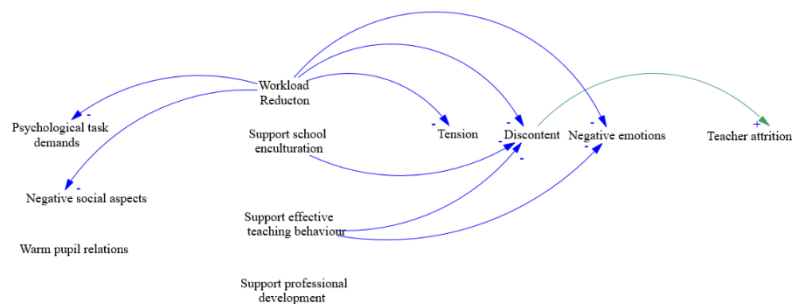


## APPENDIX A

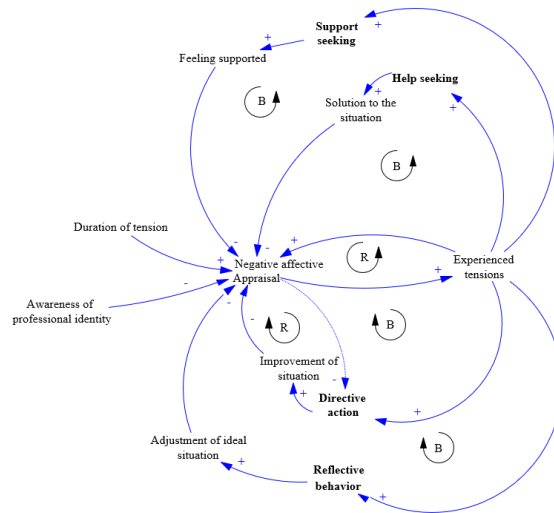
This document shows the construction of a part of the System Dynamics model, based on one qualitative and one quantitative study from the national research program (AUTHOR PUBLICATION; Harmsen et al., 2018). Other studies are included in the model but are not shown for legibility and instructional purposes.

- Quantitative studies focus on a structured overview of relations between variables, but where to intervene requires more insight in the 'how and why' of each relation. Also, not all tested variables show (cor)relations to other variables in the study (for example, 'Warm pupil relations' and 'Support professional development', Figure 1). However, these variables are included because they are considered essential to teacher attrition.



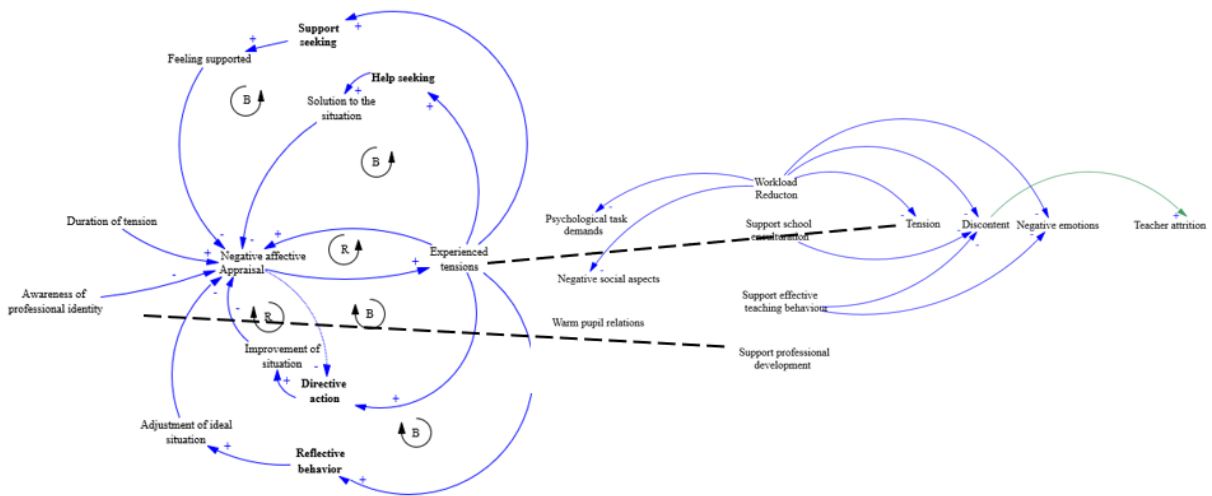
**Figure 1.** Insights from Harmsen et al. (2018) in a System Dynamics model. On the left, three stress causes and on the right three stress responses. In the middle are four aspects of induction programs. The green arrow illustrates the authors' expectations based on their findings and literature.

- Qualitative studies present results in a lengthy descriptive way, making it difficult to pinpoint where to design interventions for change. These descriptions show a different visual than the quantitative studies (Figure 2), including feedback loops (reinforcing subsystems, virtuous or vicious circles). These loops show where the system experiences an effect getting continuously stronger, or where it seeks a balance due to stimulating and inhibiting variables.



**Figure 2.** Insights from a qualitative publication (AUTHOR) in a System Dynamics model. The circular arrows indicate a feedback loop (R), increasingly getting stronger, or a balancing cycle (B), seeking a status quo.

- Both studies focus on tensions, and both mention (a relation to) the concept 'stress'. Connecting the studies into one model requires a conceptual comparison (see Figure 3).



**Figure 3.** Links in the findings of the two studies presented in Figure 1 and Figure 2. Both studies explore stress and tensions, but in different relations. The qualitative study found awareness of professional identity as an important variable, which relates to the support for professional development in the quantitative study.