

This is Hayashi Osamu, a cram school teacher who became famous for a commercial in which he says [じゃいつやるか？今でしょ！](#) “When are you going to study? Now, right!” That’s easy for him to say because Hayashi Sensei here is [blood type O](#) and as we know from the [2013](#) anime [血液型くん](#) or “Blood type kun,” blood type O people [have great focus](#) and can stay up all night studying.

You see, in Japan, blood types are sort of like zodiac signs. Many people believe that blood type affects personality and can determine things like the compatibility of a marriage partner. And, this idea has been widespread since at least the 1970’s when journalist Nomi Masahiko made it popular.

Blood type is more likely to be brought up by women when on the topic of romance, but it’s not uncommon for blood type to appear in the media and many other places. This is famous singer Nishino Kana’s 2015 [song about blood type A people](#).- “Well, I’m blood type A so I get worried about this and that...” One Japanese television show [aired an experiment](#) to see how kids would react when a “substitute teacher” dropped a vase that the kids were told was very important. They saw that blood type A kids right away told on the substitute teacher, type B kept the secret, type O also told on the sub, and AB promised to keep it secret but then ratted the sub out anyway. [\[Different clip Taiwan television\]](#)

In [1990 the Asahi newspaper](#) reported that Mitsubishi Electronics created a small team composed entirely of blood type AB people, thanks to their “excellent creativity and planning skills”.[\[2,3,4\]](#)

In 2011, ex-Minister [Ryu Matsumoto](#), famously conducted himself in an unprofessional way that led to his resignation. He blamed the [rude behavior and abrasive remarks](#) he made towards two governors on the fact that he was [blood type B](#). That same year, an [issue of Asahi Newspaper](#) talked about how some new graduates were worried that they were being discriminated against during hiring processes for being blood type B.

It's not particularly common, but people can sometimes be [asked what their blood type is](#) during a job interview[2,3], and on some companies' job application sheet, there's even [a field to fill in your blood type](#). [One twitter user wrote](#) in 2015 that one of his work superiors said that "blood type O people are usually irresponsible so I don't want to hire them."

Now let me be clear that I'm not trying to present this as a big societal "problem" - the point of these examples is simply to illustrate how widespread the concept is in Japan.

According to data from 2016, somewhere around [40% of Japanese people](#) believe that blood type contributes to your personality, but what was most surprising to me was that: According to [a 2017 survey](#) from an [online community](#) exclusive to doctors called medpeer, 38% of *doctors* thought that blood type affects personality.

Let's take a quick look at the history of this. In 1901, Austrian Physician Karl Landsteiner discovered blood types and we now can type blood based the [antigens on the blood cell](#). Simply put you are A, B, AB or O depending on if you have A antigens, B antigens, both antigens or neither of the antigens. By the way, ABO is just one of many blood grouping systems, but it's what we'll focus on for this video.

In 1910, German scientists Ludwig Hirszfeld and Emil von Dungern demonstrated that blood type is an inherited trait, which was recognized as a huge milestone for human genetics.[R]

[Around this time](#), it was found that Japan had twice as many blood type B people as did Europeans. Emil von Dungern made the baseless and unclassy comment that blood type B people, and therefore Asians with their higher percentage of blood type B people are inferior. Other researchers including [Ludwig Hirszfeld had also made negative comments](#) about blood

type B people. This inflammatory commentary is what caused professor Furukawa Takeji to begin investigating how blood type affects personality. He wanted to prove that there is nothing wrong with the character of blood type B people.[1,2]

He started his work by analyzing 11 of his relatives. He found that blood type A people were *shoukyokuteki* which translates to “inactive,” or “passive.” The blood type B and O people were *sekkyokuteki* which means “positive,” or “assertive.” This encouraged Furukawa to go on and look at colleagues and students as well, investigating 319 more people. [R] His results were presented in a 1926 paper titled “Research on Temperament due to blood type” he came up with these traits for each blood type[R]

- (1) O - inconsiderate, calm, energetic, strong spirited.
- (2) A - quiet, often worries, often complains, self absorbed.
- (3) B - considerate, caring, merry, can't stay quiet.
- (4) AB - Has traits of A both and B.

Then, In 1931 Furukawa published a sensational article in the famous economics magazine *jitsugyounonihon* titled: "[Astonishing new discovery](#)---you can understand career and marriage compatibility through blood type" But, by 1933 the Japanese Society of Legal Medicine said that there was no relationship between blood type and personality, criticizing Furukawa's statistical methods and dismissing his findings .[1,2,3,4]

Public interest in the topic remained for a while, but eventually fizzled out. Then, about 40 years later in 1971, interest in blood type boomed again thanks to journalist Nomi Masahiko's book "[Blood Type Anthropology](#)," with the subtext: “Become happy by analyzing your personality.” In the book he pointed out that a majority of the post war Japanese prime ministers [were blood type O](#) and that many successful baseball players from Japan and Korea were [blood type O or type B](#).

