretations of analytical findings that are presented in tables, and figures.
- Detailed datasets, which are made publicly available in an SPSS file attached to this article, will encourage further explorative investigations in this area of research.
- This dataset will be useful for undergraduate students. Because the current meta-analysis to test the assumptions of GTC and bridge the gaps in empirical literature used the state-of-the-art methods of MASEM. In this regard, we used TSSEM to perform MASEM. Inconsistencies were explained by categorical moderator analyses through TSSEM and OSMASEM, and also continuous moderator analyses through OSMASEM. We employed parameter-based MASEM (using bootstrap and delta methods) and Full Information Meta-Analytic Structural Equation Modeling (FIMASEM) to show the generalizability and heterogeneity of Structural Equation Modeling (SEM) parameters. Likewise, this research applied studentized deleted residuals
(SDRs) to assess outlier analysis and also conducted different methods (i.e., TSSEM with corrected correlation, Univariate-r MASEM, FIMASEM, OSMASEM) to perform MASEM to check the robustness of the findings resulted from the principal method used in this meta-analysis (i.e., TSSEM). Finally, we used multiple methods of assessing for publication bias, namely, funnel plot, trim and fill analysis, Fail-safe N, and Egger’s test. Accordingly, the reproducibility of this research based on this dataset enables researchers to enhance their methodological knowledge on different methods of MASEM.

1. Data description

In order to acquire the data, we conducted the electronic search through ProQuest, PsycINFO, Scopus, and Web of Science, and also the American Society of Criminology, National Criminal Justice Reference Service [NCJRS], Criminal Justice Abstracts. Because the GTC was introduced in 1990, the time frame of this research ranged from 1 January 1990 to 23 September 2019 for all published and non-published research. Only investigations were included that reported correlation among the constructs of this research quantitatively (i.e., parenting practices, self-control, and anti-social behavior), theoretical reviews, conceptual articles, or qualitative researches were excluded. No restriction regarding the language of publication was applied in the selection of the primary investigations. Based on the investigations included, the following data were entered into this MASEM: the correlations between constructs, the relevant sample sizes, year of publication, the mean age of the sample, individualism score for each country, the proportion of females, kinds of anti-social behavior, mode of assessment, self-control measurements, data extracted from which kind of design (cross-section vs. cross-section made through longitudinal research), the reliability of constructs. The data are summarized through four tables and three figures. Table 1 presented literature review on fully or partially role of low self-control between parenting practices and anti-social behaviors. Table 2 represented list of parenting practices elements and variables. Table 3 showed coded research characteristics used in analysis. Table 4 demonstrated the characteristics of research included in the meta-analysis of “Parenting Practices, Self-Control and Anti-Social Behaviors: Meta-Analytic Structural Equation Modeling”. The Figures of the funnel plot were employed to estimate publication bias between effective parenting practices and low self-control, effective parenting practices and anti-social behavior, low self-control, and anti-social behavior, respectively.

2. Design, materials, and methods

Two authors scrutinized abstracts and titles of all primary investigations that fulfill the search strategy to determine research eligible for inclusion. Subsequently, two authors independently assessed the full text of potentially relevant non-duplicated investigations. For each research selected for inclusion, the authors separately collected data through a standardized form that was piloted. The inter-coder reliability of the data coding process was checked by computing the intraclass coefficient of correlation for continuous variables, which yielded an average value of 0.83, and Cohen’s kappa coefficient for the categorical variables, which estimated the value of 0.84. The disagreement between authors was resolved by discussion to obtain consensus. Only investigations were included that reported correlation among the constructs of this research quantitatively (i.e., parenting practices, self-control, and anti-social behavior), theoretical reviews, conceptual articles, or qualitative researches were excluded. We developed a detailed coding scheme relying on guidelines recommended by Lipsey and Wilson ([9]), recording research descriptors, and research characteristics. The classification system, involving a list of parenting elements and variables, is presented in Table 2. The coded research characteristics employed in the final analyses can be found in Table 3. Based on the investigations included, the following data were entered into this MASEM: the correlations between constructs, the relevant sample sizes, year
of publication, the mean age of the sample, individualism score for each country, the proportion of females, kinds of anti-social behavior, mode of assessment, self-control measurements, data extracted from which kind of design (cross-section vs. cross-section made through longitudinal research), the reliability of constructs. We used the definition and data of Hofstede to report the individualism score ([https://www.hofstede-insights.com/country-comparison](https://www.hofstede-insights.com/country-comparison)). We employed the correlation coefficient $r$ to quantify the strength and direction of the links between constructs and also as the input of MASEM. Regarding the investigations that did not report the correlation of an aggregate measure between effective parenting practice, low self-control, and anti-social behaviors, an average correlation was calculated by computing the weighted mean of a list of correlations (more details are available on the Open Science Framework ([https://osf.io/w9va6/](https://osf.io/w9va6/))). We employed MASEM to explain the association between constructs and the indirect effect of effective parenting practice and their elements on anti-social behavior via low self-control. In this research, we used TSSEM to test the main hypotheses, and also both TSSEM and OSMASEM were applied to assess the effect of potential moderators.

One of the most comprehensive challenges facing researchers is how to apply and model meaningful effect size heterogeneity detected in the bivariate meta-analysis into Meta-Analytic Structural Equation Modeling (MA). The heterogeneity of effect size (i.e., a correlation coefficient between two variables) refers to the variability of estimates within a population ([Higgins, [10]]). Effect size heterogeneity is essential because findings derived only from the analysis of pooled effect sizes are sometimes misleading and limited. Unfortunately, conventional MA approaches in applied social psychology [8] fail to explain the heterogeneity of effect size regarding the path

