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Rapport building with adolescents to enhance reporting and disclosure



Rachel E. Dianiska*, Emma Simpson, Jodi A. Quas*

Department of Psychological Science, University of California, Irvine, Irvine, CA 92597, USA

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ABSTRACT

Adolescents comprise a vulnerable population that is exposed to crime and also may be reluctant to disclose full details of their experiences. Little research has addressed effective ways of increasing their willingness to disclose and provide complete reports. Strategies that improve honesty and report completeness in other age groups have not been evaluated to determine whether they are similarly effective at increasing adolescents' reporting. In the current study, we tested whether rapport building techniques, modified from those commonly used with children and adults to address reasons why adolescents are likely reluctant, enhance the amount of detail adolescents provide about prior experiences. The participants, 14- to 19-year-olds ($N = 125$), completed an online questionnaire regarding significant events (e.g., big argument with family member) they experienced during the last 12 months. After a delay, they completed a remote interview asking them to recount details of one of the events. The interview began with either standard rapport building composed of largely yes/no questions about the adolescents' background or one of two expanded rapport building phases: open-ended (questions about the adolescents' backgrounds that required narrative answers) or enhanced (open-ended questions paired with the interviewer also sharing personal information). Although only adolescents in the standard condition showed age-related increases in information disclosed, overall adolescents in the enhanced condition provided significantly longer and more detailed narratives than adolescents in the other conditions. This effect was largest for the youngest adolescents, suggesting that mutual self-

* Corresponding authors.

E-mail addresses: rdianisk@uci.edu (R.E. Dianiska), jquas@uci.edu (J.A. Quas).

disclosure may be especially beneficial for eliciting honest complete reports from adolescents about salient prior experiences.

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Introduction

In contrast to large bodies of research devoted to testing methods of improving children's and adults' eyewitness reporting tendencies, including their honesty and complete disclosures of salient and possibly stressful personal experiences (Bull, 2010; Lamb et al., 2018; Saywitz et al., 2017; Wells & Olson, 2003), minimal research has focused on methods of enhancing such reporting in adolescents. This omission is striking considering the sheer number of adolescents who witness or experience crime (Buka et al., 2001; Finkelhor et al., 2014), with 13- to 17-year-olds comprising the second most frequent age group (after young adults aged 18–24 years) to experience violent crime (Morgan & Truman, 2020) and adolescents constituting 22% of victims of abuse and neglect (U.S. Department of Health and Human Services, 2020). To intervene with adolescents when harm has occurred, it is imperative that the most effective methods of questioning possible are employed to ensure that adolescents provide honest, clear, and detailed disclosures. To date, minimal attention has been paid to whether empirically confirmed best-practice interviewing approaches for use with children are similarly effective with adolescents or whether other approaches are needed to increase their disclosures and report completeness. The overarching purpose of the current study was to test the efficacy of two rapport building approaches, one developed for use with children and one developed for use with adults, in adolescents to ascertain whether either or both approaches increase their willingness to disclose a salient prior experience and productivity of their disclosures. Before turning to the study, prior work concerning rapport building is reviewed, as is work on adolescent development that has implications for adolescents' reactions to interviewing approaches and rapport building.

Increasing report completeness in children and adults

Several of the most promising approaches to increasing honesty and complete reporting in children and adults actually occur before questions even focus on a substantive topic of interest. In both age groups, such approaches include providing instructions and building rapport. Regarding instructions with children, interviewers may discuss the value of honesty at the start of an interview or secure a promise from children to tell the truth. These pre-interview instructions increase children's honesty and willingness to disclose a transgression (Evans & Lee, 2010; Lyon & Dorado, 2008; Lyon et al., 2008) and their report completeness, that is, the amount of information they provide about the transgression (Quas et al., 2018). The benefits, moreover, often increase with age as children gain a better understanding of the obligatory nature of a promise (Lyon & Evans, 2014; Quas et al., 2018). In adults, instructions typically involve providing explanations about how the interview process will unfold (Alison et al., 2013; Collins & Carthy, 2019; Walsh & Bull, 2012) as a way of establishing a shared understanding regarding the interview format, thereby preparing interviewees for what is to come.

Rapport building, unlike instructions, tends to be more indirect in its influence, specifically by targeting interviewees' comfort and willingness to engage with the interviewer. The precise method of building rapport, like instructions, also varies between children and adults, as discussed next.

Rapport building with children

Broadly, with children the goals of rapport building are to increase their comfort and cooperativeness and provide them with guidance on how to respond, all of which should increase their honest and complete reporting. Although often considered a component of supportive interviewing, which occurs *throughout* an interview (Saywitz et al., 2017), rapport building occurs *before* interviewers ask about a substantive topic and typically involves "getting-to-know-you" questions. These may include ques-

tions concerning children's likes and dislikes but also concerning a significant event such as children's last birthday (Lamb et al., 2009; Lyon, 2014; Sternberg et al., 1997). By asking about a prior event, interviewers have children practice describing a personal experience, and this "narrative practice" should help them later when interviewers ask about a substantive event (Lyon, 2014). Research consistently finds that narrative practice rapport leads to more detailed disclosures from youths (Brown et al., 2013; Yi & Lamb, 2018), although not necessarily to an increased likelihood of disclosure itself (Foster et al., 2023; Lyon et al., 2014; Yi & Lamb, 2018). In addition, several studies have compared narrative practice rapport with other potential report-enhancing approaches and not with a control group (Hardy & Van Leeuwen, 2004; Magnusson, Ernberg, Landström, Joleby, et al., 2020), highlighting the need for more research, particularly research including control conditions, to understand the unique benefits of narrative practice rapport for children's disclosure, report completeness, and honesty.

