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Results from the Virginia Multidisciplinary Team Knowledge and Functioning Survey: The importance of differentiating by groups affiliated with a child advocacy center

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ABSTRACT

Child Advocacy Centers (CACs) are a child-centered, multidisciplinary response to child abuse. Two important components of a CAC model include the multidisciplinary team (MDT) and case review. The purpose of this study was to assess MDT members' perceptions of the MDT and case review and to test whether there were differences by profession, status, or CAC designation. MDT members (N = 217) affiliated with a CAC in Virginia completed an online survey containing 35 items. CAC staff was more likely to identify problems associated with case review than other professional groups. Investigators perceived case review meetings as lasting too long, whereas service providers did not. Supervisors and frontline workers disagreed on the core function of a CAC, as did CAC staff and investigators/service providers. Accredited and associate CACs identified problems associated with case review, while developing CACs identified staffing issues as problematic. Research identifying the elements of "effective" MDTs and case review is needed to provide guidance to CAC directors who are most frequently in the role of managing, nurturing, and arranging training for the MDT and coordinating case review meetings. In addition, greater training for MDT members in the importance of case review and collective team identification is warranted.

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1. Introduction

Child Advocacy Centers (CACs) are a child-centered, multidisciplinary response to child abuse, most frequently responding to cases involving child sexual abuse (Jackson, 2004; Simone, Cross, Jones, & Walsh, 2005). The underlying philosophy is that child abuse is a multidimensional problem that requires a multidisciplinary response. CACs have as their core function a two-pronged goal of improving the criminal justice response for child victims and to ensure that child victims receive the services they need (Connell, 2009). The CAC concept has evolved from a fledgling idea into a model with 10 core components (Wolf, 2000) and standards for membership in the National Children's Alliance (http://www.nationalchildrensalliance.org). The 10 core components include: a multidisciplinary team, cultural competency and diversity, child forensic interview, victim support and advocacy, medical evaluation, mental health services, case review, case tracking, organizational capacity, and child focused setting. Currently there are over 745 CACs in the United States and may be either developing (initial development of a CAC), associate (actively working towards meeting all 10 standards), or accredited (have met all 10 standards for membership as determined by the National Children's Alliance). Variations in implementation are expected as each center responds to the unique needs of the community in which it is developed (Jackson, 2004). Regardless of these variations, ideally, the CAC serves as the central point for all professionals involved in a case and serves as the middle ground between the therapeutic and judicial model of child protection (Snell, 2003).

One aspect of the CAC model that has received some empirical attention is the multidisciplinary team (MDT) (Bell, 2001; Cross, Jones, Walsh, Simone, & Kolko, 2007; Feng, Fetzer, Chen, Yeh, & Huang, 2010; Hochstadt & Harwicke, 1985; Jenkins, Fallowfield, & Poole, 2001; Kolbo & Strong, 1997; Lalayants & Epstein, 2005; Skaff, 1988). MDTs are comprised of individuals representing a range of professional disciplines that might be involved in a case of child abuse, from investigators (law enforcement, child protective services, prosecutors) to service providers (mental health professionals, health care providers, victim advocates) and includes CAC staff (Jackson, 2004). The underlying premise of the MDT is that collaboration among individuals with diverse expertise will result in better decision making and ultimately better outcomes for victims (Van der Vegt & Bunderson, 2005). MDTs require committed members who know their position, know their responsibility, and know and trust their teammates (Feng et al., 2010). The practice of MDTs is typically guided by the adoption of protocols (Jent et al., 2009), although the content of the protocols may vary by community.

As noted above, another component of a CAC is case review. Case review most typically involves the MDT convening to discuss the family's well-being, to share information efficiently, to determine what additional information is needed, and to assign specific tasks

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to the appropriate individuals. However, there are a few CACs that exclusively review completed cases in an effort to improve their services (Jackson, 2004). MDTs vary in the frequency with which they meet for case review, from between once a week to every other month (Jackson, 2004). Although some team members obtain information about a case from observing the child interview, case review is another means of obtaining information about a case (Jackson, 2004). Case review procedures allow team members to draw on the knowledge and experience of the other professionals attending the case review meeting for the benefit of the child and family. In addition to these practical benefits, case review is believed to facilitate collaboration among the MDT members (Kistin, Tien, Bachner, Parker, & Leventhal, 2010; Newman, Dannenfelser, & Pendleton, 2005).

