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Predictors of Counseling Self-Efficacy: Examining Counselor Trainees' Perceptions of Supervisory Interaction Style

Poonam V. Doshi, Alfred W. Ward, Rostyslaw W. Robak

Abstract: The present research examined the relationship between perceived supervisory autonomy support and counseling self-efficacy (CSE) of counselor trainees. We explored whether this relationship was mediated by autonomous work motivation using the framework of self-determination theory (SDT; Ryan & Deci, 2017). Participants were master's-level mental health counseling interns ($n = 182$) enrolled in field internships. Mediation analyses showed that autonomous work motivation partially mediated the relationship between perceived autonomy support from supervisor and counselor trainees' CSE. Results underscore the importance of adopting autonomy supportive styles of clinical supervision for enhancing counselor trainees' counseling self-efficacy.

What is the public significance of this article? This study suggests that when clinical supervisors provide an environment that supports counselor trainees' autonomy, trainees experience increased autonomous motivation, which further enhances their counseling self-efficacy.

Keywords: clinical supervision, autonomy support, counseling self-efficacy

Clinical supervision has been shown to have significant impact on the professional training and development of counselors. Supervision potentially increases counselor skills such as listening/observing, conceptualizing cases, and intervening appropriately (Diener & Mesrie, 2015), as well as client outcomes (Bambling & King, 2014). Kocarek (2002) found a significant positive relationship between counselor self-efficacy (CSE) and counselor performance. Hanson (2006) examined the relationship between CSE and supervision and found the supervisory working alliance was the most important predictor of that relationship. Further, she found that CSE is a mediator of the relationship between supervisor working alliance and counselor performance. Bambling and King (2014) showed that a supervisor's interpersonal skill predicted both supervisory alliance and supervision outcome as rated by their supervisees. The existing literature, therefore, affirms the potential benefits of supervisory variables on counselor development. The present

study intends to contribute to this literature by further examining the nature of the supervisor relationship with counselor trainee interns.

The integrated developmental model (IDM) of counselor supervision emphasizes the importance of supervisory environment that is conducive to supervisees' professional growth. Models such as IDM suggests that when supervisors facilitate an optimal environment characterized with support and encouragement, novice counselor trainees progress in terms of their autonomy, motivation, and awareness of counseling practice (McNeill & Stoltenberg, 2016; Stoltenberg & McNeill, 2010). In the present study, we specifically, look into the degree of support for trainees' autonomy in the supervisor–trainee relationship. We begin our literature review by providing a background of relevant research in supervision and CSE. Next, we introduce the supervisory style of autonomy support and highlight research pertinent to the present study. Finally, we provide an overview of the construct of autonomous

motivation, which we examine in our study as an underlying mechanism influencing the relationship between supervisory autonomy support and trainees' CSE.

Supervision and Counselor Self-Efficacy

Clinical supervision potentially contributes to supervisee's competence (Bernard & Goodyear, 2019). Supervision, in the domain of counseling, entails providing guidance to enhance the skills as well as facilitate the professional growth of a counselor, which ultimately leads to positive outcomes for the clients. In the best practice guidelines, Association for Counselor Education and Supervision (ACES, 2011) suggests that "the supervisor continually seeks to enhance his/her self-awareness around supervisor traits/characteristics/ factors that influence the supervisory relationship" (p. 8). The perception of feeling competent and confident in pursuing goal-oriented behaviors or actions is termed *self-efficacy* (Bandura, 1977). Counselor self-efficacy, therefore, is defined as counselor trainees' confidence in their ability to engage effectively in counseling sessions with their client, using microskills, being present and attentive to the counseling process, dealing with the challenging and resistant client issues, and being culturally competent, as well as possessing adequate awareness of their own values and biases during counseling interactions in the hope of mutually attaining positive outcomes for the client (Larson et al., 1992).

Existing literature has affirmed the relationship between clinical supervision and CSE (Bjornestad et al., 2014; Larson et al., 1992; Lent et al., 2003; Sutton Jr & Fall, 1995). Professional counselors who received supervision reported higher CSE compared to those who did not (Cashwell & Dooley, 2001). Similarly, counselor trainees who participated in a study by Kozina et al. (2010) reported an overall increase in CSE and specifically indicated an increased efficacy in using microskills over the course of their training period. Although, studies have focused on the relationship between supervision and CSE, there is a lack of literature investigating styles of supervision that can enhance counselor trainees' CSE. Next, we discuss the findings of few studies that have contributed to this line of research.

