The gift of life – does it apply to donation for research?

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In his influential study, “The Gift Relationship” [1970], Richard Titmuss coined the idea of voluntary, non-paid, blood donation being the gift of life for a fellow citizen. This metaphor has been powerful in mobilising donors. It conveys a direct relationship between blood donation and patients’ vitality, as well as a difference between gains and costs. As the gift of life, blood donation is seen to symbolise pure altruism and promoting solidarity between strangers. But can we apply the metaphor as successfully to donating blood for research? I interviewed a group of Finnish blood donors on what if the FRC Blood Service invited them to give a blood sample and personal information for research. The blood donors were usually willing to contribute to research for the public benefit, because they saw great potential in science to create solutions to help patients in the future. However, based on our interview data and previous research, I suggest that the analogy between the gift of life and donation for research did not work all the way. The metaphor fails to address donors’ questions on the new types of relationships, interests and risks related to the use of personal data for research. Left unanswered, these could discourage donating for research. Hence, I argue that the gift of life metaphor is not applicable to donor recruitment in the research context. I propose to look for new metaphors that resonate better with donors’ perceptions of research participation and serve the communication needs of data collectors.

Key words: donor recruitment, donors, ethics, gift, metaphor, research data.

Introduction

The argument that voluntary blood donation represents ‘a gift of life’ was presented by Richard Titmuss in his influential study The Gift Relationship: From Human Blood to Social Policy from 1970 [1]. Still today, Titmuss’ ideas about blood donation as the ‘gift of life’ continue to have an influence in the blood service field. The metaphor has since been adapted into new areas of tissue and organ collection, including research and biobanking [2–4].

Health research and research data biobanking are increasingly becoming a part of blood banks’ activities [5,6]. Adding to their traditional service in providing therapeutic blood products, research can be seen to offer blood banks an alternative way to utilize their infrastructure and sample collections. Many blood banks already run large-scale cohort studies and collect biorepositories dedicated to a specified research purpose [7,8], while others have founded blood donor biobanks [9,10]. From a service user viewpoint, one of blood banks’ main assets in this field is their access to healthy donors on a re-contact basis, which allows the longitudinal collection of biosamples, genetic and health data. As research service providers, blood banks can utilize their existing relationship with blood donors and volunteers committed relationship to blood donation. [5,9,10]

The transformation into health research services depends on co-operation with voluntary blood donors. Previous research on blood donors suggests that they...
generally share a positive attitude to research participation and are inclined to contribute to genetic studies and biobanking [6,11,12]. Most blood donors are willing to give their blood samples and additional information on health and lifestyle to their blood bank for the use of health research [8,13] without a negative impact on their blood donation [14]. The high recruitment rates in cohort studies [9,10] are seen to affirm blood donors’ co-operation when it comes to using them as a source for health research [5]. Our previous study [13] looked at the justifications for blood donors’ generally positive attitudes to biomedical research participation at the Finnish Red Cross (FRC) Blood Service and how this compared to their motives to donate blood for patients. Most donors we interviewed were prepared to give an extra blood sample and information to support medical research, which they associated with potential progress in health care for the benefit of future patients. Blood donors appreciated the practicality and familiarity of the Blood Service as a research participation context.

Burgdorf and his co-authors [5] use similar arguments to justify why blood banks should increasingly direct blood donors input to medical research. The best way, the authors propose, to understand donors’ new task in giving blood and information for research is ‘...to extend focus to a second donor gift: the gift to improve scientific knowledge’. The second gift can be considered an extension of the ‘first donor gift’, that is blood donation from a healthy person to patients in need of a blood transfusion (Fig. 1). The second gift merely extends from the first, since both donations ultimately result in improved care of patients, but the ‘donor gift 2’ does this via scientific knowledge. According to the authors, the same ethical consent should cover both ‘donor gifts’, since donation for research represents merely an added value for blood donors with a small extra cost. The second gift directs donations to the development of new diagnostic methods and personalized treatments for future patients. Burgdorf and colleagues also consider the option of giving two gifts in one donation as a potential selling point to blood donors, whose decreasing motivation poses a problem for blood banks. [5]