However, the process of collaboration can result in frustration and conflict among MDT members (Frost, Robinson, & Anning, 2003; Lalayants & Epstein, 2005), with the cost of case review, such as time spent and number of professionals involved, considered by some to be too high (Lee, Li, & So, 2005). For example, Bell (2001) found the larger the group, the lower the levels of participation among some members of the group, and that larger groups tended to be dominated by a single individual. Van der Vegt and Bunderson (2005) assert that moderate-size groups facilitate performance and communication.

Research has identified a range of additional barriers to collaboration during a case review meeting. These may include differences among MDT members in world views, confidentiality and information sharing practices, agency agendas and philosophy, and status (Bell, 2001; Frost et al., 2003). Although philosophically all MDT members are equal, in practice, MDTs have a considerable amount of inequity in the level of participation at case review meetings (Bell, 2001, p. 71), with the amount of communication being related to status. Service providers and frontline workers had the lowest rates of communication, while the MDT coordinator, supervisors and prosecutors had the highest rates of communication. Some MDT members may be less communicative if they are unsure of their value to the group. For example, victim witness had the lowest participation rate, had less direct contact with the case, and had considerably lower status than prosecutors.

Research has begun to identify possible components that may benefit case review meetings. Successful case review meetings may depend, in part, upon the knowledge, experience, and respect among the MDT members, participation of the MDT members, rules that are explicitly documented in interagency agreements and protocols, holding meetings in a neutral location such as a CAC, having an agenda, and having specific plans for follow-up (Baglow, 1990; Bell, 2001; Lee et al., 2005; Wenger, 1998).

In the context of CACs, the CAC director (or the MDT coordinator employed by the CAC) is typically responsible for coordinating, nurturing, and training the MDT (Brandon, Dodsworth, & Rumball, 2005; Hyland & Holmes, 2009; Kolbo & Strong, 1997; Newman et al., 2005) as well as managing case review meetings. The CAC director has a complex task in managing expertise diversity and unifying individual professionals into a cohesive whole (Sheppard & Zangrillo, 1996). Hallet and Stevenson (1980) noted that MDT members typically do not start out as a team, but over time these disparate members become a "team." The role of the CAC director is critical in facilitating group development and instilling within the MDT a collective team identification ("the emotional significance that team members of a given group attach to their membership in that group"; Van der Vegt & Bunderson, 2005, p. 533). CAC directors require training in understanding group dynamics, how to resolve conflict, how to encourage equal participation from all MDT members, and understanding the key role they play in piecing information together, identifying gaps, and coordinating expert knowledge (Bell, 2001; Brandon et al., 2005). In addition, CAC directors must identify and respond to the training needs of MDT members. For example, some MDT members need foundational training while others need more in-depth training (Newman et al., 2005).

All 50 states have initiatives that encourage (or require) a multidisciplinary approach to child maltreatment (Kolbo & Strong, 1997). There is accumulating evidence that CACs result in some beneficial outcomes (Cross et al., 2007; Faller & Palusci, 2007; Joa & Godlberg Edelson, 2004; Jones, Cross, Walsh, & Simone, 2007; Miller & Rubin, 2009; Smith, Witte, & Fricker-Elhai, 2006; Walsh, Lippert, Cross, Maurice, & Davison, 2008; Wolfteich & Loggins, 2007). And yet evaluation of MDTs, and CACs specifically, remains scant (Connell, 2009; Lalayants & Epstein, 2005; Newman et al., 2005). Furthermore, the specific role of the CAC director is blatantly lacking in the literature. The purpose of this study was to assess aspects of the MDT (knowledge and philosophy, perceptions of case review meetings) affiliated with a CAC, including the core function of a CAC, across three groups: profession (investigators, service providers, CAC staff), supervisor vs. frontline worker status, and CAC designation (developing, associate, or accredited).

2. Method

2.1. Sample

Completed surveys from 217 MDT members, including CAC staff, were received from across the 16 CACs in Virginia. Participants had been an MDT member for an average of 3.88 years (range: less than one year to 21 years). Thirteen disciplines were represented among the participants: child protective services (38.9%), law enforcement (18.1%), mental health professionals (10.2%), prosecutors (8.3%), victim witness (7.9%), CAC staff (including directors) (6.5%), health care providers (5.1%), and other (domestic violence (n = 2), CASA (n = 3), sexual assault (n = 1), schools (n = 1), education (n = 1), research n = 1)) (5.0%). These disciplines were collapsed into three categories: investigators (law enforcement, child protective services, prosecution) (65.3%), CAC staff (6.5%), and service providers (all others) (28.2%). The majority of respondents were frontline workers (62.7%) compared to supervisors. CAC staff were more likely to be in a supervisory role (χ^2 (2) = 7.94, $p < .05$). MDT members were affiliated either with a developing CAC (11.8%), associate CAC (44.8%), or accredited CAC (43.4%). Supervisors were more likely to be affiliated with a developing CAC (χ^2 (2) = 8.67, $p < .05$). Sample statistics are presented in Table 1.