In an early but relevant study, Friedlander and Synder (1983) reported that counselor trainees' perceptions of a supportive supervisory relationship influenced their actual counseling performance. Fernando and Hulse-Killacky (2005) reported that among the three supervisory styles (attractive, task-oriented, and interpersonal), task-oriented style was the only significant predictor of trainees' CSE. Supervisors practicing task-oriented style are goal-oriented and provide structure and direction to the trainees. In another study on supervisory styles, Rando (2001) proposed that based on varying levels of support and direction needed by the counselor trainees, supervisors can adopt one of the three supervision styles — technical director, teaching mentor, and supportive mentor. Stoltenberg and McNeill (2010) assert the importance of supervisory support as essential to counselor trainees' growth related to counseling knowledge and skills. In the present study, we examine the effect of the autonomy supportive supervisory style grounded in self-determination theory (Ryan & Deci, 2017), with an aim to reduce the gap in the literature on empirical investigation of the relationship between specific supervisory styles and counselor trainees' CSE. In the next section, we introduce the autonomy supportive style of supervision and discuss relevant research.

Perceived Supervisory Autonomy Support

The research associated with SDT, (Ryan & Deci, 2000, 2017) has identified autonomy support as a contextual factor that provides a suitable environment for an individual to satisfy the basic SDT-identified psychological needs of autonomy, competence, and relatedness (Ryan & Deci, 2017). According to Ryan and Deci (2008), "autonomy support refers to the attitudes and practices of a person (e.g., supervisor) or a broader social context that facilitate the target individual's (e.g., supervisee) self-organization and self-regulation of actions and experiences" (p. 188). In an autonomy-supportive environment, supervisors provide meaningful rationales, offer choices, use a noncontrolling language, and acknowledge negative feelings and they also acknowledge trainees' perspectives and foster their internal motivational resources (Deci & Ryan, 2000; Gagné & Deci, 2005). In the context of counseling, supervisors with an autonomy supportive

style of supervision, therefore, encourage counselor trainees to engage in self-driven counseling behaviors and activities.

Previous research has shown that supervisees who perceive their supervisor as autonomy supportive experience several positive outcomes. Datu and Mateo (2015) demonstrated empirical support for the relationship between CSE and autonomy support. Their results indicated that autonomy support acted as a buffer between lower CSE and flow among Filipino counselors. In a study conducted by Moreau and Mageau (2012), the results of their hierarchical regression analyses indicated that after controlling for stressful events and sociodemographic variables, perceptions of autonomy support from both supervisors as well as colleagues predicted higher work satisfaction, lower turnover intentions, increased psychological health, lower psychological distress, and lower suicidal ideations as outcomes in participants who were enrolled in their practicum experiences in dentistry or veterinary medicine or were new practitioners in these field. Kanat-Maymon and Reizer (2017) examined the impact of perceived supervisors' autonomy supportive style on work performance of newly employed sport analysts ($n = 68$). The results of their multi-level modeling analyses indicated that employees who perceived their supervisor as autonomy supportive showed a sharp increase in their performance over a period of 5 months compared to those employees who perceived their supervisors as less autonomy supportive in the early stage of employment. Kanat-Maymon and Reizer also reported that decline in the employees' performance over time was observed at a slower pace in employees whose supervisors were autonomy supportive compared to those who had less supportive supervisors. In a meta-analysis of 19 studies, Su and Reeve (2011) examined the effectiveness of autonomy supportive training in a variety of settings. The results supported the overall usefulness of the autonomy supportive interventions with a robust effect size of 0.63. Researchers further reported that these interventions were most beneficial for inexperienced trainees. Although there is sufficient research examining the effects of an autonomy supportive style of supervision on workplace outcomes, there is paucity

of this line of research in the field of counselor education. Furthermore, previous research in the SDT literature also affirms that supervisees' autonomous motivation mediates this relationship (Deci et al., 2017; Gillet et al., 2013; Ryan & Deci, 2017). Therefore, in the present article, we not only build on these previous studies to examine if counselor trainees' perceptions of autonomy supportive supervisors were positively related to their CSE, but also investigate if trainees' autonomous motivation mediates this relationship.

