The purpose of this study was to develop the causal relation structural model among antecedents affecting high school students' internet dependency behavior. The study sample was 1,248 students by multi-stage sampling. Instruments for collecting data were 12 questionnaires which reliabilities ranged from 0.75 to 0.94. Data was analyzed by descriptive statistics. LISREL program was also used to test hypothesis.

The results were as follows;

1. The causal relation structural model of high students' internet dependency behavior was modified to fit with the empirical data (χ^2 = 22.87 , df = 16 ,p = 0.12, CFI=1, GFI = 1 , RMSEA = 0.02, SRMR = .01, CN =1,608).

2. Online gaming addiction behavior was directly negatively affected by self-control, self-esteem and influence of peer on suitable internet usage. Moreover, it was directly positively affected by controlling internet usage from family and loneliness. These variables together predicted online gaming addiction behavior at 34 percent and influence of peer on suitable internet usage had the highest direct negative effect.

3. Online chatting addiction behavior was directly negatively affected by self-control, influence of peer on suitable internet usage and modeling of parents with media consumption. In addition, it was directly positively affected by participation in suitable activities among peer. These variables together predicted online chatting addiction behavior at 22 percent and self-control had the highest direct negative effect.

4. Appropriate learning behavior was directly negatively affected by online gaming addiction and online chatting addiction behavior. Also, It was directly positively affected by self-control, self-esteem, participation in suitable activities among peer and family relationship. It was indirectly negatively affected by 1) controlling internet usage from family and loneliness through online gaming addiction behavior 2) participation in suitable activities among peer through online chatting addiction behavior. It was indirectly positively affected by 1)self-control and influence of peer on suitable internet usage through online chatting addiction behavior and online gaming addiction behavior, 2) self-esteem through online gaming addiction behavior 3) modeling of parents with media consumption through online chatting addiction behavior. These variables together predicted appropriate learning behavior at 43 percent.