In this paper, I take the blood donors’ perspective on the question: ‘The gift of life – does it apply to donation for research?’ I consider the ‘gift of life’ to be a commonly used metaphor for blood donation that is now suggested to be applied to donation for research. I will use data from blood donor interviews at the FRC Blood Service to see how this metaphor compares to how blood donors discuss their experience on donating for therapy or research. The aim is to see whether the metaphor offers a useful conceptual tool to further donors’ co-operation with blood banks. With the help of social science research and theory, I discuss why blood banks should strive to apply metaphors that are relevant to donors and match the changing cultural contexts [2].

**Titmuss and the ‘gift of life’ metaphor**

Titmuss made the argument that voluntary, non-remunerated blood donation represents the ‘gift of life’ in his comparative study between the US commercial healthcare markets and public health services in the UK [1]. His objective was to examine in which one of these models the blood supply system works better. Titmuss concluded that the UK’s public system, where receiving and donating blood were ‘for free’, produced better results. He explained such altruistic blood donations by applying Mauss’ [15] anthropological theory of gift exchange. Unlike buying and selling, gift exchange builds on a moral relationship that is governed by the social norm of reciprocity. People build social bonds and identities when they exchange gifts. Taking part in gift exchange marks one’s inclusion into the community and informs others about one sharing its values. Therefore, aside from its potential utility, a gift carries symbolic value. According to Titmuss, voluntary blood donation is an example of a gift relationship between the blood donor and the transfusion patient. These strangers’ lives are bonded together by a shared national health care system – a structure that builds not on direct but on generalized reciprocity between fellow citizens. In the welfare state context, blood donation comes to symbolize national solidarity, mutual duty and trust. Instead of being merely a transaction, voluntary blood donation is now a moral choice to give ‘a gift of life’, claimed Titmuss.

The ‘gift of life’ metaphor continues to be applied to legitimize and mobilize public participation projects that rely on access to human biomaterial, for example biomedical research and biobanking [16]. Those applying the metaphor to collecting donations often focus on the individual motives behind the choice to donate [17]. Perhaps Titmuss’ remarks on how the use of the gift metaphor on blood donation relates to a specific cultural and institutional

![Fig. 1](image-url)
context has received less attention \[3,18\]. According to Healy \[2\], to be successful, organizations that depend on voluntary donations are required to find and apply metaphors and other 'cultural scripts' that can explicate culturally appropriate rationales for blood donation. Their success in mobilizing donors depends on how well these scripts resonate with the values of the community from which the organization draws its volunteers. If and when people then act upon these promotional scripts, they have their own interpretations of them and expectations of the organization that uses them. For example, if blood as a 'gift of life' is donated out of solidarity towards hospital patients, then donors' expectations of the Blood Service are geared towards realizing patient solidarity. The organization that uses the metaphor as its marketing tool becomes seen as accountable for delivering the promised 'gift of life' \[2\]. Because of their practical implications, blood services should carefully consider the metaphors they use and show sensitivity to people's understanding and the social context in which their messages get interpreted \[16\]. Previous research has shown that institutional reputation and shared moral views seem to carry at least equal weight in informing donors' consent for research and biobanking as they do in blood donation for patients \[19\]. The interpretations that donors make based on their reading of the institutional context can be even more relevant to the choice to participate in research than the formal information provided by these organizations \[13,20,21\].

