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The Role of Coping Strategies in Children's Repeated Suggestive Interviews

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Abstract: Often in the forensic context, child victims and witnesses are interviewed several times, exposing them to suggestive questions and social pressures. The present study had the main purpose of verifying the effect of coping strategies on the levels of immediate suggestibility and on the Resistant Behavioral Responses (RBRs) of children subjected to repeated suggestive interviews. A sample of 90 children, aged between 11 and 14, were administered the two parallel Gudjonsson Suggestibility Scales (GSS2 and GSS1) a few months apart and the Coping Inventory for Stressful Situations (CISS) to detect their coping strategies. The results showed that the avoidance coping increased suggestive vulnerability and reduced resistant responses. Task-oriented coping favored responses with greater source monitoring, which allow for the rejection of misleading information. Coping strategies did not show direct effects on the management of the socioemotional aspects involved in the suggestive interaction. After the negative feedback that invites children to be more accurate, a smaller effect of the avoidance strategy was recorded, indicating how actively requesting greater source monitoring can lead children to better recognize misleading information.

Keywords: misleading questions; coping strategies; avoidance; interrogative suggestibility; resistant responses; children

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1. Introduction

Often, child victims or witnesses of crimes are subjected to repeated judicial hearings and suggestive interviews. According to Lamb and colleagues [1], children's testimony is collected through a high use of misleading questions. The literature recognizes that children are more suggestible than adults and that they show significant vulnerability both to the cognitive factors involved in the type of question formulated (for example, close-ended questions; questions with incorrect answer alternatives), but also to social pressures [2–5].

Answering misleading questions and being exposed to criticism, social pressures or judgments of credibility of what is witnessed represents a stressful experience [6]. The forensic context seems to have its impact on the suggestive vulnerability of children who show a greater yielding to suggestive questions and a greater tendency to shift their answers following negative feedback [7–9].

According to Gudjonsson and Clark's [10] interrogative suggestibility model, three factors intervene in leading people to yield to the suggestibility factors involved in an interview: (a) expectations of success; (b) uncertainty; and (c) interpersonal trust in authoritative figures. These three factors intervene more effectively in the forensic context [2].

Interrogative suggestibility involves two independent factors of suggestibility: a yielding to leading questions that contain misleading information, and the change in answers after negative feedback which increases the levels of uncertainty, expectations of success and the authoritativeness of the interviewer [2,11].

Recently, the model of interrogative suggestibility has undergone further development, which has led to the validation of the Resistant Behavioral Responses model [12–14] based on the 'source monitoring framework' (SMF) [15].

Being able to refuse a misleading question refers to the source monitoring that the interviewee has regarding the requested information. The "No" answers or those that correct the distorted information, defined as "Direct Explanation", refer to high source monitoring and are more resistant both to leading questions and to the negative criticism of interrogative suggestibility [12,13]. People can respond to suggestive questions even by admitting that they do not know the answer ("Don't Know" answers). As children grow, they develop a greater ability to answer "Don't Know" because they have a greater maturity of cognitive functions [12,13,16].

Answering unanswerable questions is a task that inevitably requires adequate coping strategies. In the forensic context, it is important to note which coping strategy the child witness is able to use to predict his effectiveness or failure in managing the leading questions, social pressures and related stress levels. The interrogative suggestibility is a psychosocial model that refers to the coping strategies that the interviewee can generate and implement when faced with uncertainty and expectation during questioning [2].

There are few studies that have analyzed the effect of coping strategies on interrogative suggestibility and most have involved adult participants [4].

The most effective coping strategy with respect to unanswerable questions is the one that involves a critical appraisal of the situation [2].

Gudjonsson [17] and Bain et al. [18] found that adults who used avoidance coping strategies showed higher levels of suggestibility. Forrest et al. [19] found that 'problem-focused' and 'emotional' coping strategies had no predictive effects on the suggestibility score. Few studies have tested the association between coping strategies and immediate or interrogative suggestibility in children. A recent study highlighted that avoidance-oriented coping positively correlated with immediate suggestibility. Furthermore, avoidance-oriented coping emerged as the only significant predictive model for Shift and Total Interrogative Suggestibility [20].

Another factor that is important in the forensic field is the repetition of suggestive interviews to which children are subjected. Suggestive interviews risk altering witness statements and compromising the reliability of the child witness.

