

1: COMMA + verb-ing modifier---> modifies the preceding clause.

Example: The engineer identified the problem, using the latest technology. (as you cited)

2: Verb-ing modifier ONLY -----> modifies the preceding NOUN or NOUN PHRASE only.

Example: John sat in the minivan carrying seven passengers. ("carrying seven passengers" modifies "minivans" and means that the minivan in which John sat had seven passengers)

2 also applies to verb-ed modifiers.

Discouraged by the long hours and low pay, my sister finally quit her job. Correct.

My sister, discouraged by the long hours and low pay, finally quit her job. Correct.

My sister finally quit her job, discouraged by the long hours and low pay. Incorrect as per GMAT rules (Refer to Regular English Vs GMAT section below). Here the verb-ed modifier is modifying the preceding noun "her job" which does not make sense.

RULES PART I: So really speaking these are the rules governing verb-ing & verb-ed modifiers:

Verb-ing modifiers

1: When separated by comma modifies the preceding clause

2: When not separated by comma modifies the preceding noun or noun phrase

Verb-ed Modifiers

1: Always modify preceding noun or noun phrase.

We have covered this concept in detail in our concept titled "Modifiers - Verb-ing Modifiers". This concept is available in the free preview of the [e-GMAT](#) SC course. I suggest you review this concept in the free trial. You will be able to apply the concepts when you take the post assessment quiz in this file. After that definitely review a few OG sentence constructions to understand and apply these concepts on the Official Questions.

REGULAR ENGLISH Vs. GMAT: The point to be noted here is that in regular English, comma + verb-ed modifiers modify the preceding clause. They behave in similar manner as do comma + verb-ing modifiers. However, GMAT goes against this practice as is evident from [OG12#56](#). Since Official Guides set up the rules here, we incorporate these rules in our course curriculum and questions. If down the line, OG modifies this question and changes the explanation, reflecting that comma + verb-ed modifiers modify preceding clause, then we will change our curriculum and questions based on this rule accordingly.

Here are a few examples from [OG12](#) for verb-ed modifiers:

Verb-ed modifier modifying preceding noun = [OG12#28](#), [OG12#56](#).

In the light of this understanding, let us now analyze [OG12#5](#)

Diabetes ranks as the nation's third leading cause of death, surpassed only by heart disease and cancer.

In this sentence, it will not make sense for verb-ed modifier to modify the preceding noun "death".

Death cannot be surpassed by anything. Hence, the verb-ed modifier is modifying noun phrase "the nation's third leading cause of death". Now the reference makes sense and the modifier establishes the fact this particular cause of death is "surpassed only by heart disease and cancer".

Notice that "diabetes" is the "the nation's third leading cause of death". The verb "ranks" stands as "is" meaning "diabetes" = "the nation's third leading cause of death". Hence it is logical for the verb-ed

modifier to modify "diabetes" also because it is the "the nation's third leading cause of death".

Structurally, the verb-ed modifier is modifying the preceding noun phrase "the nation's third leading cause of death".

RULES PART II: So far we discussed the role of the verb-ed and the verb-ing modifiers placed after the clause preceded or not by a comma. Now answer to your second question is that verb-ed modifier is a noun modifier. When placed in the beginning of the sentence followed by a comma, it always modifies the subject of the clause. Again let me cite your example only:

Discouraged by the long hours and low pay, my sister finally quit her job. (If you ask the modifier, who was discouraged, the answer will be "my sister").

In case of the verb-ing modifiers, when placed before the clause separated by a comma they can modify either the subject or the entire clause, depending upon the context of the sentence.

Example: Singing a beautiful song, Mary mesmerized everyone present in the room. (So how did Mary mesmerize everyone? By singing a beautiful song. Here the verb-ing modifier is modifying the entire clause.)

Wearing a blue short, Joe killed the snake. (Here the verb-ing modifier is just giving additional information about how Joe was dressed. His wearing a blue shirt has nothing to do with killing the snake.)

THE DIFFERENCE: Now let us analyze the difference between these two sentences:

Diabetes ranks as the nation's third leading cause of the death, surpassed only by heart disease and cancer.

Diabetes ranks as the nation's third leading cause of the death, surpassing only by heart disease and cancer.

The first sentence is grammatically as well as logically correct. But the second is not grammatically correct. The first sentence can be rewritten as: Diabetes is the nation's third leading cause of the death that is surpassed only by heart disease and cancer.

Notice that the "that" clause is written in passive voice because diabetes is not the doer of the action "surpass". It is "heart disease and cancer" that are the doer of this action.

In the second sentence, "surpassing" modifies the preceding clause and hence associates with the subject diabetes. So if we say that Diabetes is X, surpassing only by Y and Z, it will be wrong because it is not the correct grammatical structure. Use of "by" is ungrammatical in this construction. If we remove "by" from here, then the intended meaning of the sentence will change. The sentence will then mean that Diabetes surpasses "heart diseases and cancer" but it is actually the other way round and that is why diabetes is "the nation's third leading cause of death".

Take Away

1. When verb-ing modifier is separated from the clause using a comma, then this modifier modifies the preceding clause.
2. When verb-ing modifier is not separated from the clause using a comma, then it modifies the preceding noun.
3. When verb-ing modifier is placed in the beginning of the sentence followed by a comma, then it may modify either the subject of the clause or the entire clause, depending upon the context of the sentence.
4. Verb-ed modifier modifies the preceding noun or the noun phrase.
5. When verb-ed modifier is placed in the beginning of the clause followed by a comma, then it modifies the subject of the clause.