

Clinical Child and Adolescent Psychology Master Thesis

Responding to Resistance

Does counselor self-efficacy predict autonomy-supportive responses to resistant adolescents with aggression-related problems?

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Summary

The goal of this study was to determine whether client-specific counselor self-efficacy predicted autonomy-supportive responses to resistant adolescents with aggression-related problems. A cross-sectional study with 48 participants ($M_{age} = 35.45$, SD = 10.43) was performed, in which the participants' autonomy-supportive responses were measured by means of a video vignette, which displayed a counseling session with a resistant adolescent. The participants' responses to this vignette were coded by trained graduate students. Counselor self-efficacy was measured using the client-specific Counselor Activity Self-Efficacy Scales (CASES-S). A bootstrapped linear regression analysis showed that counselor self-efficacy did not significantly predict autonomy-supportive responding in reaction to adolescents with aggression-related problems. Nevertheless, this study makes an important contribution to current research as it showed that counselors do respond very differently to resistant adolescents with aggression-related problems, in terms of autonomy-support. This conclusion could form an interesting starting point for future research to develop from.

Introduction

There he is again, 14 years old, slumping on the couch in front of you, arms crossed and clearly not in the mood to talk. This kind of behavior in treatment can be seen as resistance, which can be defined as "the tendency to respond oppositionally to external demands" (Beutler, Consoli, & Lane, 2005, p. 125). The expression of resistance "can vary from person to person and is related to an individual's acquired sensitivity to perceived interpersonal threats to one's autonomy" (Beutler et al., 2005, p. 125). As a counselor it can be very hard to respond effectively to resistant behavior in treatment sessions (Church, 1994; Hanna, Hanna, & Keys, 1999). However, using an effective strategy to overcome this resistance is important, as high resistance gives worse prospects for treatment outcomes compared to when resistance is low (Hanna et al., 1999; Westra & Aviram, 2013). Therefore, it is of great importance to investigate what makes counselors respond more or less effectively to client resistance.

Adolescents are known to be a difficult group within treatment (Church, 1994) and they can be even more challenging when they have aggression-related problems (Hanna, Hanna, & Keys, 1999). Aggression can be defined as "any form of behavior designed to harm or injure another living being who is motivated to avoid such treatment" (Shaffer, 2006, p. 286). Adolescents with aggression-related problems often display some kind of deviance or resistance to treatment (Hanna et al., 1999), which may explain why current aggression treatment programs show limited effectiveness, especially among middle adolescents (aged 13 to 17 years) (Yeager, Dahl, & Dweck, 2018). This is of great concern, as aggression-related problems are one of the most pressing problems among adolescents, for which they often get referred to mental health care (Gabel & Shinledecker, 1991; Blake & Hamrin, 2007). An example of a mental health disorder characterized by aggression is oppositional defiant disorder (ODD), which can be defined as a pattern of an angry/irritable mood, argumentative/defiant behavior or vindictiveness (American Psychiatric Association, 2014). When no effective treatment is given, adolescents with aggressive behavior disorders are at high risk of developing several negative life-outcomes, like substance abuse, disturbed mental health, involvement in the criminal justice system, school dropout and lower occupational status (Carr, 2015; Loeber, Green, Lahey, Frick, & McBurnett, 2000; Steiner & Remsing, 2007; Weisz & Kazdin, 2017). Given this worrying prognosis, it is important to improve the effectiveness of current treatment programs. In order to do so, it is needed to understand how counselors respond to the heightened resistance found among adolescents with aggressionrelated problems (Hanna et al., 1999).

Additionally, it is needed to understand how these adolescents experience certain counselor behaviors. It could be possible that adolescents perceive more threats towards their autonomy and therefore experience more resistance than younger individuals, as traditional treatment programs fail to honor the middle adolescents' growing sensitivity to status and respect (Beutler, Consoli, & Lane, 2005; Yeager, Dahl, & Dweck, 2018). This means that status and respect become very important personal values to them and, therefore, the perception of a threat towards this could lead to resistance (Rollnick & Allison, 2004). This is troubling, as it is also shown that middle adolescents experience efforts from adult authorities to influence their behavior sooner as a threat than younger individuals (Yeager et al., 2018). In addition, children and adolescents with aggressive behavior disorders typically encounter difficulties with complying with authority (Kerig, Ludlow, & Wenar, 2012). Thus, adolescents with aggression-related problems are more likely to perceive the counselors' actions as threats to their experiences of status and respect, which could possibly explain the adolescents' heightened resistance.