| Researchers | Elements of parenting practices | Kinds of anti-social behavior |
|-------------|---------------------------------|------------------------------|
| Full mediation model | Jo & Zhang (2014) | AEPP | AASB |
| | Feldman & A. Weinberger (1994) | AEPP | AASB |
| | Gibbs et al., (1998) | AEPP | AASB |
| | Boisvert et al., (2012) | Attachment | AASB |
| | Cochran et al., [4] | AEPP | Academic dishonesty |
| | E. Higgins (2002) | AEPP | AASB |
| | Simons et al (2007) | Monitoring/Discipline Supportive involvement Hostility/Rejection |
| Partial mediation model | Muftić et al., (2014) | AEPP | Violence perpetration |
| | C. Lagrange (1999) | AEPP | Property offending |
| | Hay (2001) | Supervision | Violent offenses |
| | Gibbs et al., [7] | Monitoring/Discipline AEPP | AASB |
| | Vazsonyi & Belliston (2007) | Support | AASB |
| | Benda (2003) | Monitoring | AASB |
| | Chapple et al., (2005) | AEPP | AASB |
| | Finkenauer et al., (2005) | Monitoring | Substance Use Behavioral problems |
| | Jones et al., (2007) | Support | AASB |
| | Kort-Butler et al., (2011) | Monitoring | Criminal behavior |
| | Morris et al., (2007) | AEPP | AASB |
| | Perrone et al., (2004) | AEPP | AASB |
| | Unnever et al., (2003) | AEPP | AASB |
| | Boisvert et al., (2012) | Rejection | AASB |

Note. AEPP is Aggregated construct of Effective Parenting Practices; AASB is Aggregated construct of Anti-Social Behavior.
Table 2
List of parenting practices.

| The element of parenting practices | Parenting behaviors | Names and words in description |
|-------------------------------------|---------------------|---------------------------------|
| **Emotionally supportive practices** |                     |                                 |
| Affection                           |                     | Warmth                          |
|                                     |                     | Affection                       |
|                                     |                     | Acceptance                      |
|                                     |                     | Affective tie                   |
|                                     |                     | Hugs                            |
|                                     |                     | Loving                          |
|                                     |                     | Positive feelings               |
|                                     |                     | Smiles                          |
|                                     |                     | Intimate relationship           |
| **Support**                         |                     | Emotional support               |
|                                     |                     | Understanding                   |
|                                     |                     | Helpful                         |
|                                     |                     | Encouraging                      |
|                                     |                     | Trust                           |
| **Closeness**                       |                     | Involvement                     |
|                                     |                     | Cohesion                        |
|                                     |                     | Attachment                      |
|                                     |                     | Attention                       |
|                                     |                     | Pay attention                   |
|                                     |                     | Care                            |
| **Neglectful (−)**                  |                     | Neglect                         |
|                                     |                     | Avoidance                       |
| **Rejection (−)**                   |                     | Rejection                       |
|                                     |                     | Conflict                        |
|                                     |                     | Withdrawal                      |
| **Hostility (−)**                   |                     | Hostility                       |
|                                     |                     | Anger                           |
|                                     |                     | Annoyance                       |
|                                     |                     | Irritation                      |
|                                     |                     | Sarcasm                         |
| **Monitoring**                      |                     | Supervision                     |
|                                     |                     | Tracking of activities          |
|                                     |                     | Tracking of whereabouts         |
|                                     |                     | Tracking the child’s behavior   |
|                                     |                     | Checking homework               |
|                                     |                     | Awareness of activities         |
| **Recognition**                     |                     | Recognize the anti-social      |
|                                     |                     | behaviors                      |
|                                     |                     | The ability of the parent to    |
|                                     |                     | recognize when youth engage in  |
|                                     |                     | anti-social behaviors           |
| **Effective discipline**            |                     | Fair and Non-corporal means of  |
|                                     |                     | punishment                      |
|                                     |                     | Calmly discuss misbehavior      |
|                                     |                     | Noticing when doing good        |
|                                     |                     | Withdrawal of privileges        |
|                                     |                     | Consistent discipline           |
|                                     |                     | Proportionate punishment        |
|                                     |                     | Agree on discipline             |
|                                     |                     | Responsive discipline            |
| **Harsh discipline (−)**            |                     | Firm control                    |
|                                     |                     | Harsh punishment                |
| **Physical punishment (−)**         |                     | Beaten child up                 |
|                                     |                     | Hitting                         |
|                                     |                     | Kicking                         |
|                                     |                     | Slapping                        |

(continued on next page)
coefficients of the model. Yu et al. ([11]) and Cheung [1] dealt with this problem and developed a set of techniques showing the variability surrounding relations in estimating model parameters (i.e., the heterogeneity of effect size) to calibrate the stability of parameters estimates across the population. We followed Yu et al.’s ([11]) and Cheung’s (2018) [1] combined guidelines to ensure the generalizability of findings (more details concerning the generalizability of estimated path coefficients are found in (https://osf.io/w9va6/)). The heterogeneity (SD) of the estimated parameter of the TSSEM was calibrated using the bootstrap method. In this method, random correlation matrices were sampled from the TSSEM-Stage one by the parametric bootstrap. The bootstrap method was based on the discussion in Cheung [1] and Yu et al., ([11]). Accordingly, when I² and large-width CVs for each path coefficient values reveal the existence of heterogeneity, inconsistencies were explained by categorical moderator analyses through TSSEM and One Stage Meta-Analytic Structural Equation Modeling (OSMASEM), and also continuous moderator analyses through OSMASEM.

3. Sensitivity analyses and publication bias

We performed outlier analyses to test the robustness of aggregated correlations among constructs. It was, however, performed on single correlations rather than correlation matrices. We applied SDRs to assess outlier analysis and also conducted different methods (i.e., TSSEM with corrected correlation, Univariate-r MASEM, FIMASEM, OSMASEM) to perform MASEM to check the robustness of the findings resulted from the principal method used in this meta-analysis (i.e., TSSEM). We also performed TSSEM on corrected correlation matrices, yet compared them for path coefficients with and without these corrections to test the sensitivity of our findings to measurement errors (unreliability corrections). Among the 85 samples included in the MASEM analysis, 11 samples did not report reliability for effective parenting, 8 for self-control, 13 for anti-social behaviors. We used means α 0.75, 0.77, and 0.77 for them, respectively. For better comparison between TSSEM with and without corrected correlation, all of the procedures are similar except that corrected correlations were pooled to generate correlation matrix. We assessed the robustness of the findings by comparing the findings of TSSEM with other approaches through which MASEM can be conducted (i.e., univariate-r MASEM, FIMASEM, and OSMASEM) (more details are found in (https://osf.io/w9va6/)). The current research adds multiple methods of assessing for publication bias, namely, the funnel plot, trim and fill method [5], file drawer analysis (Rosenthal, 1979), and Egger’s linear regression test [6] to identify the robustness of findings and probable small research effect for single correlations (more details are found in (https://osf.io/w9va6/)). We used the R packages metaSEM to perform MASEM [2], and the metafor package to assess publication bias, outlier, and influential analyses (Viechtbauer & Cheung, 2010) (See R-code). In this research, the target p-value was equal to 0.05. If the 95% Confidence Intervals (95%-CIs) included zero, we concluded that the intended effect size is non-