A theory of metaphors

So what does it actually mean to say that the gift of life is a powerful metaphor for blood donation? In their classic book \textit{Metaphors we Live By}, George Lakoff and Mark Johnson \[22\] present a theory on metaphors. They claim that metaphors are often mistaken for being merely figurative, poetic words marginal to rational conceptualizations of reality. Lakoff and Johnson make the case for the opposite idea, claiming that our understanding of everyday experience is in large part structured by metaphorical concepts. We use different kinds of metaphors as tools to make sense and function in the world. For example, the metaphor 'time is money' suggests that time could be experienced like money as a resource that can be organized by quantity and 'spent' on things we value. By linking two different experiences, the metaphor helps us to grasp the complexity of the concept 'time', by borrowing from the way we understand another, 'money'. By promoting such an association, the metaphor also shapes the common view of what is practical:

In all aspects of life, not just in politics or in love, we define our reality in terms of metaphors and then proceed to act on the basis of the metaphors. We draw inferences, set goals, make commitments, and execute plans, all on the basis of how we in part structure our experience, consciously and unconsciously, by means of metaphor. (Lakoff and Johnson 1980, 158).

For Lakoff and Johnson, metaphors are 'devices for understanding' \[22\] that, by linking perceptions and concepts, bring coherence to our experience. Metaphors do this by highlighting some aspects of complex reality, while hiding other relations. Hence, the focus and coherence come at the expense of narrowing down our perception to specific similarities. That is often why more than one metaphor is used to describe a phenomenon. It is also possible to create new metaphors to help understand new phenomena. Yet, for a metaphor to become 'a metaphor we live by' as Lakoff and Johnson call them, it must draw from and apply to our common experience. A metaphor also has to match the context; otherwise, it has no function. For example, if a culture does not use money, the 'time is money' metaphor does not help people to understand how to deal with time. Metaphors have no fixed meaning, but everyday use tests their applicability.

**Blood donor interviews and data analysis**

The empirical data used in the analysis come from blood donor interviews that were organized in the Finnish Red Cross (FRC) Blood Service. Interviews were conducted in winter 2015–2016 at five fixed and two mobile blood collection sites in Southern Finland. In Finland, blood donation is by law non-compensated and voluntary. The blood donor interviews were organized before the FRC Blood Service launched its Blood Service Biobank in 2017. The 11–30 min interviews took place while blood donors had their after-donation coffee and sandwich. Participation in interviews was voluntary and anonymous. Of the donors approached, 21 refused while 61 agreed to be interviewed. Three interviewees were first-time donors, and five had been deferred from donating (more information on the recruitment process can be found in Supplementary Diagram S1). The interviews followed a pre-formulated questionnaire but had an open structure that allowed follow-up questions (Table S1). The recorded interviews were then transcribed verbatim into approximately 300 pages of text.

The text analysis conducted by the author (Vera Rai-vola, VR) followed the basic principles of qualitative content analysis \[23\]. The first step was thematic categorization. VR organized interviewee responses by question 1–19, so that all 61 responses to the same question were found in a single worksheet. All responses on a
sheet were categorized based on similar patterns of content. The categories were induced into themes named by VR. The themes are analytical abstractions to describe and summarize the meaning of the original comments on each response category. The process inevitably misses much of the richness of expression, humour and wit of the original citations. Table 1 presents the themes organized into donation classes: (A) for patients and (B) for research. The coherence between responses and themes was corroborated in a working group with a senior researcher, Dr Karoliina Snell.

It is important to note that interviewees were not asked directly about their views on blood donation as the ‘gift of life’. Previously, Shaw [3] and Loeck and Boylan [24] have looked into how people perceive the term ‘gift’ in different donation contexts. They found multiple interpretations of ‘gift’ and puzzlement related to the concept’s applicability to different forms of donation. Only a few of my interviewees spontaneously used the concept of a ‘gift’. One reference came from a donor (age 57, male) who explained what he wishes to be done with the blood he donated:

36M57: Well I believe and trust that it goes to good use for those patients that the Red Cross promises. And I hope that… it will always be a small gift to someone else. I myself will get that gift if I ever need it. But so far I haven’t.