Warren and Lane [21] showed that the repetition of suggestive interviews did not necessarily lead children to be more suggestible; however, excessive interviewing of children using misleading questions could affect the recall accuracy [22], especially if their memory of what occurred is weak [23]. Children are more vulnerable and change their responses when exposed to repeated yes/no, forced-choice or misleading questions, or to challenges to their original responses [24]. Younger children, following the repetition of questions and especially after negative feedback, show a greater acceptance of the leading questions and a greater shift of their "I don't know" answers into yielding answers [12,13,16]. The increase in suggestibility appears to be due to a lack of source monitoring skills. As children grow, they develop greater source monitoring skills, managing to recognize misleading information and reject the suggestive questions [25].

Several factors can intervene to protect against the effects of repeated suggestive interviews, such as age [2], higher source monitoring skills [26] resilience skills [13,27,28], and memory confidence [4,5,29]. After the age of 12, children may develop a greater ability to reject suggestive questions even in cases of repeated interviews over time, although their significant vulnerability to socioemotional pressures and negative feedback remains [2,25,30].

Several studies have examined the effect of suggestive interviews repeated over time, but only a few studies have used the repeated administration of metric and standardized scales on the same sample [25,31]. No study has verified the effect of coping strategies on interrogative suggestibility scores obtained from the administration of two parallel scales.

The Current Study

Few studies have analyzed which coping strategies children use when dealing with suggestive interviews, demonstrating how avoidance tends to increase yielding to leading questions [20]. However, no study has verified the incidence of coping strategies in the face of repeated suggestive interviews and repeated social pressure obtained from the administration of two parallel scales of suggestibility.

Furthermore, no study has tested how coping strategies affect the resistant responses of the children in repeated suggestive interviews.

The present study had the main objective of verifying the effect of the avoidance coping strategy on interrogative suggestibility scores and on the resistant responses (RBRs) obtained in repeated suggestive interviews using two parallel scales for interrogative suggestibility.

Hypothesis 1: *Avoidance coping increases acceptance of leading questions.*

Hypothesis 2: *Low avoidance level maintains low yield scores, and higher levels of avoidance lead to greater suggestibility.*

Hypothesis 3: *Task-oriented coping favors resistant responses with higher source monitoring (NO responses) and avoidance coping reduces resistant responses with correct and high source monitoring (NO and DE responses).*

2. Materials and Methods

2.1. Participants and Procedures

The sample included 90 participants with ages ranging from 11 to 14 years old (M = 12.58 and SD = 1.35 (62.1% female; 37.9% male) recruited in several Italian middle schools. Fifty-four children (60.0%) were males and 36 children (40.0%) were females.

Participants were admitted after their parents/guardians signed consent forms and after verification of the following admission criteria: (a) Italian and foreign children with sufficient understanding of the Italian language; (b) absence of developmental pathologies and sensory deficits (autism, severe intellectual disability, deaf-mutism, etc.); (c) absence of language delay.

The study involved an assessment of suggestibility in the test–retest mode using two parallel forms of the suggestibility scale validated by Gudjonsson (1997) and adapted to the Italian language [3,13,27,32].

According to the literature on interrogative suggestibility, age and gender were considered as sociodemographic variables since the others have not demonstrated a significant impact in previous studies [4,29].

2.2. Procedure

All participants were administered the same tools following the same procedure: the Gudjonsson Suggestibility Scale 2 (GSS2) was administered first, and after about six months, the GSS1 that is a parallel form was administered. The GSS1 is semantically more complex and was administered second, in line with children's cognitive development, which allows them to perform more difficult tasks.

Furthermore, to limit the effects of possible learning of the two similar tasks, the more complex one was administered later.

In the latency phase foreseen in the administration of the suggestibility scale after the collection of the immediate recall was administered, the questionnaire on coping strategies was administered.

Data were collected from all participants in the same location on both occasions. The first administration took place in October 2022 and the second in April 2023. All tools were administered individually. The study was conducted following and respecting the ethical principles in accordance with ethical research involving children. The study conformed to

all ethical guidelines for research with human participants and followed the Declaration of Helsinki. The informed consent was signed before the inclusion of the children in the study, and it contained information on the objective of the study, methods of conduct, anonymity and information on the conservation of sensitive data. The study was approved by the institutional ethics committee (Minute number 28, dated 18 March 2020).