Equally important to the topics on which the questions are focused is how the questions are phrased. Rapport questions should be phrased in an open-ended rather than closed-ended manner and should include back channels and vocatives, which in combination train children how to narrate and encourage them to do so in response to the interviewer's questions (Cleveland et al., 2018; Quas & Dickerson, 2019). Numerous studies have reported benefits of these rapport approaches, reflected in increases in the amount of detail children provide in analog lab-based investigations of transgressions and personal experiences (Lyon et al., 2014; Magnusson, Ernberg, Landström, & Akehurst, 2020; McWilliams et al., 2021; Roberts et al., 2004; Sauerland et al., 2018; Sternberg et al., 1997; for reviews, see Lavoie et al., 2021; Saywitz et al., 2015) and in children's abuse disclosures in field investigations (Blasbalg et al., 2021; Hershkowitz et al., 2014).

Rapport building with adults

Rapport building approaches with adults involve efforts to create a positive interpersonal connection between interviewers and interviewees. Interviewers begin with getting-to-know-you questions about interviewees' background or personal history (Carol et al., 2021; Holmberg & Madsen, 2014), but the purpose of these questions is to show that interviewers are interested and paying attention (rather than to have interviewees practice per se). Thus, attention is not paid to how the questions are phrased but instead is focused on the dyadic interaction, particularly interviewers' response to interviewees' answers. Specifically, interviewers are encouraged to reveal personal information about themselves in response to interviewees' mentioning of their own background. This "mutual self-disclosure" facilitates a positive liking relationship and affords the opportunity to highlight similarities between interviewers and interviewees (Collins & Miller, 1994; Dianiska et al., 2021; Vallano et al., 2015; Wachi et al., 2018). Empirical research confirms the benefits of rapport building, including mutual self-disclosure, for adults' honesty, disclosure, and even accuracy and completeness. Such has emerged in mock crime studies of experienced or witnessed events (Fisher & Geiselman, 1992; Kim et al., 2020; Memon et al., 2010; Risan et al., 2020) and studies of confessions from guilty suspects (Brimbal et al., 2019; Kelly et al., 2016; Wachi et al., 2018).

Addressing the adolescent gap

What is strikingly absent from the aforementioned bodies of research on rapport building are investigations of rapport effects on adolescent witnesses (i.e., youths aged 13–17 years) who fall in between the two samples in prior work (cf. Sauerland et al., 2018, who examined open-ended rapport with children, adolescents, and adults). On the one hand, using open-ended questions with adolescents may be valuable in helping to establish expectations and giving adolescents practice in providing lengthy responses to interviewer prompts, similar to that observed with open-ended rapport building among children. Adolescents at times fall into a habit of providing minimal answers (Bassett et al., 2008), and forensic interviewers often note that adolescents' tendency to provide brief responses and reluctance to discuss embarrassing topics is a significant interviewing challenge (Magnusson, Ernberg, Landström, & Akehurst, 2020). The idea that open-ended questioning could be valuable in forensic interviews with adolescents is consistent with motivational interviewing

strategies with adolescents in clinical interventions, which include recommendations to ask open-ended questions to encourage elaboration (Naar-King, 2011).

On the other hand, open-ended questions alone might not be sufficient to increase adolescents' honesty or disclosures for several reasons, meaning that other approaches may be necessary. First, adolescents are likely cognizant of the purpose of interviews. This means that they likely understand interactional goals and, unlike children, are aware of expectations when they talk with adults and might not need as much practice. Yet, this also means that they can reason about adults' motives for asking questions, leading to mistrust or skepticism about adults' intent, including whether adults will value and use information that adolescents provide (Chatlani et al., 2023; Cossar et al., 2016). Open-ended questions alone do not address this potential mistrust. Second, adolescence in general is a time of increased desire for autonomy and responsibility. Adolescents strive to be respected based on their emerging adult status (Yeager et al., 2018). Interviewer behavior that affords adolescents this status may help to facilitate an interpersonal connection, thereby increasing adolescents' willingness to engage (Brown et al., 2014; Kantor, 1995). There are no clear reasons why open-ended questions alone would increase adolescents' perceptions of their status as emerging adults.

When interviewers engage in mutual self-disclosure, a tactic used when building rapport with adults, interviewers may be signaling to adolescents that the two are similar, suggesting that an adolescent's status is similar to that of an adult and hence worthy of interviewers sharing personal information. Adolescents already recognize the importance of self-disclosure, seeing it as a component of trust between peers, and adolescents may strategically use mutual self-disclosure to initiate and support friendships (Bauminger et al., 2008; Berndt, 2002; Towner et al., 2022). Hints from a few prior studies of honesty and disclosure among adolescents in clinical settings suggest that such benefits are likely (Cayanus et al., 2009; Liang et al., 2008; see Dutton, 2018). For instance, Brown et al. (2014) asked 11- to 17-year-old detainees what qualities in a mental health provider were effective in strengthening their relationship with their provider. A key quality mentioned as being especially important was that of building rapport via self-disclosure by the provider. Of course, some clinicians and researchers caution against self-disclosure as not conducive to therapeutic best practice (see Psychopathology Committee of the Group for the Advancement of Psychiatry, 2001) given its potential to cause role confusion and distraction or disengagement from the session (Johnsen & Ding, 2021); however, the adolescents in Brown et al.'s (2014) study seemed to appreciate the feeling of mutual empathy garnered by a mental health provider choosing them to be the recipients of the provider's disclosure about experiences. Similar benefits could emerge if mutual self-disclosure were used to build rapport before adolescents are asked about prior experiences in legally relevant interview settings.

