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Perception of social climate by welfare/justice-involved girls in out-of-home placement centers



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ABSTRACT

Background: Many critics consider that the cognitive behavioral approach (CBA) doesn't sufficiently take into account the needs of welfare/justice-involved adolescent girls in out-of-home placement centers, especially the centrality of interpersonal relationships (with other adolescent girls and care worker) and the establishment of a positive social climate in the placement environment. A gender-responsive approach such as the *Caring and Just Community Approach* (CJCA), could better establish this positive social climate.

Objective: This study aims to explore whether the social climate is perceived more positively by adolescent girls who participate in the CJCA, compared to those who participated in the CBA.

Methods: Participants are 213 welfare/justice-involved adolescent girls in out-of-home placement centers located in the Canadian province of Québec (CJCA = 60; CBA = 153). This study combines self-reported measures and clinical administrative data.

Results: Among adolescent girls, the CJCA democratic community values seem to be associated with a social climate which could facilitate a feeling of being more involved in their out-of-home placement unit. Both clinical approaches seem to address the centrality of interpersonal relationships and respond to the needs to feel listened to, to be respected, and to be treated with fairness by care workers.

Conclusions: This study reaffirms the importance of including gender-responsive aspects to efficient practice principles when adolescent girl intervention programs are developed. This is because different approaches, although effective, do not address all the needs of welfare/justice-involved adolescent girls in out-of-home placement centers.

1. Introduction

Paralleling the rising proportion of adolescent girls in state care due to disruptive or delinquent behaviors, the development and evaluation of intervention programs aiming to reduce such behaviors has begun to take gender into account over the past fifteen years (Bloom, Owen, Deschenes, & Rosenbaum, 2002; Chesney-Lind, Morash, & Stevens, 2008; Chesney-Lind & Shelden, 2014; Hubbard & Matthews, 2008; Kerig & Schindler, 2013). One of the main questions is whether genderneutral intervention programs are truly adapted to adolescent girls' needs. Presently, within the welfare/justice system, intervention settings wishing to use practices known for their efficiency mainly turn to the cognitive behavioral approach (CBA). To this day, this approach's efficiency is the most empirically supported for a variety of problems, such as mental health problems (Butler, Chapman, Forman, & Beck, 2006; Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012; Tolin, 2010) and delinquency (Andrews et al., 1997; Landenberger & Lipsey, 2005). Even though CBA was initially developed for a male population, some studies have evaluated its use with welfare/justice-involved adolescent girls. A meta-analysis of 29 studies on program characteristics for youth with disruptive behavior problems reported that cognitive skills training programs can have some positive effects for both genders but are significantly more effective for adolescent boys (g = 0.87) than for girls (g = 0.68; Granski, Javdani, Anderson, & Caires, 2019). This result gives weight to studies questioning the CBA's sensitivity to welfare/justice-involved adolescent girls. Notably, this questioning relates to the

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lack of attention devoted by the CBA to adolescent girls' needs regarding their placement environment characteristics. Indeed, a placement environment should promote respect, empathy, safety, and agency so as to be sensitive to adolescent girls' pathways into the welfare/justice system (Bloom & Covington, 2001; Hipwell & Loeber, 2006; Hubbard & Matthews, 2008; Ravoira, Graziano, & Patino Lydia, 2012). Promoting a positive social climate in the placement environment could be a way to address these needs (Hubbard & Matthews, 2008; Lanctôt, Lemieux, & Mathys, 2016). As such, the *Caring and Just Community Approach* (CJCA; Dionne & St-Martin, 2018) could be more suitable than the CBA in establishing a positive social climate.

2. The centrality of relationships among adolescent girls

Many risk factors associated with disruptive and delinquent behaviors are the same for adolescent girls and boys. This is the case of polyvictimization, trauma exposure and posttraumatic stress disorder, diagnosed mental health disorders, and association with deviant peers (Kerig, 2018; Kerig & Schindler, 2013; Lanctôt, 2010). However, those risk factors do not manifest in the same ways for adolescent boys and girls. For example, while both adolescent boys and girls in welfare/ justice-involved samples have been disproportionately exposed to multiple forms of victimization (Laurier, Hélie, Pineau-Villeneuve, & Royer, 2016; van Vugt, Lanctôt, Paquette, Collin-Vézina & Lemieux, 2013), victimization types differ by gender. Adolescent girls are most likely to have experienced interpersonal traumas such as physical and emotional maltreatment by caregivers as well as interfamilial and extrafamilial sexual abuse, whereas adolescent boys report more exposure to community violence (see Kerig, 2018 for a review). Also, adolescent girls demonstrate a sensitivity to interpersonal traumas that often translates into difficulties such as relationship problems, psychological distress, and shame (Bloom & Covington, 2001; Cauffman, Farruggia, & Goldweber, 2008; Garcia & Lane, 2013; Hipwell & Loeber, 2006; Kerig & Schindler, 2013; Leve, Chamberlain, & Kim, 2015; Schaffner, 2006) whereas adolescent boys tend to present more behavioral problems such as substance use and delinquency involvement (Cotton et al., 2019). These gender differences shed light on the centrality of interpersonal relationships for adolescent girls' development (Lanctôt, 2017; Zahn-Waxler & Polanichka, 2004).

Moreover, in the context of welfare/justice system interventions, adolescent girls are particularly sensitive to their out-of-home placement unit's environment. Adolescent girls assign more importance to the following needs: being listened to, being respected, and being treated with fairness (Hubbard & Matthews, 2008; Lanctôt, 2017; Ravoira et al., 2012). Managing the social climate of the placement environment is of paramount importance, considering that many adolescent girls in care of the welfare/justice system present serious disruptive behaviors coupled with severe experiences of interpersonal trauma ***(Lanctôt, 2018). For traumatized adolescent girls in particular, it is important to provide a therapeutic community environment that lets them have a voice and participate in all aspects of their program, with the goal of overcoming their sense of victimization and promoting feelings of empowerment (Lanctôt et al., 2016; Leipoldt, Harder, Kayed, Grietens, & Rimehaug, 2019). Studies also emphasized the need to establish healthy relationships with traumatized adolescent girls, with practitioners focusing more on support than on control, and on the sense of physical and emotional safety within the placement environment (Gaarder, Rodriguez, & Zatz, 2004; Lanctôt et al., 2016).

Consequently, some have suggested that conventional intervention programs be adapted in such ways as to make them more sensitive to adolescent girls' intervention experiences, difficulties, and needs (Bloom & Covington, 2001; Bloom et al., 2002; Chesney-Lind & Shelden, 2014; Gaarder et al., 2004; Hubbard & Matthews, 2008). Gender-responsive approaches have built on this to offer interventions taking into account welfare/justice-involved adolescent girls' relational needs, with a particular focus on the sensitive nature of the program's environment and social climate (Chesney-Lind et al., 2008; Gaarder et al., 2004; Lanctôt, 2017; Schaffner, 2006).

