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Do The Dual Task and PRP Paradigms Provide a Reliable Measure of Multitasking Cost?

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Abstract

The performance of concurrent tasks is a common phenomenon in the people's daily activity and this could be the reason driving scientist to identify the psychological aspects related to response selection and the reaction time. Scientists have dwelt into the science of identifying the processes that takes place during multitasking by examining how it relates response selection. Some theories describe the hypothesis on performing two perceptual motor tasking processes. For instance, some decisions originate from the response selection bottlenecks and the central cognitive zones. Finding show that when participants were exposed to a number of practice sessions, a majority of the participants attained the virtual perfect timing when doing dual task by allocating and sharing their time appropriately especially because it required basic choices. These findings illustrate that observable differences that exist between several tasks are likely to be modulated if instructions related to the modulation are applied. The second consideration involved the assessment of *psychological refractory period* interferes with activities performed at the same time. The *psychological refractory period* process best illustrates the effects of delay needed before making responses, the process involves individuals performing several task. The process involved pairing second choice reaction with the first choice reaction task; each of these tasks presented the two difficult levels of selection response. Although the participants performed tasks in several sessions, the interferences still existed. As the stimulus onset asynchrony decreases, so is the reaction time for the secondary task. The third and the fourth assignment involved variation and manipulation of selection response for the secondary task. As the SOA decreases so is the reaction time. These findings show that the problem could not be motoric but rather cognitive. Therefore, the performance of concurrent tasks is likely to overlap in the temporal region. These findings show that performing numerous practices have no impact on the effort to eradicate bottlenecks.