Autonomous Motivation as Mediator

Autonomous motivation, as conceptualized by SDT, is an important construct in understanding the professional growth of a counselor trainee (Stoltenberg & McNeill, 2010). Cognitive evaluation theory, an important aspect of SDT, assumes that in addition to social-contextual factors such as autonomy support, individuals must also experience autonomous motivation (Deci & Ryan, 1985; Ryan & Deci, 2017). An individual is autonomously motivated when he or she carries out a certain task or an activity out of volition, and therefore, experiences satisfaction and well-being (Ryan & Deci, 2008). However, not all activities that individuals engage in are autonomous. Some activities are, in fact, driven by external contingencies such as earning rewards and avoiding unpleasant consequences. In the context of counselor supervision, a central question is: Can something be done to influence a counselor trainees' behavior in such a way that they engage in significant counseling tasks or activities out of inherent or autonomous motivation to further experience feelings of efficacy to execute counseling tasks?

The path from autonomy support as a social-contextual factor in the environment to increasing one's autonomous motivation toward attaining progressive outcomes has been established in several experimental as well as correlational studies. Gillet et al. (2013) examined this mediational link and found that autonomous motivation mediated the link between autonomy support as well as organizational support with work related outcomes such as work satisfaction and turnover intentions in a sample of 735 employees working at various companies in

France. Similarly, Nie et al. (2014) investigated autonomous motivation as a mediator between autonomy support and well-being in a sample of 266 teachers from two government-run schools in mainland China. The results of path analysis revealed that autonomy support directly as well as indirectly predicted work outcomes through types of motivation (intrinsic, identified, introjected, and external regulation). There was a direct and indirect relationship for autonomy support and work stress (through external regulation and amotivation). Autonomy support also indirectly but not directly predicted illness symptoms as mediated by introjected regulation and amotivation, and negatively correlated with intrinsic motivation in this study. Although, this mediational link has been extensively researched in organization, health, academic, teaching, physical activity, and parenting domains (Abula et al., 2018; Amoura et al., 2015; Deci et al., 2017; Feng et al., 2019; Mih, 2013), the field of counselor education has lacked attention.

Purpose and Rationale of the Present Study

To the best of researchers' knowledge based on the literature review, empirical studies examining the impact of an autonomy supportive style of supervision on counselor development are limited. Also, there is limited research that has examined the mediational role of autonomous motivation between perceptions of autonomy support and counselor development in the counselor education field. Therefore, to address this gap in the literature we asked two research questions: First, does clinical supervisor's autonomy support increase counseling interns' overall self-efficacy through autonomous motivation? Second, does autonomy support benefit counselor trainees in five specific areas of CSE — microskills, process, awareness of values, difficult client behaviors, and cultural competence — by increasing trainees' autonomous motivation?

Method

Participants

Participants were 182 counselors-in-training enrolled in the mental health counseling program in the state of New York. Participants were eligible to participate if they were currently enrolled in a field

internship to complete requirements of a mental health counseling program. The sample consisted of 32 male responders (17.6%) and 143 female responders (78.6%) with 5 participants (2.7%) identifying their gender as "other." Two respondents (1.1%) did not report their gender. The mean age of participants was 29 years ($SD = 8.08$). Forty-three percent of the sample identified themselves as Caucasian, 23% as Latino/Hispanic, 19% as Black/African American, 4% as Asian, 8% as other and 1.6% were missing data. The full sample was 182 participants; however, some participants were missing data on scale items. Total and subscale scores were only created for participants with no missing item responses, resulting in listwise deletion of cases varying by analysis, yielding sample sizes for each analysis between 163 and 181. Missing items for any scale or subscale ranged between 0 and 3 and no pattern of missing items was detected. Participants reported their supervisor's credentials as 35.7% Licensed Mental Health Counselors (LMHC), 35.7% Licensed Clinical Social Workers (LCSW), 13.7% Psychologists, and 0.5% as Registered Nurses (RN). Lastly, 8.8% did not specify their supervisor's credentials.

Procedure

The researcher made an initial contact by emailing the directors of the mental health counseling program informing them of the study details (background of the study, institutional review board approval, consent forms, data collection procedure, etc.) and requesting their assistance in recruiting participants for data collection. Out of the 24 program directors contacted, 13 responded with a willingness to assist, and therefore, forwarded the researchers' request to their faculty teaching internship classes to schedule class visits for data collection. The first author visited the classes in-person at the scheduled time to recruit participants for data collection. Students were informed that their participation was completely voluntary and that their responses will be kept confidential. Informed consent and questionnaires were distributed. Participants were asked to return the blank questionnaires if they chose not to participate in this study. A total of 193 surveys were distributed, out of which 182 were completed and 11 were returned blank.