3. CBA and caring and just community approach (CJCA)

In the province of Quebec (Canada), the CBA is one of the dominant intervention approaches administered to both adolescent girls and boys in out-of-home placement centers through a program developed by Le Blanc, Dionne, Proulx, Grégoire and Trudeau-LeBlanc, 1998. This program combines individual and group activities. The aim of the program is to reduce antisocial cognitions and behaviors, through cognitive restructuring and teaching prosocial alternative behaviors. Individual activities consist of an evaluative analysis (functional and excess/deficit analyses), self-observation reports, and a behavioral contract to promote prosocial behaviors. The group component consists of four workshops targeting communication skills, anger regulation, stress management, and problem solving through modeling and role-play. More generally, change is achieved through reinforcement of desired behaviors and punishment of inadequate behaviors. All youth within one residential unit follow the same rules and sanctions as established by care workers.

Within this same system of care, and in an effort to provide an intervention program matching adolescent girls' needs more closely, the Caring and Just Community Approach (CJCA; Dionne & St-Martin, 2018) was implemented in eight Québec out-of-home placement units for girls aged 12–17.² The CJCA stems from Kohlberg (1984) cognitive developmental intervention approach, the Just Community Approach (JCA). This approach was initially developed with youth offenders, then adapted and implemented in out-of-home placement units for adolescent girls presenting externalized and internalized problems. Dionne (1996) integrated a caring perspective to this approach, through mutual aid and interactional justice, so this approach would be more suitable to adolescent girls' needs. The JCA then became the CJCA. As for CBA, the aim is to reduce or eliminate adolescents' problematic behaviors and delinquency. In contrast with the CBA, the CJCA is based on developing social competency through prosocial interpersonal negotiation strategies, sociomoral reflection, and moral judgement in a caring environment.

More specifically, the CJCA considers the shared educative experience as a rehabilitative tool promoting development. This shared educative experience is comprised of interactions between the adolescent girl, the care workers, and the peer group in the out-of-home placement unit's daily moments, such as during meals, as well as in structured clinical activities. In the CJCA specifically, the living environment is seen as a micro-community where the search for democratic, mutual aid, and justice values is omnipresent. The members of this community are the adolescents, generally nine to twelve girls, and the care workers; all are considered equal. Powers, responsibilities, and privileges are shared fairly between members, through democratic votes concerning regulations of life within this community. To consider adolescent girls' needs for fairness, trust, respect, and harmonious relationships, the CJCA also integrates a daily search for mutual aid and interactional justice through a constant preoccupation for each community member's respect, recognition, consideration, and feeling of being heard (Dionne & St-Martin, 2018).

Structural questioning, as used by care workers, is another important intervention technique specific to the CJCA. This type of questioning goes further than a simple search for content, as it attempts to deepen and to understand the adolescent's reasoning process, as well as supporting this process development by giving her clues and different angles to tackle a question. For example, the care workers could

 $^{^2}$ The CJCA is currently only used in adolescent girls' out-of-home placement centers. However, boys could also benefit from this approach (Dionne & St-Martin, 2018).

ask questions that highlight inconsistencies in the girl's reasoning or that pushes the adolescent to clarify her reasoning. Structural questioning thus stimulates imbalances in her moral judgment reasoning process, which creates developmental opportunities for her. This type of questioning also fulfills adolescent girls' needs for respect, trust, and reciprocal relationships since it requires care workers to show good listening abilities and to search for a true understanding of the girl's expressed situation, which helps establish a trusting relationship. The little empirical data concerning the JCA's efficiency suggests that this approach improves social climate in the placement environment and improves delinquent adolescent boys' moral judgement and social behaviors (Dionne, 1996).

4. Goal of the study

The general goal of the study was to explore whether adolescent girls who participated in the CJCA (Dionne & St-Martin, 2018) reported a more positive perception of the social climate prevailing in their outof-home placement unit, as compared to those who participated in the CBA (Le Blanc et al., 1998). Specifically, this study compares these two groups of adolescent girls regarding their appreciation of the quality of relationships with other adolescent girls in their placement environment, the quality of relationships with care workers, and the educative practices of care workers (e.g.: the feelings of fairness and agency).

5. Methods

5.1. Participants

The study participants were 213 girls aged 12-17 years old (M = 15.21 years; SD = 1.32) and placed in an out-of-home center in Québec, Canada. Almost nine adolescent girls out of ten were born in Canada (88.2%: n = 212). Participants were mostly placed out of home under the Youth Protection Act (YPA; 90.8%; n = 188). Placement motives were girls serious behavioral problems (36.2%; n = 75), which includes "status offenses" (like runaway and substance abuse) and mental health symptoms (like suicide attempts and self-harm), neglect or serious risk of neglect (27.1%; n = 56), psychological abuse by caregiver ill-treatment (11.1%; n = 23), physical abuse or serious risk of physical abuse (7.7%; n = 16), sexual abuse or serious risk of sexual abuse (7.2%; n = 15), and abandonment (1.4%; n = 3). A minority of the sample was placed under the Act Respecting Health Services and Social Services (ARHSSS; 6.8%; n = 14) in response to family disorganization or under the Youth Criminal Justice Act (YCJA; 2.4%; n = 5) in response to a criminal act for which an accusation had been pursued.

Participants experienced an averaged total of 3.65 years (SD = 3.84) in out-of-home placement. This measure refers to the placement length since many different placement episodes for a participant may have occurred within a given period. However, as Trocmé, Hélie, MacLaurin, Fallon, Shlonsky, Mulcahy, and Esposito (2009) indicate, time spent in 72-hour respite and emergency placements are not considered for placement length. Indeed, those placements are not considered to be significant as they do not necessarily entail an ongoing out-of-home placement. The inclusion criterion for all study participants was to have spent at least ten weeks in their out-of-home placement units, at the time of data collection. There were no exclusion criteria. This interval is the minimum for completing the self-reported questionnaire on their placement environment's social climate (Mathys, Lanctôt, & Touchette, 2013).