2.3. Instruments

2.3.1. Gudjonsson Suggestibility Scales

The Gudjonsson Suggestibility Scale is a tool designed to measure levels of immediate suggestibility. There are two parallel forms, Gudjonsson Suggestibility Scales 1 and 2 (GSS1 and GSS2) [11,33,34]. These two forms differ only in the stimulus used; in particular, GSS 1 is more complex and for this reason is usually administered to adults or older children. In this study, the GSS1 scale validated by Curci and Bianco [32] was used, which showed internal coherence scores all higher than 0.60 for a sample of adolescents. The GSS2 form [3,7] used in this study has been validated on a large sample of children and adolescents and has been administered in several studies [8,9,12,13,28], showing good reliability and internal consistency (Cronbach's alpha coefficient: Yield 1, $\alpha = 0.81$; Yield 2, $\alpha = 0.83$; Shift, $\alpha = 0.71$; and Total Suggestibility, $\alpha = 0.77$) [3].

Both GSS1 and GSS2 comprised a short story about a boy having an accident on his bicycle. After reading the story, the experimenter asks the minor to say everything he remembers, referred to as immediate recall. After a delay of about 40–50 min, during which other unrelated tasks are completed, twenty questions are asked about the story, fifteen of which are misleading (i.e., the participant does not possess the required information to answer the questions) and five are neutral questions. The number of acceptance answers to the leading questions constitutes the yielding score (Yield 1). After the first interview, the participant is then told that he/she has made some mistakes and all questions have to be repeated, providing Yield 2 (i.e., the number of leading questions to which the participant yields after being provided with negative feedback) and Shift (the number of questions to which the participant changes the answer after negative feedback irrespective of direction). Total Suggestibility is comprised of the sum of Yield 1 and Shift.

According to the RBR model [12,13], the Resistant Behavioral Responses for both GSS1 and GSS2 were coded as follows: "No" and "neither" answers were labeled as "No" (NO); every time the minor answered that the information required was not in the story or that it was not mentioned, the responses were labeled as "Direct Explanation" (DE); when the minor answered that he/she did not know or did not remember, the answers were labeled as "Don't Know" (DK). Only the answers relating to the leading questions of both the first and second interviews were counted in both scales.

2.3.2. Coping Inventory for Stressful Situations (CISS) [35,36]

The CISS is a self-administered questionnaire that measures three types of coping styles: *task-oriented (T), emotion-oriented (E), avoidance (A)*. It helps to determine the preferred coping style. Task-oriented coping measures the tendency to use concrete problem-solving in stressful situations; emotion-oriented coping aims at mitigating emotional stress; avoidance-oriented coping describes activities and cognitive changes aimed at avoiding stressful situations. Avoidance includes two subscales: distraction and social diversion. In this study, only the three main scales were used. The CISS has 48 items evaluated on a five-point scale (1 = never; 5 = very often).

The CISS presents good Cronbach reliability indices from 0.80 to 0.90 for the adolescent sample. The test–retest reliability presents satisfactory values from 0.60 to 0.73, indicating stability of the measurements.

2.4. Statistical Analyses

We examined all variables for normality and calculated bivariate correlations to examine multicollinearity among predictor variables and associations among predictor and dependent variables. We conducted a paired *t*-test between GSS2 and GSS1 scores.

To test the predictivity of the avoidance coping strategy, multiple linear regression models were generated, taking the yield scores of the two parallel scales as the dependent variable, and age, gender and immediate recall as predictors in step 1. In the second step, avoidance coping was added.

To test the relationship between yield scores and avoidance coping levels (low, average and high as fixed factors) GLM-repeated measures were carried out.

Pearson correlation analyses were conducted between coping strategies and Resistant Behavioral Responses (RBRs) obtained on the two scales both at Yields 1 and 2. MANOVA analysis was generated to test the effects of coping strategies on RBRs. The selection of coping strategies to be included in the models took place on the basis of correlation results.

3. Results

3.1. Preliminary Analysis

Preliminary Shapiro–Wilk normality tests were performed on scores of both GSS2 ($W\text{-}_{Yield1}$ = 0.96; Gl 90; *p* n.s.; $W\text{-}_{Yield2}$ = 0.96; Gl 90; *p* n.s.; $W\text{-}_{Shift}$ = 0.96; Gl 90; *p* n.s.; $W\text{-}_{Total}$ = 0.98; Gl 90; *p* n.s.) and GSS1 ($W\text{-}_{Yield1}$ = 0.98; Gl 90; *p* n.s.; $W\text{-}_{Yield2}$ = 0.98; Gl 90; *p* n.s.; $W\text{-}_{Shift}$ = 0.97; Gl 90; *p* n.s.; $W\text{-}_{Total}$ = 0.99; Gl 90; *p* n.s.).

Paired *t*-test was performed between the suggestibility scores of the two scales (Table 1). Table 1 shows that the Yields 1 and 2 scores of the GSS1 are significantly lower compared to the first administration. In the other scores, there were no significant differences.