| The element of parenting practices | Parenting behaviors | Names and words in description |
|-----------------------------------|---------------------|-------------------------------|
| Verbal aggression as punishment   | (-)                 | Abusive name calling          |
|                                   |                     | Yelling, Nagging, Scolding    |
|                                   |                     | Verbal attacks, Threatening to hit |

Note. This research equalized the direction of effect sizes (multiplied by −1 as needed), for neglectful, rejection, hostility, harsh discipline, verbal aggression, and physical punishment as the different manifestations of parenting practices' elements, to display relationships of effective parenting practices with low self-control and anti-social behaviors.
**Table 3**
Coded research characteristics used in analysis.

| Characteristic                          | Coded as                                                                 | Used to                                                                 |
|----------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------|
| Sample size (n)                        | (C) Number of participants included in the analysis                      | Weight each research findings                                          |
| Sex (female)                           | (C) Proportion of female respondents                                      | Proportion of female, mean age and culture used as a continues moderators on the relationship of effective parenting practices, low self-control, and anti-social behavior. |
| Age                                    | (C) Mean age of the sample                                               |                                                                        |
| Culture                                | (C) Hofstede’s individualism score                                        |                                                                        |
| Mode of assessment                     | (CA) The perspective from which participants’ low self-control and anti-social behaviors were assessed. Due to a small number of alternative categories coded as self-report (1) vs other (0). |                                                                        |
| Type of anti-social behaviors          | (CA) vandalism, theft, and assault, group fight, shot or stabbed someone, and pulled a knife or a gun on someone, physical assault, shoplifting, carry a hidden weapon, attack someone categories coded as crime (1) Alcohol use, school misconduct, sell drugs, write bad checks, gang membership, nonviolent crime, substances use, childhood antisociality, risky lifestyles, running away home, risk-taking behaviors categories coded as analogous behavior (2), and general deviance (3). |                                                                        |
| Data extracted from which kinds of design | (CA) Data extracted from cross-sectional investigations versus cross-section made through longitudinal investigations. Categories coded as cross-section (1) and cross-section made through longitudinal investigations (2). |                                                                        |
| Self-control measurements              | (CA) Due to a small number of alternative categories coded as Grasmick (1993) constructed a 24-item (1) and other measurements (2). |                                                                        |

Note. (C) = continuous, (CA) = categorical variables.

significant. Correlation based effect sizes were interpreted as small for $r < 0.23$, medium for $r=0.24$ to $0.36$, and large for $r > 0.37$) (Cohen, 1992) (See Figure 1-3).

**Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.
Table 4
Characteristics of included research.

| Author name | Sample Size | Female% | Mean age | IND score | Kinds ASB | MODEASS | LSC MEAS | Kinds of design | Alpha Parenting | Alpha LSC | Alpha ASB |
|-------------|-------------|---------|----------|-----------|-----------|---------|---------|-----------------|----------------|----------|----------|
| (Vazsonyi et al., 2016) (Czech) | | | | | | | | | |
| Setting 1 | 239 | 47.5 | 14.02 | 58 | AB | SR | GR93 | CS | .71 | .83 | .88 |
| Setting 2 | 239 | 47.5 | 14.02 | 58 | AB | SR | GR93 | CS | .71 | .83 | .67 |
| Setting 3 | 239 | 47.5 | 14.02 | 58 | CR | SR | GR93 | CS | .71 | .83 | .76 |
| Setting 4 | 130 | 47.7 | 14.71 | 58 | AB | SR | GR93 | CS | .79 | .82 | .88 |
| Setting 5 | 130 | 47.7 | 14.71 | 58 | AB | SR | GR93 | CS | .79 | .82 | .70 |
| Setting 6 | 298 | 54 | 16.23 | 27 | AB | SR | GR93 | CS | .92 | .68 | .82 |
| (Alvarez-Rivera & Fox, 2010) (Puerto Rico) | | | | | | | | | |
| Setting 1 | 1072 | 51.4 | 13.53 | 91 | AB | SR | OTHER | LON | .72 | .65 | .94 |
| Setting 2 | 1072 | 51.4 | 13.53 | 91 | CR | SR | OTHER | LON | .72 | .65 | .86 |
| Setting 3 | 1072 | 51.4 | 13.53 | 91 | CR | SR | OTHER | LON | .72 | .65 | .86 |
| (Baker, 2010) (U.S.) | 4834 | 52 | 16.02 | 91 | AB | OTHER | OTHER | LON | .78 | .68 | |
| (Bobbio et al., 2019) (Argentina) (Boccio & Beaver, 2018)(U.S.) | | | | | | | | | |
| Setting 1 | 346 | 50 | 15.5 | 91 | CR | OTHER | OTHER | LON | .55 | .66 | .6 |
| Setting 2 | 346 | 50 | 15.5 | 91 | CR | OTHER | OTHER | LON | .64 | .66 | .6 |
| Setting 3 | 346 | 50 | 15.5 | 91 | CR | OTHER | OTHER | LON | .64 | .66 | .6 |
| Setting 4 | 346 | 50 | 15.5 | 91 | AB | OTHER | OTHER | LON | .55 | .66 | .53 |
| Setting 5 | 346 | 50 | 15.5 | 91 | AB | OTHER | OTHER | LON | .64 | .66 | .53 |
| Setting 6 | 346 | 50 | 15.5 | 91 | AB | OTHER | OTHER | LON | .84 | .66 | .53 |
| (Brownfield, 2010) (Canada) (Burt & Ronald, 2006) (U.S.) (Cheung & Cheung, 2008) (Hong Kong) | | | | | | | | | |
| Setting 1 | 1015 | 54 | 16.01 | 25 | AB | SR | OTHER | CS | .66 | .61 | .73 |