5.2. Measures

Dependent variable. Perceptions of social climate in the out-ofhome placement unit were measured with the Psycho-Educational Placement Environment Questionnaire (PEPEQ; Mathys et al., 2013). This questionnaire is adapted from the Socio-Educational Environment Questionnaire (Janosz & Bouthillier, 2007). It measures three social climate dimensions in the out-of-home placement unit: relationships with peers, relationships with care workers, and perceptions of practices. This three-factor solution was validated with confirmatory factor analyses and was found to be better than a one-factor solution. Four items in a scale measuring the feeling of belonging within the out-ofhome placement unit were removed, since they presented improper validity indicators for the factor model (Mathys et al., 2013). Thus, the questionnaire is composed of 63 multiple-choice questions, most of which use a 6-point Likert scale (1 = "strongly disagree", 6 = "strongly")agree"). Only the items measuring the perception of violence perpetrated by peers use a 5-point Likert scale (1 = ``never'', 5 = ``verv)often"). The relationships with peers dimension relies on five scales: having friendly, trusting relationships with peers (5 items, $\alpha = 0.82$), feeling safe among peers (5 items, $\alpha = 0.71$), experiencing indirect aggression from peers (9 items, $\alpha = 0.92$), experiencing verbal aggression from peers (5 items, $\alpha = 0.87$) and experiencing physical aggression from peers (6 items, $\alpha = 0.59$). The relationship with care workers dimensions relies on three scales: having warm, close relationships with care workers (5 items, $\alpha = 0.93$), feeling valued by care workers (4 items, $\alpha = 0.90$), and feeling supported by care workers (5 items, $\alpha = 0.91$). The perception of practices in the out-ofhome placement unit dimension relies on four scales: fairness of rules and punishments (4 items, $\alpha = 0.83$), equity of treatment compared with other adolescent girls in the unit (4 items, $\alpha = 0.90$), clarity of rules and punishments (6 items, $\alpha = 0.84$), and opportunities to have a voice in the way the unit is run (4 items, $\alpha = 0.80$). The reliability of the scales was assessed by the authors. For each scale, the higher the score, the more the adolescent girl perceives this characteristic as present within her out-of-home placement unit's environment.

Independent variable. Participation in the CJCA or the CBA within the out-of-home placement unit is measured with a dichotomic clinical approach variable (CJCA = 1; CBA = 0). Slightly more than a quarter of adolescent girls (28.2%; n = 60) were placed in units where the CJCA was implemented. A quarter of these participants (n = 15) were previously placed in units relying on the CBA over an average period of 1.28 years (SD = 0.94), but none of them had filled out the questionnaires under both approaches. Placement in a CJCA or a CBA residential unit was not the result of a decision based on adolescent girls' profiles or placement motives: it was based on administrative processes such as available spaces in residential units at the beginning of their out-of-home placement. Implementation of the CJCA (Parent, Chenard, & Lanctôt, 2017) and of the CBA (Lanctôt, 2010) has been evaluated as satisfying regarding the integrity of the programs, in the placement center where this study was conducted.

Control variables. Perception of the social climate within their outof-home placement unit may be influenced by some of the adolescent girls' pre-treatment experiences, such as relational issues (Lanctôt et al., 2016). The Inventory of Interpersonal Problems (IIP; Horowitz, Alden, Wiggins, & Pincus, 2000) is thus used to control for interpersonal problems. Two versions of the IIP were used in this study. The full, 64question version (IIP-64; Alden, Wiggins, & Pincus, 1990) was used for the group who participated in the CBA whereas the short, 32-question version (IIP-32; Barkham, Hardy & Starup, 1996) was used for the group who participated in the CJCA. The IIP-32 requires only 15 min to complete and, for this practical reason, this version was used for the second study with the CJCA group. As both versions present a 30% agreement for their combined items and the IIP-32 preserved the same content coverage for each factor of the IIP-64, they are considered relatively comparable (see Hughes & Barkham, 2005). The IIP-64 and the IIP-32 measure eight interpersonal problems and present adequate psychometric attributes with an internal consistency backed by moderate to high alpha values (Hughes & Barkham, 2005). These scales contain 5-point Likert scale (1 = "not at all", 5 = "extremely") which measure eight interpersonal problems: domineering/controlling (IIP-

64, $\alpha = 0.68$; IIP-32, $\alpha = 0.73$), vindictive/self-centered (IIP-64, $\alpha = 0.59$; IIP-32, $\alpha = 0.87$), cold/distant (IIP-64, $\alpha = 0.74$; IIP-32, $\alpha = 0.79$), socially inhibited (IIP-64, $\alpha = 0.77$; IIP-32, $\alpha = 0.90$), non-assertive (IIP-64, $\alpha = 0.81$; IIP-32, $\alpha = 0.84$), overly accommodating (IIP-64, $\alpha = 0.79$; IIP-32, $\alpha = 0.60$), self-sacrificing (IIP-64, $\alpha = 0.78$; IIP-32, $\alpha = 0.79$), and intrusive/needy (IIP-64, $\alpha = 0.75$; IIP-32, $\alpha = 0.80$). The reliability of the IIP scales was assessed by the authors. For each scale, the higher the score, the more the adolescent girl presents the interpersonal problem.

5.3. Procedures

All study participants were voluntarily involved and were chosen on a non-random basis. The study was first presented by a research assistant in the adolescent girls' out-of-home placement unit and those who expressed the desire to participate and met the criteria for inclusion were retained. The participants' and their parents' consent were obtained per the ethics committee's requirements. Sociodemographic variables (age and where they were born) and their out-of-home placement history were extracted from the clinical administrative database. Questionnaires were filled out by the adolescents within their outof-home placement unit, either on paper or electronic device, under a research team member's supervision.

The current study combines two distinct studies which used the same instruments and were conducted within the same out-of-home placement center. Study 1 was conducted between January 2008 and October 2009 among a sample of adolescent girls who participated in the CBA. These less recent data stemming from a large study evaluating the CBA were selected due to their accessibility and the exploratory purpose of the present study. Moreover, adolescent girls in residential units are a vulnerable population and research protocols involving selfreported questionnaires are to be kept to a minimum as requested by the ethics committee at the center where both studies took place. Questionnaires were filled out three months following the placement in the out-of-home unit. Study 2 was conducted in two phases with a sample of adolescent girls who participated in the CJCA. The first phase occurred between November 2015 and June 2016 and the second phase occurred between November 2017 and April 2018. During the first phase, questionnaires on social climate and interpersonal problems were collected four times. Unfortunately, many adolescent girls didn't complete the questionnaire at each time and it was impossible to select specific times given these missing data. Results remained generally stable no matter which time was used (analyses not presented in this article) suggesting that exposure time to the CJCA doesn't impact the adolescent girls' social climate perception. To maximize the number of CJCA participants, a mean score was then constructed from all completed questionnaires per participant, i.e. from one to four questionnaires per girl. Therefore, each adolescent girl who responded at least once to the questionnaire has a score. The mean score was used in the analyses and the procedure was the same for both social climate and interpersonal problems questionnaires. In the second phase, both questionnaires were collected once.