2.2. Survey instrument

Initial items for inclusion in the survey were identified through existing MDT surveys and brainstorming sessions. This process was followed by written drafts of the survey instrument that were distributed to the Research and Evaluation Subcommittee of the Virginia Chapter of Child Advocacy Centers for review and comment. After several drafts, a survey instrument was agreed upon. The instrument initially requested demographic information such as CAC affiliation, profession, and frontline worker or supervisor status. The following two sections contained Likert scale statements that addressed (Section 1) the MDT's perceptions of how well case review was functioning, and (Section 2) the MDT's knowledge of the multidisciplinary team philosophy and procedures. The following section then asked about the attendance at, length of, and frequency of case review meetings, followed by a question about the manner in which MDT members obtain information about a case. Finally, the survey contained three open-ended optional questions asking participants what is working well with their CAC/MDT, what is in need of improvement, and what is the core function of a CAC.

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Table 1
Sample descriptive statistics (N = 217).

Category	CAC	Response rate by CAC	
		% of total sample	Response rate (%) (# of participants/# of email addresses received from the CAC)
Child advocacy center (CAC)	Center for Alexandria's Children	5.7	38.7% (12/31)
	Arlington County Child Advocacy Center	7.1	41.7 (15/36)
	Southwest Virginia Children's Advocacy Center	3.8	27.6 (8/29)
	Children's Advocacy Center of Bristol/Washington County	5.7	36.4 (12/33)
	Foothills Child Advocacy Center	7.5	53.3 (16/30)
	Childhelp Children's Center of Virginia	1.9	28.6 (4/14)
	The Collins Center	6.1	65.0 (13/20)
	Loudoun Child Advocacy Center	10.4	56.4 (22/39)
	Child Abuse Program Children's Hospital of The King's Daughters	9.9	43.8 (21/48)
	Children's Advocacy Center of the New River Valley	2.4	55.6 (5/9)
	Child Advocacy Center Greater Richmond SCAN	11.8	21.2 (25/118)
	Children's Trust Roanoke Valley	9.4	37.0 (20/54)
	Southern Virginia Child Advocacy Center	3.3	33.3 (7/21)
	Safe Harbor Child Advocacy Center	6.6	45.2 (14/31)
	Valley Children's Center	5.7	27.3 (12/44)
	ChildSafe Center	2.8	46.2 (6/13)
Overall response rate		100%	40.6% (217/535)
How long have you been a member of this multidisciplinary team?		$M = 3.88$ years, range 0–21 years	
Profession	Investigators (65.3%)	Law enforcement	18.1%
		Child protective services	38.9
		Prosecution	8.3
	CAC staff (6.5%)	CAC staff	6.5
	Service providers (28.2%)	Victim witness	7.9
		Medical	5.1
		Mental health	10.2
		Other	5.0
Frontline/ supervisor status	Frontline worker	62.7%	
	Supervisor	37.3	
CAC Designation	Developing	11.8%	
	Associate	44.8	
	Accredited	43.4	

2.3. Procedure

The survey was submitted to the University's Institutional Review Board for review and approval. Once approval had been granted, email addresses of all the MDT members were requested from CAC directors (including CACs that had multiple MDTs). Email addresses and the survey itself were loaded into Survey Monkey. The week prior to release of the electronic survey, CAC directors were asked to notify their MDT members that they would be receiving an email from the Virginia Chapter of Child Advocacy Centers, the purpose of which was to collect data on CACs in Virginia for use in funding justification and program improvement. CAC directors notified MDT members that the survey was forthcoming and encouraged their participation. The official invitation to participate in the survey from Survey Monkey was disseminated the following Monday. It was made clear in the cover letter to MDT members that the survey was anonymous and that no name or email address tracking device would be utilized. MDT members were given two weeks to complete the survey, with a reminder email being sent 10 days prior to the close of the survey. This strategy resulted in 217 completed surveys, or a response rate of 40.6% (560 emails were submitted, 8 members opted out of the survey, and 17 emails were returned, yielding a base of 535 potential participants). Although each CAC participated, response rates from the individual CACs ranged from a low of 21.2% to a high of 65.0% (see Table 1). At the close of the survey session, the data were extracted from Survey Monkey and converted to an SPSS file for analysis.