Table 1. Paired *t*-test on the suggestibility scores between the GSS2 and GSS1 scales (N = 90).

Variable	GSS2 M (SD)	GSS1 M (SD)	*t*
Immediate recall	16.70 (4.79)	16.92 (5.99)	−0.74
Yield 1	6.94 (3.00)	6.18 (2.57)	2.67 *
Yield 2	8.46 (3.79)	7.18 (3.04)	3.63 **
Shift	5.15 (3.06)	5.20 (2.50)	−0.16
Total IS	12.08 (4.92)	11.38 (4.44)	1.47

* $p < 0.01$, ** $p < 0.001$; GSS1 and GSS2 = Gudjonsson Suggestibility Scales 1 and 2. Total IS = Total Interrogative Suggestibility.

To verify the association between coping strategies and suggestibility scores, a correlation analysis was conducted.

Pearson's correlation analysis showed the significant positive associations between avoidance coping and suggestibility scores on both GSS2 (Yield 1: r = 0.558, $p < 0.001$; Yield 2: r = 0.530, $p < 0.001$; Shift: r = 0.579, $p < 0.001$; and Total Interrogative Suggestibility: r = 701, $p < 0.001$) and GSS1 (Yield 1: r = 0.351, $p < 0.001$; Yield 2: r = 0.357, $p < 0.001$; Shift: r = 0.371, $p < 0.001$; and Total Interrogative Suggestibility: r = 0.412, $p < 0.001$). No correlation was found between task- and emotion-oriented coping and GSS scores. Immediate recall of both GSS2 and GSS1 showed significant negative correlations only with avoidance coping (r = −0.204, $p < 0.05$; r = −0.299, $p < 0.01$, respectively).

3.2. Hypothesis 1

To test the predictive effect of the avoidance coping on yield levels, several linear regression models were generated, assuming age, gender and immediate recall as predictors in step 1, and avoidance coping in step 2 (Table 2). As shown in Table 2, age had a negative predictability on all subsidence scores, indicating that older children are less suggestible. Immediate recall showed a significant predictivity on Yield 1 of both scales and on Yield 2 of the GSS1. Immediate recall maintained its effect only in step 2 of the GSS1 because

its effect was absorbed by the introduction of avoidance coping. High immediate recall scores reduced yield levels. The models showed a strong influence of avoidance coping in increasing yield levels at GSS2. The predictive effect of avoidance coping on yield levels on GSS1 was detected only on Yield 2, where participants showed lower suggestive vulnerability.

Table 2. Hierarchical linear regression models of the age, gender, immediate recall and avoidance coping on yield scores (n = 90).

	GSS2				**GSS1**			
	Yield 1		**Yield 2**		**Yield 1**		**Yield 2**	
Step 1	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)
Age	−1.080	−0.378 ***	−1.563	−0.433 ***	−0.992	−0.201 ***	−1.410	−0.486 ***
Gender	0.261	0.042	0.051	0.007	−0.006	−0.001	−0.322	−0.052
Immediate recall	−0.142	−0.285 **	−0.099	−0.157	−182	−0.425 ***	−0.133	−0.262 **
	R^2 = 0.266		R^2 = 0.240		R^2 = 0.415		R^2 = 0.366	
	F = 11.005 ***		F = 9.560 ***		F = 21.542 ***		F = 17.481 ***	
Step 2								
Age	−0.842	−0.295 **	−1.264	−0.350 ***	−0.925	−0.377 ***	−1.308	−0.451 ***
Gender	0.159	0.026	−0.077	−0.010	−0.034	−0.007	−0.366	−0.059
Immediate recall	−0.085	−0.170	−0.027	−0.043	−0.166	−0.387 ***	−0.109	−0.214 *
Avoidance	0.099	0.435 ***	0.124	0.432 ***	0.028	0.143	0.042	0.183 *
	R^2 = 0.432		R^2 = 0.403		R^2 = 0.433		R^2 = 0.395	
	ΔR^2 = 0.165 ***		ΔR^2 = 0.163 ***		ΔR^2 = 0.018		ΔR^2 = 0.029 *	
	F = 17.086 ***		F = 15.183 ***		F = 17.188 ***		F = 14.688 ***	

* $p < 0.05$; ** $p < 0.01$, *** $p < 0.001$; GSS1 and GSS2 = Gudjonsson Suggestibility Scales 1 and 2. Total IS = Total Interrogative Suggestibility.