5.4. Analytical strategies

Bivariate analyses were conducted to evaluate whether there were significant differences between the two groups (CJCA and CBA) in regards to adolescent girls' sociodemographic characteristics, their placement history, their interpersonal problems, and the out-of-home placement unit's social climate. Nonparametric means tests, Mann-Whitney U tests, were conducted since the normal distribution assumption was violated and to reduce the influence of size differences between the two groups (Nachar, 2008). Multiple linear regressions (MLR) using the different PEPEQ scales as dependent variables were conducted to know whether the clinical approach (CJCA or CBA) influences the perceptions of social climate among adolescent girls in outof-home placement units.

An exploratory factor analysis was conducted on the eight IIP scales to reduce their number by grouping them in greater factors. This was done to respect the assumption concerning the ratio between the number of subjects and the number of variables included in the regression model ($n \ge 50 + 8$ *number of independent variables; Tabachnick & Fidell, 2013). Since all eight scales were correlated between themselves, principal component analysis was used for factor extraction and direct oblimin for factor rotation (Tabachnick & Fidell, 2013). The resulting factor solution is average, based on Kaiser's standards (1974; KMO = 0.72, $\chi 2 = 747.55$, $p \le 0.001$) and distinguishes three factors explaining 66.6% of interpersonal problems variance, as measured by the IIP. These factors are lack of affirmation and intrusiveness (composed of the non-assertive, overly accommodating, selfsacrificing, and intrusive/needy scales), cold or negative relationships (composed of the vindictive/self-centered, cold/distant, and socially inhibited scales) and domineering/controlling (composed of the scale by the same name). For the PEPEQ, the perceptions of verbal and relational violence were combined into a single scale because of their strong correlations (r[213] = 0.77; $p \le 0.001$): experiencing non-physical aggression by peers.

6. Results

6.1. Group equivalence

Table 1 shows descriptive statistics for control variables as well as the results of comparison analyses between the CJCA and CBA groups. Both groups are comparable for all control variables (p > 0.05) except for the following interpersonal problems: domineering/controlling (z [1.211] = -3.71, $p \le 0.001$) and cold or negative relationships (z [1.212] = -2.32, $p \le 0.05$). Adolescent girls who participated in the CBA reported more interpersonal problems than adolescents who participated in the CJCA. They more often wished to control others through aggressive or manipulative behaviors for instance. They also reported more distant relationships with others, either through caring little about others' problems, through showing little affection or connection with others, or through feeling more anxiety, embarrassment, or shyness in their presence.

6.2. Social climate by clinical approach

Descriptive and comparative statistics for social climate scales within out-of-home placement units are also presented in Table 1. Results show that two out of three social climate dimensions are different depending on the clinical approach (CJCA or CBA). The perceived quality of relationships with peers from the placement unit seems lower within the group exposed to the CJCA. While the groups did not differ in their sense of comfort and safety with fellow adolescent girls in their out-of-home placement units, adolescent girls who participated in the CJCA reported having experienced more non-physical (7 [1.213] = 2.94, $p \le 0.01$) and physical aggression from peers (z $[1.213] = 3.20, p \le 0.001$) than adolescent girls who participated in the CBA. On the contrary, adolescent girls who participated in the CJCA reported more positive perceptions than adolescent girls who participated in the CBA regarding educational practices within their out-ofhome placement unit. Adolescent girls who participated in the CJCA reported a higher sense of fairness about rules and punishments (z $[1.213] = 3.24, p \le 0.001$) and reported a stronger feeling of having a voice in the way their out-of-home placement unit was run (z $[1.213] = 4.41, p \le 0.001$). However, no significant differences were observed in the ways adolescent girls from each group perceived equity of treatment between adolescent girls, or clarity of rules within their out-of-home placement unit. Finally, relationships with care workers were perceived similarly whether adolescent girls participated in the CJCA or the CBA.

Table 1

All variables by intervention approach (CJCA and CBA).

Variables	Full sample			CJCA			CBA			Phi/z	n
	%	M (SD)	Md	%	M (SD)	Md (mean rank)	%	M (SD)	Md (mean rank)	-	
Age	-	15.21 (1.32)	15.28	-	15.23 (1.37)	15.43 (110.03)	-	15.20 (1.31)	15.25 (105.81)	0.45	213
Born in Canada	88.2	-	-	84.7	-	-	89.5	-	-	-0.07	212
Serious behavioral problems/delinquency ^a	38.6	-	-	30.0	-	-	42.2	-	-	-0.11	207
Placement length (years)	-	3.65 (3.84)	2.11	-	3.40 (3.96)	1.43 (94.53)	-	3.75 (3.81)	2.30 (111.23)	-1.79^{\dagger}	212
IIP - Lack of affirmation and intrusiveness	-	2.11 (0.65)	2.03	-	2.13 (0.70)	2.08 (109.13)	-	2.10 (0.51)	2.00 (105.49)	0.39	212
IIP - Cold or negative relationships	-	1.98 (0.62)	1.92	-	1.91 (0.93)	1.58 (90.78)	-	2.00 (0.63)	2.00 (112.56)	-2.32*	212
IIP – Domineering/controlling	-	2.07 (0.71)	2.00	-	1.82 (0.76)	1.63 (80.74)	-	2.17 (0.67)	2.13 (115.58)	-3.71***	211
Relationships with peers											
Having friendly, trusting relationships with peers	_	4.19 (1.10)	4.30	_	4.33 (0.96)	4.40 (112.36)	_	4.14 (1.16)	4.20 (104.24)	0.95	213
Feeling safe among peers	-	5.27 (0.85)	5.60	-	5.23 (0.80)	5.40 (98.03)	-	5.28 (0.88)	5.60 (110.52)	-1.34	213
Experiencing non-physical aggression from peers	-	1.59 (0.77)	1.32	-	1.75 (0.79)	1.57 (126.62)	-	1.53 (0.75)	1.26 (99.31)	2.94**	213
Experiencing physical aggression from peers	-	1.12 (0.27)	1.00	-	1.16 (0.26)	1.02 (124.68)	-	1.11 (0.28)	1.00 (100.07)	3.20***	213
Relationships with care workers											
Having warm, close relationships with care workers	_	4.01 (1.37)	4.20	_	4.13 (1.26)	4.50 (112.63)	_	3.96 (1.41)	4.00 (104.79)	0.84	213
Feeling valued by care workers	_	4.98 (1.05)	5.00	_	4.97 (0.88)	5.00 (101.00)	_	4.99 (1.11)	5.25 (109.35)	-0.91	213
Feeling supported by care workers	-	4.24 (1.34)	4.40	-	4.14 (1.21)	4.40 (100.33)	-	4.28 (1.39)	4.40 (109.61)	-0.99	213
Perceptions of practices											
Fairness of rules and punishments	_	3.37 (1.35)	3.25	_	3.81 (1.25)	3.75 (128.78)	_	3.19 (1.35)	3.00 (98.46)	3.24***	213
Equity of treatment compared with other girls on the unit	-	4.50 (1.37)	4.75	-	4.31 (1.33)	4.50 (95.98)	-	4.57 (1.38)	5.00 (111.32)	-1.65	213
Clarity of rules and punishments	-	4.57 (1.07)	4.83	-	4.75 (0.97)	5.04 (116.64)	-	4.50 (1.10)	4.67 (103.22)	1.43	213
Opportunities to have a say in the way the unit is run	-	3.69 (1.38)	3.75	-	4.33 (1.04)	4.50 (136.68)	-	3.45 (1.42)	3.25 (95.36)	4.41***	213