There were only two of such accounts of a gift in the interview data. Therefore, the second step of analysis was theoretically constructed by VR by comparing the interview themes with existing conceptualizations of the ‘gift of life’ metaphor from Titmuss [1], Burgdorf et al. [5] and social scientists [4,17,25] in the context of blood donation and donation for research. Based on the theory of Lakoff and Johnson [22], if the ‘gift of life’ is to be used as a

| A. Themes on blood donation for patients | B. Themes on blood donation for research |
|----------------------------------------|----------------------------------------|
| Donated blood as a ‘gift of life’       | Blood donation as a ‘gift of life’       |
| • People can die from a blood shortage  | • Give blood oneself does not need for living, to others who do |
| • The need for blood can afflict everyone’s life | • Blood donation is to benefit the patients |
| • Products from donated blood are used to treat and cure hospital patients | • Giving to get in return, when necessary |
| Other views on donated blood            | • Voluntary help without compensation |
| • Having blood in the bank brings security to life | Other views on blood donation |
| • Donated blood is given to the Blood Service to use where it is the best | • It is easy, but can have its inconveniences |
| • Donated blood should not be wasted or sold for profit | • It feels good to do good |
| • The blood gets tested, and it can be studied | • It is a [social] habit |
|                                        | • Doing one’s part, setting an example |
|                                        | • Need to trust the Blood Service not to put people at risk or making it a business |
|                                        | • Doing it because one is able and it can benefit the donor’s well-being |

Table 1 Interview themes on donated blood and blood donation for (A) patients and (B) research subdivided into themes that align with the ‘gift of life’ metaphor and other viewpoints on donation.
device for blood service public communication, it needs to grasp something essential about the way in which blood donors understand donating blood in both context (A) and (B). To test this idea, an abductive analysis strategy was used in the allocation of themes into groups. In Table 1, the first column itemises themes which are considered to relate donated blood to the ability to ‘give life’ compared with themes that are taken as referring to another purpose. The second column distinguishes between themes in which blood donation as a practice aligns with the idea of exchanging ‘gifts of life’ and themes that describe another kind of practice. The taxonomy accomplished by VR was critically dissected with a team of senior researchers (Dr Snell and Professor Ilpo Helén).

Applying the ‘gift of life’ to understand blood donation

The Table 1 interview themes in section (A) show that interviewees associated donated blood with a life-giving or saving quality. Similarly, to what Charbonneau and Tran [26] found, the blood donors in this study tended to value donated blood by its usefulness in treating hospital patients. However, donors’ focus of interest was not on the process that delivers those treatments, but on the concrete benefits that donating blood would have on people’s lives: how donated blood could help patients to get better and return to normal life, and how having blood in the bank would make everyone’s – including their own – lives safer. Donors observed that blood donation was a collective effort for welfare. Their choice to give blood was related to a vision of people taking turns in helping each other in a moment of need. The sense of blood circulating between members of society, says Cohn [25], is still a very powerful image. It links giving blood to the idea of a national community and interdependent lives [27]. Interviewees also noted they had to trust the FRC Blood Service and the health care system to make the best use of donated blood in improving well-being. These themes matched the ‘gift of life’ metaphor as described by Titmuss [1]. However, they apply to the extent to which blood donation is related to direct aid to hospital patients and mutuality between citizens [17]. According to Tutton [4], the ‘gift of life’ metaphor directs focus to the values people expect from voluntary donation, like equality and solidarity. The metaphor works best when used to highlight policy principles about tissue collection. However, if we wish to understand the full complexity of donors’ experiences, the ‘gift of life’ applies only partially, as it leaves out other themes in Table 1 that might be important to donors. To be a tool for action instead of empty rhetoric, the metaphor must seem true to donors’ experiences of reality [27].

Applying the ‘gift of life’ to understand donation for research

To what extent does the ‘gift of life’ metaphor apply to donation for research? When we consider the themes of Table 1, the change from blood donation to donation for research adds more variability. Comparing the A and B columns, the goal of providing treatments for patients and increasing human well-being seems indeed to be an overarching theme in both contexts, as Burgdorf et al. [5] presented. However, as discussed in our previous articles [13,19], from the blood donors’ viewpoint, the research and development processes will likely take long time and be risky. These themes challenge the picture of a ‘second gift’, that straightforwardly leads to patient benefits. From the donors’ perspective, a donation for research meant extending their trust in the Blood Service and its ability to responsibly manage donor data. Compared with (A), the themes in (B) – donation for research – concern mostly different experiences and the Titmussian interpretation of the ‘gift of life’ metaphor seems to cover a lesser share of themes in B).