In order to minimize resistance, it is really important for the counselors to know how to honor the adolescents' growing sensitivity to status and respect and to behave accordingly. In general, to experience feelings of high status and being respected an individual should be treated as though they have agency and autonomy, are competent and are of potential value to a group (Yeager, Dahl, & Dweck, 2018). Specifically, as adolescents with aggression-related problems are highly resistant and perceive threats to their autonomy more easily, they are likely to benefit more from self-directed and autonomy-supportive counseling strategies rather than from directive strategies (Beutler, Harwood, Michelson, Song, & Holman, 2011; Beutler, Moleiro, & Talebi, 2002). Church (1994) examined the differences between autonomysupportive counselors and more directive counselors. According to him, autonomy-supportive counselors "provided enough structure so that the adolescents could feel supported, yet, by not imposing their authority they left room for the adolescents' need for freedom" (p. 104). More directive counselors were described as follows: "Their primary stance was to direct the conversation about the therapeutic relationship and to present themselves as authorities. They offered little opportunity for the exploration of issues or for the adolescent to develop their own solutions." (p.104). Another line of research supporting the importance of autonomysupport is research about motivational interviewing (Miller, 1983). Motivational interviewing is a client-centered counseling style which emphasizes the importance of client autonomy and has shown to be highly effective in reducing resistance and establishing behavior change among several areas (Britt, Hudson, & Blampied, 2004; Martins & McNeil, 2009; Westra &

Aviram, 2013). As motivational interviewing has proven to be effective to reduce resistance, it could be assumed that autonomy-support is an important aspect of reducing resistance. Therefore, the first goal of this study is to examine the degree of autonomy-support in counselors' responses to resistant adolescents with aggression-related problems.

The second goal of this study is to explain where differences in autonomy-supportive responding between counselors may come from. How a counselor would respond to a resistant adolescent could be influenced by counselor self-efficacy. Counselor self-efficacy can be defined as "the counselors' beliefs about their ability to perform particular role-related behaviors" (Lent et al., 2006, p. 453). This could concern their perceived ability to perform counseling behaviors with clients in general (general counselor self-efficacy) or with specific clients (client-specific counselor self-efficacy) (Lent et al., 2006). According to Bandura's general social cognitive theory, "people will approach, explore, and try to deal with situations within their self-perceived capabilities, but they will avoid transactions with stressful aspects of their environment they perceive as exceeding their ability" (Bandura, 1977, p. 203). Accordingly, counselors with higher counselor self-efficacy may be likely to persist longer, generate more adequate counseling responses and make a bigger effort when encountering clinical impasses, compared to counselors with lower counselor self-efficacy (Lent et al., 2006). This may suggest that higher counselor self-efficacy is related to more effective insession counselor behaviors. However, no research has been conducted yet to investigate the relationship between counselor self-efficacy and autonomy-supportive responding. Some research has shown that higher counselor self-efficacy is related to the use of more counselor micro-skills (i.e., specific skills to communicate effectively) (Larson et al., 1992). Therefore, we expect that higher counselor self-efficacy will predict the use of more autonomysupportive responses in reaction to resistant adolescents with aggression-related problems.