In Nomi Masahiko's 1978 book "[New Blood Type Anthropology](#)," he discusses some data from [that same year - 1978, from the AIU insurance company](#). After looking at 1374 people involved in car accidents across 3 months, they found that those with blood type O were significantly more likely to be involved in an accident and blood type A people were less likely to be in an accident.

運送免許取得年数別の加害者の割合

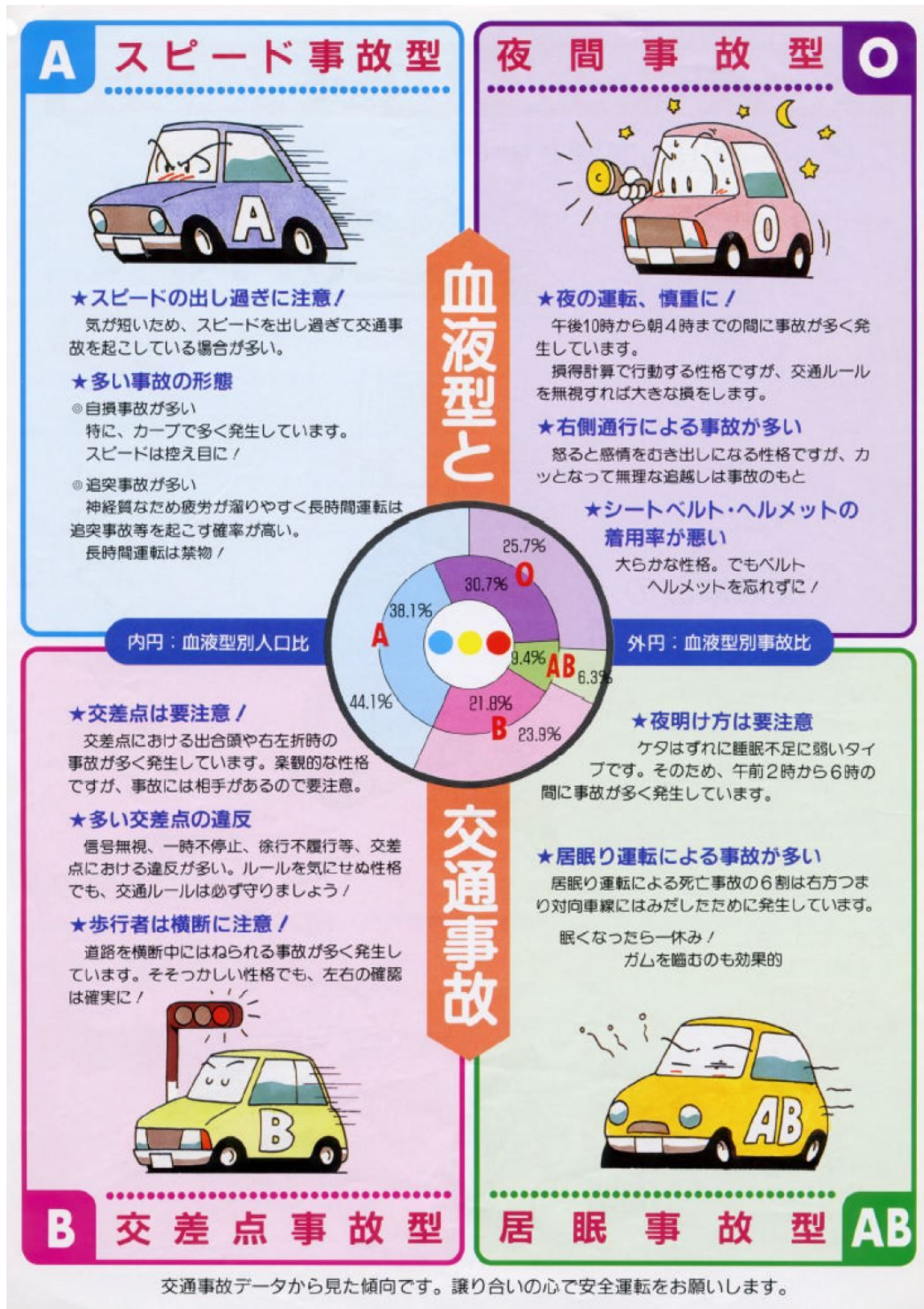
	O型	A型	B型	A B型	人数
1年未満	23.1%	50.0%	11.5%	15.4%	78人
1年以上 5年未満	39.5%	33.3%	18.6%	8.5%	387人
5年以上10年未満	42.9%	33.9%	14.3%	8.9%	336人
10年以上15年未満	29.2%	30.3%	28.1%	12.4%	267人
15年以上	32.0%	35.1%	21.6%	11.3%	291人
調査対象者全体	35.6%	34.3%	19.6%	10.5%	1,374人
日本人平均	30.7%	38.1%	21.8%	9.4%	—

※赤字は最も高い数値

Blood type O people made up 5% more than expected of the accidents, and blood type A people made up 4% less than expected. Initially, this data might seem pretty convincing.

But several years later, [in 1995](#), the story was flipped. Type O's were exonerated and now type A's were the bad guys. 3234 accidents in Ibaraki across two months showed that type A people were much more likely to have a car accident and type O people were much less likely to have one. Despite this inconsistency with the 1978 data, conclusions were even made about which blood type is more likely to have what type of accident, as is

illustrated in this easy to understand comic.



