WRITING THE LAY SUMMARY BASICS

Writing the lay summary – basics

1

WHAT DO YOU NEED TO SAY?

- Know your audience.
- Provide only the essential context for the research.
- Answer the "so what?" behind your research.
- Address the 5W and 1H.

2

HOW WILL YOU SAY IT?

- Aim for the "wow" factor; identify one primary facet of your research to which almost anyone could relate, and use that to appeal to your reader.
- Write in the active voice.
- Have a title that is short, clear, relevant and reader-friendly.
- Craft a strong 20-30-word summary to use as your first sentence.
- Use analogies to explain complex ideas.
- Section text in distinct categories.
- Stay exactly on point.
- Use positive phrasing.
- Use person-centered language.
- Be specific.
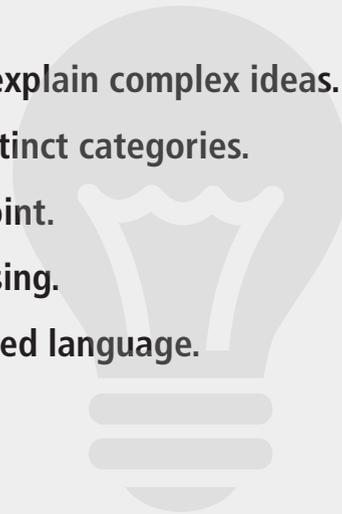
3

DID YOU?

- Use simple sentences.
- Reduce essential arguments to their most straightforward and reader-friendly form to reduce ambiguity.
- Respect the length requirements of the lay summary, often restricted to between 100 and 1000 words.
- Use software tools to test readability.
- Get feedback from colleagues and supervisors, as well as others not in your field.
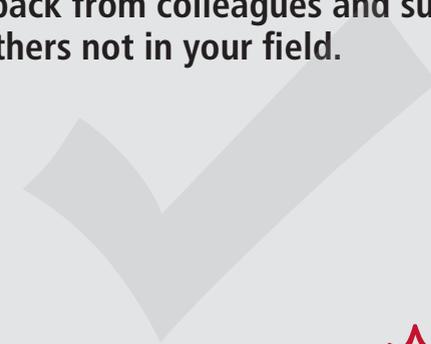
Know Your Audience

💡 That's a challenge – lay summaries are, by definition, for people who don't know why they should be at all interested in what you have to say. It's your job to make what you do interesting to a non-research community. The following, an example of a perfectly fine abstract, has little to no meaning to the lay audience.

200 male Vietnam combat veterans who were **assigned to a posttraumatic stress disorder (PTSD) group (n=100)** or a non-PTSD group **(n=100)** were administered the **MMPI** to develop empirically based criteria for use of the MMPI to aid in assessment and diagnosis of PTSD. Standard clinical profiles demonstrated that PTSD Ss had overall **higher mean elevations**, [greater maladjustment] and **discriminant function analysis** correctly classified 74% of Ss in each group. A special PTSD subscale was developed and cross-validated that improved diagnostic hit rates to 82% of Ss.

(Keane, T., Malloy, P., Fairbanks, J. (1984)

💡 It's about the jargon. What does 'assigned to…a group' actually mean, outside of data collection circles? Or 'n=100'? What is an MMPI, or a 'higher mean elevation'? Discriminant function analysis? Almost a quarter of the text above is jargon, the first enemy of the lay summary.

Let's omit all that and just tell the story:

Before and After

ORIGINAL

200 male Vietnam combat veterans who were assigned to a posttraumatic stress disorder (PTSD) group (n=100) or a non-PTSD group (n=100) were administered the MMPI to develop empirically based criteria for use of the MMPI to aid in assessment and diagnosis of PTSD. Standard clinical profiles demonstrated that PTSD Ss had overall higher mean elevations, [greater maladjustment] and discriminant function analysis correctly classified 74% of Ss in each group. A special PTSD subscale was developed and cross-validated that improved diagnostic hit rates to 82% of Ss.