Because of these discrepancies, I would argue that the ‘gift of life’ might not be the best device for understanding donation on the context of research. Blood services that need applicable metaphors to attract donor co-operation should consider updating rather than merely extending the use of older metaphorical tools. By looking for new metaphors, they might avoid the risk of highlighting unwarranted promises or failing to recognize values and experiences that today’s blood donors find important [3,24,28]. I will discuss a few examples from Table 1 to illustrate what might get lost in applying the ‘gift of life’ to donation for research, and what new metaphors could look like in this context.

Lives as data

Interviewees were generally supportive of health research and found it necessary for the development of better treatments. However, they argued that donation for research referred to a different thing from what they usually meant by blood donation. Research as a purpose for donation appeared less concrete, so metaphors that make research outcomes more tangible could be useful. A script used by the FRC Blood Service ‘Lend a hand for science, too’, promotes the purpose of scientific knowledge, while tapping into blood donors’ preparedness to assist researchers to get the needed research material. The challenge in asking donors to help researchers or ‘science’ is that researchers might seem ‘faceless’ and their scientific research needs lack a sense of urgency. One possible way to tackle these issues is to introduce researchers and their concrete research goals to donors.
Another notion the donors made was that donation for research made it increasingly complicated to really control the fact that their donations will be used for to protect life in a manner of solidarity. This uncertainty created a tension with the theme of donation as a mutual ‘gift’ with a moral purpose. From the history of science, donors could find proof that people are able to use scientific knowledge both for good and bad. Aware that the future is unknown, the interviewees were careful not to make definite claims about the actual social implications of scientific knowledge, but merely wished that their donation should be used for good. The request to share their blood and data with and for research evoked different questions about data control and access, while donors also acknowledged the potential future benefits of data sharing, as a 21-year-old woman described:

37F21: In principle I would be ready to donate my information, but before any research, I would like to know what they are used for. I think it sounds good that you can choose to withdraw from it [biobank] if, for instance, it feels that the research does not fit with my values. [...] In a way I understand that it requires a huge work to collect those [samples] separately for each study, so in a way it sounds good to have that kind of database ready for use. I can imagine there to be some resistance regarding issues of data protection, fears about what if my data ends up in the wrong hands. Perhaps I still feel quite confident that when they set out to do something like this, the first thing is to make pretty sure that this data will not end up in the wrong hands.

Important questions about who should be allowed access to donors’ – in metaphorical terms – ‘lives as data’, and whether data use practices are comparable with volunteers’ values, do not clearly configure in the ‘gift of life’ discussion. Neither does the focal role of companies and commercial funding in today’s biomedicine. Such developments were apparent to many of our interviewees as well as the fact that data collection is a ubiquitous part of our lives today. Mentioning Google, one interviewee claimed she was not very concerned about giving the Blood Service blood samples and information, since, ‘…in real life, awfully lot of data about us exists, so for me it does not really matter if there is a little more here or less there’ [52F47]. However, she clarified, it was rather here at the Blood Service she was happy to trust her data as she knew it was not being used for ‘nonsense’ or only to make profit. Such conditions were a focus of interest to other blood donors, too. Taking Titmuss’ original ideas straight into today’s information society risks ignoring these contextual changes and people’s interests in data and the conditions for its use [4,17,29,30]. For example, only referring to ‘free gifts’ creates a tension with reality where (global) R&D companies are among the likely beneficiaries of volunteers’ solidarity.

