

Origins: Goals

Of course the ultimate, general goal of science is to gain knowledge. But we can distinguish more specific **goals**. These goals differ in terms of the *type of knowledge* we want to obtain and for what *purpose* we want to obtain it.

Universalistic research tries to provide explanations that apply generally. For example, we could hypothesize that playing violent computer games leads to aggressive behavior. The specific game, or the type of person playing it, is not relevant here, because we assume the relation between violent game play and aggression holds for any violent game, be it GTA, Call of Duty, any other game. We also assume the relation holds for men and women, of any age, in any cultural setting.

Universalistic research aims to describe or explain phenomena that apply to all people or all groups, or societies.

The scientific method can also be used for **Particularistic** research purposes. Particularistic research is aimed at describing or explaining a phenomenon that occurs in a specific setting or concerns a specific group.

For example, we could investigate the change in the number of Dutch teenagers hospitalized for alcohol poisoning just after the legal drinking age was first raised from 16 to 18 years in the Netherlands.

The point here is to investigate the size of an effect for a specific group in a specific location, during a very specific time. We wouldn't necessarily expect to find the same effect in a different country or in ten years time, if the drinking age was changed again.

Ok, so the goal of research can either be universalistic or particularistic. Or in less fancy terms: aimed at obtaining general versus specific knowledge. A very closely related and largely overlapping distinction is between **fundamental** and **applied** research.

Applied research is directly aimed at solving a problem. It develops or applies knowledge in order to improve "the human condition".

Suppose we want to help depressed people and we think that depression is caused by loneliness. We could create a program that aims to lower depression by making people less lonely. We could give lonely depressed people a cat to take care of and investigate if their feelings of depression actually go down now that they're no longer lonely.

Applied research can be contrasted with **fundamental research**. In fundamental research, the aim is to obtain knowledge just "for the sake of knowing"; the only purpose of fundamental research is to further our understanding of the world around us, nothing more. It doesn't have an immediate application; it doesn't directly solve a



problem.

For example, we might investigate the relation between loneliness and depression in a large-scale survey study, to see whether people who feel lonelier also feel more depressed, and vice versa.

The aim here is to show there is a *relation* between loneliness and depression. Maybe we want to see if this relation exists for both men and women and for different cultural and age groups. But note that we do *not* state how depression can be treated. The goal is to know more about the relationship, not to help depressed people.

Most *fundamental* research is *universalistic*. But in some cases fundamental research *can be particularistic*, for example when research is done in a very specific setting.

For example, we could investigate the relation between playing violent computer games and aggressive behavior in a very specific group of young delinquent first offenders in Amsterdam who all come from privileged backgrounds.

This very specific problem group could provide interesting insight into the relation between violent game play and aggression. Note that we're not investigating how to rehabilitate or prevent recidivism in this group.

Applied research is often *particularistic*, aimed at solving a problem for a specific group, in a specific context, but it *can be universalistic*.

Take the cat-intervention aimed at lowering depression. We could expand this applied research study by comparing a group of people that take care of a friendly cat that seeks their company and a cat that avoids any contact.

This helps us to find out more specifically what type of treatment is effective. But it also adds a universalistic element: we can investigate what it means to be lonely. Is the mere presence of a living being enough, or is interaction required?

In many cases applied research produces results that lead to new insights. These insights can be related to the intervention or treatment, but they can also provide 'fundamental knowledge'. So the two types of research can reinforce each other.