Measures

Perceived autonomy support scale for employees. Perceived Autonomy Support Scale for Employees (PASS-E; Moreau & Mageau, 2012) consists of 21 items and was adapted by Moreau and Mageau from Parental Perceived Autonomy Support Scale (P-PASS). The Cronbach's alpha for P-PASS ranged from .76 to .94 as reported in Mageau et al. (2015), therefore suggesting it as a reliable and valid measure. Factor analyses tested by Moreau and Mageau (2012) confirmed that PASS-E consists of two second order factor structures labeled autonomy support and control, and both were strongly negatively correlated with each other ($r = -.67$). The Cronbach's alpha coefficient for perceptions of supervisors' autonomy support subscale in Moreau and Mageau (2012) study was reported as $\alpha = .94$. The autonomy support subscales include nine items that measured trainees' perceptions of whether the supervisor offered choices, provided a rationale, and acknowledged supervisees' feelings and viewpoints (three items each respectively). Participants were instructed to think of their supervisor at the current clinical internship site and respond to the perceptions of autonomy support statements on a 7-point Likert-type rating scale from (1) Do not agree at all, to (7) very strongly agree. An example of an autonomy supportive item is: *"My supervisor consults with me to find what modifications I would like to make to my work."*

The multidimensional work motivation scale. The Multidimensional Work Motivation Scale (MWMS) was developed by Gagné et al. (2015), and was validated on a varied sample of employees ($n=3435$) across nine countries and seven languages. In the present study, we use the English version of the questionnaire. The questionnaire consists of 19 items and factor structure is composed of five first-order factors. The five factors were labelled as amotivation, external regulation, introjected regulation, identified regulation, and intrinsic regulation. In addition, the researchers also obtained a three-factor structure of the second order labeled as autonomous motivation, controlled motivation, and amotivation. Based on self-determination theory (Deci & Ryan, 2008), autonomous motivation

consists of identified and intrinsic motivation subtypes; controlled motivation comprises of external and introjected regulation subtypes, and amotivation is a stand-alone factor. Gagné et al. (2015) states that the 19 items be administered with one preceding stem question: "Why do you or would you put efforts into your current job?" (p. 196). We rephrased the word "job" with "internship" in the stem question to adapt to the needs of our study." The participants were instructed to respond to these statements on a 7-point Likert-type rating scale from (1) not at all, to (7) completely. The alpha coefficients for the English language MWMS were reported above .80 for all subscales (Gagné et al., 2015).

Counseling self-estimate inventory. Counselor self-efficacy was measured by the Counseling Self-Estimate Inventory (COSE; Larson et al., 1992), a 37-item instrument. Items are rated on a 6-point Likert-type scale ranging from 1 (strongly disagree), to 6 (strongly agree), indicating their actual self-efficacy related to counseling in the present time rather than in future. Higher scores indicate a higher level of counseling self-efficacy and vice versa. COSE consists of five factors. The first factor, "microskills" (12 items), assesses the effectiveness of counselor's basic counseling skill response to the client. "Process" (10 items) assesses contents related to a pattern of responses rather than an individual skill response. These responses are based on consistent counselor-client interactions meant to encourage a client's energized participation. The "difficult client behaviors" subscale measures counselor's preparedness related to their knowledge and skill to deal with the clients who may be reluctant, less motivated, or present as difficult. "Cultural competence" assesses a counselor's competence to address issues posed by clients belonging to various ethnic backgrounds. Lastly, the "awareness of values" subscale assesses a counselor's own awareness of his or her personal beliefs. Psychometric properties reported by Larson et al. (1992) included alpha coefficients of .93 for the total scale, .88 for microskills, .87 for process, .80 for difficult client behaviors, .78 for the cultural competence subscale, and .62 for the awareness of values subscale.

Data Analysis

Means, standard deviations, and correlations of the study variables are displayed in Table 1. An a priori power analysis using G*Power 3.1 (Faul et al., 2009), for a test of a single regression coefficient in a three-predictor model, yielded an $n = 73$ to achieve a power of .9 for $\alpha = .05$ and a medium effect size ($\eta^2 = .15$). A post-hoc power analysis, for a test of a single regression coefficient in a three-predictor model, yielded power ranging from .97 to .98, for $\alpha = .05$ and a low to medium effect size ($\eta^2 = .09$) for sample size ranging from 163 and 181, respectively (G*Power 3.1; Faul et al., 2009). To examine whether autonomous motivation plays a mediating role in the relationship between an autonomy supportive style of supervision and counseling interns' total counseling self-efficacy as well as its subscales, we performed a series of regression analyses. We tested mediation hypotheses in four steps (Baron & Kenny, 1986). In step one, the outcome variable, which is counseling self-efficacy (and its subscales in subsequent regressions), was regressed onto the predictor, which was supervisory autonomy support, ignoring the mediator. This regression, if significant, determined the total effect (c) of the relationship between predictor and outcome variables. In step 2, autonomous work motivation (mediator) was regressed on supervisory autonomy support (predictor) which, if significant, determined the effect of path (a). In step 3, both autonomy support (predictor) as well as autonomous motivation (mediator), were regressed on the outcome counseling

