Main Article Summary 15 points

SUMMARY (15 points)

<u>Instructions</u>: Choose the most relevant work from the five selected articles (from Assignment 2). Submit a written summary of your main article using the given template. The goal is to summarize the topic, methods, and findings of your most relevant article.

<u>Formatting</u>: Typed, using the summary template (see below). Include your name and section number.

Submission and Due time: Submit your work to CatCourses by <u>09:00 AM</u> on <u>September 20.</u>

Article Summary (Template)

APA formatted reference:

Previous research on the topic / theoretical issues (from the introduction of the article):

<u>Purpose of the study</u>:

Summary of the methods:

Measures/Instruments used (definitions of the IV and DV?):

Summary of Findings:

Other Notes (could include next steps, quotes to use, methodological plans, etc.):

Haiyan Liu Section 01

Main Article Summary (Example Assignment)

APA formatted reference:

Berman, M. G., Jonides, J., & Kaplan, S. (2008). The cognitive benefits of interacting with

nature. Psychological Science, 19(12), 1207-1212. https://doi.org/10.1111/j.1467-

9280.2008.02225.x

<u>Previous research on the topic / theoretical issues:</u>

Uses attention restoration theory (ART) – attention is separated into two components, 1) involuntary attention, 2)voluntary/directed attention

Directed attention influences cognitive and emotional functioning, short term memory, and school success.

Previous research has suggested that

- interactions with nature improve attention and memory
- cognitive performance can be affected by glucose consumption and sleep
- mediation may also restore directed attention.

Nature invokes involuntary attention, giving directed attention a rest and a chance to restore.

Hypothesized that directed attention is the one that is restored by interactions with nature.

Purpose of the study:

Study 1: to determine how interactions with nature and urban environments affect cognitive performance.

Study 2: (to test ART) to determine if interactions with nature improve only executive attention (directed) and not alerting or orienting (which require less cognitive control).

Summary of the methods:

Study 1: 38 University of Michigan undergraduates, completed a mood inventory, cognitive test, fatigue task, took a 50-55 minute walk (woods or urban), cognitive test, mood inventory and questions assessing the walk. Repeated again 1 week later with the other type of walk.

Study 2: 12 University of Michigan undergraduates, completed a mood inventory, cognitive test, ANT (attention test), viewed pictures for about 10 minutes (nature or urban), cognitive test, ANT, and mood inventory.

Repeated again 1 week later with other set of pictures.

Measures/Instruments used (definitions of the IV and DV?):

IV- condition (nature/urban walk).

Study 1) a walk in a natural setting (park) or a walk in an urban setting (downtown).

Study 2) photos of natural settings (Nova Scotia) or photos of an urban setting (city scape).

DV

Study 1) cognitive performance - backward digit span;

Study 2) cognitive performance – backward digit span, and attention - ANT

Scales:

PANAS – mood inventory

Backward digit span – cognitive performance task

ANT – attention task

Summary of Findings:

Interactions with nature do improve cognitive performance – performance is better after a walk in nature but not better after a walk in an urban environment; performance is better after looking at pictures of nature but not after looking at urban pictures.

Mood is also better after a walk in nature as compared to a downtown walk.

Nature does seem to refresh/restore directed memory but not involuntary memory.

Nature feels refreshing to people.

Other Notes (could include next steps, quotes to use, methodological plans, etc.):

"In sum, we have shown that simple and brief interactions with nature can produce marked increases in cognitive control. To consider the availability of nature as merely an amenity fails to recognize the vital importance of nature in effective cognitive functioning."

Author's suggestions for next steps: compare the effects of nature to other interventions also shown to influence cognitive performance: glucose consumption, sleep, meditation.