Note. ^a = Placement motives were dichotomized: child maltreatment/family disorganization (0) and serious behavioral/delinquency problem (1); CJCA = Caring and Just Community Approach; CBA = Cognitive Behavioral Approach; IIP = Inventory of Interpersonal Problems.

M = Mean; Md = Median; SD = Standard deviation.

[†] $p \le 0.10$. * $p \le 0.05$. ** $p \le 0.01$. *** $p \le 0.001$.

Table 2

Impact of the clinical approach on the PEPEQ relationships with peers.

Variables	Having friendly, trusting relationships with peers		Feeling sat	Feeling safe among peers		Experiencing non-physical aggression from peers		Experiencing physical aggression from peers	
	В	ß	В	ß	В	ß	В	ß	
Age	-0.11	-0.14*	0.12	0.19***	-0.07	-0.12	-0.04	-0.21***	
Born in Canada	0.24	0.07	-0.22	-0.09	0.19	0.08	0.05	0.06	
Serious behavioral/delinquency problem ^a	0.28	0.13^{\dagger}	0.14	0.08	-0.08	-0.05	-0.07	-0.12	
Placement length (years)	-0.05	-0.17**	-0.01	-0.07	0.03	0.14*	0.00	0.06	
IIP – Domineering/controlling	-0.04	-0.03	0.23	0.19**	0.04	0.04	0.02	0.05	
IIP – Lack of affirmation and intrusiveness	0.21	0.13^{\dagger}	-0.30	-0.24***	0.23	0.20**	0.03	0.07	
IIP – Cold or negative relationships	-0.52	-0.30***	-0.34	-0.26***	0.15	0.12^{\dagger}	0.06	0.13 ⁺	
Intervention approach (CJCA = 1)	0.10	0.04	-0.02	-0.01	0.28	0.17*	0.06	0.10	
R^2	0.17		0.22		0.16		0.13		
F	5.05***		6.74***		4.68***		3.56***		
ΔR^2	0.00		0.00		0.03		0.01		
ΔF	0.39		0.02		5.92*		2.22		

Note. ^a = Placement motives were dichotomized: child maltreatment/family disorganization (0) and serious behavioral/delinquency problem (1); CJCA = Caring and Just Community Approach; IIP = Inventory of Interpersonal Problems.

[†] $p \le 0.10$. * $p \le 0.05$. ** $p \le 0.01$. *** $p \le 0.001$.

Eleven multiple linear regression models using the PEPEQ scales as the dependent variable are presented in Table 2 (relationships with peers), Table 3 (relationships with care workers) and Table 4 (perceptions of practices). Regarding relationships with peers, while the four MLR models are statistically significant (all $p \le 0.001$ and R^2 ranging from 0.13 to 0.22), the clinical approach is only associated with experiencing non-physical aggression from peers (B = 0.28, $\beta = 0.17$, $p \le 0.05$). Indeed, adolescent girls who participated in the CJCA experienced more non-physical aggression from peers. Adolescent girls in both groups perceived similarly friendly and trusting relationships with peers, felt equally safe among them, and experienced the same level of physical aggression from peers. Adolescent girls in both groups reported equally warm and close relationships with care workers and felt similarly valued and supported by them.

The clinical approach is mainly associated with adolescent girls' perceptions of practices. Adolescent girls who received the CJCA reported a greater sense of fairness with regards to effective rules and punishments in their out-of-home placement unit (B = 0.41, β = 0.13,

Table 3

Impact of the clinical approach on the PEPEQ relationships with care workers.

Variables	Having warm, clo	se relationships with care workers	Feeling value	ed by care workers	Feeling supported by care workers	
	В	ß	В	ß	В	ß
Age	0.04	0.04	0.02	0.02	0.05	0.06
Born in Canada	-0.17	-0.04	0.01	0.00	-0.01	-0.00
Serious behavioral/delinquency problem ^a	-0.03	-0.01	0.19	0.09	0.05	0.02
Placement length (years)	0.01	0.03	0.02	0.06	-0.00	-0.01
IIP – Domineering/controlling	-0.42	-0.22^{**}	-0.15	-0.10	-0.30	-0.16*
IIP – Lack of affirmation and intrusiveness	0.57	0.27***	0.37	0.23**	0.28	0.14^{\dagger}
IIP – Cold or negative relationships	-0.13	-0.06	-0.24	-0.15^{\dagger}	-0.24	-0.11
Intervention approach (CJCA = 1)	-0.03	-0.01	-0.05	-0.02	-0.30	-0.10
R ²	0.10		0.06		0.05	
F	2.75**		1.61		1.38	
ΔR^2	0.00		0.00		0.01	
ΔF	0.03		0.08		1.95	

Note. ^a = Placement motives were dichotomized: child maltreatment/family disorganization (0) and serious behavioral/delinquency problem (1); CJCA = Caring and Just Community Approach; IIP = Inventory of Interpersonal Problems. [†] $p \le 0.10$. * $p \le 0.05$. ** $p \le 0.01$. *** $p \le 0.001$.

Table 4

Impact of the clinical approach on the PEPEQ perceptions of practices.