2.4. Data reduction, coding, and analyses

2.4.1. Data reduction using principal components factor analysis

Statements contained on the *Virginia Multidisciplinary Team Knowledge and Functioning Survey* utilized a Likert scale with the following response options: 1 strongly agree, 2 agree, 3 disagree, 4 strongly disagree, 5 not applicable. Response option 5 (not applicable) was counted as missing data and not included in the analyses. Principal components factor analysis with varimax rotation, using .58 as the cutoff, was performed on 24 statements contained in Sections 1 and 2 of the survey, yielding a four factor solution based on eigenvalues greater than one (five items failed to load on any factor and were dropped from further analyses). Factor 1 was measuring the MDT member's knowledge of the multidisciplinary team philosophy and procedures and was labeled *Knowledge of the MDT's philosophy and procedures* (Knowledge) (9 items). Factor 2 was measuring how well attended and participatory were case review meetings and was labeled *Well-attended and participatory case review* (Casereview) (5 items). Factor 3 was measuring the helpfulness of case review to MDT members and was labeled *Helpfulness of case review to MDT members* (Helpfulness) (2 items). Factor 4 was measuring lack of decision making and assessment at case review meetings and was labeled *Lack of decision making and assessment at case review* (Assessment) (3 items). Table 2 presents the items and factor loadings for each of the four factors.

Based on the factor loadings, four variables were created by summing the items that loaded on each factor, again using 0.58 as the cutoff. The factor labels were used for the variable names. For each of the four variables created, Table 3 presents the number of items, descriptive statistics, and Chronbach's alphas.

2.4.2. Coding

The three open-ended questions were coded post-hoc by the author using a content analysis approach in which all the responses to the questions were read and categories created to capture the intent of the comment. This process resulted in 13 categories that captured what is working well (later collapsed into three categories), 24 categories that captured what needs improving (later collapsed into three categories), and 5 categories that captured the core function of a CAC.

2.4.3. Analyses

Descriptive, chi-square, and ANOVA statistics were used to analyze the data.

3. Results

3.1. Results for entire sample and by comparison groups

Results of the 11 variables are presented for the entire sample, followed by specific comparisons of each variable by: 1) profession (investigators, CAC staff, service providers; two variables were

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Table 2
Factor loadings from the Virginia Multidisciplinary Team Knowledge and Functioning Survey.

	Factor loading
Factor I items: knowledge of the MDT's philosophy and procedures (Knowledge)	
MDT members are knowledgeable about the CAC's mission and philosophy.	.693
MDT members have read and are familiar with all the protocols of the CAC.	.744
I received training in understanding the MDT protocols, mission and philosophy.	.583
MDT members can identify a course of action when needed.	.686
The MDT members try to get all the information they can before making a decision about something.	.720
The MDT members share information about a child so that information from all disciplines can be heard to ensure that children and families receive all the services they need.	.670
MDT members are aware of cultural differences and needs.	.723
The MDT process consistently achieves its intended goals.	.709
There is follow up at case review to ensure all members have completed what they agreed to do at the last meeting.	.637
Factor 2 items: well-attended and participatory case review (Casereview)	
MDT members regularly attend case review.	.709
MDT members actively participate in case review.	.770
MDT members share information freely during case review.	.791
MDT members are comfortable asking questions of the other MDT members during case review.	.690
MDT members are given an opportunity to voice their opinions during case review.	.696
Factor 3 items: helpfulness of case review to MDT members (Helpfulness)	
Attending case review is important for the success of my job or my agency.	.836
Information exchanged during case review meetings helps me do my job.	.778
Factor 4 items: lack of decision making and assessment at case review (Assessment)	
At the end of a case review meeting, the MDT does not assess whether the MDT achieved its intended goals for that meeting.	.819
The MDT makes few decisions by consensus and instead lets i ndividuals make decisions.	.829
The MDT often fails to make decisions because it does not have the necessary information or people have not done their homework.	.812

assessed for differences between law enforcement and child protective services (CPS)), 2) supervisor/frontline worker status, and 3) CAC designation (developing, associate, accredited). Only significant results are presented below.

