Effect of Chair Discomfort on Information Retention

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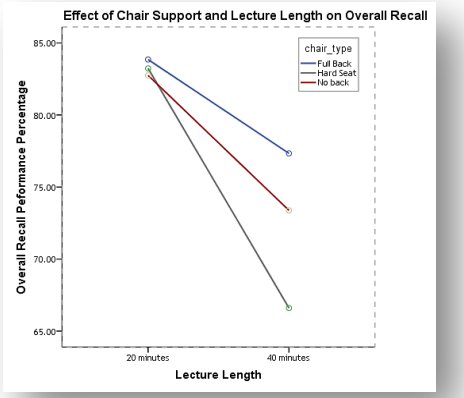
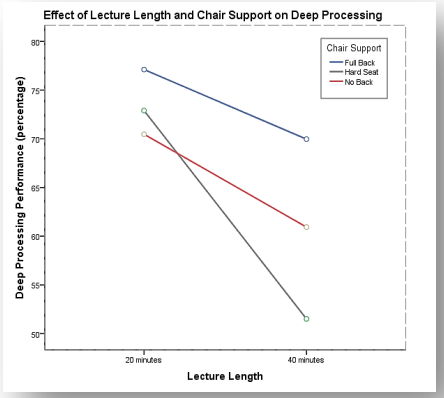
In the current study of the effects of chair discomfort on information retention, we predicted that higher levels of seating discomfort and longer periods of time spent in a seated position would result in lower levels of information retention in a classroom setting. Our findings are shown below.

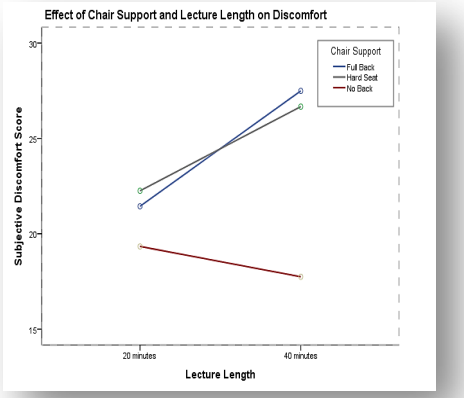
•**A 3x2 between-subjects ANOVA** results show no effect of chair support type on shallow processing, $F(2, 146) = .92$, $p = .40$ ($M_{HS} = 87.63$, $M_{NB} = 90.40$, $M_{FB} = 87.65$); but a strong significant effect of lecture length on shallow processing, $F(1, 146) = 23.57$, $p < .01$ ($M_{20min} = 93.05$, $M_{40min} = 84.07$,).

•**A 3x2 between-subjects ANOVA** results demonstrate a significant effect of chair support type, $F(2, 146) = 7.11$, $p < .01$ ($M_{HS} = 62.20$, $M_{NB} = 65.70$, $M_{FB} = 73.54$), as well as lecture length on deep processing , $F(1, 146) = 24.23$, $p < .01$ ($M_{20min} = 73.49$, $M_{40min} = 60.80$).

•**A 3 x 2 between-subjects ANOVA** results show a significant effect of chair support type on total subjective discomfort, $F(2, 146) = 4.8$, $p < .001$ ($M_{HS} = 25.38$, $M_{NB} = 18.48$, $M_{FB} = 24.91$).







Summary: Overall recall performance was primarily affected by the time spent listening to a lecture. Shallow processing task performance was affected by the amount of time spent in the lecture but not by the type of chair support, while deep processing task performance was significantly affected by both lecture length and chair support, indicating that an inclination of chair support effect on the overall task could stem from its effect on the deep processing task. Deep processing is key to long-term retention. Given the chair support effect on deep processing, better understanding of learners' environment and what it provides to a learner may prove itself quite useful to both educators and learners.