Just this year, 2018, Takeda Tomohiro published a book titled: "[It's really amazing! Blood types. The new truth can be seen from statistics.](#)"

In the chapter titled "The mystery of No type A sluggers" he points out that all of the top ten Japanese home run batters *and* top ten batters with the most hits are either type B or O. This might sound impressive, 「[これちょっとほっとけないデータですね!](#)」 But then again, this is looking at only 20 people. When you look at the distribution of blood types across the 786 players in the [12 teams](#) of the Japanese pro baseball league, it is hardly different from that of the national blood type distribution.

Let's look at some science on what we're confident that blood type *does* have bearing on. There's a lot of research showing blood type does affect your health in several ways. But... Blood type O's get most of the perks. They are less likely to get pancreatic cancer[\[R\]](#), are less likely to get Malaria[\[R\]](#), are less likely to get diabetes[\[R1, R2, R3, R4\]](#) and are less likely to develop cardiovascular disease and cognitive decline in old age[\[R, R2\]](#). Type O's can thank lower levels of von Willebrand factor, a blood clotting agent for their protection against heart disease and cognitive decline, but this also means they are more likely to die from severe trauma.[\[R, R2\]](#)

You may have heard of the book "[Eat right for your type](#)" where author Peter D'Adamo claims that your ticket to good health is eating in a way that is suitable for your blood type. He provides several lines of reasoning to back up his claims which I may discuss in another video, but this blood type diet of his seems to be like the diet version of the [Barnum effect](#). The barnum effect is where someone will be given a fortune or description of their personality based on their star sign or blood type and the person may say it sounds very accurate- it sounds just like them. But in reality, the description was vague enough to where it could have applied to anyone.

「[全員当たるよ。](#)」

A 2014 study[R] found that the diets found in “Eat right for your type” - the blood type A diet, AB diet and O diet provided benefits like lowered BMI, waist circumference, blood pressure, triglycerides and insulin, ...but it didn't matter who followed which diet. You could be blood type O and still get the benefits from a blood type A diet.

However, a conjecture made in chapter 4 of the book had me interested: D'Adamo claims that “*Studies have shown that Type O has a stress response that centers on fight-or-flight.*” [Clip: “*Type O people have too much of an enzyme that causes dopamine to convert to adrenaline*”

He explains that the neurotransmitter dopamine is converted into the neurotransmitter norepinephrine by an enzyme called dopamine beta-hydroxylase (DBH), and that blood type O people have higher levels of DBH, so they are prone to anxiety from increased levels of norepinephrine. Higher levels of norepinephrine apparently also causes a tendency towards anger and aggression. Hence, this is why he recommends type O people to do vigorous exercise and eat a lot of protein because that will block the enzyme DBH.

In the book, there are no reference numbers next to his claims, and “Appendix G: The Scientific Evidence” didn't have any information on where he got this dopamine beta-hydroxylase idea, but I went ahead and looked into it and found a paper by a Donna Hobgood under “Medical Hypotheses”[R]

She explains that the gene for the enzyme we just discussed - dopamine beta hydroxylase is on chromosome 9q34 and is in tight [linkage disequilibrium](#) with the ABO blood typing gene. This might have been what one of the Japanese doctors in the earlier mentioned medpeer survey was referring to when he said that the reason he believes blood type is related to personality is that “[he] had heard that the gene for blood type and

personality factors are close to each other on DNA.”

Hobgood says in her paper that “low activity DBH would relate to impulsive behaviors while high activity DBH would relate to persistent behaviors.”

Then, in 2015, inspired by the hypothesis presented by Hobgood, Japanese researchers investigated “ABO Blood Type and Personality Traits in Healthy Japanese Subjects.”[\[R\]](#) The results of the study showed significant differences in persistence scores, showing that subjects with the blood type A allele were more persistent. Though the authors were careful to say that this should be considered preliminary results and that this data are inconsistent with several other previous studies.

In contrast, a 2014 paper looking at 10,000 people from both Japan and the U.S. found that blood type explained “*less than 0.3% of the total variance in personality.*” The paper is titled “*No relationship between blood type and personality: Evidence from large-scale surveys in Japan and the US*”[\[R\]](#)

So, we’re hardly at a point where we can make any worthwhile conclusions about a person’s character based on their blood type.

With all this said, couldn’t there be something to this blood type personality thing? After all, the reason some people get invested in this idea is because they really identify with the description for their blood type.

But, that sounds a lot like the Barnum Effect.

And, another factor in this could be that it’s an example of a self fulfilling prophecy - if someone is often told from a young age that they must be the unique and artistic type because they are blood type AB, then they might start to view themselves as uniquely artistic. Or, if you have a giant “[B](#)” stuck to your shirt, you might act a little more like a type B person. But Maybe the type A blood in me is making me too skeptical.

While it's hard to actually make use of this information about blood type, hopefully this was a decent exercise in critical thinking.