Variables Fairness of rules and punishments scale			Equity of tre other girls or	atment compared with n the unit	Clarity of rules and punishments		Opportunities to have a voice in the way the unit is run	
	В	ß	В	ß	В	ß	В	ß
Age	0.14	0.13^{\dagger}	0.12	0.12†	0.06	0.07	-0.07	-0.07
Born in Canada	-0.02	-0.01	-0.05	-0.01	0.12	0.04	0.24	0.06
Serious behavioral/delinquency problem ^a	0.03	0.01	0.26	0.09	-0.04	-0.02	-0.15	-0.05
Placement length (years)	-0.00	-0.01	-0.01	-0.01	-0.01	-0.02	-0.00	-0.01
IIP – Domineering/controlling	-0.53	-0.28***	-0.44	-0.23**	-0.35	-0.23^{**}	-0.39	-0.20**
IIP – Lack of affirmation and intrusiveness	0.20	0.10	0.21	0.10	0.29	-0.17*	0.29	0.14†
IIP – Cold or negative relationships	-0.04	-0.02	-0.07	-0.03	-0.10	-0.06	-0.09	-0.04
Intervention approach $(CJCA = 1)$	0.41	0.13*	-0.52	-0.17**	0.10	0.04	0.71	0.23***
R^2	0.09		0.10		0.09		0.14	
F	3.57***		2.56**		2.27*		3.87***	
ΔR^2	0.02		0.03		0.00		0.05	
ΔF	3.75*		6.11**		0.32		11.17***	

Note. ^a = Placement motives were dichotomized: child maltreatment/family disorganization (0) and serious behavioral/delinquency problem (1); CJCA = Caring and Just Community Approach; IIP = Inventory of Interpersonal Problems.

 ${}^{\dagger}p \le 0.10. * p \le 0.05. ** p \le 0.01. *** p \le 0.001.$

 $p \le 0.05$). They also perceived more opportunities to have a voice in the out-of-home placement unit (B = 0.71, β = 0.23, $p \le 0.001$), while adolescent girls who received CBA reported more equity in the way adolescent girls were treated depending on their age, ethnicity, family background, or placement motive (B = -0.52, β = 0.17, $p \le 0.01$). The clinical approach is not associated with the clarity of rules and punishments.

7. Discussion

The study goal was to explore social climate perception (quality of relationships between adolescents, quality of relationships between adolescents and the care worker team, perception of educative practices) through the clinical approach received by adolescent girls (CJCA compared to CBA) within an out-of-home placement unit. Results indicate that the CJCA seems to better respond to feelings of justice and provide more opportunities to have a voice in the way the out-of-home placement unit is run, while the CBA seems to better respond to the feeling of equity. These results were obtained by controlling for sociodemographic characteristics, placement history, and interpersonal problems. Adolescent girls who participated in the CJCA perceived more nonphysical violence perpetrated by peers than adolescent girls who participated in the CBA. One hypothesis regarding these results would be that, under the CJCA, violence within the out-of-home placement unit is addressed by mobilizing all members to think about solutions. Comparatively, under the CBA, violence is addressed one-on-one. Thus, within the units using the CJCA, adolescent girls might be more aware of non-physical violence, which would explain their reporting a higher proportion of violence. Although adolescents are more aware of nonphysical violence perpetrated by peers, this does not seem to impact their relationships with peers nor their feeling of safety. As such, both clinical approaches seem to address the centrality of interpersonal relationships for adolescent girls' development (Lanctôt, 2017; Zahn-Waxler & Polanichka, 2004) although mutual aid and interactional justice are at the heart of the CJCA.

Participation in the CJCA or the CBA clinical approach does not seem to be associated with the quality of relationships between adolescent girls and care workers. Thus, the structural questioning technique used within the CJCA would not be associated with feelings of being listened to and taken into account by care workers. As such, both clinical approaches seem to respond to the needs of feeling listened to, respected, and treated with fairness (Hubbard & Matthews, 2008; Lanctôt, 2017; Ravoira et al., 2012). Frequent care worker turnover within the out-of-home placement center could affect these relationships. Lack of stability could make adolescent girls anticipate care workers' departure, thus avoid developing significant and trusting relationships (Hébert, Lanctôt, & Turcotte, 2016). It is also possible that relationships between adolescent girls and care workers are influenced by the personal characteristics of these care workers (Elvins & Green, 2008) more than the clinical approach.

Concerning educative practices, adolescent girls who participated in the CJCA reported a greater feeling of having a voice in their out-ofhome placement unit, compared to adolescent girls who participated in the CBA. This result validates the intrinsic principles of the CJCA, since this approach mainly differs from the CBA insomuch as adolescents hold a democratic decisional power equal to the care workers'. This allows adolescents to actively participate in decisions concerning the organization of their out-of-home placement unit, such as establishing its rules. This possibility of expressing themselves with regards to the community's organization promotes adolescent girls' feelings of holding a sense of agency in their rehabilitation, overcoming their sense of victimization and facilitates feelings of empowerment, which constitutes promising intervention avenues (Lanctôt et al., 2016; Leipoldt et al., 2019;).

Although adolescent girls who participated in the CJCA also report a greater feeling of fairness concerning their placement environment's rules and punishments, the adolescent girls who participated in the CBA showed stronger feelings of equity. The greater feeling of justice among adolescent girls who participated in the CJCA could stem from a better understanding of rules' relevance and usefulness since those rules are established democratically and collaboratively, which is not the case within the CBA. These results correspond to one of the CJCA's core values, the continual search for justice. The higher feeling of equity (i.e. the perception that problematic situations are handled independently from the adolescent girls' placement motives and characteristics) perceived by adolescent girls who participated in the CBA could be explained by the practice of applying the same rules for all adolescent girls in residential units. This way, adolescent girls can't perceive to be treated somewhat differently relative to the others. Within the CJCA, there is no one way of handling a given situation. The care worker mainly tries to develop the adolescent girl's sociomoral judgement, through the specific intervention technique of structural questioning, which is itself characterized by reflective and open questions. However, this intervention technique is subjective and depends on a care worker's ability to use it correctly. Since learning to use and applying the CJCA can take several months or even years (Parent et al., 2017) and out-ofhome placement units show an important level of staff turnover, care workers might not master this subjective technique at the same level. As such, adolescent girls might consider that some problematic situations were handled unfairly. It is important to mention that this result is not surprising. Indeed, Dionne and St-Martin (2018) report that the feeling of fairness concerning girls' placement environment's rules and punishments was always higher than the feelings of being treated with equity during CJCA development and experimentation years.

7.1. Study limits

This study does present some limits. Implementation of the CJCA started in 2012 in the province of Quebec, at a different rhythm from one out-of-home placement unit to the next (Parent et al., 2017). Since this implementation has occurred at varying speeds and since the CJCA data were collected at two separate moments (2015–2016 and 2017–2018), it is possible that participants were not all participating in the same approach components, which could have affected their answers. Moreover, the data from adolescent girls who participated in CBA was measured in 2008–2009. In the last decade, many changes can have occurred within the institution governing the placement center as

well as within out-of-home placement units. As such, results must be cautiously interpreted since the differences found could have occurred because of the time difference. It is possible that the non-random assignment of participants to one of the groups (CJCA or CBA) influenced the results of this study. However, adolescent girls were not assigned based on their profiles or placement motives and both groups were comparable except for two IIP factors (control variables in all the MLR).