Before we test this hypothesis, several methodological limitations of previous research should be noted. These concern the operationalization of autonomy-support. First, a common way to measure autonomy-support is to assess the counselor's behavior during real counseling sessions (Zuroff et al., 2007). However, this design is not standardized and the expression of autonomy-support could have been influenced by multiple factors, such as client characteristics. Second, another commonly used way to measure autonomy-supportive responses is to derive it from the type of intervention that is used, with cognitive and behavioral therapies indicating a directive counseling style, and self-directed, psychodynamic or other relationship-oriented therapies indicating an autonomy-supportive counseling style (Beutler, Moleiro, & Talebi, 2002). However, this approach fails to measure individual

differences between counselors in their degree of autonomy-support. Last, autonomy-support could be measured by means of written vignettes (Shachner & Farber, 1997). However, this method is not able to give the participant the opportunity to really imagine that he or she is in an actual counseling situation. In addition, written vignettes could possibly give the participant time to think about their answers, rather than eliciting a spontaneous and realistic response. Therefore, this study will use video vignettes, which is a more specific and standardized way to measure counselor in-session behavior whilst at the same time eliciting realistic responses. This research design is not commonly used to measure autonomy-support and could therefore be an interesting addition to existing research.

To examine whether counselor self-efficacy predicts autonomy-supportive responding, a cross-sectional study will be conducted. In this study, counselors (N = 48) will be shown a video vignette in which an adolescent shows resistance in therapy. The counselors will be asked to respond to this video vignette and their responses will be coded in terms of being more or less autonomy-supportive. A questionnaire will be used to assess their client-specific counselor self-efficacy. We expect that higher counselor self-efficacy scores predict higher scores of autonomy-support.

Method

Participants

A total of 48 participants (91.7% women; $M_{age} = 35.45$, SD = 10.43) participated in the study. Of these participants, 43.8% were basic psychologists, 33.3% were specialized psychologists, 10.4% were remedial educationalists and 12.5% defined themselves as other (most of them were following an education in order to become a specialized psychologist). Most participants were Dutch (97.9%). To be included in the study, participants had to have at least a University Master's degree for psychologist or remedial educationalist and had to have some experience in counseling children and youth. Participants were approached by means of LinkedIn, Facebook and personal networking and were sent an information-letter about the study. Before the experiment started, they were asked to fill in an informed consent form.

Four adolescent theatre students (50.0% girls; $M_{age} = 13.45$, SD = .72) participated in recording the video vignettes. Prior to this, the students and their parents filled in an informed consent form. As a reward, the participants received 15 euros each. In the end, only three video vignettes were used, which were played by three actors (66.7% girls; $M_{age} = 13.15$, SD = .49).

Instruments

This study was part of a larger study that was designed as an experiment with two withinsubject conditions, which examined whether a given DSM-label (oppositional defiant disorder (ODD) or social anxiety disorder (SAD)) influenced the participants' reaction to resistance. Within this experiment, the order of the conditions was counterbalanced to cancel out possible order effects. Therefore, it was equally divided between the participants if they were shown the ODD-condition in either the first or the second fragment. For this study, only the ODDcondition was used as we were interested in the counselors' responses to adolescents with aggression-related problems, specifically.

Stimuli. Both video fragments show a counseling session in which the counselor asks the adolescent about a homework assignment (e.g. practicing relaxation exercises). The adolescent shows resistance, as he or she did not complete the assignment. Fragment one always displayed a resistant boy and fragment two always displayed a resistant girl. However, the participants' ratings have confirmed that they were not significantly different in their degree of resistance (p = .909). By distributing the conditions evenly among participants we tried to limit other possible gender-effects as well. An example of a part of the interaction between the displayed counselor and adolescents is as follows:

Counselor:	"Tell me, have you been able to use a [feelings] thermometer?"
Client:	" nothing happened last week."
Counselor:	"No hmm?"
Client:	"It's going fine, you know. I did not do those thermometer-things."

During this interaction the adolescent is slumping on the couch, not making eye contact, shrugging his shoulders and responding in a slightly annoyed tone, indicating non-verbal expressions of resistance.

As noted before, three video fragments were used: the practice fragment, fragment one and fragment two. Each video fragment consisted of three parts. First, participants were shown an introduction text about the adolescents' problem behavior and diagnosed disorder. Second, the video vignette started playing. And last, the line *"You can respond now"* appeared on the screen, after which the participants could respond as if they were in a real counseling session with the adolescent. Within the practice fragment, the video and its' introduction text were always the same. However, either fragment one or fragment two was the ODD-condition, indicated by the introduction-text. The video content of fragment one and two were always the same. The participants' verbal responses to these fragments were audiorecorded.

