Teaching and Teacher Education 69 (2018) 43–51

Contents lists available at ScienceDirect

Teaching and Teacher Education

journal homepage: www.elsevier.com/locate/tate

Why autonomy-supportive interventions work: Explaining the professional development of teachers' motivating style

Sung Hyeon Cheon [a], Johnmarshall Reeve [b, *], Youngsun Lee [c], Jae-won Lee [d]

[a] Kangwon National University, Republic of Korea
[b] Korea University, Republic of Korea
[c] Inha University, Republic of Korea
[d] Yong In University, Republic of Korea

HIGHLIGHTS

- Post-intervention, teachers' motivating style became more autonomy supportive.
- During the intervention, teachers developed three personal-professional resources.
- Intervention-enabled gains in teaching efficacy explained greater autonomy support.
- Intervention-enabled gains in intrinsic goals explained greater autonomy support.

ARTICLE INFO

Article history:
Received 8 April 2017
Received in revised form
19 September 2017
Accepted 28 September 2017

Keywords:
Autonomy support
ASIP
Intervention
Intrinsic goals
Teaching efficacy
Self-determination theory

ABSTRACT

Carefully designed interventions consistently help K-12 teachers learn how to implement a more autonomy-supportive classroom motivating style. In the present study, we investigated what resources teachers acquired during these interventions that explained why they are so able to successfully upgrade the quality of their motivating style. We randomly assigned 91 full-time teachers to participate or not in a year-long autonomy-supportive intervention program (ASIP), and we longitudinally assessed autonomy support and three hypothesized mediating resources—gains in need satisfaction during teaching, gains in teaching efficacy, and a greater adoption of intrinsic instructional goals. The ASIP did increase teachers' autonomy support, as expected, and the two resources that explained this professional developmental achievement were intervention-enabled gains in teaching efficacy and intrinsic instructional goals.

In every class, teachers ask their students to engage in various learning activities. While doing so, teachers inevitably rely on a particular motivating style, the most widely studied of which is autonomy support (Assor, Kaplan, & Roth, 2002; Cheon, Reeve, Yu, & Jang, 2014; Deci, Schwartz, Sheinman, & Ryan, 1981). Autonomy support is an interpersonal tone of support and understanding in which the teacher appreciates, vitalizes, and actively supports students' inner motivational resources (e.g., intrinsic motivation, psychological needs) by utilizing teaching practices such as taking the students' perspective, creating opportunities for students' input and initiative, offering learning activities in need-satisfying ways, providing explanatory rationales for teacher requests, and acknowledging and accepting students' expressions of negative affect as both understandable and okay. A teacher's classroom autonomy-supportive motivating style is important because its presence catalyzes high-quality and engagement-fostering motivations (need satisfaction, autonomous motivation, intrinsic goals) and hence students' adaptive classroom functioning and outcomes (Assor et al., 2002; Cheon, Reeve, & Moon, 2012; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004; Vansteenkiste, Simons, Lens, Soenens, & Matos, 2005).

When K-12 teachers participate in carefully-designed, theory-

* Corresponding author. 633 Uncho-Useon Hall, Department of Education, Korea University, Anam-dong, Seongbuk-gu, Seoul 02841, Republic of Korea.
E-mail address: reeve@korea.ac.kr (J. Reeve).

https://doi.org/10.1016/j.tate.2017.09.022
0742-051X/

based, and workshop-oriented training programs to learn how to become more autonomy supportive toward their students during instruction, two reliable effects occur. First, most teachers capitalize on this professional developmental opportunity and successfully upgrade the quality of their classroom motivating style (more autonomy supportive), as documented both by students' post-intervention perceptions of their teacher's motivating style (Cheon et al., 2012; Cheon, Reeve, & Song, 2016) and by observers' objective ratings of teachers' post-intervention teaching behavior (Cheon et al., 2014; Cheon & Reeve, 2015). Second, after teachers become more autonomy supportive, their students show large, educationally-important, and wide-ranging gains in autonomous motivation, classroom engagement, conceptual learning, academic achievement, and well-being (Cheon et al., 2012, 2016; Chatzisarantis & Hagger, 2009; Tessier, Sarrazin, & Ntoumanis, 2010; Vansteenkiste, Matos, Lens, & Soenens, 2007).

What this research literature has not yet been able to do is to explain precisely what personal resources teachers acquire during these interventions that allow them to upgrade the quality of their motivating style so successfully and so reliably. That is, these interventions work, but it is still an open question as to precisely why they work as well as they do.

1. Explaining why autonomy-supportive intervention programs work

We propose that teacher participation in an ASIP allows teachers to develop three empowering personal-professional resources—namely, greater psychological need satisfaction during teaching, greater teaching efficacy, and the adoption of relatively more intrinsic (and less extrinsic) instructional goals.