3.1.1. Knowledge of the MDT's philosophy and procedures (Knowledge)

The mean response for *Knowledge* was 15.02 (range 9–32), indicating relative agreement with these items (see Table 3). When *Knowledge* was compared by law enforcement (N = 39) and CPS (N = 84), law enforcement (M = 13.13) more frequently agreed with *Knowledge* statements than did CPS (M = 15.85) ($F(1) = 7.81$, $p < .01$).

Table 3
Number of items, mean, range and Chronbach's alpha coefficients for the four created variables based on the principal components factor analysis.

Variable name	# items	Mean	Range	Alpha
Knowledge of the MDT's philosophy and procedures (Knowledge)	9	15.02	9–32	.92
Well-attended and participatory case review (Casereview)	5	7.94	5–16	.90
Helpfulness of case review to MDT members (Helpfulness)	2	3.30	2–8	.82
Lack of decision making and assessment at case review (Assessment)	3	7.96	3–12	.80

3.1.2. Well-attended and participatory case review (Casereview)

The mean response for *Casereview* was 7.94 (range 5–16), indicating relative agreement with these items (see Table 3). A trend was noted when *Casereview* was compared by profession, with CAC staff (M = 9.54) less frequently agreeing with *Casereview* statements compared to MDT members in the other two professions (investigators M = 7.75, service providers M = 8.00) ($F(2) = 2.93$, $p = .056$). Tukey's post-hoc analysis revealed that the real difference was between CAC staff and investigators.

When *Casereview* was compared by law enforcement (N = 39) and CPS (N = 84), law enforcement (M = 6.89) more frequently agreed with *Casereview* statements than did CPS (M = 8.15) ($F(1) = 6.85$, $p < .01$).

When *Casereview* was compared by CAC designation, MDT members affiliated with associate CACs (M = 8.48) less frequently agreed with *Casereview* statements than MDT members in the other two CAC designation categories (accredited CACs M = 7.61, developing CACs M = 7.42) ($F(2) = 3.14$ $p < .05$). Tukey's post-hoc analysis revealed the real difference was between accredited and associate CACs.

3.1.3. Helpfulness of case review (Helpfulness)

The mean response for *Helpfulness* was 3.30 (range 2–8), indicating a high level of agreement with these items (see Table 3). No significant associations with comparison groups emerged.

3.1.4. Lack of decision making and assessment at case review (Assessment)

The mean response for *Assessment* was 7.96 (range 3–12), indicating relatively lower levels of agreement with these items (see Table 3). When *Assessment* was compared by supervisor and frontline worker status, frontline workers more frequently agreed with *Assessment* statements (M = 7.63) than did supervisors (M = 8.53) ($F(1) = 6.78$, $p < .01$).

When *Assessment* was compared by CAC designation, a trend indicated that MDT members affiliated with an associate CAC (M = 7.55) more frequently agreed with *Assessment* statements than members in the other two CAC designation categories (accredited CACs M = 8.13, developing CACs M = 8.80) ($F(2) = 2.96$ $p = .055$). Tukey's post-hoc analysis revealed the real difference was between associate and developing CACs.

3.1.5. Actual attendance at case review

Regarding actual case review attendance, 37.2% of participants attend 100% of the time, and 35.7% attend 75% of the time (see Table 4).

Table 4
Percentage of agreement with statements regarding attending, frequency, and length of case review meetings, and how information about a case is obtained (N = 217).

		% agree
I attend ____ (choose one) of case review meetings held in my jurisdiction.	25%	14.3
	50%	12.8
	75%	35.7
	100%	37.2
The length of the MDT meetings is (choose one):	Too long	10.2
	Just about right	88.3
	Too short	1.5
The MDT meets (choose one):	Too frequently	3.6
	Just about right	91.3
	Not frequently enough	5.1
I most often obtain the information I need from a child interview by (choose one):	Observing the child interview at the CAC	47.7
	Reviewing the DVD of the child interview	7.2
	Consultation	8.2
	Attending case review meetings	26.2
	Doing the forensic interview	6.2
	Combination of the above	4.0
	Other (i.e., reading an extended forensic interview)	0.5

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When attending case review was compared by profession, a trend indicated that CAC staff were more likely to attend case review 100% of the time (χ^2 (6) = 12.56, p = .051).

3.1.6. Length of case review

The majority (88.3%) of MDT members reported that the length of MDT case review meetings is "just about right" (see Table 4).

When the length of MDT meetings was compared by profession, investigators were more likely to report case review meetings lasting too long, while service providers were less likely to report this (χ^2 (4) = 20.87, p<.01).