3.3. Hypothesis 2

The previous regression models showed significant effects of avoidance coping on suggestibility scores that are higher in GSS2 than in GSS1. The results also highlighted the protective effect given by the progressive increase in age, which decreased after the inclusion of avoidance coping (Table 2).

To test the effect of avoidance coping on repeated suggestive interviews, three levels of the variable were first constructed:

- Low (−1 SD from the mean), medium (mean value) and high (+ 1 SD from the mean). A GLM for repeated measures model was generated, assuming the yield dimension on four levels ($Yield1_{GSS2}$, $Yield2_{GSS2}$, $Yield1_{GSS1}$ and $Yield2_{GSS1}$) as the dependent variable, and Avoidance_level as the fixed factor.

The model showed the main effects for yield (Pill's trace: Val. = 0.395; F = 19.576; gl (3, 87) $p < 0.001$; $\eta^2 = 0.395$) and for Yield*Avoidance_level (Pill's trace: Val. = 0.165; F = 2.728; gl (6, 182) $p < 0.05$; $\eta^2 = 0.083$). Avoidance_level showed a significant difference for between-subject effects (F = 33.826; $p < 0.001$; $\eta^2 = 0.424$). Estimate parameters highlighted higher avoidance levels at all yield levels in repeated suggestive interviews ($Yield\ 1_{GSS2}$: M_{low}–M_{medium} = −3.39; t = −6.05, $p < 0.001$; M_{low}–M_{high} = −4.15; t = −6.00, $p < 0.001$; $Yield2_{GSS2}$: M_{low}–M_{medium} = −4.39; t = −5.97, $p < 0.001$; M_{low}–M_{high} = −4.53; t = −4.85, $p < 0.001$; $Yield\ 1_{GSS1}$: M_{low}–M_{medium} = −2.36; t = −4.86, $p < 0.001$; M_{low}–M_{high} = −2.32; t = −3.31, $p < 0.01$; $Yield2_{GSS1}$: M_{low}–M_{medium} = −3.43; t = −6.12, $p < 0.001$; M_{low}–M_{high} = −2.36; t = −3.03, $p < 0.01$).

In the levels of Yields 1 and 2 of the GSS1, there was a reduction in avoidance-oriented coping scores, which was also associated with a reduction in suggestibility scores (Figure 1). Figure 1 shows how high avoidance coping scores led to high levels of yield on both scales. Furthermore, low avoidance coping scores led to lower yield levels, and therefore to greater resistance to leading questions.

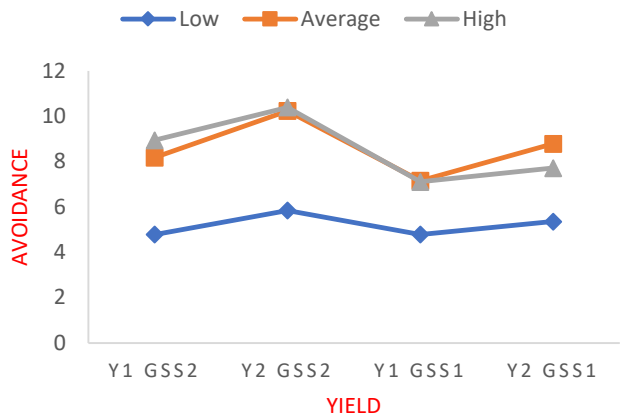

Figure 1. Estimated marginal averages of yield and avoidance levels (N = 90). Y1 = Yield 1; Y2 = Yield 2.

3.4. Hypothesis 3

Pearson's correlations were performed to verify association between Resistant Behavioral Responses and coping strategies. The task-oriented coping has positive correlations with all NO responses and negative correlations with "Don't Know" responses at the first interviews in both scales. Avoidance showed negative correlations with NO, "Direct Explanation" and "Don't Know" especially at GSS2 (Table 3).

Table 3. Pearson's correlations between Resistant Behavioral Responses in both GSS scores and coping strategies (N = 90).

	Coping Strategies		
	Task	**Emotion**	**Avoidance**
GSS2			
NO1	0.185 *	−0.152	−0.294 **
DE1	−0.070	0.087	−0.529 ***
DK1	−0.187 *	−0.017	−0.262 **
NO2	0.233 *	−0.114	−0.149
DE2	−0.029	0.087	−0.286 **
DK2	−0.120	−0.031	−0.290 **
GSS1			
NO1	0.211 *	−0.077	−0.154 *
DE1	−0.075	0.093	−0.145
DK1	−0.190 *	0.016	−0.193 *
NO2	0.171 *	−0.059	−0.113
DE2	−0.097	0.115	−0.252 **
DK2	−0.055	0.070	−0.116

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; GSS1 and GSS2 = Gudjonsson Suggestibility Scales 1 and 2; DE1 and 2 (Direct Explanation); DK 1 and 2 ("Don't Know").