self-efficacy (as well as its subscales in subsequent regression analyses). In this step, the mediator (autonomous motivation) must be significantly related to the outcome (counseling self-efficacy and its subsequent subscales). In addition, the relationship between the initial predictor (autonomy support) and the outcome (counseling self-efficacy) disappears or is substantially reduced and weight significantly reduces as well, and thus indicates that the variance in the outcome is accounted for by the mediator (autonomous motivation). As per Hayes' (2018) recommendation, bootstrap 95% confidence intervals were calculated for each indirect effect. This procedure was followed to test the mediational effect of autonomous motivation on total counseling self-efficacy as well as all its subscales — microskills, process, awareness of values, difficult client behaviors, and cultural competence.

We conducted assumption checks for regression in the preliminary analyses. The scatter plots of standardized residual values and standardized predicted values for all the mediation analyses showed that the assumptions for linearity and homoscedasticity were met. The histogram plots showed normality of residuals. We also examined assumptions for multicollinearity by checking variance inflation factor (VIF) and tolerance factors. These assumptions were met as the VIF (1.69–1.74) and tolerance (0.57–0.60) statistics were within acceptable limits. Therefore, the assumptions for regression were met.

Table 1

Means, Standard Deviations, and Correlations of Variables

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Perceived supervisor autonomy support	50.11	10.73	-							
2. Autonomous motivation	36.63	5.78	.65**	-						
3. Total counseling self-efficacy	175.41	19.78	.31**	.36**	-					
4. Microskills	58.89	6.67	.37**	.34**	.81**	-				
5. Process	27.26	5.28	.24**	.30**	.82**	.53**	-			
6. Awareness of values	37.18	5.34	.29**	.31**	.81**	.52**	.71**	-		
7. Difficult client behaviors	30.81	5.35	.20**	.27**	.79**	.55**	.52**	.51**	-	
8. Cultural competence	20.49	2.88	.11	.23**	.63**	.44**	.48**	.43**	.47**	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Results

From a simple mediation analysis conducted using ordinary least squares path analysis, autonomy support indirectly influenced total counseling self-efficacy through its effect on autonomous work motivation of the counseling intern. This mediation model is depicted in Figure 1, which also serves as a model for subsequent mediation analyses throughout the paper. As can be seen in Table 2, counseling interns experienced more autonomous work motivation when they perceived their supervisors to be autonomy supportive ($a = 0.34$) and this autonomous work motivation further predicted the total counseling self-efficacy of the interns ($b = 0.83$). The indirect effect was $(0.34)(0.83) = .28$. We tested the significance of this indirect effect using bootstrapping procedures. The 95% confidence interval based on 5,000 bootstrap samples for the indirect effect was .06 to .51. Thus, the indirect effect was statistically significant. Furthermore, the direct effect was not significant ($c' = .31, p = .08$).

In the second simple mediation analysis, autonomy support directly influenced microskills significantly ($c' = .16, p = .01$). However, indirect effect on microskills through autonomous work motivation was insignificant. As seen in Table 3, counsel-