Measures. To measure autonomy-supportive responding (the dependent variable), the audio-recorded responses of the participants were coded by two trained graduate students. During training, 18.8% of the data was used and a coding scheme was developed, which was based on the Motivational Interview Skills Code 2.1 (MISC; Miller, Moyers, Ernst & Amrhein, 2008) as autonomy-support is one of the characteristics coded by this instrument. The coding scheme can be found in the appendix. The inter-coder reliability was sufficient (r_s = .76) and differences in coding were resolved by a third trained coder. Participants' reactions were coded by means of a 7-point Likert scale (1 = very directive, 2 = quite directive, 3 =somewhat directive, 4 = neutral, 5 = somewhat autonomy-supportive, 6 = quite autonomysupportive, 7 = very autonomy-supportive). A directive response was characterized by the impression that the client did not have the freedom to say that he or she did not want to do the homework. For example, a 'very directive' score would be given when someone said "In order for this treatment to work, I need you to do the homework assignments as we agreed". A 'neutral' score would be given when a reaction is completely neutral or when an equal amount of expressions of the two poles was given. An autonomy-supportive response was characterized by the impression that the client could admit that he or she did not want to do the homework or when there was no emphasis on the agreement, for example when they said: "I'm happy to hear you had such a good week, would you like to tell me about it?"

To measure counselor self-efficacy (the independent variable) we used a Dutch translation of the client-specific Counselor Activity Self-Efficacy Scales (CASES-S; Lent, Hill, & Hoffman, 2003; Lent et al., 2006). Only the session management self-efficacy items were used, which assessed the counselors' perceived ability to manage a variety of relatively common, specific counseling tasks by integrating basic helping skills. The scale consists of 10 statements, for example: *"Help your client to decide what actions to take regarding his or her problems."*. The participants were asked to recall the adolescent from the video vignette and to indicate, by means of a 10-point Likert-scale ($0 = no \ confidence, 9 = complete \ confidence)$, to what extent they were confident that they could perform certain counselor skills effectively, specifically for this adolescent. The score for this questionnaire was the calculated mean score, which could range from 0 to 9. The Dutch translation of the session management self-efficacy scale of the CASES-S was sufficiently reliable ($\alpha = .75$).

Several control variables were measured by means of five exit questions. First, participants were asked how realistic they found the video vignettes and how much resistance

they experienced in the video vignettes. For these questions, a 9.8 cm line was presented with at the beginning and end of this line a description ((*Unrealistic* = 0, 10 = Realistic) or (*No* resistance = 0, 10 = Strong resistance)). The participants were asked to draw a mark on the line to indicate the amount of realism or resistance they experienced. The total score for these questions was the length in millimeters from the beginning of the line to the mark, which could range from 0 to 98. Second, another exit-question measured to what extent the participants reacted realistically (*"I reacted to the fragments as I would do during a real counseling session."*). The participants could respond to this question by means of a 7-point Likert scale (0 = completely disagree, 7 = completely agree). The score on this question could range from 0 to 7, but was computed into a dichotomous score with a cut-off point (0 to 3 = non-realistic response, 4 to 7 = realistic response). Last, two open questions were added to measure whether the participants correctly remembers the ODD-diagnosis of the adolescent in the video vignette (0 = other diagnosis, 1 = ODD-diagnosis) or whether the participants were aware of the research goal of this study (0 = not aware, 1 = aware).