Remote interviewing

A separate issue of interest in the current study concerned whether the effects of rapport building would be evident in a remote interview context. Pragmatically, remote interviewing protected the health and safety of participants given that data collection occurred during the height of the COVID-19 pandemic. Yet, more broadly, it is important to establish the value of remote interviewing as a viable method of encouraging honesty, disclosures, and report completeness, especially with youths. Remote interviewing has become increasingly common as a way of collecting information from hard-to-reach populations, and the COVID-19 pandemic further increased its use (Alvarado, 2021; Lucas & Villarroel, 2022). Telehealth also seems to be an effective alternative to face-to-face psychotherapy for both children and adults (Greenwood et al., 2022; Meininger et al., 2022). Yet, few studies have focused on remote interviewing in forensic settings, especially with adolescents. Studies that do exist, however, suggest no differences in the amount of information children reported (Doherty-Sneddon & McAuley, 2000; Hamilton et al., 2017) or in the accuracy of their responses (Dickinson et al., 2021) depending on whether they were questioned remotely or live and in person (see Brown et al., 2021, for a review). The same pattern (i.e., no differences) has emerged among adults questioned about a mock crime (Hoogesteyn et al., 2023). One study even found increased benefits of remote interviews, such that when interviews were conducted in a virtual environment participants were more accurate than when they were conducted face-to-face (Dando et al., 2023). Thus, although

remote interviewing seems to be comparable to traditional face-to-face interviewing, how interview manipulations, such as rapport building, affect adolescents' reporting in a remote context is important to examine directly.

The current study

The overarching purpose of the current research was to test whether rapport building facilitates adolescents' willingness to provide detailed and honest disclosures about a prior salient experience in a remote interview setting. Prior to carrying out the research, we conducted a pilot study to test the feasibility of our remote interviewing paradigm and prioritize the types of prior experiences about which the adolescents would be asked. Based on the pilot study results, feasibility was high and adolescents could report on a range of salient prior experiences (details of this pilot study are included in the online [supplementary material](#)).

The design was as follows. Adolescents first completed a set of online pre-interview questionnaires, which included a life event questionnaire (LEQ), on which they indicated whether they had experienced (or engaged in) each event during the last 12 months, as well as measures of personality (e.g., shyness) that might affect adolescents' willingness to disclose and receptiveness to rapport building. Second, and after a delay, adolescents completed an online interview conducted over Zoom. Interviews began with one of three rapport building manipulations: *enhanced rapport*, which involved open-ended prompts paired with mutual self-disclosure from the interviewer; *open-ended rapport*, which included the same open-ended prompts as the enhanced condition but without the addition of the interviewer's self-disclosure, included to parallel rapport practices recommended for use with children ([Hershkowitz, 2011](#); [Lyon, 2014](#)); or *closed-ended rapport*, a control condition composed of yes/no and short-answer background and demographic questions ([Lyon et al., 2014](#)). After the rapport introduction, adolescents in all conditions were given identical recall prompts asking them to describe a target event (i.e., the most serious event they indicated had occurred on the LEQ).

Of primary interest were the effects of both open-ended and mutual self-disclosure rapport building on adolescents' reports of a prior salient experience as well as whether evident effects varied developmentally, specifically across early to later adolescence (i.e., 14–19 years of age). A more exploratory goal was to evaluate whether the two rapport approaches differentially affected the amount of factual versus evaluative details adolescents provided about their prior experience, testing the assumption that mutual self-disclosure might be especially beneficial in increasing adolescents' willingness to discuss evaluative and emotional components of their experience more than factual components ([Karni-Visel et al., 2019](#)). We hypothesized that both open-ended and mutual self-disclosure during rapport building would increase the amount of detail that adolescents later reported about a prior target experience relative to standard closed-ended rapport approaches common to forensic interview settings, with this increase being most pronounced in the mutual self-disclosure rapport condition ([Dianiska et al., 2021](#); [Saywitz et al., 2015](#)).

Method

Participants and design

In total, 132 adolescent participants completed the study. Seven of these participants were excluded for providing different birth dates at two time points, not being U.S. citizens, or otherwise providing answers that suggested they were not attending to the questions, leading to a final sample of $N = 125$ (35 male, 84 female, and 6 nonbinary or genderqueer) aged 14 to 19 years ($M = 17$ years, $SD = 1.67$). A minimum planned sample size of $N = 111$ with power of .80 was estimated for the current study based on a slightly more conservative effect size estimate than we observed in our pilot study (see [supplementary material](#)). Participants were primarily Caucasian or Asian (self-reported ethnicities were 36% White, 33% Asian, 19% Hispanic, 8% Black, and 4% other) and high-achieving scholastically according to their own reports. Participants were randomly assigned to a rapport condition: *standard*, *open-ended*, or *enhanced rapport* (i.e., mutual self-disclosure).

Procedure

All study procedures were approved by the university's institutional review board. Adolescents were recruited via flyers and announcements at high schools located in diverse economic neighborhoods, word-of-mouth (via snowball sampling), and a university database of families that expressed interest in learning more about projects in the field of child development. Adolescents under 18 years of age were given a link to send to their parents with the consent form, and parents provided written consent before the adolescents were contacted and given the assent form. Adolescents aged 18 years and older were given the consent to sign themselves. Participants completed a pre-survey questionnaire and later a 30-min remote interview.

Pre-survey

The pre-survey, which participants completed on their own, took approximately 20 min. It was composed of three sets of questionnaires that collected demographic information, individual difference characteristics, and life experiences.

Demographic questions confirmed participants' age and asked about gender, racial and ethnic background, and grades in school. Individual difference characteristics that could serve as potentially important covariates were assessed via widely used standardized measures appropriate for adolescents. First was the Trauma Symptoms Checklist for Children (TSCC; Briere, 1996; Wherry et al., 2016), a well-established measure of overall functioning and trauma symptoms. Respondents rate the frequency with which they experienced symptoms associated with anxiety (e.g., "Feeling nervous or jumpy inside"), depression (e.g., "Feeling sad or unhappy"), anger (e.g., "Getting mad and can't calm down"), posttraumatic stress (e.g., "Can't stop thinking about something bad that happened to me"), and disassociation (e.g., "Feeling like things aren't real") on a scale from 0 (*never*) to 3 (*almost all the time*). Responses were summed to yield a total symptom score, which was of interest in the current study. Higher scores reflect greater symptomatology (Cronbach's α in the current study = .91).