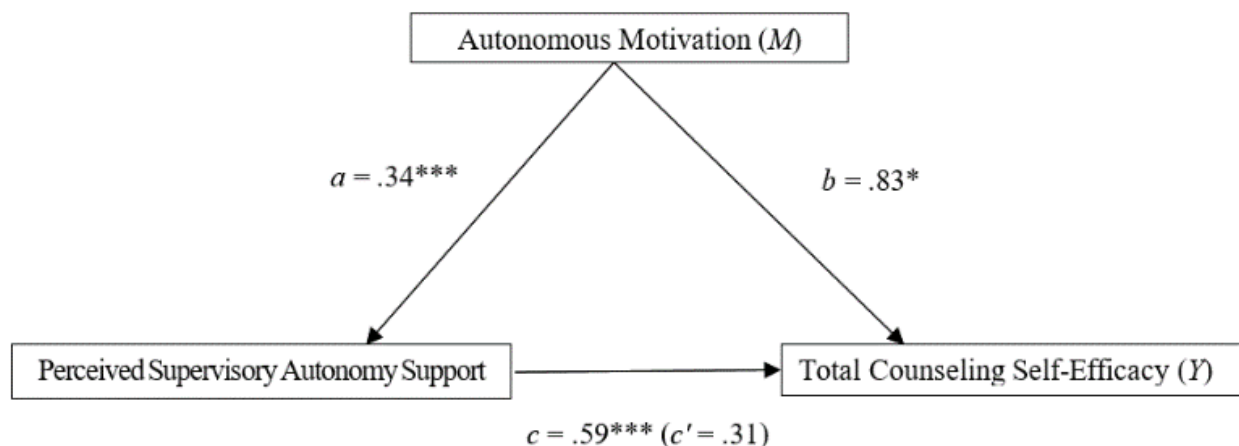
ing interns experienced more autonomous work motivation when they perceived their supervisors to be autonomy supportive ($a = 0.35$), however, this autonomous work motivation did not further predict microskills of the interns ($b = 0.18$). The indirect effect was $(0.35)(0.18) = .06$. The 95% confidence interval based on 5000 bootstrap samples for the indirect effect was -.01 to .13. Thus, the indirect effect was not statistically significant.

The third simple mediation analysis showed that autonomy support indirectly influenced the process subscale score of counseling self-efficacy through autonomous work motivation. As can be seen in Table 3, counseling interns experienced more autonomous work motivation when they perceived their supervisors to be autonomy supportive ($a = 0.35$) and this autonomous work motivation further predicted the process subscale score ($b = 0.20$). The indirect effect was $(0.35)(0.20) = .07$. The 95% confidence interval based on 5,000 bootstrap samples for the indirect effect was .01 to .13. Thus, the indirect effect was statistically significant but direct effect was not ($c' = 0.05, p = 0.26$).

In the fourth simple mediation analysis, autonomy support directly influenced awareness of values significantly ($c' = .09, p = .04$). However, indirect effect on awareness of values scores through

Figure 1

Test of Mediation by Autonomous Motivation of the Relationship Between Supervisors' Autonomy Support and Total Score of COSE



Note. $*p < .05$. $**p < .01$. $***p < .001$.

Table 2

Model Coefficients for the Autonomous Work Motivation as a Mediator Between Autonomy Support and Total COSE

Predictor	Outcome							
	<i>M</i> (Autonomous Work Motivation)				<i>Y</i> (Total Counseling Self-Efficacy)			
		Coeff.	<i>SE</i>	<i>p</i>		Coeff.	<i>SE</i>	<i>p</i>
<i>X</i> (Autonomy support)	<i>a</i>	.34	.03	<.001	<i>c'</i>	.31	.17	.08
<i>M</i> (Autonomous Motivation)		-	-	-	<i>b</i>	.83	.32	.01
Constant	<i>i</i> ₁	19.67	1.70	<.001	<i>i</i> ₂	129.43	9.42	<.001
<i>R</i> ² = .40				<i>R</i> ² = .14				
<i>F</i> (1, 161) = 106.03, <i>p</i> = <.001				<i>F</i> (2, 160) = 12.93, <i>p</i> = <.001				

autonomous work motivation was insignificant. As can be seen in Table 3, counseling interns experienced more autonomous work motivation when they perceived their supervisors to be autonomy supportive ($a = 0.35$), however, this autonomous work motivation did not further predict awareness of values of the interns ($b = 0.15$). The indirect effect was $(.35)(.15) = .06$. The 95% confidence interval based on 5,000 bootstrap samples for the indirect effect was -.01 to .12. Thus, the indirect effect was not statistically significant, but the direct effect was.

The fifth simple mediation analysis showed that autonomy support indirectly influenced the difficult client behaviors subscale scores of COSE through autonomous work motivation. As can be seen in Ta-

ble 3, counseling interns experienced more autonomous work motivation when they perceived their supervisors to be autonomy supportive ($a = 0.35$) and this autonomous work motivation further predicted the difficult client behaviors subscale score ($b = 0.24$). The indirect effect was $(.35)(.24) = .08$. The 95% confidence interval based on 5,000 bootstrap samples for the indirect effect was .02 to .14. Thus, the indirect effect was statistically significant. The direct effect was found to be nonsignificant ($c' = 0.02, p = 0.73$).