(continued on next page)
| Author name (Year) (Country) | Sample Size | Female% | Mean age | IND score | Kinds of ASB | MODEASS | LSC MEAS | Kinds of design | Alpha Parenting | Alpha LSC | Alpha ASB |
|-----------------------------|-------------|---------|----------|-----------|--------------|---------|---------|----------------|----------------|----------|----------|
| Setting 2                   | 1015        | 54      | 16.01    | 25        | CR           | SR      | OTHER   | CS             | .66            | .61      | .5       |
| Setting 3                   | 1015        | 54      | 16.01    | 25        | CR           | SR      | OTHER   | CS             | .66            | .61      | .5       |
| Setting 4                   | 1015        | 54      | 16.01    | 25        | CR           | SR      | OTHER   | CS             | .56            | .61      | .73      |
| Setting 5                   | 1015        | 54      | 16.01    | 25        | CR           | SR      | OTHER   | CS             | .56            | .61      | .5       |
| Setting 6                   | 1015        | 54      | 16.01    | 25        | CR           | SR      | OTHER   | CS             | .56            | .61      | .5       |
| (Cheung & Cheung, 2010)     |             |         |          |           |              |         |         |                |                |          |          |
| Setting 1                   | 1015        | 54      | 16.01    | 25        | CR           | SR      | OTHER   | CS             | .66            | .61      | .79      |
| Setting 2                   | 1015        | 54      | 16.01    | 25        | CR           | SR      | OTHER   | CS             | .56            | .61      | .7       |
| (Costello & Dunaway, 2003)  |             |         |          |           |              |         |         |                |                |          |          |
| Setting 1                   | 377         | 52.51   | 15       | 91        | CR           | SR      | GR93    | CS             | .84            | .78      | .64      |
| Setting 2                   | 377         | 52.51   | 15       | 91        | AB           | SR      | GR93    | CS             | .84            | .78      | .84      |
| (Evans et al., 2012) (U.S.)|             |         |          |           |              |         |         |                |                |          |          |
| Setting 1                   | 381         | 100     | 13       | 91        | GC           | SR      | OTHER   | LON            | .77            | .73      | .9       |
| Setting 2                   | 381         | 100     | 13       | 91        | GC           | SR      | OTHER   | LON            | .70            | .73      | .9       |
| Setting 3                   | 381         | 100     | 13       | 91        | GC           | SR      | OTHER   | LON            | .88            | .73      | .9       |
| Setting 4                   | 381         | 100     | 13       | 91        | GC           | SR      | OTHER   | LON            | .71            | .73      | .9       |
| Setting 5                   | 381         | 100     | 13       | 91        | GC           | SR      | OTHER   | LON            | .88            | .73      | .9       |
| Setting 6                   | 381         | 100     | 13       | 91        | GC           | SR      | OTHER   | LON            | .70            | .73      | .9       |
| Setting 7                   | 381         | 100     | 13       | 91        | GC           | SR      | OTHER   | LON            | .88            | .73      | .9       |
| Setting 8                   | 381         | 100     | 13       | 91        | GC           | SR      | OTHER   | LON            | .71            | .73      | .9       |
| (Frijns et al., 2005) (Netherlands) | 1173       | 49      | 12.3     | 80        | GC           | SR      | OTHER   | LON            | .79            | .7       | .93      |
| (Guo, 2018)(U.S.)           |             |         |          |           |              |         |         |                |                |          |          |
| Setting 1                   | 1020        | 50      | 12.23    | 91        | GC           | SR      | OTHER   | CS             | .68            | .83      | .65      |
| Setting 2                   | 1020        | 50      | 12.23    | 91        | AB           | SR      | GR93    | CS             | .79            | .81      | .45      |
| Setting 3                   | 1020        | 50      | 12.23    | 91        | AB           | SR      | GR93    | CS             | .81            | .81      | .45      |
| Setting 4                   |             |         |          |           |              |         |         |                |                |          |          |
| Setting 5                   |             |         |          |           |              |         |         |                |                |          |          |
| Setting 6                   |             |         |          |           |              |         |         |                |                |          |          |
| Setting 7                   |             |         |          |           |              |         |         |                |                |          |          |
| Setting 8                   |             |         |          |           |              |         |         |                |                |          |          |

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Table 4 (continued)