MANOVA was performed to verify task and avoidance coping effects on Resistant Behavioral Responses (VD) in both GSS 2 and 1 scales.

The model showed the main effect only for avoidance coping (Pillai's trace: Val 0.418; F = 4.839; gl (12, 81); $p < 0.001$; $\eta^2 = 0.418$). Avoidance coping showed negative results between-subject effects on $NO\text{-}1_{GSS2}$ and $NO\text{-}2_{GSS2}$, and for DE responses (see Table 4). Between subjects for task-oriented coping were on all NO responses, showing an increase in these responses in both GSS2 and GSS1. The results showed how the use of the avoidance coping had an effect on reducing resistant responses, while the task-oriented coping favored the production of more effective responses in rejecting the leading questions.

Table 4. Between-subject effects of coping strategies on RBRs (N = 90).

	Between-Subject Effects			
	F	**Sign**	**η^2**	***t***
Avoidance				
NO-1 GSS2	11.903	0.01	0.115	−3.45 **
NO-2 GSS2	12.267	0.01	0.118	−3.50 **
DE-1 GSS2	6.359	0.05	0.065	−2.52 *
DE-2 GSS2	8.443	0.01	0.084	−2.91 **
DE-2 GSS1	5.959	0.05	0.061	−2.44 *
Task-oriented				
NO-1 GSS2	6.285	0.05	0.064	2.51 *
NO-2 GSS2	9.263	0.01	0.091	3.04 **
NO-1 GSS1	5.892	0.05	0.060	2.43 *
NO-2 GSS1	3.680	0.05	0.038	1.92 *

* $p < 0.05$, ** $p < 0.01$; GSS1 and GSS2 = Gudjonsson Suggestibility Scales 1 and 2; DE1 and 2 (Direct Explanation).

4. Discussion

This study investigated how coping strategies intervene in children when faced with repeated suggestive interviews. The main hypotheses concerned verifying the effect of the strategies as factors of protection and the reduction in the levels of suggestibility, as well as a greater production of resistant responses. The study recruited children aged 11 to 14 years. The degree of variability of the results linked to the age range can be considered to have been reduced in order to limit the possible effects mainly linked to age. After age 10, executive functions may be sufficiently mature to provide the ability to selectively control information to perform a task, the ability to inhibit an action or verbal response, the ability to solve problems, self-control and the monitoring of information. These skills also allow children to recognize which coping strategy they adopt when faced with a certain task [37]. According to the study by Arterberry [37], the ability to inhibit affirmative or acceptance responses to suggestive questions depends on executive functions.

A recent study verified the impact of executive functions on interrogative suggestibility in a group of adolescents, highlighting how the lack of control, low monitoring of distorting and misleading sources and low general executive functions lead to higher Shift scores [38]. In other words, adolescents with low executive functions tend to change their responses more after receiving negative feedback. Cognitive uncertainty and a lack of metacognitive skills can increase the change in responses in a suggestive sense. This could also be one of the reasons why children are more suggestible than adolescents. Executive functions interact with other psychological factors such as anxiety, social pressure and avoidance, which increase a negative and stressful perception of the interrogative suggestibility situation [2,38]. These factors tend to determine greater vulnerability, especially to the effect of negative feedback.

Indeed, answering unanswerable questions repeatedly represents a stressful situation and a task that requires functional actions to contain aspects of uncertainty, expectations of trust and the negative social pressure exerted by the interviewer with negative feedback. These aspects are the fundamental principles of the psychosocial model of interrogative suggestibility [10,20].

Executive functions show sufficient development after 10 years of age. Furthermore, compared to children, adolescents may present an awareness and recognition of the coping strategies used. These two reasons led to recruiting participants from 11 years of age. After the age of 14, cognitive functioning presents less variability due to maturity and cognitive development. Furthermore, suggestive vulnerability over the age of 13 presents characteristics similar to those of adults. This literature evidence led to the decision to limit the sampling of our study to between 11- and 14-year-olds.

Three main coping strategies were considered: task-oriented, emotion-oriented and avoidance. In the case of an effective coping strategy, the expected outcome was a reduction in suggestibility levels at GSS1, which was administered 6 months after GSS2.

