

The differential impact of teachers and teaching assistants (TAs) on academic progress: What role does autonomy support play?

Why was this looked at?

Research on TAs

TAs now represent a quarter of the workforce in UK mainstream schools (Webster, Blatchford, & Russell, 2013). TAs have a direct pedagogical role, yet worryingly, a recent study found that the: "...pupils who received the most support from teaching assistants (TAs) had less engagement with a qualified teacher and were found to make significantly less academic progress than similar pupils who received less TA support." (Webster et al., 2013, p. 78).

Part of Webster et al.'s (2013) explanation for the differential impact of teachers and TAs on academic progress focused on differences between teacher and TA talk. Specifically, they found that, linguistically and cognitively, TA talk would 'close down' students' contributions whereas teacher talk saw them 'open up'. An examination of the data on which this conclusion was drawn indicated that, on the basis of the definitions and instructional behaviours outlined by Reeve (2009), this distinction between teacher and TA talk could alternatively be seen as the difference between autonomy-supportive versus controlling interactional styles.

Research on SDT and autonomy support

In a review of research on the application of SDT to educational practice, Niemiec and Ryan (2009) demonstrated that the majority of this research focuses on the following two areas:

1. The positive relationship between autonomous motivation and a range of desirable academic and psychological outcomes for students.
2. Schools as social contexts that promote or thwart autonomous motivation.

With this in mind, research has examined how teachers, who represent a core element of the school social context, influence students' autonomous motivation (Soenens, Sierens, Vansteenkiste, Dochy, & Goossens, 2012; Roth, Assor, Kanat-Maymon, & Kaplan, 2007). Furthermore, with the positive relationship between autonomy-supportive teaching and autonomous motivation well-established, research has looked to identify what factors predict the extent to which teachers are autonomy-supportive (Pelletier, Sequin-Levesque, & Legault, 2002). This research has considered a range of motivational variables yet little attention has been given to the role of teachers' perceived competence.

What key terms does the reader need to know?

Self-determination theory (SDT): A meta-theory of human motivation and personality (Ryan & Deci, 2000). It posits that for people to flourish, three basic psychological needs must be met:

1. **Autonomy:** Behaviour is experienced as volitional and free from control (Niemiec & Ryan, 2009).
2. **Competence:** Behaviour is experienced as effectively enacted (Niemiec & Ryan, 2009).
3. **Relatedness:** Feeling connected to others by way of reciprocal love and care (Deci & Ryan, 2000).

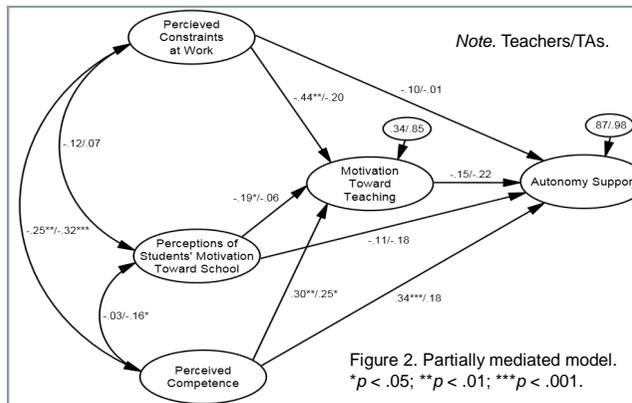
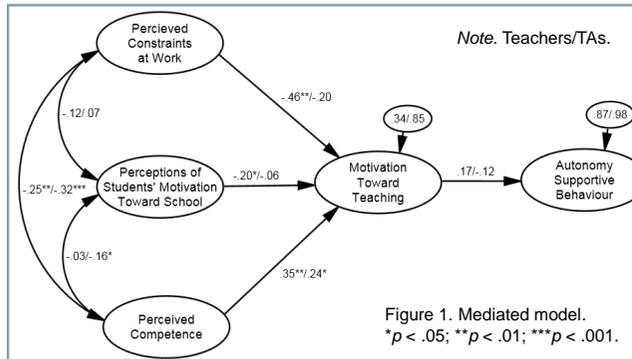
Autonomy support: An interpersonal style that promotes volition, interest and a sense of initiative in others (Soenens et al., 2012).