| Author name       | Sample Size | Female% | Mean age | IND score | Kinds ASB | KINDS MODEASS | LSC MEAS | Kinds of design | Alpha Parenting | Alpha LSC | Alpha ASB |
|-------------------|-------------|---------|----------|-----------|-----------|----------------|----------|-----------------|----------------|-----------|-----------|
| Setting 9         | 197         | 50      | 16       | 91        | AB        | SR             | GR93     | CS              | .77             | .81       | .61       |
| Setting 10        | 197         | 50      | 16       | 91        | AB        | SR             | GR93     | CS              | .85             | .81       | .61       |
| (Hay & Forrest, 2008) (U.S.) | 750         | 52      | 13.22    | 91        | GC        | SR             | OTHER   | CS              | .79             | .63       |           |
| (Higgins, 2002) (U.S.) | 425         | 52.9    | 21       | 91        | GC        | SR             | OTHER   | CS              | .92             | .91       | .8        |
| (Huang, 2007) (U.S.) | 985         | 50.6    | 11       | 91        | AB        | OTHER          | OTHER   | LON             | .7              | .8        |           |
| (Intravia et al., 2012) (U.S.) | 1675        | 50      | 13.79    | 91        | CR        | SR             | OTHER   | CS              | .84             |           |           |
| (Schreck et al., 2002) (U.S.) | 1101        | 51      | 15.5     | 91        | AB        | SR             | GR93     | CS              | .84             |           |           |
| (Janssen et al., 2016) (Netherlands) | 615         | 48      | 13.9     | 80        | GC        | SR             | GR93     | LON             | .82             | .72       | .83       |
| (Janssen et al., 2017) (Netherlands) |            |         |          |           |           |                |          |                 |                 |           |           |
| Setting 1         | 2472        | 51.1    | 12.39    | 91        | AB        | SR             | GR93     | CS              | .77             | .87       | .78       |
| Setting 2         | 2472        | 51.1    | 12.39    | 91        | AB        | SR             | GR93     | CS              | .74             | .87       | .78       |
| Setting 3         | 2472        | 51.1    | 12.39    | 91        | AB        | SR             | GR93     | CS              | .74             | .87       | .78       |
| Setting 4         | 2472        | 51.1    | 12.39    | 91        | AB        | SR             | GR93     | CS              | .74             | .87       | .78       |
| Setting 5         | 2472        | 51.1    | 12.39    | 91        | AB        | SR             | GR93     | CS              | .74             | .87       | .78       |
| Setting 6         | 2472        | 51.1    | 12.39    | 91        | AB        | SR             | GR93     | CS              | .74             | .87       | .78       |
| Setting 7         | 2472        | 51.1    | 12.39    | 91        | AB        | SR             | GR93     | CS              | .74             | .87       | .78       |
| Setting 8         | 2472        | 51.1    | 12.39    | 91        | AB        | SR             | GR93     | CS              | .74             | .87       | .78       |
| (Jennings et al., 2010) (U.S.) | 407         | 58.3    | 16       | 91        | AB        | SR             | OTHER   | CS              | .75             | .83       |           |
| (Jennings et al., 2010) (U.S.) | 407         | 58.3    | 16       | 91        | AB        | SR             | OTHER   | CS              | .75             | .83       |           |
| Setting 1         | 315         | 00      | 13       | 80        | GC        | SR             | GR93     | LON             | .77             | .75       | .85       |
| Setting 2         | 288         | 100     | 13       | 80        | GC        | SR             | GR93     | LON             | .77             | .75       | .85       |
| (Jennings et al., 2010) (U.S.) | 407         | 58.3    | 16       | 91        | AB        | SR             | OTHER   | CS              | .75             | .83       |           |
| (Jennings et al., 2010) (U.S.) | 407         | 58.3    | 16       | 91        | AB        | SR             | OTHER   | CS              | .75             | .83       |           |
| Setting 1         | 3449        | 50      | 14       | 18        | AB        | SR             | OTHER   | CS              | .86             | .65       | .54       |
| Setting 2         | 3449        | 50      | 14       | 18        | AB        | SR             | OTHER   | CS              | .86             | .65       | .64       |
| (Youngoh Jo & Lee, 2018) (South Korea) | 2491        | 85.3    | 11       | 18        | CR        | SR             | GR93     | LON             | .82             | .64       | .55       |
| (Youngoh Jo & Lee, 2018) (South Korea) | 2491        | 85.3    | 11       | 18        | CR        | SR             | GR93     | LON             | .82             | .64       | .55       |
| Setting 1         | 731         | 00      | 13.5     | 80        | CR        | SR             | GR93     | LON             | .81             | .85       | .92       |
| Setting 2         | 731         | 00      | 13.5     | 80        | CR        | SR             | GR93     | LON             | .81             | .85       | .79       |

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Table 4 (continued)

| Author name (Year) (Country) | Sample Size | Female% | Mean age | IND score | Kinds of ASB | MODEASS | LSC MEAS | Kinds of design | Alpha Parenting | Alpha LSC | Alpha ASB |
|-----------------------------|-------------|---------|---------|-----------|--------------|---------|---------|---------------|----------------|-----------|----------|
| (Kazemian et al., 2009) (Canada) | 470 | 00 | 16.9 | 80 | AB | OTHER | OTHER | LON | .68 | .75 | .62 |
| (Kuhn & Laird, 2013) (U.S.) Setting 1 | 180 | 51 | 12.04 | 91 | AB | SR | GR93 | CS | .79 | .88 | .87 |
| Setting 2 | 180 | 51 | 12.04 | 91 | AB | SR | GR93 | CS | .58 | .88 | .87 |
| (Li et al., 2019) (Poland) Setting 1 | 146 | 00 | 16.97 | 60 | AB | SR | OTHER | CS | .95 | .77 | .77 |
| Setting 2 | 146 | 00 | 16.97 | 60 | AB | SR | OTHER | CS | .91 | .77 | .77 |
| Setting 3 | 355 | 00 | 16.97 | 60 | AB | SR | OTHER | CS | .95 | .77 | .77 |
| Setting 4 | 355 | 00 | 16.97 | 60 | AB | SR | OTHER | CS | .91 | .77 | .77 |
| (Longshore et al., 2005) (U.S.) Setting 1 | 359 | 26 | 16 | 91 | CR | SR | OTHER | LON | .51 | .54 | .58 |
| Setting 2 | 199 | 40 | 21.5 | 91 | CR | OTHER | GR93 | CS | .75 | .82 | .89 |
| Setting 3 | 199 | 40 | 21.5 | 91 | CR | OTHER | GR93 | CS | .88 | .82 | .89 |
| Setting 4 | 199 | 40 | 21.5 | 91 | CR | OTHER | GR93 | CS | .83 | .82 | .89 |
| Setting 5 | 199 | 40 | 21.5 | 91 | CR | OTHER | GR93 | CS | .75 | .82 | .78 |
| Setting 6 | 199 | 40 | 21.5 | 91 | CR | OTHER | GR93 | CS | .88 | .82 | .78 |
| (McGloin et al., 2004) (U.S.) Setting 1 | 1725 | 49 | 12.73 | 91 | AB | OTHER | GR93 | LON | .78 | .78 | .78 |
| Setting 2 | 1409 | 54 | 12.2 | 91 | GC | SR | GR93 | LON | .72 | .7 | .85 |
| Setting 3 | 1034 | 48 | 12.07 | 91 | CR | OTHER | OTHER | LON | .64 | | |
| Setting 4 | 825 | 50 | 15 | 91 | CR | SR | OTHER | LON | .91 | .82 | .82 |
| (Miller, 2012) (U.S.) Setting 1 | 101 | 22 | 15.67 | 91 | AB | OTHER | GR93 | CS | .85 | .92 | |
| Setting 2 | 101 | 22 | 15.67 | 91 | AB | OTHER | GR93 | CS | .89 | .92 | |
| Setting 3 | 101 | 22 | 15.67 | 91 | AB | OTHER | GR93 | CS | .88 | .92 | |
| (Meldrum et al., 2009) (U.S.) Setting 1 | 1364 | 46 | 14.03 | 91 | AB | SR | GR93 | LON | .8 | .78 | .61 |
| Setting 2 | 763 | 49 | 11.93 | 91 | AB | SR | OTHER | LON | .69 | .68 | |
| Setting 3 | 763 | 49 | 11.93 | 91 | CR | SR | OTHER | LON | .69 | .68 | | (continued on next page)
Table 4 (continued)