3.1.7. Frequency of case review

The majority (91.3%) of MDT members reported that the frequency with which case review meetings are held is "just about right" (see Table 4).

When the frequency of case review meetings was compared by profession, CAC staff were more likely to report that the MDT does not meet frequently enough (χ^2 (4) = 19.40, p<.01).

3.1.8. Obtaining information about a case

As presented in Table 4, nearly half (47.7%) of MDT members obtain the information they need by observing the child during the forensic interview and another quarter (26.2%) obtain information by attending case review meetings.

When the method of obtaining information was compared by profession, investigators were more likely to obtain information from observing the child forensic interview and from reviewing the DVD of the child interview, and less likely to obtain information from case review. In contrast, service providers were more likely to obtain information from case review and less likely to obtain information from observing the child forensic interview and from reviewing the DVD (χ^2 (12) = 86.57, p<.001).

When the method for obtaining information was compared by status, supervisors were more likely to obtain information about a case from consultation (phone, in person, staff) and to obtain information from some combination of methods, while frontline workers were less likely to obtain information from a combination of methods (χ^2 (6) = 21.75, p<.01).

3.1.9. Aspects of the CAC or MDT that are working well

When MDT members were asked which aspects of their CAC or MDT are working well, 56.7% (123/217) of MDT members responded (see Table 5). Of these, 34.1% reported that aspects of case review were working well, 33.4% reported that aspects of the MDT were working well, and 29.3% reported that aspects of the CAC were working well (3.2% reported "everything"). However, no significant differences emerged across the three comparison groups.

Table 5
Percentage of agreement with coded aspects of the Child Advocacy Center (CAC) or multidisciplinary team (MDT) that are working well (N = 123).

Inquiry	Coded response category	% agree	
		Item	By category
What is working really well at your CAC or among the MDT members?	Case review (CR): communication/discussion/information sharing/active participation/joint decision making	25.2	34.1
	CR: attend case review meeting	4.1	
	CR: location of case review meetings	2.4	
	CR: scheduling meeting	2.4	
	MDT: cooperation/collaboration/teamwork/committed/shared vision or goal	29.3	33.4
	MDT: observe forensic interviews	3.3	
	MDT: training and cultural competency training	0.8	
	CAC: great support staff	9.8	29.3
	CAC: scheduling (e.g., child interviews)	6.5	
	CAC: child-friendly location	0.8	
	CAC: utilization	0.8	
	CAC: aspects of the forensic interview (well-trained)	11.4	
	Everything	3.2	3.2

3.1.10. Aspects of the CAC or MDT that are in need of improvement

When MDT members were asked which aspects of the CAC or MDT are in need of improvement, 51.6% (112/217) of MDT members responded. Over one-third (40.2%) reported that aspects of case review were in need of improvement, 17.8% reported that aspects of the MDT were in need of improvement, and 32.2% reported that aspects of the CAC were in need of improvement (9.7% reported "nothing") (see Table 6).

When what needs improvement was compared by CAC designation, MDT members affiliated with an accredited CAC were more likely to perceive aspects of case review as being in need improvement and less likely to perceive a need to increase staff, whereas MDT members affiliated with a developing CAC were more likely to perceive a need to increase staff and less likely to perceive aspects of case review being in need of improvement (χ^2 (4) = 14.66, p<.01).

3.1.11. The core function of a CAC

Finally, MDT members were asked to articulate the core function of a CAC, and half (53.9%; 117/217) of MDT members responded. Over a third (37.4%) perceived the core function of the CAC as a

Table 6
Percentage of agreement with statements related to aspects of the child advocacy center (CAC) or multidisciplinary team (MDT) in need of improvement (N = 112).

Inquiry	Coded response category	% agree	
		Item	By category
What aspects of your CAC or MDT are in need of improvement?	Case review (CR): procedures need to change (e.g. review more cases; review different cases; clearer goals for CR; review for what could be done better in the future)	8.9	40.2
	CR: better communication needed, communication between meetings	6.3	
	CR: attendance (need all members to attend; other community partners)	14.3	
	CR: length of meetings needs to change	0.8	
	CR: referrals need improving or follow up on referrals	2.7	
	CR: need strong leader needed (should hire only the best to work on these cases	5.4	
	CR: follow up needed	1.8	
	MDT: training (forensic interviewing training; cultural competency)	0.9	17.8
	MDT: greater understanding of roles; buy in	13.3	
	MDT: turnover is a problem	2.7	
	MDT: protocols need changing; nee stronger MDT protocols	0.9	
	CAC: staffing increased	4.5	32.3
	CAC: expanded hours needed; greater availability	0.9	
	CAC: medical component	3.6	
	CAC: forensic interview (interviewer not available when needed; need foreign language speaking FI, scheduling interviews is difficult; need f/t FI)	8.9	
	CAC: prosecution needs improving	2.7	
	CAC: sustainability	1.8	
	CAC: technology/equipment needs	1.8	
	CAC: cultural competency	1.8	
	CAC: location (free standing building)	0.9	
	CAC: case tracking	0.9	
	CAC: expand jurisdiction covered/expanded service to cover non-caretaker cases)	2.7	
	CAC: more referrals to CAC	1.8	
	None/nothing	9.7	9.7