Second was a brief measure of sociability and shyness from the Cheek and Buss Shyness Scale (CBSS; Bruch et al., 1989; Cheek & Buss, 1981). Respondents rate the extent to which statements reflecting shyness (e.g., "I feel inhibited in social situations") and sociability (e.g., "I like to be with people") are characteristic of them on a scale from 0 (*extremely unlike me*) to 4 (*extremely like me*). Items were summed to yield two scores: one for shyness (Cronbach's α in the current study = .63) and one for sociability (Cronbach's α in the current study = .85). Higher scores reflect greater self-reported shyness and sociability. Third was an abbreviated assessment of Big 5 personality traits, the Ten-Item Personality Inventory (TIPI; Gosling et al., 2003). Respondents rate the extent to which they agree or disagree with statements describing pairs of traits reflecting the following: extraversion, agreeableness, emotional stability, conscientiousness, and openness to experiences (Cronbach's α in the current study = .69). Items were averaged separately for each trait.

Finally, participants completed a 36-item LEQ that included a list of significant negative experiences (e.g., having a big argument with a family member; Allen & Rapee, 2009), significant positive experiences (e.g., doing well on an important exam; Allen & Rapee, 2009), and delinquent behaviors and misdeeds (e.g., drinking, buying, or attempting to buy alcohol when under the legal age to do so; adapted from Dianiska et al., 2021). Adolescents were asked to indicate whether they had experienced/engaged in each event during the last 12 months.

At the end of the pre-survey, participants were directed to a calendar to schedule a remote interview within the next few weeks at their convenience.

Remote interview

Remote interviews were carried out on Zoom and took approximately 30 min to complete. The delay between the pre-survey and the remote interview was about 12 days ($M = 12.64$ days, $SD = 18.02$; seven participants had a delay of more than 30 days). Interviews were video- or audio-recorded save for three participants whose parents did not consent to recording (in these instances, interviewers exported the Zoom caption transcripts from the session). Participants were randomly assigned to one of the three pre-interview rapport conditions, with the requirement that equal numbers of female participants across three broad age categories were in each condition.

Each interview began with an interviewer explaining the purpose (i.e., to learn more about adolescents by talking with them about their feelings, thoughts, and behaviors). The interviewer then administered one of the three rapport building introductions. In the *standard* rapport condition, participants were asked 22 closed-ended getting-to-know-you questions about their background (e.g., age, year in school, where they grew up). These questions were phrased in a way that requested either yes/no or one-word responses, and the interviewer provided no feedback regardless of the length of participants' answers. In the *open-ended* rapport condition, participants were asked 14 open-ended getting-to-know-you questions about their background (e.g., "Tell me about a pet(s) that you have. If you don't have any, what kind would you like and why?"; "What adjective describes you best and why?"). Such questions encouraged participants to provide elaborated answers. In addition, when participants only answered a part of the question, they were asked to "tell me more." Finally, in the *enhanced* mutual self-disclosure rapport condition, participants were asked 10 of the same open-ended getting-to-know-you questions. After participants responded, interviewers answered about themselves as well, highlighting similarities (e.g., sharing that they also had a dog) or dissimilarities (e.g., saying a different adjective that they would use to describe themselves) as a way of connecting and sharing.

Following rapport, interviewers conducted the life event interview, which involved asking participants to describe a target event, selected from the experiences participants indicated had occurred on their LEQ. Selection of the target event was done by identifying the negative event or delinquent behavior with the highest seriousness rating per the pilot study that participants endorsed as having occurred. A small number of participants did not indicate that any negative experiences had occurred. These participants were either asked to describe the most serious positive experience that had occurred, again according to seriousness ratings from the pilot study (e.g., doing well on a test; $n = 21$) or asked to describe a generic negative event, a time that they had wronged another person ($n = 15$).

Participants were interviewed about a range of events or acts, including use of illegal drugs, doing well on an important exam, lying about their whereabouts, trespassing, assault, shoplifting, smoking, plagiarizing, and having a big argument (see Table S.1 in the [supplementary material](#) for the most frequent target events and their seriousness ratings). Participants were asked two open-ended requests for narratives about the target event. The first was, "Recall the time when you [life experience; e.g., lied about your whereabouts to your parents]. We are interested in a specific instance in which you had this experience. If this has happened on multiple occasions, we would like you to recall a specific time that you had this experience—either a particularly memorable time or the most recent time. I'm going to ask you to recall all of that event from beginning to end. Provide as many details as you can remember. Take a moment to think about it. When you have finished thinking about it, describe it." Once participants indicated that they were finished, the interviewer prompted them a second time: "Now, take another moment to think and provide any more details that you can recall about the event. It's important to provide as much detail as you possibly can."

Post-interview survey

Immediately after participants had exhausted their reports of the target event, they were given a link in the Zoom chat box to complete a post-interview survey. Questions asked about participants' perceptions of the interviewer, their own cooperation, and the seriousness of the experience they discussed. Participants answered items on a scale from 1 (*not at all/not a lot*) to 7 (*extremely/a lot*) about the importance and unpleasantness of the event, how strong their memory for the event was, how certain they were that their descriptions were accurate, the amount of information they felt that they disclosed, and how willing they were to disclose information. Two additional items asked about their ability to remember their emotions about the event at the time it happened and at present (i.e., "To what extent are you able to remember the emotions you felt at the time that the event happened/the emotions you felt about the event right now?"). Next was a self-report scale of perceived rapport with the interviewer (adapted from [Vallano & Compo, 2011](#)). Participants rated their agreement with statements about the extent to which their interaction with the interviewer was boring (reverse-coded), smooth, satisfying, awkward (reverse-coded), friendly, and positive on a scale from 1 (*not at all*) to 6 (*extremely*). Finally, participants were presented with the LEQ asked to indicate how *serious*

each event or experience was on a scale from 1 (*not at all*) to 7 (*extremely*) and whether they would be willing to tell a friend, a parent, or an authority figure that the experience had happened to them (see [supplementary material](#)). Post-interview survey data were missing for one participant.