References: Niemiec, C., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133-144; Pelletier, L. G., Levesque, C. S., & Legault, L. (2002). Pressure from above and pressure from below as determinants of teachers' motivation and teaching behavior. *Journal of Educational Psychology*, 94, 186-196; Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational Psychologist*, 44, 159-175; Roth, G., Assor, A., Kanat-Maymon, Y., & Kaplan, H. (2007). Autonomous motivation for teaching: How self-determined teaching may lead to self-determined learning. *Journal of Educational Psychology*, 99, 761-774; Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78; Soenens, B., Sierens, E., Vansteenkiste, M., Dochy, F., & Goossens, L. (2012). Psychologically controlling teaching: Examining outcomes, antecedents, and mediators. *Journal of Educational Psychology*, 104(1), 108-120; Webster, R., Blatchford, P., & Russell, A. (2013). Challenging and changing how schools use teaching assistants: Findings from the Effective Deployment of Teaching Assistants project. *School Leadership and Management*, 33(1), 79-96; Wellborn, J., Connell, J., Skinner, E., & Pierson, L. (1992). Teacher as social context (TASC). Two measures of teacher provision of involvement, structure, and autonomy support. *Technical Report*. Rochester, New York: University of Rochester.

What was the focus?

Research Questions

- RQ1. Are teachers more autonomy-supportive than TAs?
RQ2. What factors determine teachers' and TAs' autonomy-supportive behaviour?



Who conducted this research?

Dr Marcus Bennett

University College London/Essex County Council
marcus.bennett@essex.gov.uk

What was done?

429 school staff (202 teachers, 227 TAs) from across the range of UK mainstream educational settings and one special school completed a questionnaire booklet comprised of four pre-existing measures and one new measure. Demographic information was also collected.

Measure	Construct
The Autonomous Motivation for Teaching Scale (Roth et al., 2007)	Autonomous motivation for teaching
Teacher as Social Context – Autonomy Subscale (Wellborn, Conner, Skinner, & Pierson, 1992)	Autonomy support/Autonomy-supportive behaviour
The Constraints at Work Scale (Pelletier et al., 2002)	Perceived constraints at work
The Perception of Students' Motivation Scale (Pelletier et al., 2002)	Perception of students' autonomous motivation towards school
The Perceived Competence for Teaching Scale	Perceived competence for teaching

RQ1: What was found?

Teachers reported offering students significantly more autonomy support than did TAs, $t(400) = 5.39$, $p < .001$, $r = .26$. Differences between the professional groups on individual subscales showed this difference to be accounted for by teachers scoring significantly higher for choice ($r = .22$), respect ($r = .10$) and controlling behaviour (when scores were reversed; $r = .25$). The difference in terms of relevance ($r = .08$) was not significant.

RQ2: What was found?

Variance explained (see Figures 1 and 2)

Teachers: Model explained 13% of variance in autonomy support and 66% in autonomous motivation for teaching.

TAs: Model explained 2% of variance in autonomy support and 15% in autonomous motivation for teaching.

Significant relationships between the variables

Teachers: perceived competence → autonomy support
perceived competence → autonomous motivation
constraints at work → autonomous motivation

TAs: perceived competence → autonomy support
perceived competence → autonomous motivation

Note. → = x was a significant predictor of y

What are the implications for EP Practice?

1. EPs should support all teaching staff, but TAs in particular, to adopt an autonomy-supportive approach.
2. EPs should support school leaders to adopt practices that promote feelings of autonomy and competence among school staff. This could include helping school leaders to select or develop performance management systems that enhance the perceived competence of staff and to demonstrate a managerial style that is autonomy-supportive.