

Table 1. Overview of utilized variables.

| Scale | N | # | α | $\bar{r}_{i(t-i)}$ | Scale | M | SD |
|--|-----|----|----------|--------------------|---------|-------|------|
| <i>Cognitive variables:</i> | | | | | | | |
| Phys. probl. sol. ability | 141 | 16 | 0.87 | 0.52 | 0,1,2 | 7.35 | 6.8 |
| General phys. prob. sol. ability | 130 | 15 | 0.69 | 0.3 | 0.15 | 7.02 | 2.85 |
| General cog. abilities | 76 | 34 | 0.88 | 0.4 | 0,1 | 23.51 | 7.11 |
| <i>Affective/motivational variables:</i> | | | | | | | |
| Self-efficacy physics | 141 | 4 | 0.85 | 0.69 | 1,2,3,4 | 3.33 | 0.57 |
| Expectancy physics competition | 141 | 5 | 0.71 | 0.47 | 1,2,3,4 | 2.6 | 0.49 |
| Value physics competition | 141 | 4 | 0.77 | 0.57 | 1,2,3,4 | 2.85 | 0.64 |
| Sense of belonging | 141 | 15 | 0.81 | 0.42 | 1,2,3,4 | 3.32 | 0.34 |
| Social support in physics | 141 | 12 | 0.77 | 0.41 | 1,2,3,4 | 2.55 | 0.5 |
| <i>Success criterium:</i> | | | | | | | |
| Highest round | 141 | 1 | | | 1,2,3,4 | 1.61 | 0.63 |

^a N ... Number of student responses with at least one valid value, α ... internal consistency and $\bar{r}_{i(t-i)}$... mean discriminatory power of items.