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**PSYCHOLOGY ATAR – YEAR 11 2023  
Unit 2**

**Task 6: Science Inquiry (Practical)**

*Science Inquiry and Social Influences*

**Syllabus Points:**

* Science Inquiry
* Social Influences: Conformity

**Conditions**

Time for the task:

* Part A: 4 hours in class plus homework time to conduct planning, research and note-taking
* Part B: 50 minutes in class to complete an in-class inquiry under supervised conditions. Students are permitted their scientific report.

**Task weighting**

* 15% in total
  + Part A due Tuesday, 19 September 2023, submitted by 11:59pm via SEQTA, worth 5%
  + Part B to be completed in class on Wednesday, 20 September 2023 worth 10%

**Science Inquiry Practical Task**

Conformity has been described as the tendency for an individual to change their behaviour in response to group pressure. Over several decades, social psychologists have developed numerous theories and approaches to describe and understand conformity. One of the factors that has been identified as affecting conformity is social loafing, which claims that individuals reduce their effort when working in a group.

The aim of this investigation is to examine the relationship between group size and social loafing. Specifically, you will investigate whether there is a connection between the size of a group and the amount of social loafing during a task.

Participants will compete in groups to construct the tallest, freestanding tower. Following the activity, each participant will complete a questionnaire regarding their perceived level of effort. These ratings will be collected from all participants and collated to form a set of results for the class.

Using the data collected and research, you will write a formal scientific report.

**Word Limit:** 1,500 words

Your formal report will need to include:

1. An abstract – provide an overview of the investigation, including the aim, main features of the method, summary of results and conclusion/s
2. An introduction – provide information and research related to the topic for the investigation
3. Method – describe the participants, materials and procedures so that the investigation can be replicated
4. Results – represent data in a written summary, tables and graphs
5. Discussion
   1. Discuss the results of the investigation and how they relate to relevant psychological theories
   2. Evaluate the design of the investigation and explain how the investigation could be improved
   3. Discuss how ethical issues were addressed
   4. Explain the relevance of the results to the population from which the sample was drawn, and to theory or other research
   5. State a conclusion that relates the results to the hypothesis or research question
6. References – provide an alphabetical list of any references used in the report
7. Appendix – attach your post-activity questionnaire.

**Instructions for researcher**

1. Participants are randomly put into groups of either 2 or 4
2. Give standardised instructions:
   1. Each group will compete against each other to see which group can construct the tallest, freestanding structure in 15 minutes, using only 20 straws and one metre of masking tape.
3. Begin 15-minute timer
4. Measure structures
5. Record groups in order of tallest to shortest
6. Participants complete Post-Activity Survey

*Questionnaire used in the Post-Activity Survey:*

* Subjective Mental Effort Questionnaire

**Part B: Response (55 minutes in class, worth 10%)**

* Supervised in class with your scientific report from Part A allowed (your SEQTA submission will be printed and ready for you in-class).
* Write detailed answers to the questions provided in Part B.

**Year 11 Psychology Marking Key: Science Inquiry (Practical)**

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| --- | --- |
| **Description** | **Marks** |
| **Abstract** | |
| * Succinctly writes a specific aim | 2 |
| * Provides a general aim | 1 |
| * Briefly describes the method, including   + The participants   + Materials used   + How the task was administered | 1–3 |
| * States the results of the research * Draws a relevant conclusion | 1–2 |
| **Subtotal** | **7** |
| **Introduction** | |
| * Makes a relevant statement about group influences on behaviour and social loafing, describing their main features | 2 |
| * Makes some comments about group influences on behaviour or social loafing | 1 |
| * Supports above information with reference to relevant research | 2 |
| * Refers to some research without making links to the topic | 1 |
| * Includes a rationale | 1 |
| * Includes an aim | 1 |
| * Writes clear, succinct directional hypothesis that follows on logically from the aim | 2 |
| * Poses a research question | 1 |
| **Subtotal** | **8** |
| **Method** | |
| * Describes participants in sufficient detail to be replicated, e.g. number, age, gender * Describes the selection process | 1–2 |
| * Describes materials * Provides sufficient detail to be replicated | 1–2 |
| Describes the procedure including:   * Describes in detail the process for allocating participants to groups and roles * Describes task in sufficient detail to be replicated * Describes management of variables including explanation of uncontrolled variables * Addresses validity and reliability | 1–3 |
| **Subtotal** | **7** |
| **Results** | |
| * Organises all relevant data logically in correctly labelled tables   + Correctly organises table   + Correctly labels table, including units, where appropriate   + Includes relevant data | 1–3 |
| * Presents data in a graph   + Correctly graphs data   + Uses appropriate labelling   + Uses appropriate titles | 1–3 |
| Provides an accurate and detailed description of the data | 1 |
| **Subtotal** | **7** |

|  |  |
| --- | --- |
| **Discussion and evaluation** | |
| * Discusses the results of the investigation and relates the results to the research question | 4 |
| * Discusses the results of the research, supports and comments on the research question and describes relevant psychological theories | 3 |
| * Describes what happened in the investigation and cites relevant psychological theories | 2 |
| * Describes what happened in the investigation | 1 |
| * Explains how the results relate to relevant psychological theories | 2 |
| * Describes relevant psychological theories | 1 |
| * Evaluates the investigation design:   + Discusses any methodological flaws   + Explains steps taken to ensure reliability and how it could be improved | 3 |
| * Explains how variables were controlled and suggests ways to improve reliability | 2 |
| * States that variables need to be controlled and suggests how to improve reliability | 1 |
| * Discusses ethical issues and describes how these were addressed | 2 |
| * Refers to ethical issues that were considered in the investigation | 1 |
| * Discusses relevance of results to the population from which the sample was drawn as well as to theory or other research referred to in the introduction | 2 |
| * Suggests how the investigation might be of relevance to science or society | 1 |
| * Makes accurate conclusions that relate to the research question | 2 |
| * Forms an accurate conclusion but does not relate it to the research question | 1 |
| **Subtotal** | **15** |
| **References** | |
| * Reference list:   + Relevant references   + Range of references   + Listed alphabetically | 1–3 |
| * In-text citations:   + Consistently used correctly   + Incorrectly formatted or not consistently used | 1–2 |
| **Subtotal** | **5** |
| **Appendix** | |
| * Appends questionnaire | 1 |
| **Subtotal** | **1** |
| **Total** | **50** |