(Keane, T., Malloy, P., Fairbanks, J. (1984)

NEW & IMPROVED ✔

Clinicians have used The Minnesota Multiphasic Personality Inventory (MMPI) test for over forty years to assess personality and psychopathology. We wondered if it could identify PTSD among combat veterans. It did! Then we created a sub-scale, or a kind of mini-focus of the MMPI, which made diagnosis of this mental health problem even more accurate. Effective treatment relies on good diagnoses. Our findings show promise for both PTSD sufferers and clinicians who work with them.

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Identify a relatable facet of your research

Identify one primary facet of your research to which almost anyone can relate, and use that to appeal to your reader.
A good lay summary shows, whatever your area of research, its relationship to the human being, the person reading your summary.

Hook your reader.

RESEARCH ON MUSCULOSKELETAL STRESS IN THE FIELD

Gentle reader, haven't we all felt some sort of pain from physical stress?

RESEARCH ON CHILDHOOD DEPRESSION IN MILITARY FAMILIES

Gentle reader, what is it like when your child, or a child you know, is suffering?

RESEARCH ON GENDER TRANSITIONING WHILE IN THE MILITARY

Gentle reader, you either know of or are someone who routinely has to negotiate gender and orientation, right?

Answer the question behind your research

Writing about the identification of critical functional and regulatory domains in gelsolin?

✔ Tell your readers that understanding this one protein's behaviour might advance the treatment of blood disorders.
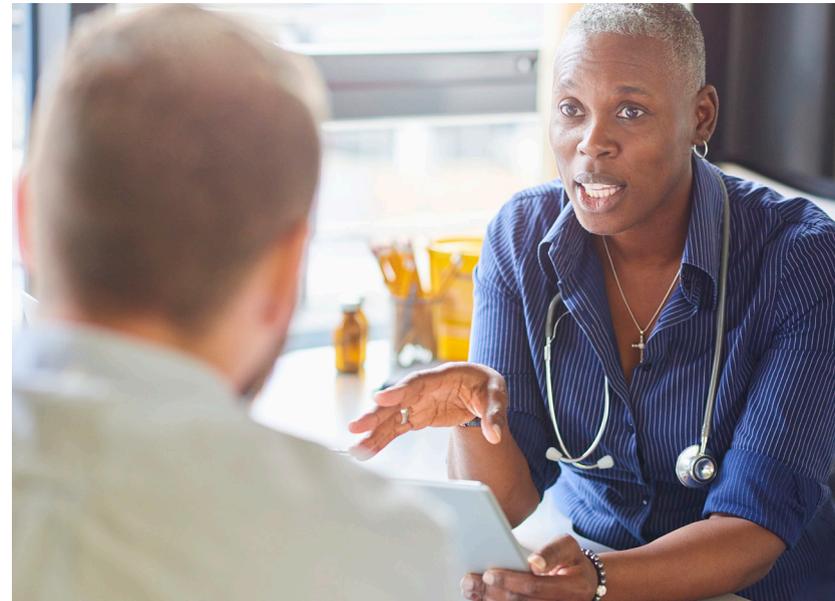
Writing about endocrine aspects of Post-traumatic Stress Disorder and implications for diagnosis and treatment?

✔ Tell your reader that understanding how severe stress and trauma, i.e. PTSD, impacts hormones, meaning those afflicted might benefit from hormone-based pharmacological treatment.

Writing about changes in cortisol and dehydroepiandrosterone in women victims of physical and psychological intimate partner violence?

✔ Tell your reader that partners of those afflicted with PTSD experience hormonal changes that impact their physical and mental health.

Write in the active voice

Traditionally, science writing has used the passive voice to suggest objectivity and scholarly distance in a neutral observer. But **News Flash**

1. Your readers are not scientists.

2. Writing in the sciences **is changing**, from passive to active voice, in part from our broad recognition that there is neither absolute objectivity nor pure neutrality in any of the research we humans do. Active voice is replacing passive voice because active voice is more honest, and it's more concise.

