

## 問題の解答と出題意図

内容的には、研究倫理に関する話題であるが、内容を問うていると言うよりも、前後の文章に答えがあるのを拾い上げられるかどうかの、英文読解問題である。たとえ1文内に1, 2個分からない単語があっても、辞書を使用できるので、シンプルな文章の構文や構成を理解できるかどうかを確認している。

Q1) Who tested the replicability of high profile papers in the RPCB project?

前の文章をそのまま英語で記載すれば良い。

解答例) The research teams organized by the non-profit Center for Open Science in Charlottesville, Virginia and Science Exchange, research-services company based in Palo Alto, California, (set out to systematically test whether selected experiments in highly cited papers published in prestigious scientific journals could be replicated.)

Q2) Fill (A) and (B) with 40 or 80.

文章内容から推測して、40か80を入れるとすると、陰性の結果の方が再現されやすいという話の流れから、A: 80 B: 40 が答えとなる。

Q3) What happens if the research achieved replication by other researchers?

次の文章の but 以下の gain 以下が答えとなる。

解答例) The research will gain an assurance central to the progress of science: that an observation or result is sturdy enough to spur future work.

Q4) How can researchers raise the replicability of their own experimental results?

文章のなかで、答えの候補は複数ある。具体的な文章例として、以下の2つをあげる。

文章の内容を少しでもつかんでいれば、容易に選んで書くことができる。

解答例 1) Several efforts have encouraged authors to share more-precise methodological details of their studies. *Nature*, along with other journals, introduced a reproducibility checklist in 2013. It requires that authors report key experimental data, such as the strain, age and sex of animals used. Authors are also encouraged to deposit their experimental protocols in repositories, so that other researchers can access them.

解答例 2) Furthermore, the ‘Landis 4’ criteria were published in 2012 to promote rigorous animal research. They include the requirement for blinding, randomization and statistically assessed sample sizes. Registered Reports, an article format in which researchers publish the design of their studies before doing their experiments, is another key development.