| Author name (Year) (Country) | Sample Size | Female% | Mean age | IND score | Kinds of ASB | MODEASS | LSC MEAS | Kinds of design | Alpha Parenting | Alpha LSC | Alpha ASB |
|-----------------------------|-------------|---------|----------|-----------|-------------|---------|----------|----------------|----------------|----------|----------|
| (Moon & Morash, 2013) (U.S.) |             |         |          |           |             |         |          |                |                |          |          |
| Setting 1                   | 296         | 57      | 14       | 91        | CR          | SR      | GR93     | CS             | .65             | .9        | .91      |
| Setting 2                   | 296         | 57      | 14       | 91        | CR          | SR      | GR93     | CS             | .84             | .9        | .91      |
| Setting 3                   | 296         | 57      | 14       | 91        | CR          | SR      | GR93     | CS             | .85             | .9        | .91      |
| Setting 4                   | 296         | 57      | 14       | 91        | GC          | SR      | GR93     | CS             | .85             | .9        | .79      |
| Setting 5                   | 296         | 57      | 14       | 91        | GC          | SR      | GR93     | CS             | .85             | .9        | .79      |
| Setting 6                   | 296         | 57      | 14       | 91        | GC          | SR      | GR93     | CS             | .85             | .9        | .79      |
| Setting 7                   | 296         | 57      | 14       | 91        | CR          | SR      | GR93     | CS             | .65             | .9        | .82      |
| Setting 8                   | 296         | 57      | 14       | 91        | GC          | SR      | GR93     | CS             | .84             | .9        | .82      |
| Setting 9                   | 296         | 57      | 14       | 91        | GC          | SR      | GR93     | CS             | .85             | .9        | .79      |
| (Moon & Alarid, 2015) (U.S.) |             |         |          |           |             |         |          |                |                |          |          |
| Setting 1                   | 296         | 57      | 14       | 91        | GC          | SR      | GR93     | CS             | .9              | .9        | .88      |
| Setting 2                   |             |         |          |           |             |         |          |                |                |          |          |
| (Mufrić et al., 2014) (U.S.) | 1759       | 50.50   | 13.79    | 91        | GC          | SR      | GR93     | LON            | .85             | .73       |          |
| Setting 1                   |             |         |          |           |             |         |          |                |                |          |          |
| (Kabiri et al., 2019) (Iran) | 784        | 44      | 24.3     | 41        | AB          | SR      | GR93     | CS             | .88             | .88       | .89      |
| (Schreck, 2002) (U.S.)      | 1054       | 51      | 16       | 91        | CR          | SR      | GR93     | CS             |                |          |          |
| Setting 1                   | 867         | 54      | 10.5     | 91        | AB          | SR      | OTHER    | LON            | .75             | .8        |          |
| Setting 2                   | 867         | 54      | 10.5     | 91        | AB          | SR      | OTHER    | LON            | .83             | .8        |          |
| Setting 3                   | 867         | 54      | 10.5     | 91        | AB          | SR      | OTHER    | LON            | .79             | .8        |          |
| (Vazsonyi et al., 2007) (Hungry) |             |         |          |           |             |         |          |                |                |          |          |
| Setting 1                   | 826         | 31.6    | 16.6     | 80        | GC          | SR      | GR93     | CS             | .79             | .83       | .96      |
| Setting 2                   | 826         | 31.6    | 16.6     | 80        | GC          | SR      | GR93     | CS             | .70             | .83       | .96      |
| Setting 3                   | 826         | 31.6    | 16.6     | 80        | GC          | SR      | GR93     | CS             | .75             | .83       | .96      |
| (Vazsonyi & Belliston, 2007) |             |         |          |           |             |         |          |                |                |          |          |
| Setting 1                   | 344         | 66.6    | 19.8     | 46        | GC          | SR      | GR93     | CS             | .75             | .8        | .91      |
| Setting 2                   | 344         | 66.6    | 19.8     | 46        | GC          | SR      | GR93     | CS             | .74             | .8        | .91      |
| Setting 3                   | 344         | 66.6    | 19.8     | 46        | GC          | SR      | GR93     | CS             | .69             | .8        | .91      |