Greater need satisfaction. The reason why students of autonomy-supportive teachers show a wide range of important positive educational outcomes (e.g., greater engagement) is clear—it is because they first experience greater psychological need satisfaction during classroom instruction (i.e., greater autonomy, competence, and relatedness satisfaction; Cheon et al., 2012). That is, gains in need satisfaction produce a wide range of positive outcomes (Ryan & Deci, 2017). That is, students show more interest during instruction, become more engaged, and learn more conceptually after they first experience greater autonomy, competence, and relatedness need satisfaction. Interestingly, teachers too experience this same boost in their own need satisfaction after they learn how to teach in more autonomy-supportive ways (Cheon et al., 2014). That is, just as their students show greater need satisfaction from receiving autonomy support, teachers show greater need satisfaction from giving autonomy support. Other research shows that a teacher's autonomy-supportive motivating style and his or her need satisfaction during teaching tend to positively covary (Quiles, Moreno-Murcia, & Lacarcel, 2015). Given this evidence, we propose that teacher participation in an ASIP will enhance teachers' need satisfaction during teaching and this intervention-enabled boost in need satisfaction will, in turn, explain why teachers are able to use the ASIP to learn how to become more autonomy supportive.

Greater teaching efficacy. Teaching efficacy is a teacher's judgment of his or her capacity to cope with the teaching situation in ways that bring about desired outcomes, and it revolves principally around teachers' confidence in being able to implement instructional strategies that reliably boost students' learning, engagement, and desired behavior (Tschannen-Moran & Woolfolk Hoy, 2001). Like other teacher training programs to increase teaching efficacy (e.g., Liaw, 2017), teachers who participate in autonomy-supportive interventions also show a rather pronounced increase in their teaching efficacy (Cheon et al., 2014), and this increase occurs because, during an ASIP, teachers (1) expand their existing repertoire of instructional behaviors to incorporate new-and-improved and evidence-based ways to enhance their students' conceptual learning, engagement, and behavior and (2) come to believe that these newly-learned autonomy-supportive instructional behaviors (e.g., "take the students' perspective", "provide explanatory rationale for requests") are both highly effective and easy-to-do (Reeve & Cheon, 2016). Given that participation in an ASIP has been shown to increase teaching efficacy and given that ASIP participation helps teachers see autonomy-supportive instructional behaviors as both effective and easy-to-implement, we propose that a second reason why teachers learn to be more autonomy supportive is because the intervention enhances their sense of teaching efficacy.

Teaching efficacy and competence need satisfaction are similar, but not interchangeable, motivational constructs (Rodgers, Markland, Selzler, Murray, & Wilson, 2014). Both constructs can be experienced and measured in somewhat similar ways (e.g., as perceived competence), but they are also different in important ways. Teaching efficacy is a key concept in social-cognitive theory (Bandura, 1986), and it represents a teacher's situation-specific self-confidence. Teaching efficacy develops as teachers reflect on whether they can execute specific teaching behaviors under specific circumstances. Once formulated, teaching efficacy predicts behavioral initiation, effort, and persistence, but it does not concern the outcomes of such teaching (e.g., need satisfaction, well-being). The need for competence is a key concept in self-determination theory (Ryan & Deci, 2017), and it represents a teacher's sense of effective functioning during teaching. Competence need satisfaction during teaching predicts the proactive desire (intrinsic motivation) to exercise and grow one's capacities and teaching skill, and it generates a willingness (even an eagerness) to seek out new challenges and to want to make progress and to learn something new. When teachers add new instructional stills to their repertoire, they do not so much formulate a judgment of efficacy but, instead, experience a deep sense of satisfaction and well-being from a job well done. In terms of measurement, self-efficacy and competence need satisfaction have been shown to be two distinct constructs—conceptually and statistically (as per confirmatory factor analysis; Rodgers et al., 2014).

Adoption of intrinsic instructional goals. Instructional goals represent the priorities or desired outcomes that teachers bring with them into the classroom. According to a self-determination theory framework (Kasser & Ryan, 1996, 2001; Sheldon, Ryan, Deci, & Kasser, 2004), these priorities can be divided into two categories of intrinsic and extrinsic instructional goals. Extrinsic instructional goals are those classroom priorities and teacher strivings to promote their students' socially-valued indicators of worth, such as high test scores, while intrinsic instructional goals are those classroom priorities and teacher strivings to promote their students' personal and relationship growth (Jang, 2017). Adopting intrinsic goals can be expected to increase teachers' use of autonomy-supportive instructional behaviors because autonomy support is literally the means by which teachers pursue their intrinsic instructional goals [i.e., "To accomplish my intrinsic instructional goal (e.g., to promote my students' personal growth), I will need to teach in an autonomy-supportive way."], just as adopting extrinsic goals can be expected to take teachers away from autonomy-supportive instructional behaviors [i.e., "To accomplish my extrinsic instructional goal (e.g., to promote my students' high test scores), I will need to forego teaching in an autonomy-supportive way."]. Given the close relation between intrinsic goals and autonomy-supportive teaching practices (Jang, 2017), we