Procedure

Three graduate students collected the data for this study. They were all trained in order to conduct the study as similarly and standardized as possible. To conduct the study, the examiner came to a place convenient for the participant. Mostly, this was at the participant's work-place or home. The study procedure lasted around 30 minutes. First, the participant was asked to read the information-letter again after which he/she had the opportunity to ask questions if anything was unclear. If everything was clear, he/she was asked to sign an informed consent form. After this, the participant was handed a laptop and an instructionpaper which described the exact steps the participant had to take in order to complete the study. To make sure the participant's reaction would be as close as possible to the reaction he/she would have given during a real counseling session, some extra instructions were given: "Okay, so it is important that you really try to get into character as therapist and that you respond as if it is a real counseling session. Further, it will probably be a bit odd to give a reaction to the video, but just do your best. And please remember that you already know the client, as this is your third session.". After this, the participant could start the practice fragment on the laptop by his-/herself, as indicated on the instruction-paper ("You may click on the practice fragment now"). After the practice fragment had been completed, the examiner started the audio-recorder and left the room in order for the participant to feel more at ease and respond as natural as possible. The participant completed fragment one and two by his-/herself, as indicated on the instruction-paper (*"You may click on fragment 1 and respond to this"*, *"After this you may click on fragment 2 and respond to this"*). After the participant had given his/her verbal reaction to both fragments, the examiner was called back into the room, stopped the audio-recorder and handed the participant the survey containing the counselor self-efficacy scale, the exit questions and several demographic questions. The examiner left the room again until the survey was completed. After this, the examiner gave the participant a debriefing about the purpose of the study and participant was thanked for his/her efforts.

Data analysis

The data will be analyzed using IBM SPSS Statistics 20. The dependent variable autonomysupportive responding is a continuous variable, as well as the independent variable counselor self-efficacy. A simple linear regression analysis will be used to test if higher counselor selfefficacy predicts more autonomy-supportive responses.

Resultaten

Data-screening

The total group of participants consisted of 48 persons (91.7% female; $M_{age} = 35.45$, SD = 10.43). However, data of two participants was excluded as they had not responded to the video vignettes as if they were the actual counselor; instead, they had given a description of how they would have responded. In addition, data of one more participant was excluded as he had missing data on the counselor self-efficacy questionnaire. After controlling for outliers, one more participant was excluded from the data-set as his counselor-self efficacy score was more than three standard deviations below the mean score (z = -3.34).

Participants

The final sample consisted of 44 participants (93.2% female, $M_{age} = 35.93$, SD = 10.70). Of these participants 47.7% were basic psychologists, 36.4% were specialized psychologists, 6.8% were remedial educationalists and 9.1% defined themselves as other (most of these were following an education in order to become a specialized psychologist).

Preliminary analyses

Descriptive statistics for all study variables can be found in Table 1. For the correlation analysis between counselor self-efficacy and autonomy-supportive responding the complete

sample of 44 participants was used. Only 39 participants (94.9% female; $M_{age} = 35.89$, SD = 11.24) were included in the other correlation analyses as five participants had missing data on the exit questions concerning experienced realism and resistance.

Table 1.

Means (M) and Standard Deviations (SD) of, and Correlations (r) with their Bias-Corrected and Accelerated 95% Confidence Intervals (BCa 95% CI) between Counselor Self-Efficacy, Autonomy-Supportive Responding, Experienced Resistance and Experienced Realism.

					r [BCa 95% CI]			
		Ν	М	SD	1	2	3	4
1.	Counselor self-efficacy	44	6.34	.79	-	.17	17*	.20*
						[11, .48]	[49, .18]	[07, .47]
2.	Autonomy-supportive	44	4.22	2.22		-	15*	.26*
	responding						[44, .20]	[05, .54]
3.	Experienced resistance	39	63.26	16.03			-	.18*
								[12, .49]
4.	Experienced realism	39	76.18	14.94				-

Note. No significant correlations have been found, as all the BCa confidence intervals include zero.

* Cases of missing variables have been deleted pairwise, therefore N = 39.

Before the primary analysis was performed, we checked if the control variables (experienced amount of realism and experienced amount of resistance) were related to the independent variable (counselor self-efficacy) and/or the dependent variable (autonomy-supportive responding). If these correlations appeared to be significant, these control variables could have been responsible for a part of the variance in autonomy-supportive responding scores. If so, they had to be included as covariates in the model.