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Table 4 (continued)

| Author name (Year) (Country) | Sample Size | Female% | Mean age | IND score | Kinds ASB | MODEASS | LSC MEAS | Kinds of design | Alpha Parenting | Alpha LSC | Alpha ASB |
|-----------------------------|-------------|---------|----------|-----------|-----------|---------|---------|----------------|----------------|-----------|-----------|
| (Vazsonyi & Belliston, 2007) (Netherlands) | | | | | | | | | | | | |
| Setting 1                   | 1244        | 53.3    | 16.10    | 80        | GC        | SR      | GR93    | CS             | .74            | .85       | .95       |
| Setting 2                   | 1244        | 53.3    | 16.10    | 80        | GC        | SR      | GR93    | CS             | .73            | .85       | .95       |
| Setting 3                   | 1244        | 53.3    | 16.10    | 80        | GC        | SR      | GR93    | CS             | .72            | .85       | .95       |
| (Vazsonyi & Belliston, 2007) (Switzerland) | | | | | | | | | | | | |
| Setting 1                   | 3819        | 37.5    | 18.2     | 68        | GC        | SR      | GR93    | CS             | .74            | .8        | .96       |
| Setting 2                   | 3819        | 37.5    | 18.2     | 68        | GC        | SR      | GR93    | CS             | .75            | .8        | .96       |
| Setting 3                   | 3819        | 37.5    | 18.2     | 68        | GC        | SR      | GR93    | CS             | .79            | .8        | .96       |
| (Vazsonyi & Belliston, 2007) (U.S.) | | | | | | | | | | | | |
| Setting 1                   | 1273        | 61.4    | 20       | 91        | GC        | SR      | GR93    | CS             | .87            | .85       | .95       |
| Setting 2                   | 1273        | 61.4    | 20       | 91        | GC        | SR      | GR93    | CS             | .83            | .85       | .95       |
| Setting 3                   | 1273        | 61.4    | 20       | 91        | GC        | SR      | GR93    | CS             | .79            | .85       | .95       |
| (Vazsonyi & Belliston, 2007) (U.S.) | | | | | | | | | | | | |
| Setting 1                   | 802         | 49.9    | 16.4     | 91        | GC        | SR      | GR93    | CS             | .84            | .91       | .97       |
| Setting 2                   | 802         | 49.9    | 16.4     | 91        | GC        | SR      | GR93    | CS             | .83            | .91       | .97       |
| Setting 3                   | 802         | 49.9    | 16.4     | 91        | GC        | SR      | GR93    | CS             | .78            | .91       | .97       |
| (Vazsonyi & Belliston, 2007) (U.S.) | | | | | | | | | | | | |
| Setting 1                   | 689         | 53.6    | 15.7     | 91        | GC        | SR      | GR93    | CS             | .88            | .92       | .99       |
| Setting 2                   | 689         | 53.6    | 15.7     | 91        | GC        | SR      | GR93    | CS             | .83            | .92       | .99       |
| Setting 3                   | 689         | 53.6    | 15.7     | 91        | GC        | SR      | GR93    | CS             | .85            | .92       | .99       |

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Table 4 (continued)

| Author name (Year) (Country) | Sample Size | Female% | Mean age | IND score | Kinds ASB | MODEASS | LSC MEAS | Kinds of design | Alpha Parenting | Alpha LSC | Alpha ASB |
|------------------------------|-------------|---------|----------|-----------|-----------|---------|---------|----------------|----------------|-----------|-----------|
| (Vazsonyi & Klanjšek, 2008) (Switzerland) | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .74 | .8 | .96 |
| Setting 1 | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .76 | .8 | .96 |
| Setting 2 | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .78 | .8 | .96 |
| Setting 3 | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .81 | .8 | .96 |
| Setting 4 | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .76 | .8 | .96 |
| Setting 5 | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .85 | .8 | .96 |
| Setting 6 | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .73 | .94 | .94 |
| Setting 7 | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .71 | .94 | .94 |
| Setting 8 | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .8 | .94 | .94 |
| Setting 9 | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .77 | .94 | .94 |
| Setting 10 | 2603 | 29.5 | 18.22 | 68 | GC | SR | GR93 | CS | .86 | .94 | .94 |
| Setting 11 | 1364 | 48.8 | 10.5 | 91 | GC | SR | OTHER | LON | .73 | .81 | .8 |
| (Vazsonyi & Huang, 2010) (U.S.) (Vera & Moon, 2013) (U.S.) | 277 | 57 | 14 | 91 | AB | SR | GR93 | CS | .84 | .9 | .94 |
| Setting 1 | 277 | 57 | 14 | 91 | AB | SR | GR93 | CS | .84 | .9 | .94 |
| Setting 2 | 555 | 50 | 40.5 | 91 | GC | SR | GR93 | CS | .86 | .64 | .6 |
| (Jr et al., 1998) (U.S.) (Wright et al., 2001) (New Zealand) (You & Kim, 2016) (South Korea) | 1037 | 49 | 16 | 79 | GC | SR | OTHER | CS | .94 | .75 | .84 |
| Setting 1 | 448 | 00 | 15.2 | 18 | AB | SR | OTHER | CS | .94 | .75 | .84 |
| Setting 2 | 282 | 100 | 15.2 | 18 | AB | SR | OTHER | CS | (continued on next page) | (continued on next page) | (continued on next page) | (continued on next page) |
| Author name (Year) (Country) | Sample Size | Female% | Mean age | IND score | Kinds ASB | MODEASS | LSC MEAS | Kinds of design | Alpha Parenting | Alpha LSC | Alpha ASB |
|-----------------------------|-------------|---------|----------|-----------|------------|---------|---------|----------------|----------------|-----------|----------|
| (Beaver, 2008) (Canada)     |             |         |          |           |            |         |         |                |                |           |          |
| Setting 1                   | 3780        | 50      | 8        | 80        | CR         | SR      | OTHER   | LON            | .72             | .79       | .52      |
| Setting 2                   | 3780        | 50      | 8        | 80        | CR         | SR      | OTHER   | LON            | .66             | .79       | .52      |
| Setting 3                   | 3780        | 50      | 8        | 80        | CR         | SR      | OTHER   | LON            | .57             | .79       | .52      |
| (Chen, 2017) (China)        | 600         | 50      | 8        | 20        | AB         | SR      | GR93    | CS             | .71             | .86       |          |
| (Cho et al., 2005) (South Korea) (Finkenauer et al., 2005) (Netherland) | 2844 | 46 | 8 | 18 | AB | SR | 2 OTHER | LON | .83 | .8 | .75 |
| Setting 1                   | 1359        | 47.8    | 12.3     | 80        | CR         | SR      | OTHER   | CS             | .8              | .67       | .84      |
| Setting 2                   | 1359        | 47.8    | 12.3     | 80        | CR         | SR      | OTHER   | CS             | .65             | .67       | .84      |
| Setting 3                   | 1359        | 47.8    | 12.3     | 80        | CR         | SR      | OTHER   | CS             | .8              | .67       | .68      |
| Setting 4                   | 1359        | 47.8    | 12.3     | 80        | CR         | SR      | OTHER   | CS             | .65             | .67       | .68      |
| Setting 5                   | 1359        | 47.8    | 12.3     | 80        | CR         | SR      | OTHER   | CS             | .68             | .67       | .68      |
| Setting 6                   | 1359        | 47.8    | 12.3     | 80        | CR         | SR      | OTHER   | CS             | .68             | .67       | .68      |
| (Liu et al., 2019) (China)  |             |         |          |           |            |         |         |                |                |           |          |
| Setting 1                   | 917         | 46.23   | 14.38    | 20        | AB         | SR      | OTHER   | CS             | .94             | .88       | .71      |
| Setting 2                   | 917         | 46.23   | 14.38    | 20        | AB         | SR      | OTHER   | CS             | .9              | .88       | .71      |
| (Marcotte et al., 2002) (Canada) |             |         |          |           |            |         |         |                |                |           |          |
| Setting 1                   | 249         | 0.0     | 15.09    | 80        | AB         | SR      | OTHER   | CS             | .94             | .63       | .71      |
| Setting 2                   | 279         | 100     | 15.09    | 80        | AB         | SR      | OTHER   | CS             | .94             | .63       | .71      |
| (Moon et al., 2012) (South Korea) |             |         |          |           |            |         |         |                |                |           |          |
| Setting 1                   | 2817        | 49      | 14       | 18        | AB         | SR      | GR93    | LON            | .87             | .63       | .67      |
| Setting 2                   | 2817        | 49      | 14       | 18        | AB         | SR      | GR93    | LON            | .82             | .63       | .67      |
Table 4 (continued)