The comparison between the paired scores between the two scales has in fact highlighted a reduction in the levels of Yields 1 and 2 (see Table 1). However, no significant difference was detected at the level of Shift and Total Interrogative Suggestibility, which was dependent—to a greater extent—on the effect of negative criticism given to participants after the first interview (Yield 1). These findings are in line with other studies [18–21,23] that have shown how adolescents can increase their resistance to repeated suggestive interviews. More precisely, this reduction has brought attention to the role of coping strategies as the ability to deal with tasks more effectively.

According to the other studies [17,18,20], the results of the present study highlighted how the suggestibility scores relating to both suggestibility scales showed positive significance only with avoidance coping. Avoidance coping also showed negative correlation with immediate recall, highlighting how avoidance leads to a less accurate and complete memory and leads children to accept more leading questions. Avoidance coping has a predictive effect on the failure levels of both scales, leading to a greater acceptance of the misleading questions (see Table 2). Furthermore, the avoidance strategy led to a reduction in the protective effect given by the increase in age, which is normally associated with a greater degree of maturity of the cognitive functions that allow one to reject suggestive questions [38].

Normally, high immediate recall performs a protective function with respect to giving in to leading questions because it allows for greater source monitoring [3,5,9,39,40]. The use of the avoidance strategy significantly reduced the protective effect of even immediate recall, to the point of making it ineffective on yield levels in some cases. The effect of the coping strategy was greater at GSS2 than at GSS1, assuming that at the second interview, the children changed their strategy or reduced its use. Avoidance coping did not show a predictive effect on the Yield 1 of the GSS1, where in fact a greater effect of immediate recall was recorded. The first scale probably represented a new and more stressful task and was more associated with avoidance coping. The second administration may have favored more functional coping strategies.

In a previous study [25], the authors demonstrated how older children faced with similar suggestive tasks are able to better cope with the psychological factors involved in a suggestive interview. According to previous study [25], children in subsequent interviews find themselves faced with a task that they already cognitively know: they find a similar language and can predict stress factors. This could lead them to a more functional and adaptive verbal behavior, which allows them to reduce unhelpful coping strategies and resort to problem-solving strategies. In fact, after receiving negative criticism, which explicitly invites them to be more accurate, a smaller effect of the avoidance strategy was recorded.

It was therefore hypothesized that the different levels of avoidance could affect the immediate suggestibility scores differently. As an originality compared to other studies [18,25], avoidance coping was not only used as a continuous variable, but was divided into three levels, low (−1 SD), medium and high (+1 SD), to differentiate the effects.

With the second hypothesis, we wanted to verify whether the different levels of avoidance had a different effect on the levels of yield. In the GLM-repeated measures model of the four yields (Yields 1 and 2 of the GSS2 and Yields 1 and 2 of the GSS1), the effect of the three levels of avoidance coping (low, average and high) was verified as a fixed factor. The results showed a significant within-subject effect for the yield measure. This indicated how the children performed differently in the individual interviews, recording a higher score on Yield 2 compared to Yield 1 on each scale. The increase in Yield 2 appears to be due to the negative feedback effect. According to Gudjonsson [2], the Shift is closely linked to the effect of criticism and is an independent factor of suggestibility from the tendency to accept the leading questions (yield). The yield is in fact more associated

with the more cognitive and verbal aspects involved in the suggestive interaction. The effect of social pressure given by negative criticism also affects the Failure 2 score, which increases the levels of uncertainty that do not seem to be well managed by avoidance coping. According to Gilbert and colleagues [38], managing negative feedback requires more monitoring and self-control skills, which may not be guaranteed by avoidance and/or inactive coping strategies [41,42].

The repeated measures model also showed a significant interaction effect of the repeated yield and the avoidance coping levels. Children who had a low level of avoidance coping showed low compliance on all four suggestive interviews (see Figure 1). Children with medium and high avoidance use showed high levels of yielding. At GSS1 yields, lower avoidance coping effects were recorded and were associated with a reduction in vulnerability, which, however, was higher than in the low avoidance group.

It is likely that avoidance is not associated with effective source monitoring, which is the ability that best allows us to discriminate misleading information [26,43,44]. Rossi-Arnaud and colleagues [41,42] found that process-focused and collaboration reduce the interrogative suggestibility. The authors also demonstrated that explanation and restatement strategies reduce suggestive vulnerability. In our study, we therefore also wanted to verify which resistant responses (RBRs model) were associated with the main coping strategies.

The RBRs model refers to the degree of source monitoring present in the subject's responses in relation to the suggestive questions [12,13].