Before these analyses could be performed, we had to check if the assumptions for normality and linearity were met. To check the assumption of normality, the Shapiro-Wilk test was used, as this test could be used best to investigate normality of the scores among small samples (N < 50) (Field, 2013). The experienced resistance scores (p = .462) and the counselor self-efficacy scores (p = .054) did not deviate significantly from normal. However, the experienced realism scores (p < .05) and the autonomy-supportive responding scores (p < .001) appeared to be significantly non-normal. This indicated that bias corrected accelerated bootstrapping should be performed (Field, 2013) when autonomy-supportive responding and/or experienced realism are included in the correlation analysis. After taking a look at the *spred vs zresid* plots for counselor self-efficacy/ autonomy-supportive responding vs experienced realism/ experienced resistance, it could be said that the assumption of linearity was met, as no curves were detected in the scatterplots.

A bootstrapped multivariate Pearson correlation was performed to examine whether experienced resistance and/or experienced realism were related to counselor self-efficacy and/or autonomy-supportive responding. Results showed (see Table 1) that experienced resistance and experienced realism were not significantly correlated with counselor self-efficacy and autonomy-supportive responding, as the bootstrapped confidence interval of the correlation-coefficient (r) included zero.

Primary analyses

The main aim of this study was to investigate whether higher counselor self-efficacy could predict the use of more autonomy-supportive responding in reaction to resistance in therapy. A simple regression analysis was performed to test this hypothesis. However, before any conclusions could be drawn, the assumptions of normality, linearity, homoscedasticity and independence had to be checked. As noted before, the assumption of normality was met for counselor self-efficacy but not for autonomy-supportive responding, which indicated that bias accelerated bootstrapping had to be performed (Field, 2013). After taking a look at the *spred vs zresid* plot, it could be said that the assumptions of linearity and homoscedasticity were met, as values were distributed evenly throughout the scatterplot. To check the assumption of independence, the Durbin-Watson test was used, showing that d = 1.84. According to Durbin and Watson (1951), for this sample size *d* had to be higher than $d_u = 1.57$, and (4 - d) should be higher than d_u . As this was the case, it could be said that the assumption of independence was met and that the residuals seemed to be uncorrelated.

After checking the assumptions, a bootstrapped simple linear regression analysis (1000 samples, $\alpha = .05$) was performed to examine whether counselor self-efficacy predicted the use of autonomy-supportive responding. Results showed that counselor self-efficacy did not significantly predict autonomy-supportive responding, F(1, 42) = .904, p = .347, $\beta = .15$, b = .41 [-.49, 1.23], as the bootstrapped confidence interval of the *b*-value includes zero. Within this model, counselor self-efficacy only accounted for 2.1% of the variation in autonomy-supportive responding. See Figure 1 for the relation between counselor self-efficacy and autonomy-supportive responding. Figure 1 shows a great variance in autonomy-supportive

responding scores. However, this variance is not significantly predicted by counselor selfefficacy.



Figure 1. The Relation between Counselor Self-Efficacy and Autonomy-Supportive Responding.

Control analyses

As all our participants correctly remembered that the adolescent in the video vignette was diagnosed with ODD, no control analysis was performed to check if an incorrect remembrance of the diagnosis had an influence on the outcomes of the primary analysis.

Two control analyses were performed in which the data of participants who felt that they had not responded realistically or who were aware of the research question were excluded from the data-set, in order to check if data of these participants had an influence on the outcomes of the primary analysis. Preliminary analyses showed that all assumptions except the assumption of normality were met. Two bootstrapped simple linear regression analyses (1000 samples, $\alpha = .05$) were performed to examine whether counselor self-efficacy predicted autonomy-supportive responding. The results showed that the relation between counselor self-efficacy and autonomy-supportive responding remained non-significant, after controlling for non-realistic responses, F(1, 37) = .503, p = .483, $\beta = .12$, b = .34 [-.62, 1.12], and awareness of the research question, F(1, 35) = 1.245, p = .272, $\beta = .19$, b = .51 [-.37, 1.36]. This indicated that non-realistic responses and awareness of the research question did not have a significant influence on our research outcomes.