| Author name (Year) (Country) | Sample Size | Female% | Mean age | IND score | Kinds ASB | MODEASS | LSC MEAS | Kinds of design | Alpha Parenting | Alpha LSC | Alpha ASB |
|-----------------------------|-------------|---------|----------|-----------|-----------|---------|----------|----------------|----------------|-----------|-----------|
| (Özdemir et al., 2013) (Turkey) | 546         | 56.2    | 16       | 37        | AB        | SR      | GR93     | CS             | .77            | .83       | .8        |
| Setting 1                   |             |         |          |           |           |         |          |                |                |           |           |
| Setting 2                   | 546         | 56.2    | 16       | 37        | AB        | SR      | GR93     | CS             | .86            | .83       | .8        |
| (Shadmanfaat et al., 2018)  | 318         | 48      | 23       | 41        | AB        | SR      | GR93     | CS             |                |           |           |
| (3) (South Korea)           | 3610        | 00      | 16.11    | 91        | GC        | SR      | OTHER    | OTHER LON      | .81            | .71       | .74       |
| (Watts & McNulty, 2016) (U.S.) | 102         | 00      | 31.73    | 91        | CR        | SR      | GR93     | CS             | .86            | .9        | .94       |
| (Wells et al., 2015) (U.S.) | 322         | 69.25   | 19.27    | 91        | GC        | SR      | GR93     | LON            | .8             | .84       | .79       |
| (Gelder et al., 2017)       | 1197        | 48      | 15.04    | 68        | AB        | SR      | GR93     | LON            |                |           |           |
| (Switzerland)               | 6504        | 51.61   | 9.5      | 91        | AB        | OTHER   | GR93     | LON            | .84            | .69       | .73       |
| (Chae, 2016) (U.S.)         | 1724        | 56.6    | 17.2     | 91        | CR        | SR      | 1        | CS             | .64            | .87       | .88       |
| (Toro, 2010) (U.S.)         | 1724        | 56.6    | 17.2     | 91        | CR        | SR      | 1        | CS             | .64            | .88       | .76       |
| Setting 1                   | 1724        | 56.6    | 17.2     | 91        | CR        | SR      | 1        | CS             | .64            | .88       | .61       |
| Setting 2                   | 1724        | 56.6    | 17.2     | 91        | CR        | SR      | 1        | CS             | .64            | .88       | .8        |
| Setting 3                   | 1724        | 56.6    | 17.2     | 91        | CR        | SR      | 1        | CS             | .72            | .88       | .76       |
| Setting 4                   | 1724        | 56.6    | 17.2     | 91        | CR        | SR      | 1        | CS             | .72            | .88       | .74       |
| Setting 5                   | 1724        | 56.6    | 17.2     | 91        | CR        | SR      | 1        | CS             | .72            | .88       | .61       |
| Setting 6                   | 1724        | 56.6    | 17.2     | 91        | CR        | SR      | 1        | CS             | .72            | .88       | .8        |
| Setting 7                   | 1724        | 56.6    | 17.2     | 91        | CR        | SR      | 1        | CS             | .72            | .88       | .74       |
| Setting 8                   | 1724        | 56.6    | 17.2     | 91        | CR        | SR      | 1        | CS             | .72            | .88       |           |
| (Brauer, 2011) (U.S.)       | 1919        | 50      | 13.5     | 91        | GC        | SR      | 2        | LON            | .6             |           | .72       |

Note. IND score=individualism score; Kinds ASB= kinds of anti-social behavior; MODE ASS= mode of assessment; LSC MEAS= Low Self-Control measurement; Alpha_ASB= alpha anti-social behavior Analogous Behavior=AB; Crime= CR; General Crime= GC; Self Report =SR; Cross Section=CS; Longitudinal=LON; Grasmick(1993)= GR93.
**Fig. 1.** Effective parenting practices and low self-control.

**Fig. 2.** Effective parenting practices and Anti-social behavior.

**Fig. 3.** Low self-control and Anti-social behavior.

**Supplementary materials**

Supplementary material associated with this article can be found, in the online version, at https://osf.io/w9va6/.

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