The sixth simple mediation analysis showed that autonomy support indirectly influenced the cultural competence subscale scores of counseling self-efficacy through autonomous work motivation. As can be seen in Table 3, counseling interns experienced

Table 3

Summary of Autonomous Motivation as a Mediator Between Supervisors' Autonomy Support and COSE Subscales

Counseling Self-Efficacy Subscales	Path (<i>a</i>)	Path (<i>b</i>)	Path (<i>c</i>) or Total Effect	Path (<i>c'</i>) or Direct Effect	Indirect effect (<i>a·b</i>)	Bootstrap 95% CI (<i>a·b</i>)
Microskills	.35***	.18	.22***	.16**	.06	-.01, .13
Process	.35***	.20*	.12**	.05	.07	.01, .13
Awareness of values	.35***	.15	.15***	.09*	.06	-.01, .12
Difficult client behavior	.35***	.24*	.10*	.02	.08	.02, .14
Cultural competence	.35***	.12*	.03	-.01	.04	.01, .08

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. Values for paths *a*, *b*, *c*, *c'* are unstandardized regression coefficient.

more autonomous work motivation when they perceived their supervisors to be autonomy supportive ($a = 0.35$) and this autonomous work motivation further predicted the cultural competence subscale score ($b = 0.12$). The indirect effect was $(.35)(.12) = .04$. The 95% confidence interval based on 5,000 bootstrap samples was .01 to .08. Thus, the indirect effect was statistically significant. The direct effect was found to be nonsignificant ($c' = -.01, p = 0.72$).

Discussion

The present study aimed to extend the mediational hypothesis link widely affirmed in the SDT literature to the field of counselor education. We, therefore, examined the relationship between perceived autonomy support from the supervisor, autonomous motivation, and CSE of the counseling interns in this study. As anticipated, we found that autonomous motivation plays an important role by mediating the relationship between perceptions of supervisory autonomy support and counseling interns' overall counseling self-efficacy. Our results are in line with previous related findings in the SDT literature that autonomous motivation mediates the relationship between perceived supervisory autonomy support and outcomes such as work satisfaction and psychological well-being among health care interns and new professionals (Moreau & Mageau, 2012), work satisfaction, and turnover intentions in French workers (Gillet et al., 2013), as well as job satisfaction among Chinese teachers working at government middle schools (Nie et al., 2014).

In the present study, we further explored this mediational relationship on each of the CSE areas — microskills, process, awareness of values, difficult client behaviors, and cultural competence — by conducting additional path analyses. Although, perceived autonomy support from a supervisor indirectly predicted overall CSE of the counseling intern through autonomous motivation, this finding was not similar for specific areas of CSE. To our surprise, only three out of the five areas of COSE — attending to process, handling difficult client behaviors, and feeling culturally competent — were indirectly predicted by autonomy support, whereas microskills and awareness of values were not.

An unexpected but interesting finding was that autonomy support directly predicted both microskills and awareness of values. These findings suggest that perceptions of supervisory autonomy support had a direct impact on counselors' beliefs in their ability to execute microskills together with their ability to become cognizant of and deal with values and biases that come in the way of working with their clients. With reference to the findings on microskills, a possible explanation could be that microskills are basic counseling skills that are concrete and easily quantifiable, compared to other aspects of counseling (Larson et al., 1992). Therefore, it is plausible that the counselor is directly reliant on a supervisor's autonomy support to become efficacious in performing microskills. Autonomy support also *directly* (and not indirectly) predicted awareness of values subscale in a positive direction. One possible explanation for this direct predictive relationship could be that the trainees' values are being challenged in the supervision process, especially during field internships (Leach et al., 1997).

Counselor complexity model (Stoltenberg, 1981) provides a possible alternative explanation of the findings that autonomy support directly predicted counselor's efficacy to execute microskills and become aware of values. According to Stoltenberg, counselor trainees at Level 1 (i.e., primitive) stages of counseling development might need more direct supervisory support because of higher anxiety and ambiguity involved in exploring their own values, beliefs, and biases as a counselor trainee (Stoltenberg & McNeill, 2010). Although, we did not measure it in this study, it is likely that the participants were experiencing anxiety related to Stoltenberg's Level 1 stage of counselor development, and therefore, relied directly on supervisory support to perform microskills as well as become aware of their values toward clients. We recommend that future researchers provide an additional clarification of these results by incorporating the measures to assess interns' levels of anxiety associated with internship. Finally, it is important to note that in the present study, exploratory analyses did not show any differences in trainees' counseling self-efficacy scores based on the supervisor's licensure credentials (e.g., LMHC, LCSW, etc.).