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Table 7
Percentage of agreement with coded core function of a child advocacy center (CAC) (N = 117).

Inquiry	Coded response category	% agree
Core function of a CAC	Two-pronged response: criminal justice/forensic interview/MDT coordination and victim services/advocacy	37.4
	Forensic interview (fewer interviews/one time; MDT observes interview; sometimes includes reducing trauma to children because there is only one interview)	16.9
	Coordinate, nurture, and train MDT	14.4
	Referral or provision of services for victims	12.7
	Other (child friendly facility, improve criminal justice system response, reduce the number of children abused; prevention; child safety/protect children/help children/ best interests of children; reduce trauma to children)	18.6

two-pronged response to child victims in which both the criminal justice system needs are met and the needs of child victims are met through service referral or provision. MDT members also identified aspects of the forensic interview (16.9%), coordinating, nurturing and training the MDT (14.4%), referral or provision of services to children (12.7%), and other (18.6%) (see Table 7).

When the core function of a CAC was compared by profession, CAC staff were more likely to perceive the core function of a CAC to be coordinating, nurturing, and training the MDT (χ^2 (8) = 29.21, $p<.001$).

When the core function of a CAC was compared by status, frontline workers were less likely to perceive coordinating, nurturing, and training the MDT as the core function of a CAC, while more likely to perceive service referral or provision as the core function of a CAC. In contrast, supervisors were more likely to perceive coordinating, nurturing, and training the MDT as the core function of a CAC, while less likely to perceive service referral or provision as the core function of a CAC (χ^2 (4) = 10.15, $p<.05$).

4. Discussion and implications

A summary of the overall results would mask the important findings that were revealed when the variables included in this study were examined by profession, supervisor vs. frontline worker status, and CAC designation. It is only at a deeper level of analysis that important differences were identified.

Differences were observed among the three professional groups, with several findings related to CAC staff. CAC staff (typically directors) reported attending 100% of case review meetings, most likely because they typically manage such meetings. However, they also reported that the MDT does not meet frequently enough, and a trend indicated that they perceived case review as less well attended and participatory than other professions, especially investigators. CAC staff may perceive problems with case review in part because they are responsible for adhering to the standards of practice promulgated by the National Children's Alliance, standards with which the MDT members may be less familiar. In comparing the actions of the MDT at case review with the national standards, CAC staff may feel that the MDT falls short of meeting those standards. At a more foundational level, CAC staff perceived more than any other group that the core function of a CAC is to coordinate, nurture, and train the MDT (Brandon et al., 2005; Hyland & Holmes, 2009; Kolbo & Strong, 1997; Newman et al., 2005). This may accurately reflect the roles of each group, but this discrepancy in perception has the potential to result in conflict and/or interfere with team cohesion. As manager of the MDT, it is the responsibility of CAC staff to develop collective team identification (Sheppard & Zangrillo, 1996; Van der Vegt & Bunderson, 2005). These findings suggest that greater training for CAC directors in managing MDTs and case review meetings is warranted (Bell, 2001; Brandon et al., 2005; Newman et al., 2005).

Differences between investigators (law enforcement, CPS, prosecution) and service providers (e.g., victim witness, health care providers, mental health professionals) also emerged. Investigators reported that case review meetings last too long and that they are more likely to obtain information about a case through observing the child interview. In contrast, service providers reported that case review meetings did not last too long and that they are more likely to obtain information about a case through case review meetings. It may be that because investigators do not use case review to obtain information, and there are times during the meeting when they are not discussing one of their own cases, that they perceive case review as redundant and too lengthy (Lee et al., 2005). In contrast, because service providers typically do not observe the child interview, the case review meeting is the method by which service providers obtain information about a case and therefore may not perceive case review meetings as lasting too long. Explicitly acknowledging these different needs among the MDT members may facilitate greater understanding among the MDT members.