The small number of participants who participated in the CJCA (n = 60) affected the number of variables included in this study. Only sociodemographic variables, placement history, and interpersonal problems were included as control variables. For future research, we suggest adding care worker characteristics like work experience as control variables since these are associated with perceptions of social climate (Leipoldt et al., 2019). The hypothesis regarding these characteristics' impacts on relationships between adolescents and care workers, beyond the intervention approach, could be verified. Also, the use of different IIP versions for both groups (IIP-32 for the CJCA group, IIP-64 for the CBA group) limits the interpersonal problems measure. A nonparametric comparison analysis was used to reduce the impacts of the unequal distribution of participants among both groups, although this technique is considered less statistically powerful than its parametric equivalent (Nachar, 2008). Furthermore, the exploratory factor analysis conducted on the IIP scales involved complex variables and a poorly defined factor (domineering/controlling scale). Although the study remains exploratory, this analysis is considered risky (Tabachnick & Fidell. 2013).

8. Conclusion

Placement environments and social climates which are in touch with adolescents' needs promote responsiveness to intervention (Kerig & Schindler, 2013). As such, many argue that integrating empirically backed gender-responsive components to intervention programs would be the most efficient manner of reducing risky behaviors and delinquency among adolescent girls, as well as ensuring better responses to these adolescent girls' specific intervention needs (Hubbard & Matthews, 2008; Kerig & Schindler, 2013; Lanctôt, 2017). Compared to the apparently gender-neutral CBA (Le Blanc, Dionne, Proulx, Grégoire, & Trudeau-Le Blanc, 1998), the CJCA (Dionne & St-Martin, 2018) is a clinical approach based on cognitive development and includes genderresponsive components to offer a democratic environment which better meets needs expressed by adolescent girls placed in out-of-home centers. Study results suggest that CJCA components are associated to some aspects of a more positive social climate among adolescent girls (fairness of rules and of punishments and of having a voice), while CBA stirs a higher feeling of equity. This study thus supports the inclusion of gender-responsive components to efficient practice principles, as a promising avenue for developing intervention programs serving welfare/justice-involved adolescent girls placed in out-of-home centers. However, this study remains exploratory and other studies are necessary to advance more robust conclusions. Evaluating the CJCA's efficiency in reducing risky and delinquent behavior among adolescent girls does remain necessary.

9. Compliance with ethical standards

The authors declare that they have no conflict of interest. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

References

Alden, L. E., Wiggins, J. S., & Pincus, A. L. (1990). Construction of circumplex scales for

the inventory of interpersonal problems. *Journal of Personality Assessment, 55*(4), 521–536.

- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1997). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *The Philosophy and Practice of Corrections*, 4(3), 9.
- Barkham, M., Hardy, G. E., & Startup, M. (1996). The IIP-32: A short version of the Inventory of interpersonal problems. *British Journal of Clinical Psychology*, 35(1), 21–35.
- Bloom, B., & Covington, S. (2001). Effective gender-responsive interventions in juvenile justice: Addressing the lives of delinquent girls. In Annual meeting of the American Society of Criminology. Atlanta, GA.
- Bloom, B., Owen, B., Deschenes, E. P., & Rosenbaum, J. (2002). Moving toward justice for female juvenile offenders in the new millennium: Modeling gender-specific policies and programs. *Journal of Contemporary Criminal Justice*, 18(1), 37–56.
- Butler, A., Chapman, J., Forman, E., & Beck, A. (2006). The empirical status of cognitivebehavioral therapy: A review of meta-analyses. *Clinical Psychology Review*, 26(1), 17–31. https://doi.org/10.1016/j.cpr.2005.07.003.
- Cauffman, E., Farruggia, S. P., & Goldweber, A. (2008). Bad boys or poor parents: Relations to female juvenile delinquency. *Journal of Research on Adolescence*, 18(4), 699–712.
- Chesney-Lind, M., Morash, M., & Stevens, T. (2008). Girls' troubles, girls' delinquency, and gender responsive programming: A review. Australian & New Zealand Journal of Criminology, 41(1), 162–189.
- Chesney-Lind, M., & Shelden, R. G. (2014). Girls, delinquency, and juvenile justice (4th ed.). Chichester, England: John Wiley & Sons.
- Cotton, S. M., Rice, S., Moeller-Saxone, K., Magnus, A., Harvey, C., Mihalopoulos, C., ... Herrman, H. (2019). Sex differences in psychological distress, behavioural and emotional problems, and substance use in young people in out-of-home care. *Child & Family Social Work*.
- Dionne, J. (1996). L'intervention cognitive-développementale auprès des adolescents délinquants. Criminologie, 29(1), 45–70.
- Dionne, J., & St-Martin, N. (2018). Caring and just community approach: une façon différente d'intervenir avec les adolescents en difficulté d'adaptation. Montréal, Québec: Éditions du CIUSSS du Centre-Sud-de-l'Île-de-Montréal.
- Elvins, R., & Green, J. (2008). The conceptualization and measurement of therapeutic alliance: An empirical review. *Clinical Psychology Review*, 28(7), 1167–1187.
- Gaarder, E., Rodriguez, N., & Zatz, M. S. (2004). Criers, liars, and manipulators: Probation officers' views of girls. Justice Quarterly, 21(3), 547–578. https://doi.org/10.1080/ 07418820400095901.
- Garcia, C. A., & Lane, J. (2013). What a girl wants, what a girl needs: Findings from a gender-specific focus group study. *Crime & Delinquency*, 59(4), 536–561. https://doi. org/10.1177/0011128709331790.
- Granski, M., Javdani, S., Anderson, V. R., & Caires, R. (2019). A Meta-Analysis of Program Characteristics for Youth with Disruptive Behavior Problems: The Moderating Role of Program Format and Youth Gender. American Journal of Community Psychology.
- Hébert, S. T., Lanctôt, N., & Turcotte, M. (2016). "I didn't want to be moved there": Young women remembering their perceived sense of Agency in the Context of placement instability. *Children and Youth Services Review*, 70, 229–237. https://doi.org/10. 1016/j.childyouth.2016.09.029.
- Hipwell, A. E., & Loeber, R. (2006). Do we know which interventions are effective for disruptive and delinquent girls? *Clinical Child and Family Psychology Review*, 9(3 4), 221–255. https://doi.org/10.1007/s10567-006-0012-2.
- Hofmann, S. G., Asnaani, A., Vonk, I. J. J., Sawyer, A. T., & Fang, A. (2012). The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognitive Therapy and Research*, 36(5), 427–440. https://doi.org/10.1007/s10608-012-9476-1.
- Horowitz, L. M., Alden, L. E., Wiggins, J. S., & Pincus, A. L. (2000). Inventory of interpersonal problems (IIP-32/IIP-64). London: Psychological Corporation.
- Hubbard, D. J., & Matthews, B. (2008). Reconciling the differences between the "genderresponsive" and the "what works" literatures to improve services for girls. *Crime & Delinquency*, 54(2), 225–258. https://doi.org/10.1177/0011128706296733.
- Hughes, J., & Barkham, M. (2005). Scoping the Inventory of interpersonal problems, its derivatives and short forms: 1988–2004. *Clinical Psychology & Psychotherapy*, 12(6), 475–496. https://doi.org/10.1002/cpp.466.
- Janosz, M., & Bouthillier, C. (2007). Rapport de validation du Questionnaire sur l'Environnement Socioéducatif des écoles secondaires. Groupe de recherche sur les environnements scolaires (GRES). Montréal, Québec: Université de Montréal.
- Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 39(1), 31–36. https:// doi.org/10.1007/BF02291575.
- Kerig, P. K. (2018). Polyvictimization and girls' involvement in the juvenile justice