Implications for Mental Health Counseling

The present study contributes to the counselor development literature on the beneficial impact of supervisory autonomy support on counselor trainees' development in terms of CSE. The results of our study provide further evidence to support the integrated developmental model's (IDM) notion that ongoing supervisory support is important for counselor trainees' professional development (Stoltenberg & McNeill, 2010), especially in the early phase of their training. We found that perceived autonomy support from the supervisor enhances trainees' autonomous motivation, which further improves trainees' CSE specifically process, dealing with difficult clients, and being culturally competent. Conceivably, these findings imply that supervisors are encouraged to be more supportive of counselor trainees' autonomy.

Supervisors may facilitate an autonomy supportive environment by creating opportunities for counselor trainees to share their own ideas and perspectives for implementing and executing tasks pertaining to their actual counseling sessions. The finding that autonomy support directly predicts microskills and awareness of values suggests that trainees are directly dependent on a supervisor's support to learn these beginning skills. We, therefore, urge supervisors to be aware of the supervisee needs, especially during the early phase of their training as counselors. During situations when the supervisor must be more directive, they could still continue to support trainees' autonomy by providing a rationale when requesting the trainee perform a particular task (Deci et al., 2017; Ryan & Deci, 2017). Su and Reeve (2011) reported that interventions consisting of training programs ranging from 1 hour to 3 hours of training for supervisors to be autonomy supportive were relatively most effective. This suggests that supervisors can possibly adopt an autonomy supportive style of supervision within their current supervisory practices. Nevertheless, further research is required to confirm this assertion in counselor supervision.

The present study has implications for counselors-in-training as well. Counselor trainees are entry-level clinicians who may benefit from feeling

competent as they are consistently required to determine which set of skills and techniques might be appropriate given their clients' needs. Consequently, based on the findings of our study, if they perceive their supervisors to be autonomy supportive, counselor trainees may feel more motivated to perform such challenging counseling tasks of attending to process of counseling, handling difficult client behaviors, and practicing cultural competency with an increased sense of CSE.

Limitations and Future Research

We recognize several limitations to the present research. First, most of our participants identified themselves as Caucasian females. Therefore, the demographic distribution of our sample must be kept in mind before generalizing the results to the counseling interns at large. We would also like to note that the data for this study was collected during the summer and fall of 2016. Second, the study measured counseling interns' CSE at one point in time. Therefore, the results did not allow us to draw conclusions on long-term effects of supervisory perceived autonomy support. Future studies must consider using a longitudinal design to examine these changes across different time periods. Third, the current study measured only CSE as an outcome. Therefore, the effects of autonomy support on other counselor variables are not known. The fourth limitation is that the researchers looked at the supervisory autonomy support of the supervisors through the self-report of the overall perception of counseling interns. We suggest that future research can use the supervisor-supervisee dyad model to investigate the relationship between supervisory styles and CSE. In addition, the counselor's perceptions of their own self-efficacy were measured using self-reports. Even though the COSE demonstrates sound psychometric properties, session evaluation ratings may provide a better understanding of the counselor's performance. However, self-reports are commonly used in psychology and counseling research. Furthermore, self-reports are considered more relevant when it comes to measuring concepts such as measuring one's perception about competence (McCroskey, 1997). Fifth, the present study did not measure individual differences to investigate if those with specific personality traits might prefer an

autonomy supportive style of supervision. For example, Black and Deci (2000) reported that organic chemistry students who were low in autonomous self-regulation (i.e., individuals' relative degree of autonomy) benefited more from their instructors' autonomy support than those who were high in autonomous self-regulation. Finally, we recommend that future studies consider looking at a wider range of outcomes to further understand the effects of autonomy supportive supervision style. Based on the previous literature in SDT, it might be worth studying outcomes such as work satisfaction, turnover intentions, illness symptoms, and psychological well-being (Gillet et al., 2012; Moreau & Mageau, 2012; Nie et al., 2014) in the context of counselor education.

In conclusion, the findings provide evidence for the importance of an autonomy supportive style of supervision for counselors-in-training. The results also support the role of autonomous motivation as a mediator between autonomy support and overall CSE as well as specific areas of CSE of process, difficult client behaviors, and feeling culturally competent. The researchers hope that the findings of the present study will encourage clinical field supervisors of mental health counseling programs to incorporate an autonomy supportive style of supervision for the purpose of increasing trainees' CSE via autonomous motivation.

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