Statement coding

Participants' event narratives were transcribed and coded to create two types of disclosure scores. First, we calculated the total number of words provided regardless of content. Second, we conducted a more fine-grained coding of the content, distinguishing two types of information: *timeline* details relevant to the facts of the experience (i.e., details that help to establish what occurred following the timeline of the event) and *evaluative* details (i.e., details that referenced feelings or thoughts as the experience was unfolding) (Quas & Dickerson, 2019; Quas & Lench, 2007). Sentences could contain information relevant to both, but the two types of information were mutually exclusive. For example, the sentence "I went to meet him at the place he said I should" includes eight timeline units (i.e., "I" "went to meet" "him" "at the place" "he" "said" "I" "should"). Evaluative units, in contrast, included content like "I was scared" (three units) and "that was upsetting" (three units). Although interviewing tactics often affect the provision of objective information, such as factual details of the experience, here we examined whether rapport building might also affect the provision of subjective and often emotionally laden evaluative information.

Unit coding reliability was established among three coders for a subset of narratives (30%). Inter-rater reliability was assessed with intraclass correlation coefficients (ICCs). Coders agreed on the total number of timeline details, average measures $ICC = .99$, $F(35, 70) = 195.06$, $p < .001$, and evaluative details, average measures $ICC = .96$, $F(35, 70) = 23.04$, $p < .001$. Discrepancies were discussed and consensus was reached before a final sum of details was created for each participant's narrative. After establishing reliability, the coders divided the remaining narratives for coding. Participants who were unwilling to discuss the negative target event with the interviewer ($n = 4$) were assigned values of 0 for word count and both types of information units.

Results

Preliminary analyses and analysis plan

Preliminary analyses first tested for potential confounds and covariates. [Table 1](#) depicts key characteristics across interview conditions. With regard to condition assignments, gender (proportion female) and mean age did not differ across the three interview conditions, nor did the delay between the pre-survey and Zoom interview. However, time length of rapport did differ across conditions, $F(2, 119) = 18.66$, $p < .001$. As can be seen in [Table 1](#), the standard condition was the shortest, as might be expected. The lengths of the open-ended and enhanced conditions, however, did not significantly differ from each other.

Table 1
Participant demographics and report characteristics by condition.

	Standard (<i>n</i> = 45)	Open-ended (<i>n</i> = 40)	Enhanced (<i>n</i> = 40)	Overall
Mean age (and <i>SD</i>) in years	16.98 (1.73)	16.80 (1.72)	17.02 (1.58)	16.94 (1.67)
Gender (% female)	78.8	64.8	72.5	70.6
Grades (% receiving mostly As)	77.8	80.0	75.0	77.6
Race/ethnicity (% White)	39.5	37.5	35.9	37.7
Days between pre-survey and Zoom (and <i>SD</i>)	12.08 (14.97)	13.48 (27.07)	10.60 (8.47)	12.64 (18.02)
Mean seriousness rating (and <i>SD</i>)	4.98 (0.95)	4.94 (1.02)	5.23 (0.77)	5.05 (0.92)
Mean rapport length (and <i>SD</i>) in minutes	4.42 (1.59) ^a	6.95 (2.57) ^b	8.15 (3.96) ^b	6.44 (3.23)
% Reported negative event	84.4	80.0	85.0	83.2
% Did not disclose	6.7	0	2.5	3.2

Note. Conditions sharing a superscript for rapport length are statistically equivalent.

Next, we considered the types of events reported and the seriousness of events across conditions, as reported by the participants themselves. As mentioned, a subset of participants did not indicate on the LEQ that any negative event or experience had occurred during the last 12 months. We examined the dependent measures between these participants (who only reported significant positive events, e.g., doing well on a test; $n = 21$) and participants who reported at least one negative event or were asked about the generic negative event of wronging another ($n = 104$). No differences emerged in the amount of information provided between those describing positive events ($M = 352.52$, $SD = 202.78$) and those describing negative events ($M = 439.64$, $SD = 560.40$), $t_s < 0.70$, $p_s > .49$. Furthermore, when the 21 participants who described a positive event were excluded, the pattern of results reported in the remainder of the analyses remained the same. Therefore, we elected to collapse across all events discussed, although we also return to the issue of event valence in the Discussion.

Next, we examined the average seriousness rating of the events that each participant was asked to describe, both according to the pilot study seriousness ratings (which were used to select the events) and according to participants' own ratings. No differences in perceived seriousness across rapport conditions emerged, $F(2, 122) = 1.16$, $p = .32$. The difference remained nonsignificant when participants who did not report and participants who were asked about a positive event were excluded, $F(2, 97) = 1.95$, $p = .15$.

Finally, we tested for differences in the disclosure scores (word count, timeline units, and evaluative units) based on participant gender, individual differences (trauma symptoms, shyness, sociability, and Big 5 personality) and the seriousness of the events. Here, t tests comparing male and female participants (nonbinary and genderqueer excluded) revealed no effects, $t_s < 0.83$, $p_s > .41$. When the individual difference scores and event seriousness were correlated with word count, timeline units, and evaluative units (see Table 2), conscientiousness was positively related to all three disclosure scores. Its inclusion did not alter the reported results. Thus, it is not considered further, and no other significant associations were evident.

Table 2

Correlations between demographics, individual differences, and disclosure scores.

	Word count	Timeline units	Evaluative units
<i>Demographics</i>			
Age	-.025	-.037	-.016
Gender	.077	.066	.116
Academic achievement	-.030	-.010	-.071
<i>Individual differences</i>			
TSCC			
Sum score	-.082	-.087	-.117
CBSS			
Shyness	-.033	-.038	-.026
Sociability	-.070	-.051	-.089
TIPI			
Extraversion	.077	.096	.047
Agreeableness	-.102	-.083	-.110
Openness	-.041	-.010	-.094
Emotional stability	-.167	-.165	-.112
Conscientiousness	.202*	.208*	.200*
<i>Interview perceptions</i>			
Perceived support	.049	.042	.052
Willingness to disclose	.213*	.231**	.156
<i>Life event</i>			
Seriousness	.085	.055	.120

Note. Values reflect Pearson's (or point-biserial for gender) correlations to the disclosure scores. TSCC, Trauma Symptoms Checklist for Children; CBSS, Cheek and Buss Shyness Scale; TIPI, Ten-Item Personality Inventory.

