# Article information:

Resource-constrained project scheduling with activity splitting and setup times - ScienceDirect  
<https://www.sciencedirect.com/science/article/abs/pii/S0305054819301170?via%3Dihub>

# Article summary:

1. A meta-heuristic solution approach using extended networks is presented to solve the resource-constrained project scheduling problem with activity splitting and setup times.

2. The algorithm has been tested using a large computational experiment with five types of setup times, and can easily cope with an extension to the problem with overlaps between preemptive parts of activities.

3. Computational experiments show that activity preemption sometimes leads to makespan reductions without requiring a lot of splits in the activities, and that the degree of these makespan reductions depends on the network and resource indicators of the project instance.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article “Resource-constrained project scheduling with activity splitting and setup times” is generally reliable and trustworthy, as it provides a detailed overview of a meta-heuristic solution approach for solving the resource-constrained project scheduling problem with activity splitting and setup times. The article also presents a logical boolean optimizer used to solve conflicts, as well as results from a large computational experiment which demonstrate that activity preemption can lead to makespan reductions without requiring many splits in activities. Furthermore, it is noted that the degree of these makespan reductions depends on the network and resource indicators of the project instance.

The article does not appear to have any major biases or one-sided reporting, as it provides an objective overview of its proposed solution approach for solving this type of problem. Additionally, all claims made are supported by evidence from experiments conducted by the authors, which further adds to its reliability. There are no missing points of consideration or unexplored counterarguments present in this article either; however, there is some promotional content present in certain sections which could be removed or toned down slightly for greater objectivity.

In conclusion, this article is generally reliable and trustworthy due to its objective overviews and supported claims; however, some promotional content could be removed or toned down slightly for greater objectivity.

# Topics for further research:

* Resource-constrained project scheduling
* Activity splitting
* Setup times
* Logical boolean optimizer
* Activity preemption
* Network and resource indicators

# Report location:

<https://www.fullpicture.app/item/54baf1fb638f3bf4bad8941f699da06c>