Task-oriented coping showed positive correlations with all NO responses on both scales and negative correlations with "Don't Know" responses at the first interview of GSS scales (see Table 3). Instead, avoidance coping showed negative correlations with the Direct Explanation and "Don't Know" responses.

These results are in line with other studies that have demonstrated how reasoning and focusing strategies, such as task-oriented, allow us to detect and reject misleading information [38,42].

The MANOVA analysis on resistant responses showed within-subject effects only for the avoidance strategy, but not for the task-oriented one. This seems to suggest that the task-oriented strategy is more stable because it is more associated with cognitive abilities and presents only between-subject effects. The avoidance strategy, on the other hand, shows its variability because it is probably also more associated with external and contextual factors.

The multivariate MANOVA analysis showed that the use of avoidance strategies reduces the production of accurate responses and high source monitoring (NO and DE responses). The avoidance coping effect was lower on the RBRs of GSS1, which was administered second. Probably repeating a known task allows adolescents to activate more active strategies and explanation and statement processes [25,42].

Task-oriented coping had a positive effect on the production of NO responses. NO answers can lead to process-focused and greater source monitoring, allowing a reduction in yield [41,42,45]. No strategy considered in this study had an effect on "Don't Know" responses, which seems to refer to cognitive abilities different and independent from those linked to clear source monitoring [16,45,46].

Understanding the effects of coping strategies on the process of responding to suggestive questions and social pressures also has implications in the forensic context. The forensic interview represents a stressful situation during which children may be exposed to verbal, emotional and relational pressure factors. Promoting more active coping strategies in children that leads them to carefully evaluate information can help them give more resistant responses. Furthermore, explicitly telling children that they can correct misleading or incorrect information entered during the interview can encourage more accurate coping strategies by limiting the use of avoidance methods that seem to be associated with greater vulnerability.

Furthermore, making it clear that they can admit not remembering if the requested information is not recallable or certain can counteract those responses of the compliance with the misleading information requested.

5. Limitations

In this study, there are some limitations, one of which concerns the size of the sample which limits the extension and generalization of the results. The relevance of the coping strategies was obtained using a self-reported questionnaire that has no validity scales and that cannot verify whether the younger children in particular responded accurately to what was asked. The administration of the questionnaire on strategies was not repeated at the second administration of the GSS scale and this may limit the effective measurement of the reduction in the avoidance strategy. Finally, the study has a limitation of ecological validity compared to the forensic context because participants were recruited in a neutral context. Future studies could replicate the same research with real child witnesses to verify its actual applicability.

6. Conclusions

Several studies and forensic practices suggest how child witnesses and victims of crimes are interviewed several times by the police and judges using suggestive questions and exposing them to criticism and external expectations. These factors can affect the accuracy and fidelity of children's memories, leading them to introduce misinformation or distortions into their memories. The forensic context for children can be stressful and this can lead to a greater suggestive vulnerability by adhering to misleading information proposed during the interview.

Not all children can adopt effective cognitive strategies to cope with suggestive stressors. It seems relevant to investigate which coping strategy children are able to use when exposed to repeated suggestive interviews to help them activate more functional strategies in answering questions and managing social pressure. The main purpose of the present study was to verify the effect of coping strategies on the levels of immediate suggestibility and on the Resistant Behavioral Responses (RBRs) of children subjected to repeated suggestive interviews. The study highlighted how, in children, the high use of avoidance strategies reduces the ability to maintain adequate source monitoring, causing them to give in more to leading questions because they are unable to detect misleading information. Older children in particular and those who manage to activate cognitive problem-solving strategies are able to reject the suggestions following negative feedback.

Children who use task-oriented coping give responses with greater source monitoring, which allow for the rejection of misleading information. The results also highlighted that coping strategies did not show direct effects on the management of the socioemotional aspects involved in the suggestive interaction. After the negative feedback that invites children to be more accurate, a smaller effect of the avoidance strategy was recorded, indicating how actively requesting greater source monitoring can lead children to better recognize misleading information.

The results of this study suggest that during judicial hearings, children could be invited to follow the Ground Rule but could also be actively brought back to the memory task, helping them through mnemonic techniques to actively retrieve the information rather than accepting the suggested information. Stimulating coping strategies that favor a careful, reflective and reasoned response process could reduce the risk of giving suggested answers, and this could be useful in application during forensic interviews.

In light of this, it becomes essential that the interview is carried out according to the guidelines highlighted and that the professionals in the sector are specifically trained in listening to minors in forensic settings.

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