#### *Path Analysis.* A path model of the relationship between expected grade, grading, and overall evaluation questions were analyzed using AMOS 18.0 and maximum likelihood estimation. The following fit indices were examined to determine model adequacy: *X*2*/df* ratio (Bryant & Yarnold, 1995), root mean square residual (RMSEA: Steiger, 1990), Normed Fit Index (NFI: Bentler & Bonnett, 1980), Tucker-Lewis Index (TLI: Tucker & Lewis, 1973), and the Comparative Fit Index (CFI: Bentler, 1990). Small values (<.06) are preferred for the RMSEA and RMR indices, and high values closer to 1.0 indicate better fit for the NFI, TLI and CFI. Because of the strong inter-correlation between grading questions, these questions were averaged to create one overall score for grading in a course. Figure 1 shows the path analysis. A student’s expected grade was thought to influence their ratings on the fairness and appropriateness of grading in the course, which then influences their overall evaluation of the course. A student who is performing poorly in a course may perceive the grading to be unfair, which will then lower their evaluation of the course as a whole.

Two competing models were examined, using both expected grade to predict overall evaluation directly, and only grading predicting evaluation directly. Both of these models failed to converge, indicating that they were likely underspecified. When both expected grade and grading were used to predict overall evaluation directly (Figure 1), the model also failed to converge. Therefore, the first path model was considered best. The fit statistics for the model are in Table 1, and show excellent fits in NFI, TLI, CFI, RMR, and a good fit for RMSEA. The chi-square statistic is a little high, but this statistic is influenced by sample size. The path between expected grades to grading was found to be 0.41 (*SE* = 0.02). As student’s expected grade increased, their perception/rating of grading and assignments also increased. The relationship between grading and overall evaluation was 1.16 (*SE* = 0.02), indicating that as ratings of grading increased, overall evaluation also increased.

Table 1.

*Fit Statistics for Path Analysis*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | *X2* | *df* | SRMR | RMSEA | NLI | TFI | CFI |
| All evaluations | 12.68 | 1 | 0.003 | 0.057 | 0.997 | 0.992 | 0.997 |

Overall Evaluation

Class Grading

Expected Grade

Expected Grade

Overall Evaluation

Class Grading

*Figure 1*.