Z-score	FG-LAI	ALAI
GLOBAL B.A.C. S	-3.10 (± 0.91)	-2.37 (±1.08)*
V.M.	$-3.19 (\pm 0.58)$	$-2.21 (\pm 0.76)$ *
W.M.	$-2.76 (\pm 1.13)$	$-1.45 (\pm 1.02)^*$
M.S.	$-0.27 (\pm 0.75)$	0.07 (±0.70)
V.F.	$-1.97 (\pm 0.54)$	$-1.28 \ (\pm 0.48)^*$
A.	$-3.12 (\pm 3.18)$	$-2.65 (\pm 2.77)$
E.F.	$-2.67 (\pm 1.26)$	$-1.55 (\pm 1.64)*$

speed was barely affected. In contrast, verbal memory was most impaired, whereas motor speed was the least impaired cognitive domain in the group receiving FG-LAI. Patients with schizophrenia taking ALAI showed a better cognitive function in all domains (except for motor speed and attention) than patients receiving FG-LAI. Summarized results in Table 1.

**CONCLUSIONS:** In our study, patients with schizophrenia receiving Aripiprazole long-acting injectable have better cognitive function than patients receiving first-generation long-acting antipsychotics.

## 69 Mnemonics versus Cramming. Learning Can Be Effective, Efficient and Fun. A Systematic Review Studying Memorization Techniques in Education

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ABSTRACT: The Problem: While learning is at the core of any education (e.g., primary or high school, college, or continuing medical education, to name a few), evidence-based methods of effective memorization are lacking from most forms of education. If attempts are made to teach memorization techniques, they are often without a sound scientific backing. The classical form of memorization (popularly known as "cramming", or "rote learning") is tedious, time consuming, and - we know from personal experience - can be so boring that students avoid memorizing at all. A "new" technique of memorization, which is usually referred to as "mnemonics" or "memory techniques" (first reported as being used by the Greeks and the Romans to learn speeches by heart) has received rave reviews from enthusiastic users. A quick

search of the scientific databases shows the technique has been studied quite extensively in a number of areas, including education, the medical world, and in the field of learning disabilities, but as far as we know no systematic reviews have assessed the effectivity of using the mnemonics technique versus classical memorization in education.

**STUDY OBJECTIVE:** We hypothesize that memorization using mnemonics is a more effective strategy than classical memorization(cramming). To study this hypothesis we have performed a systematic review as described below. In this poster we will describe our study and show preliminary findings.

METHOD: Design: We have performed a systematic review using the Rapid Evidence Assessment procedure described by the Center for Evidence Based Management.

Setting and participants: Studies included limited to those that tested the use of mnemonics in education (primary school, high school, university).

Interventions and main outcome measure of the primary studies: We included studies that compared memorization using mnemonics with "regular" memorization (cramming).

RESULTS: Using 4 databases (Academic Search Premier, PubMed, ERIC and PsycInfo) we found 803 articles. After one round of filtering 589 articles were excluded from the study. The major reasons for exclusion were: learning disabilities, non-educational setting, and no study. In this poster we present the results of the first 10 papers that were included after the second, more stringent, round of filtering. In all 10 papers the mnemonics group performed significantly better on at least a number of the memorization tasks, but in no instance worse than the control group. In some cases where the control groups performed worse, the results were not significant.

**CONCLUSIONS:** This poster describes the analysis of the first 10 papers of our full set of mnemonics studies. They all show a significant advantage of using mnemonics in memorization. If these results are confirmed in our full systematic review, we expect this to have a significant impact on the way "learning how to learn" is taught.

## 74 Alpha Lipoic Acid Responsive Hypergeusia

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