Another problem with applying the ‘gift of life’ metaphor to research was the difficulty for donors to understand what tangible bearing donation for research would have on people’s lives. What seems to be in demand are metaphors targeting what research, scientific knowledge or therapies mean for a good life. Understanding this would help donors to justify why it is important to take part in research activities. With the ‘second gift’, donors are left on their own devices to work out how the anticipated therapies improve the lives of patients. Our interviewees fortunately had some knowledge about medical research and creative thinking, so they came up with many suggestions about possible research outcomes. For example: findings about genes, genealogy, genetic risks and gene tests were spontaneously mentioned. Some imagined that the data blood donors provided for research could eventually help prevent or treat public health problems; others hoped for solutions to more specific health concerns. By consenting to give researchers the material they needed, donors were hoping to make such useful knowledge readily available and see it translated into everyday well-being. Metaphors like ‘acting for better health’ or ‘building healthier futures’ address these hopes and link donors’ research or biobank consent with expected improvements in health care. Donation for research being a joint effort, donors expected the FRC Blood Service to keep their data from ending up in ‘the “wrong hands”’ (37F21) that were not advancing public health. The organization was also expected to inform its donors about research results that might be of interest and used for protecting their lives. Conceptualizing donation for research as a ‘partnership for health’ could emphasize the reciprocal aspect of research collaboration, and donors trust in the blood/data procuring service organization to manage donations for the purpose of good.

New tools for understanding donation

Using data from blood donor interviews, I argue that donations for research have added new themes into the discussion about blood donation for which the metaphor ‘gift of life’ is not the most useful device to understand. Drawing the focus only onto what is similar between the ‘first’ and ‘second gift’ [5] hides many of the donors’ experiences and interests that are specific to research participation. Blood services that hope to modernize and extend their research services should not only appeal to nostalgic thoughts about direct ‘gifts of life’, which overlook the changes that have taken place in the blood supply sector.
since Titmuss endorsed this slogan [2,27,29]. If blood services wish for people to continue to trust them with the use of their blood and their data on their genes, health, etc., they might need to bring their communication strategies up to date with their donors, who understand that ‘life as data’ – metaphorically speaking – has become an everyday theme we now live by. Blood services operate as part of a society where information on different spheres of life gets collected into databases, clouds, biobanks and registers to serve as a resource for creating health, but also wealth, and is open to other potential uses [29]. As Sheikh, Deleuran and Hoeyer [28] show in their article about voluntary donors’ views on the commercial plasma industry, a selective focus on the blood banks’ side risks creating space for concerns that donors might be kept uninformed and their views disrespected. Opening a discussion about the principles of cooperation, even in potentially conflict-prone topics, builds trust in the longer term. As Burgdorf et al. [5] and Mitchell [6] emphasize, blood banks need to ensure that their research service strategies align with donors’ interests, including the interest in shared values, which the use of the ‘gift’ metaphor highlights. I suggest that instead of starting from a fixed conceptual framework, blood banks might also find it useful to investigate what new, different metaphors donors find valid for depicting collaboration in the research context. Studies could test empirically which metaphors and slogans resonate with donors’ interest in advancing research that matches their values. According to Kanellopoulou [30], research institutions which wish to maintain public support and trust must focus on donor empowerment and social reciprocity. With their extensive expertise in donor relations and public communication, blood services are well positioned to compose a functional set of metaphors, scripts and slogans that best reflect these principles.

Acknowledgements

I thank all the interview participants who shared their views to enable this study. I am grateful to Professor Ilpo Helen and Dr. Karoliina Snell for their contribution to the analysis and wish to thank Professor Jukka Partanen for supervision and support. I wish to thank the staff at the FRC Blood Service at Helsinki Sanomatalo, Kivihaka and Mobile Unit; Kuopio; Tampere and Turku for their kind cooperation.

Sources of research support

This study was partially supported by the Finnish Funding Agency for Technology and Innovation (Tekes) to the SalWe GID (Personalized Diagnostics and Care) programme (ID 3982/31/2013), VTR funding from the Finnish Government and the Academy of Finland’s research programme pHealth (Grant Nos. 292408 and 292456).

Conflicts of interests

The author declares no conflict of interests.

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Supporting Information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Diagram S1 Blood donor interview recruitment process

Table S1 Donor interview questions