Important differences emerged between law enforcement officers and CPS workers. Law enforcement officers were more likely than CPS workers to perceive the MDT as possessing greater knowledge of philosophy and procedures, and also to perceive that case review is more highly attended and participatory. These differences may be related to status (Bell, 2001). Alternatively, these findings may reflect a general approach taken by social workers to reflect on the process as well as the outcomes, resulting in social workers' lower perceptions related to the MDT and case review.

Supervisors and frontline workers differed in their perceptions across a range of variables. Frontline workers perceived a greater lack of decision making and assessment of case review meetings than supervisors, which may reflect frontline workers' feelings that they have less status in decision making (Bell, 2001). Facilitating a collective team identification (Van der Vegt & Bunderson, 2005), holding meetings in a neutral location (Bell, 2001), and restricting meetings to moderate-size groups (Van der Vegt & Bunderson, 2005) are several ways to level the status among MDT members. Frontline workers also perceived service provision as the core function of a CAC whereas supervisors perceived the coordinating, nurturing, and training of the MDT as the core function of a CAC. The fact that supervisors and frontline workers perceive different core functions of a CAC may fuel disagreements between these two groups and how to allocate precious resources. Finally, supervisors were more likely to obtain information from consultation or a combination of methods, whereas frontline workers were less likely to obtain information from a combination of methods, which likely reflects the fact that supervisors attend case review meetings less frequently than frontline workers (Jackson, 2004).

Significant differences were observed depending on the CAC designation. MDT members affiliated with a developing CAC are struggling with staffing issues such as having insufficient staff (Newman et al., 2005). Developing CACs in Virginia are eligible for the least amount of funding at a time when their sustainability is most fragile and their staffing is most lean. They may require greater financial assistance than CACs further along in their organizational development. In contrast, MDT members affiliated with an accredited CAC identified specific aspects of case review as being in need of improvement (Bell, 2001; Lee et al., 2005; Newman et al., 2005). Like the MDT itself, case review is a dynamic process in need of continual oversight. It may be that accredited CACs, which have been through the accreditation process, can more easily identify gaps between the practice of case review and the standards promulgated by the National Children's Alliance. Research is beginning to address the lack of knowledge regarding case review practices (Baglow, 1990; Lee et al., 2005). Finally, MDT members affiliated with an associate CAC appear also to be

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struggling with case review, but specifically struggling with lack of attendance and participation and lack of group decision making and assessment at case review meetings (Baglow, 1990; Lee et al., 2005). These findings likely reflect the fact that many associate CACs, which are not yet fully accredited, are still in the process of developing their MDTs and case review procedures. As such, MDTs affiliated with associate CACs may require training in the importance of case review meetings and simultaneously team building training (Bell, 2001; Hallet & Stevenson, 1980; Van der Vegt & Bunderson, 2005), while CAC directors of such centers may require training in the implementation of specific case review procedures (Baglow, 1990; Lee et al., 2005). As a whole, these findings indicate the need for different resources to target CACs, depending on their stage of organizational development.

4.1. Limitations

The participation of all CACs enabled comparisons that cannot be made when a CAC surveys its own MDT members. However, our methodology (voluntary participation) introduced the possibility of sample bias with no measure for assessing bias as the survey was anonymous and voluntary. Future research will want to employ methods for assessing bias. For example, if an MDT member opts out of participating, they could provide their profession and years of service. Psychometrics performed on the instrument demonstrated internal reliability of the four factor-based variables, providing support for confidence in the instrument. However, further instrument development is warranted.

5. Conclusions and future research

These findings underscore the importance of identifying differences among MDT members' profession, supervisory vs. frontline worker status, and CAC designation when evaluating CACs to improve services as there were meaningful differences across these groups. These differences indicate the need to respond differently to the unique challenges associated with each group. Future research must seek to understand the role of CAC directors in the development of MDTs and the role they play in managing and facilitating case review. However, greater empirical guidance for CAC directors in what constitutes “effective” MDTs and “effective” case review meetings in needed (Kistin et al., 2010). This field may benefit from reviewing extant multidisciplinary team research in other disciplines (education, medicine). Finally, differences in perceptions regarding the core function of a CAC identified in this study have the potential to hinder team development, with adverse consequences for the children and families involved (Doss & Idleman, 1994). Future research should determine whether sharing a common vision of the CAC promotes collective team identification (Van der Vegt & Bunderson, 2005).

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