Discussion

The first goal of this study was to examine the degree of autonomy-support in counselors' responses to resistant adolescents with aggression-related problems. The second goal of this study was to explain where differences in autonomy-supportive responding between counselors may come from and we expected that higher counselor self-efficacy predicted more autonomy-supportive responses. Our results showed that the counselors differed greatly in their degree of autonomy-support in response to resistant adolescents with aggression-related problems. However, counselor self-efficacy could not significantly predict these differences in autonomy-support, which rejected our hypotheses.

Our findings contradict the findings of Larson et al. (1992), who found that higher counselor self-efficacy was related to better counselor achievement. This might be explained by the fact that their study did not specifically measure autonomy-supportive responding as one of the micro-skills that indicated counselor achievement. It could be possible that there is a different relation between counselor self-efficacy and autonomy-supportive responding, compared to counselor self-efficacy and the counseling micro-skills measured by Larson et al. For instance, it could be possible that counselors, who have high expectations of their counselor capabilities, leave less room for the client to influence the counseling process and thus, yield a more directive rather than autonomy-supportive counseling style. In line with this notion, Heppner, Multon, Gysbergs, Ellis and Zook (1998) have found a negative relation between career counselor self-efficacy and the clients' experienced internal locus of control. These findings suggest that the relationship between counselor self-efficacy and autonomy-supportive responding might be more complicated than simply assuming that higher counselor self-efficacy is related to more autonomy-support. More research is needed to investigate this relationship.

Another explanation for the non-significant relation between counselor self-efficacy and autonomy-supportive responding could be that there appeared to be little difference between the participants' counselor self-efficacy. This could have had a negative effect on the power of our study, which means that there might have been a bigger chance that no significant relation had been found, while there actually was one (Type II error) (Field, 2013). A possible explanation for the low variance in counselor self-efficacy-scores might be that the video vignettes did not display enough resistance to elicit differences between the participants' counselor self-efficacy. That is, it would be plausible that counselors have a fair amount of self-efficacy to manage moderate amounts of resistance. Indeed, the participants' rates indicated that the resistance in our video vignettes was moderate. Possibly, when more severe kinds of resistance would have been displayed, the counselor would have needed to make an appeal to more advanced counseling strategies in order to overcome this. As counselor self-efficacy is mostly influenced by performance accomplishments (Bandura, 1977), it is plausible that counselors would experience more differences in their perceived ability to effectively perform such advanced helping skills compared to basic helping skills. However, future research is needed to conclude this hypothesis.

Strengths and limitations

There are several strengths and limitations of this study. A strength of this study is its research design. As noted before, the video vignettes allowed us to measure autonomy-support in a specific, realistic and, yet, systematic manner. Therefore, this design enabled us to measure differences between participants, to elicit spontaneous and realistic responses and to draw fairly reliable conclusions from the research outcomes, as the possible influence of client-factors was limited. Indeed, according to the participants' rates the video vignettes were a realistic display of resistance. In addition, the video vignettes appeared to be a sensitive instrument to measure autonomy-support, as it elicited a wide variety of responses which differed greatly in their amount of autonomy-support.

A few limitations to this study should be noted as well. First, it could have been possible that our study did not have enough power to confirm our hypothesis. Our results showed that more counselor self-efficacy did coincide with the use of more autonomysupportive responses, which was as we expected. However, the effect was small and the relation was non-significant. In order to get a bigger effect size it is needed to enhance the power of our study, which could be achieved by using a bigger sample. This could possibly lead to a significant relation between counselor self-efficacy and autonomy-supportive responding.

Another limitation concerns the ecological validity of this study. Within this study we only measured the participants' counselor self-efficacy to perform certain basic helping skills during a counseling session with a moderately resistant adolescent. Therefore, no conclusions can be made concerning the counselors' self-efficacy to perform certain specific helping skills or concerning other degrees of resistance. During real counseling sessions, the counselors' self-efficacy would probably be formed by their perceived ability to perform both basic and

specific helping skills. Additionally, during real counseling sessions counselors would probably endure different degrees of resistance as well. Therefore, we should be cautious with the generalization of our findings to real counseling settings. We tried to enhance the ecological validity of this study as much as possible. First, we added a practice fragment to ensure that the participants became familiar with the design, in order for them to respond more realistically. This seemed to be an important addition, as participants frequently noted that it felt somewhat uncomfortable to respond to the video vignettes for the first time. Second, we included a control question to check if participants felt like they responded as they would have in a real counseling session. If they did not, this could have interfered with the generalizability of our study. However, we found that excluding the data of participants who felt like they had not responded realistically did not significantly change the relation between counselor self-efficacy and autonomy-supportive responding.

