The purpose of this study was to examine the construct validity of intrinsic motivation in terms of factors related to intrinsic motivation in learning context. The specific objectives were as follows:

1. To investigate factors related to intrinsic motivation.
2. To compare intrinsic motivation between male and female students.
3. To compare the strength of contributing factors such as background, parental motivation practices, and classroom climate to intrinsic motivation.
4. To analyze the causal relationship of intrinsic motivation.

The sample consisted of 567 7th (M.S.1) grade students from secondary schools under the Department of General Education, Ministry of Education in the Bangkok Metropolis. Questionnaires designed to measure variables were administered to collect data. The program SPSS and AMOS were used to analyze the data.

The research findings were summarized as follows:

1. Intrinsic motivation was positively related to parental income, prior knowledge, perceived parental intrinsic motivation practices, perceived teachers’ encouragement of autonomy, self-regulation learning strategy, deep learning strategy, general problem-solving ability, problem-solving ability in inductive reasoning on number, and school achievement. Perceived parental extrinsic motivation practices and surface learning strategy were negatively related to intrinsic motivation.
2. Female students scored higher on intrinsic motivation than male students.
3. The parental motivation practices factor contributed to male and female students’ intrinsic motivation the most, the background factor was second for male students while the classroom climate factor was second for female students.
4. Perceived parental intrinsic motivation positively affected students' intrinsic motivation the most, whereas perceived parental extrinsic motivation negatively affected students' intrinsic motivation. Similarly, perceived teachers' encouragement of autonomy had positive effect on students' intrinsic motivation, but perceived teachers' control had negative effect on female students' intrinsic motivation.

5. Intrinsic motivation directly and indirectly affected surface learning strategy, self-regulation learning strategy, deep learning strategy, general problem-solving ability, problem-solving ability in inductive reasoning on number, and school achievement.

6. The empirical causal relationship of intrinsic motivation in learning context fitted with theoretical framework of intrinsic motivation. Specifically, prior knowledge, parental motivation practices, and classroom climate had effects on intrinsic motivation, and effective learning behavior was influenced by intrinsic motivation.