

# Career development inventory: evidence for reliability and validity, advantages d...

[Business](#), [Career](#)



As depicted by Thompson & Lindeman (1981) 5, 039 students, from grades 9 through 12, were used in the norming sample . To enable interpretation of the scores, they created percentile tables for each scale and each grade separately, as well as male and female subgroups within each grade. This allows for appropriate comparison later on when administering the CDI.

According to the CDI manual, although the sample of secondary school students was useful in developing a comparison group for scores and percentile interpretation, the sample is not a representative national sample of all 9th through 12th grade students (Thompson & Lindeman, 1981).

Eastern schools were heavily represented in the standardization group, while the rest of the US was not represented as well. This is an important note to recognize when speaking about generalizability of this inventory. Contrary to that disadvantage, the sample does however comprise groups that differ in relevant characteristics, like urban, suburban, rural, and inner city students (Thompson & Lindeman, 1981). It is explained in the CDI manual, that as the use of the inventory increases, they will be able to review the normative sample and a new breakdown will become available.

The image below is taken from the CDI manual, it is contains the list of schools were data was collected to norm the items on this inventory (Thompson & Lindeman, 1981).

### Evidence for reliability

The CDI manual represents reliability data in terms of internal consistency- Cronbach's coefficient alpha and stability- test-retest. Measurements of

internal consistency were given for the following individual scales: CP = 0.89, CE = 0.78, and WW = 0.84, these three scales show adequate reliabilities for use (Thompson & Lindeman, 1981). However, the individual scales DM and PO have reliabilities of 0.67 and 0.60. These median reliability measures are moderate, and because of this, Thompson & Lindeman (1981) emphasize utilizing caution when making a judgment about an individual student based on their DM and PO scores alone. Despite that, this does not mean these scales are not sound and should be thrown out, it is important to note that some of reliability measures are decreased due to low values for specific subgroups. For example, for the DM scale, the internal consistency for males was 0.70 and 0.59 for females, thus causing a decrease in the overall measure for the DM scale (Thompson & Lindeman, 1981). Consequently, one should be cautious and study the scores of a student carefully before making any conclusions.

As for stability or test-retest, they measured the extent to which the inventory yields the same or almost the same score for a student on separate occasions. According to the CDI manual, career development characteristics are expected to be stable over the period of weeks or months, significant changes in development only occurs over the period of years (Thompson & Lindeman, 1981). Therefore, when testing the individuals for a second time, over the course of one to six months, they were looking for scores to be highly correlated with their old scores. Test-retest measurements were CP = 0.79, CE = 0.73, DM = 0.70, WW = 0.67 and PO = 0.61, with a composite score reliability of 0.84 (Thompson & Lindeman,

1981). With those measures, one can conclude that CDI scores are highly stable overtime.

### Evidence for validity

Now that reliability was confirmed, one can move on to validity. Construct validity was discussed in dealing with 3 aspects of the CDI. The first topic for construct validity that was discussed is grade differences. The construct underlying the CDI is career maturity, which is a developmental characteristic, meaning it should increase as students advance from 9th to 12th grade (Thompson & Lindeman, 1981). Therefore, when examining mean grades on the CDI, they are expected to increase with grade level. Research by Thompson & Lindeman, (1981) revealed that his was the case, there was a positive correlation between the scale scores and grade level, which means there was an increase for all separate and combined scores with an increase in grade level. The amount of rise differs from scale to scale. They found that the CP scale showed the greatest mean increase of 9th grade: 96. 0 to 12th grade: 107. 4, while PO showed the smallest mean increase of 9th grade: 98. 3 to 12th grade: 100. 8 (Thompson & Lindeman, 1981).

Another topic of construct validity is sex differences. There were only a few instances where there was meaningful differences between the students' sex and their scores on the CDI. Results indicate a notable difference in grades 11 & 12 on the DM and WW scales, which both encompass the cognitive scale category (Thompson & Lindeman, 1981). On both these individual scales females made higher mean scores. Such differences are consistent

with sex differences found in academic achievement at these grade levels, where females score higher than males. Overall, the cognitive scales, DM and WW, are more highly correlated with academic achievement measure than are CP and CE, the career development scales (Thompson & Lindeman, 1981).

Lastly, in evaluating construct validity, differences in score means among students in dissimilar programs were explored. In the norming groups, students were given five program options and were instructed to specify where they were enrolled. The options included: general, college preparatory, vocational/technical, business, or honors (Thompson & Lindeman, 1981). The CDI was not generated to predict specific differences among programs, although, individual differences should occur on their own. Namely, students in honors programs would be expected to have larger mean scores, particularly on the cognitive scales (Thompson & Lindeman, 1981). According to the CDI manual, in grades 10, 11, and 12, students in college preparatory and business programs tended to have higher scores on the cognitive category scales when compared to students in the general and vocational programs (Thompson & Lindeman, 1981). Nonetheless, on the attitudinal scales category, the vocational students scored higher. As explained in the manual, this difference can perhaps be attributed to the fact that these students would be entering the workforce sooner and have planned and explored more than other students, hence scoring higher on the attitudinal scales (Thompson & Lindeman, 1981). Overall, one can

confidently say there is strong evidence of construct validity on this inventory.

### Advantages/Disadvantages

With regards to advantages and disadvantages of the CDI, one can argue that a disadvantage would be faking. Because this inventory has high face validity and the questions are straightforward this may be a concern for some. Although this is possible, there isn't a large likelihood that this would happen, because the CDI is essentially measuring their knowledge of the world of work, I don't believe a student would not have much interest or benefit in manipulating their answers.

Additionally, a disadvantage of using the CDI does not come from the instrument itself, rather the interpretation. Although we would like to have an assessment that will tell us an exact answer as to if someone is ready to make life changing decisions about their career, or not, this is not the case. The scores are not tell tale and it is up to the counselor to speak to the student and interpret the results based on their knowledge of the bigger picture.

Lastly, a disadvantage to recall has to do with the generalizability of the examination. As Thompson & Lindeman (1981) explain in the manual, the sample is not representative of the nation's 9th through 12th grade students. They stated a possibility of norms being reviewed and broken down once again in the future.

On the other hand, an advantage of this inventory is that the CDI will point individuals and their counselors in the direction of areas they need to work on, which will consequently result in wiser career choices. I also believe it can be useful to use as a conversation starter between the counselor and student, helping them engage with the student and begin exploring their interests and career options.

Another salient advantage is that it is easily accessible online and for no cost, unlike some costly inventories out there.

### Overall Evaluation

Overall, the Career Development Inventory is a great inventory that can be used by counselors to measure an individual's readiness to make vocational or educational decisions (Thompson & Lindeman, 1981). These decisions are critical to one's future career and can be very difficult to make when a student is only in high school. It is a great measure used by career counselors to increase awareness regarding time frames and the need to plan and explore one's place in the world of work (Thompson & Lindeman, 1981). Additionally it can be used to suggest specific interventions based on an individual's scores and is aimed at assisting the individual in adapting to her or his environment (Savickas & Hartung, 1996). The CDI was found to be reliable and valid, despite that, one should not make judgements about a student without taking into consideration their individual story and why they scored how they did. Scores should not be used to label the individual, rather to help increase their curiosity and information- seeking skills.