Future research

In line with the limitations of our study, a few recommendations for future research can be made. First, it would be recommended to perform an experimental study to examine whether the degree of client resistance has an influence on the participants' counselor self-efficacy and/or autonomy-supportive responding. In order to examine this, one group of participants could be shown video vignettes in which an adolescent is moderately resistant, and one group of participants could be shown video vignettes in which the same adolescent is severely resistant. The participants' counselor self-efficacy and autonomy-supportive responding could be measured and it could be examined if there are any differences between the two groups. Using an experimental design could make an important contribution as it would enable us to draw conclusions about cause and effect, which had not been able with our current correlational design. For this study, longer video vignettes could be used; situations could be added in which several exploration, insight or action skills could be performed, or in which relationship conflict or client distress are displayed. This way, participants could indicate their perceived ability to perform certain specific helping skills as well. As noted before, this could have a positive effect on the power and ecological validity of the study.

Second, it would be recommended to perform an experimental study in which real counselor-client dyads are followed Using real counselor-client dyads would be less standardized, however it could give us important insights on the effects of counselor self-efficacy and autonomy-supportive responding on specific client outcomes, like resistance. The manipulation in this study could be that one group receives a training to enhance their

counselor self-efficacy and that the other group receives no training. Then, it could be examined how this training would influence autonomy-supportive responding and client outcomes.

Last, it would be important to investigate what other variables might be related to counselors' use of autonomy-supportive responses in reaction to resistant adolescents with aggression-related problems. In this study, no significant relation between counselor self-efficacy and autonomy-supportive responding has been found. However, we found that counselors do responded very differently in terms of autonomy-support in reaction to resistant adolescents with aggression-related problems, which could probably be explained by the influence of other variables. For example, given the fact that adolescents with aggression-related problems often show deviance and resistance in therapy (Hanna, Hanna, & Keys, 1999), it would be possible that counselors get affected by this and that countertransference occurs. That is, the counselor could give an unconscious, conflict-based reaction to the clients' behavior (Hayes, Gelso, & Hummel, 2011). As some counselors are better at managing countertransference than others (Hayes et al., 2011), it could be important to investigate how countertransference and countertransference management are related to autonomy-supportive responding and resistance.

Conclusion

This study found that counselor self-efficacy did not significantly predict autonomysupportive responding in reaction to resistant adolescents with aggression-related problems. Even though our hypothesis has been rejected, this study offers an important contribution as we developed a new instrument to measure autonomy-support which was shown to be sensitive as it was able to detect great differences in autonomy-supportive responding. This suggests that counselors do respond very differently towards resistance displayed by adolescents with aggression-related problems in terms of autonomy-support. This is important to know, as the low treatment effectiveness among adolescents with aggression-related problems might be caused by the heightened resistance among these adolescents (Hanna, Hanna, & Keys, 1999; Yeager, Dahl, & Dweck, 2018). Previous research indicates that autonomy-supportive strategies reduce resistance more effectively, compared to directive strategies (Westra & Aviram, 2013; Zuroff et al., 2007), and that lower resistance is related to better treatment outcomes, compared to when resistance remains high (Beutler, Harwood, Michelson, Song, & Holman, 2011; Beutler, Moleiro, & Talebi, 2002; Martins & McNeil, 2009; Westra & Aviram; Zuroff et al.). This suggests that autonomy-supportive responses could effectively reduce resistance among adolescent with aggression-related problems. Therefore, finding that counselors do respond very differently to this resistance in terms of autonomy-support, could form a starting point from which future research could develop. Hopefully this study will, together with future research, eventually make a contribution to the improvement of treatment programs for adolescents with aggression-related problems.

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Appendix