* Significant at the .05 level.

** Significant at the .01 level.

Effects of rapport building condition

Our main analyses focused on how different rapport building approaches affected the completeness of adolescents' reports about a salient prior experience, testing our hypotheses that open-ended and especially enhanced rapport would increase the amount of detail that adolescents provided when describing a salient prior experience. We first tested this hypothesis via an analysis of covariance (ANCOVA) predicting the total number of words. Rapport condition (standard, open-ended, or enhanced) was entered as a between-participants factor, with participant age entered as a continuous covariate along with the Rapport \times Age interaction. In addition, because length of rapport varied among conditions, it was entered as an additional covariate. We then conducted a 3 (Rapport Condition: standard, open-ended, or enhanced) \times 2 (Information Type: timeline or evaluative) mixed model ANCOVA to test our tentative hypotheses concerning the effects of rapport on the type of information reported. Age (continuous) and the Rapport \times Age interaction were also entered, as was rapport length. Following these main tests, we conducted additional ANCOVAs with similar predictors (i.e., rapport condition, age, and rapport length) to test whether participants in the different rapport conditions felt differently about the interviewers. Significant effects at $p < .05$ and effect sizes, including η_p^2 and Cohen's d , are reported. Descriptive statistics can be found in Table 3.

Amount of detail

When the ANCOVA predicting total number of words was conducted with rapport condition as a between-participants factor, age and length entered as continuous covariates, and a Rapport \times Age interaction, the main effect of rapport condition was significant, $F(2, 115) = 3.23$, $p = .04$, $\eta_p^2 = .05$. Planned comparisons revealed that participants in the enhanced condition provided longer narratives than did participants in both the open-ended ($d = 0.35$) and standard ($d = 0.40$) conditions (Table 3), whose narratives did not differ from each other.

We next analyzed the content of what participants reported, specifically the amounts of timeline and evaluative details reported. First, the main effect of rapport condition was significant, $F(2, 115) = 3.54$, $p = .03$, $\eta_p^2 = .06$. Consistent with the aforementioned analyses of word count, participants in the enhanced condition provided a greater number of units of information collapsed across type than did participants in the open-ended ($d = 0.31$) and standard ($d = 0.38$) rapport conditions, again with no differences in units emerging between participants in the open-ended and standard condi-

Table 3

Mean disclosure amount and perceived support and cooperation by rapport condition.

	Standard	Open-ended	Enhanced
<i>Prompt 1 disclosure</i>			
Word count	210.78 (248.32)	232.55 (162.75)	366.15 (480.29)
Units of information	112.47 (130.30)	126.73 (94.91)	185.83 (241.20)
Timeline	96.22 (111.22)	106.88 (83.81)	153.07 (200.60)
Evaluative	16.24 (24.23)	19.85 (21.47)	32.75 (50.60)
<i>Prompt 2 disclosure</i>			
Word count	109.27 (147.05)	131.35 (101.80)	194.08 (380.99)
Units of information	53.29 (76.08)	64.72 (54.51)	93.45 (185.35)
Timeline	45.29 (62.26)	51.90 (45.43)	72.92 (127.16)
Evaluative	7.87 (17.18)	12.82 (17.78)	22.03 (62.91)
<i>Total disclosure</i>			
Word count	320.04 (378.50)	363.90 (223.77)	560.23 (770.33)
Units of information	165.76 (196.54)	191.45 (127.68)	279.28 (380.30)
Timeline	141.51 (163.00)	158.78 (109.27)	226.00 (285.68)
Evaluative	24.11 (38.18)	32.68 (33.73)	54.78 (107.95)
<i>Self-reported</i>			
Perceived support	4.98 (0.90)	5.13 (0.61)	5.21 (0.63)
Willingness to disclose	7.05 (1.36)	7.35 (0.83)	7.55 (0.85)

Note. Values in parentheses represent standard deviations.

tions. Neither the main effect of information type, $F(1, 115) = 2.84, p = .10, \eta_p^2 = .02$, nor the main effect of age, $F(1, 115) = 1.04, p = .31, \eta_p^2 = .01$, was significant.

Second, several significant interactions also emerged: the two-way Information Type \times Rapport condition interaction, $F(2, 115) = 5.46, p = .01, \eta_p^2 = .09$, the two-way Age \times Rapport Condition interaction, $F(2, 115) = 3.41, p = .04, \eta_p^2 = .06$, and the three-way Age \times Rapport \times Information Type interaction, $F(2, 115) = 5.52, p = .01, \eta_p^2 = .09$. Follow-up analyses revealed significant differences in the amount of timeline units across rapport conditions, $F(2, 115) = 4.32, p = .02, \eta_p^2 = .07$, but not (and in contrast to our hypothesis) in the amount of evaluative units across rapport conditions, $F(2, 115) = 1.26, p = .29, \eta_p^2 = .02$. Participants provided the most information related to the event timeline in the enhanced rapport condition, followed by the open-ended and then standard conditions ($ps < .04$) (Table 3). The Age \times Rapport interaction suggested that as age increased, participants in the standard condition provided a larger number of units of information overall ($r = .29, p = .05$). However, age was unrelated, or possibly even negatively related, to the number of units of information in the open-ended and enhanced conditions, and in fact the correlations between age and number of units trended in the opposite direction ($rs = -.20, ps = .22$).