system: Investigating gender-differentiated patterns of risk, recidivism, and resilience. Journal of Interpersonal Violence, 33(5), 789-809.

- Kerig, P., & Schindler, S. (2013). Engendering the evidence base: A critical review of the conceptual and empirical foundations of gender-responsive interventions for girls' delinquency. *Laws*, 2(3), 244–282. https://doi.org/10.3390/laws2030244.
- Kohlberg, L. (1984). Essays on Moral Development. Volume Two: The Psychology of Moral Development. The Nature and Validity of Moral Stages. San Francisco: Harper et Row, Publishers.
- Lanctôt, N. (2010). Les effets d'un programme cognitif-comportemental appliqué à des adolescentes hébergées en centre jeunesse. Criminologie, 43(2), 303. https://doi.org/ 10.7202/1001779ar.
- Lanctôt, N. (2017). Gender-responsive programs and services for girls in residential centers: Meeting different profiles of rehabilitation needs. *Criminal Justice and Behavior* 0093854817733495.
- Lanctôt, N., Lemieux, A., & Mathys, C. (2016). The value of a safe, connected social climate for adolescent girls in residential care. *Residential Treatment for Children & Youth*, 33(3–4), 247–269. https://doi.org/10.1080/0886571X.2016.1207218.
- Landenberger, N. A., & Lipsey, M. W. (2005). The positive effects of cognitive-behavioral programs for offenders: A meta-analysis of factors associated with effective treatment. *Journal of Experimental Criminology*, 1(4), 451–476.
- Laurier, C., Hélie, S., Pineau-Villeneuve, C., & Royer, M. N. (2016). From maltreatment to delinquency: Service trajectories after a first intervention of child protection services. *Journal of Public Child Welfare*, 10(4), 391–413. https://doi.org/10.1080/15548732. 2016.1209147.
- Le Blanc, M., Dionne, J., Proulx, J., Grégoire, J. C., & Trudeau-Le Blanc, P. (1998). Intervenir autrement: Un modèle différentiel pour les adolescents en difficulté. Montréal, Québec: Les Presses de l'Université de Montréal.
- Leipoldt, J. D., Harder, A. T., Kayed, N. S., Grietens, H., & Rimehaug, T. (2019). Determinants and outcomes of social climate in therapeutic residential youth care: A systematic review. *Children and Youth Services Review*, 99, 429–440. https://doi.org/ 10.1016/j.childyouth.2019.02.010.
- Leve, L. D., Chamberlain, P., & Kim, H. K. (2015). Risks, outcomes, and evidence-based interventions for girls in the US juvenile justice system. *Clinical Child and Family Psychology Review*, 18(3), 252–279. https://doi.org/10.1007/s10567-015-0186-6.
- Mathys, C., Lanctôt, N., & Touchette, L. (2013). Validation d'une mesure de climat de groupe chez des adolescentes en centre de réadaptation : le vécu éducatif partagé au travers de trois dimensions essentielles. Revue Européenne de Psychologie Appliquée/European Review of Applied Psychology, 63(2), 109 119. https://doi.org/ 10.1016/j.eran.2012.11.001.
- Nachar, N. (2008). The Mann-Whitney U: A test for assessing whether two independent samples come from the same distribution. *Tutorials in Quantitative Methods for Psychology*, 4(1), 13–20 https://doi.org/10.20982/tqmp.04.1.p013.
- Parent, G., Chenard, G., & Lanctôt, N. (2017). L'Approche de Communauté, d'Entraide et de Justice : une étude d'implantation (unpublished manuscript). Montréal, Québec.
- Ravoira, L., Graziano, J., & Patino Lydia, V. (2012). Urgent work: Developing a genderresponsive approach for girls in the juvenile justice system. Universitas Psychologica, 11. 1167–1181.
- Schaffner, L. (2006). Girls in trouble with the law. New Brunswick, NJ: Rutgers University Press.
- Tabachnick, B., G. et Fidell, L. S. (2013). Using multivariate statistics (6th ed.). Boston, MA: Pearson Education.
- Tolin, D. F. (2010). Is cognitive-behavioral therapy more effective than other therapies? A meta-analytic review. *Clinical Psychology Review*, 30(6), 710–720. https://doi.org/ 10.1016/j.cpr.2010.05.003.
- Trocmé, N., Hélie, S., MacLaurin, B., Fallon, B., Shlonsky, A., Mulcahy, M., & Esposito, T. (2009). Matrice d'indicateurs de protection de la jeunesse. Bulletin d'information, Montréal : Centre de recherché sur l'enfance et la famille de l'Université McGill, Montréal, Québec : Université McGill et Centre de recherche sur l'enfance et la famille.
- van Vugt, E., Lanctôt, N., Paquette, G., Collin-Vézina, D., & Lemieux, A. (2014). Girls in residential care: From child maltreatment to trauma-related symptoms in emerging adulthood. *Child Abuse & Neglect*, 38(1), 114–122. https://doi.org/10.1016/j.chiabu. 2013.10.015.
- Zahn-Waxler, C., & Polanichka, N. (2004). All things interpersonal: Socialization and female aggression. In M. Putallaz & K. L. Bierman (Eds.), Duke series in child development and public policy. Aggression, antisocial behavior, and violence among girls: A developmental perspective (pp. 48–68). New York, NY, US: Guilford Publications.