Finally, regarding the three-way interaction, we plotted the timeline and evaluative details (Fig. 1, left and right panels, respectively) with different lines for the three rapport conditions. As is evident, in the standard rapport condition there was a weak positive association between age and the provision of timeline details ($r = .29, p = .05$) and the provision of evaluative details ($r = .26, p = .08$), although it was nonsignificant. But overall, as reported above, the total amount of timeline details was lower in the standard condition compared with the other conditions. These age trends, however, disappeared and again seemed to go in the opposite direction in the open-ended and enhanced conditions. Rather, age was not significantly related to the provision of timeline or evaluative details for participants in either the open-ended condition (timeline $r = -.14, p = .39$; evaluative $r = -.29, p = .07$) or the enhanced condition (timeline $r = -.24, p = .13$; evaluative $r = -.06, p = .71$).

In all, participant narratives contained more timeline details than evaluative details. The enhanced rapport condition led to the longest narratives by word count as well as the most units of information disclosed in general. Interestingly, however, only participants in the standard rapport condition demonstrated a positive relationship between age and units of information disclosed.

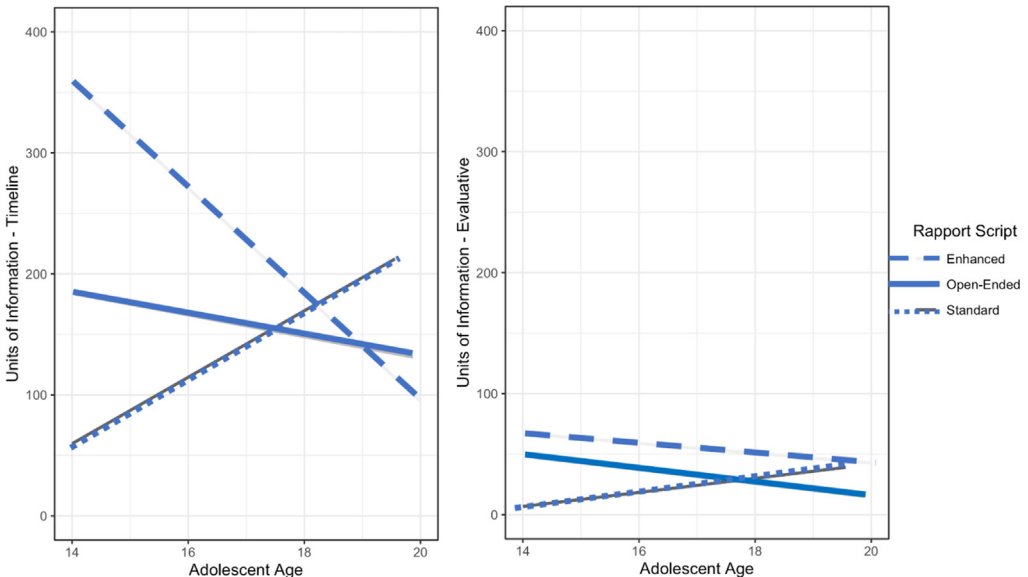


Fig. 1. Relationship among rapport condition, age, and number of units of information provided related to timeline (left) and evaluative (right) details.

Perceived support and cooperation

In our final analysis, we evaluated participants' perceptions of the interviewer. We focused on two separate components of participants' perceptions. One was perceived support, computed based on participants' ratings of how boring (reverse-coded), smooth, satisfying, awkward (reverse-coded), friendly, and positive the participants felt their interaction was. The other was perceived cooperativeness, reflected in participants' ratings of their willingness to provide information. We anticipated that cooperation would be more important than support in predicting report completeness, possibly as a mediator (see [Dianiska et al., 2021](#)), given that interviewers in all conditions were supportive in general, but for adolescents the interviewer's self-disclosures in the enhanced condition could further increase participants' feelings of willingness to be cooperative and share. Before testing these possibilities, we correlated support and willingness to disclose with the three disclosure outcomes ([Table 2](#)) collapsed across rapport conditions. As is evident, although perceived support was unrelated to participants' reporting, greater perceived cooperativeness was related to increases in the amount of information provided overall and timeline information.

Two ANCOVAs with rapport condition entered as a between-participants factor and age entered as a continuous variable were conducted predicting participants' perceptions. Neither model was significant directly or in conjunction with age, $F_s(2, 115) < 1.18$, $p_s > .31$. It is worth noting that all participants, across conditions, rated the interviewer as highly supportive and the their cooperativeness as extremely high. In fact, both were nearly at ceiling across conditions, making it difficult to detect differences. Nonetheless, general differences in perceived support (which itself can affect reporting separate from rapport) were not driving the evident difference in reported details as a function of rapport condition. Instead, the method through which rapport was built, in this case via mutual self-disclosure, seemed uniquely valuable.

Discussion

The goal of the current study was to provide a rigorous test of two potentially influential methods of increasing the amount of information that adolescents willingly provide when questioned about a salient prior event, particularly a negative experience that may have involved risk or harm. We were interested in both open-ended rapport building, which is recommended for use in forensic settings with children, and mutual self-disclosure, which is recommended for use in forensic but also interrogation settings with adults. Our main hypothesis was that, although both approaches would be more effective at increasing adolescents' report completeness than standard rapport building (i.e., closed-ended getting-to-know-you questions), mutual self-disclosure would be particularly so given its potential to increase adolescents' feelings of worth and connectedness. A secondary hypothesis was that the benefit of mutual self-disclosure would be larger when adolescents' reports of emotional and evaluative details, rather than timeline details, were examined.

Three key important sets of findings emerged, which in combination provide support for our main hypothesis but not the nuanced one. First, as anticipated, both younger and older adolescents were swayed in terms of their report productivity when an interviewer self-disclosed in response to adolescents' initial responses as a way of facilitating rapport. Second, the benefits of this enhanced rapport were more robust when adolescents' reports of timeline details, rather than details about their thoughts and feelings, were examined. And third, enhanced rapport building had a generalized effect, increasing adolescents' reports regardless of whether those were negative or positive.

Overall, across all participants ranging in age from early to late adolescence, those whose interviews began with enhanced rapport provided the longest narratives about a salient prior experience, with these narratives also containing the largest number of factual details, which themselves are key to understanding the unfolding of the experience itself. Prior studies have similarly found that mutual self-disclosure is an effective tool to facilitate detailed disclosures about negative experiences from adults (e.g., [Dianiska et al., 2021](#)). But in most such studies, the negative experiences involved wrongdoing engaged in by the adults (e.g., [Brimbal et al., 2019](#); [Dianiska et al., 2021](#); [Wachi et al., 2018](#)). Our study varied, however, in that some self-identified events from the LEQ concerned adolescents' own high-risk behavior, but many did not. Instead, these events included negative events that they might

have experienced or witnessed such as being teased or bullied. Moreover, a few participants were asked about a salient and serious positive event. Regardless of whether the latter participants were included or not, findings consistently showed benefits of rapport.

Theoretically, mutual self-disclosure may have appealed to adolescents' sense of autonomy and need for respect. That is, adolescents may have interpreted the interviewer's willingness to share personal information as a signal that they are worthy and respected, with this signal in turn increasing adolescents' ongoing willingness to engage, be honest and open, and provide rich accounts of target prior experiences. Similar types of feelings (e.g., showing respect by reciprocating openness) have been reported in studies examining how mutual sharing between therapists and adolescent patients affects adolescents' disclosures (Brown et al., 2014). Because the interviewer selected adolescents as disclosure recipients of personal information, the adolescents may have been more likely to do the same in response.

Of note, Dianiska et al. (2021) reported that in adults the beneficial effects of enhanced rapport building were due to mutual self-disclosure affecting adults' perceptions of interviewer support, which in turn affected their cooperation and report completeness. We did not find any evidence of similar mediational relations in our study with adolescents. As mentioned, the adolescents in general felt very positively about the interviewer regardless of interview condition. Ceiling effects, therefore, may have made detection of mediation difficult. It may also be, however, that mutual self-disclosure tapped hallmark aspects of adolescents' desires for respect and autonomy (Brown et al., 2014; Yeager et al., 2018), which led to their increases in reporting, rather than mutual self-disclosure affecting their perceived willingness to cooperate or feelings of being supported. Furthermore, interviews in our study were conducted remotely, whereas interviews in Dianiska et al. (2021) were conducted in person.

In our study, age was negatively related to how much participants reported in the enhanced rapport condition but was positively related to how much participants reported in the standard condition. This pattern was unexpected, and we are not entirely certain as to why it occurred. Perhaps the older college student participants were simply more used to engaging in conversations about their experiences, including in online settings, or more used to taking part in research, leading to muted effects of the manipulations in general. Indeed, as evidenced in Fig. 1, the oldest participants' performance varied far less than that of the youngest participants across conditions. Had we included a larger sample or replicated Dianiska et al.'s (2021) design more precisely, we may have detected somewhat different patterns with the young adults, which may be worth exploring in the future, including across age.

In their narratives, adolescents were more likely to provide details related to facts of the experience rather than evaluative details. We suspected that rapport building that addresses adolescents' motivational needs, such as mutual self-disclosure, might facilitate youths' expression of evaluative information. However, we did not see differences in evaluative details based on rapport condition, and instead report-enhancing strategies appear to affect children's and adolescents' reporting tendencies in general, as has been reported in other studies (e.g., Nunan et al., 2022; Quas & Dickerson, 2019). Also of note, in interviewing, including legal contexts, evaluative information is not commonly provided spontaneously by youths, and instead targeted prompting is needed (Lyon et al., 2012; Quas & Dickerson, 2019). Had more than two recall prompts been included, or had the interviewer specifically asked about how the adolescents felt or what they were thinking during the target event, we might have elicited more detailed responses, which could have varied as a function of rapport.

Finally, rapport building appeared to benefit adolescent reporting regardless of the valence of an event and, importantly, even when interviews were conducted remotely. Proposed mechanisms of how rapport affects reporting may be by reducing anxiety surrounding negative recalled events (e.g., Kieckhafer et al., 2014) or by increasing benevolence toward the interviewer (e.g., Carol et al., 2021). Although speculative, the former mechanism might suggest that rapport would benefit recall and reporting of negative events in particular. Rather, because we observed benefits of rapport for both positive and negative events, it may be the case that the rapport facilitates reporting more generally.

Limitations and directions for future research

Here, we focused on adolescent reports of unique, salient personal experiences that had occurred during the last 12 months. Because of this, we could only assess the effect of rapport building on report completeness in response to open-ended prompts, but not accuracy, including in response to open-ended or closed-ended questions. In addition, all adolescents completed the pre-study questionnaire, which included the checklist of experiences. Thus, all had disclosed the prior event before being questioned, so we were not assessing disclosure *per se* but rather the amount of information willingly disclosed. Prior disclosure is a strong predictor of subsequent disclosure (Rush et al., 2014). Therefore, it will be important to examine the utility of rapport building in increasing disclosure itself in the future, including honest disclosures of especially negative events about which adolescents may feel culpable, that they experienced directly, or that they witnessed, all of which they may be embarrassed to report. It is of interest, however, that four participants still explicitly reported that they did not want to discuss the target event. All of these target events were negative, and three of the four participants who said this were in the standard rapport condition. Overall, the effects of rapport on disclosure could be explored more fully with wider age ranges, with larger and more diverse samples, and in conjunction with other interview strategies known to improve reporting or reduce errors (e.g., interviewer supportiveness throughout the interview that is not limited to only pre-substantive rapport). Given the increasing need and preference for using remote communication platforms for research and educational purposes, among others, it will be important for future work to test whether differences in rapport building or age groups remain in in-person interviews and whether these differences vary between in-person and online interviews.

In closing, our work encouragingly shows that rapport can be effectively established remotely and can increase some important facets of disclosure processes in adolescents. Both mutual self-disclosure and open-ended rapport building are effective in facilitating willing disclosures from adolescents about significant negative life experiences. Whether remote rapport building is an equally effective alternative to in-person interviews, and whether it affects adolescent honesty and accuracy, remains to be tested.

Data availability

I have shared the link to the repository with data and materials.

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Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jecp.2023.105799>.

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