3. Active voice always shows who is doing what, so the writer's point is visible, thus easier to absorb than passively written work.

HOW TO FIX PASSIVE VOICE? JUST ALWAYS ANSWER THE QUESTION "BY WHAT OR WHOM?"

PASSIVE

Many guidelines for the management of low back pain in primary care **have been published** during recent years.

ACTIVE ✔

Healthcare journals have published many guidelines for the management of low back pain in primary care.

Respondents **were asked** to describe their country in terms of the field of military psychology.

Interviewers asked respondents to describe their country in terms of the field of military psychology.

Put the subject and verb UP FRONT AND CLOSE.

Read the two sentences below. In each, the main point of the sentence is at the end. Moving the main point to the front of the sentence is easier on the reader.

1. Because the experiences and mental health outcomes of veterans of the Vietnam War essentially motivated the contemporary study of traumatic stress, **combat exposure has been a prototypical Criterion A stressor for PTSD.**

SWITCHED SEQUENCE:

✔ **Combat exposure has been a prototypical Criterion A stressor for PTSD** because the experiences and mental health outcomes of veterans of the Vietnam War essentially motivated the contemporary study of traumatic stress.

2. Given the beneficial effects of mindfulness practice on enhancing emotion regulation as well as decreasing anxiety and depressive symptoms, **mindfulness has been increasingly discussed in the context of PTSD and its treatment.**

SWITCHED SEQUENCE:

✔ **Mindfulness has been increasingly discussed in the context of PTSD and its treatment**, given the beneficial effects of mindfulness practice on enhancing emotion regulation as well as decreasing anxiety and depressive symptoms.

Better, but eliminate passive voice! "Clinicians increasingly discuss mindfulness in the context of PTSD and its treatment…"

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Create a short, clear, reader-friendly, relevant title

Consider these randomly selected titles; while all no doubt convey useful information about the content to which they allude, none have vocabularies accessible to anyone, none are in the active (rather than passive voice) and none shows sufficient brevity. Think about your audience; what will grab the eye? What conveys the story my research tells, in a human way?

The subacromial impingement syndrome of the shoulder treated by conventional physiotherapy, self-training, and a shoulder brace: Results prospective, randomized

"PATIENT, HEAL THYSELF": CAN SELF-GUIDED TRAINING FIX THAT SHOULDER INJURY? ✔

The Effect of Organizational Conditions (Role Conflict, Role Ambiguity, Opportunities for Professional Development, and Social Support) on Job Satisfaction and Social

"I'D STAY IN THIS POSITION IF ONLY…": THE IMPACT OF AN ORGANIZATION'S CHOICES ON ITS SOCIAL WORKERS ✔

Advancing a Conceptual Model of Evidence-Based Practice Implementation in Public Service Sectors

NEW AND IMPROVED: CHANGING THE WAY WE PROVIDE PUBLIC SERVICES ✔

Use comparisons, metaphors, images and analogies to make complex ideas clear

Readers make super rapid mental images when reading; that's why active voice, wherein who/what is visible to the reader, is easier to understand. Comparisons, metaphors, images and analogies too, are great ways to give visibility, thus intelligibility, to your writing:

"A chunk of neutron star the size of a sugar cube weighs more than the human race."

"To see what it's like to be your own heart, try using a teacup to empty a bathtub in 15 minutes—then do it again and again, without stopping, for the rest of your life."

"An antioxidant is like the screen in front of your fireplace. It quenches the sparks as they form. If the fire in the fireplace is out of control, the screen is useless."

"Dark matter cannot be seen. Dark matter is like a man in a black tux and a women in a white dress dancing in a dimly lit room. We can not see dark matter (hence the name) but we can see the Bright matter. We know there is dark matter because we see the lighted matter and we know that they're in balance with each other."

"Our understanding of human pre-history is based on the remains of perhaps 5,000 individuals. You could fit it all into the back of a pickup truck."

Use positive phrasing

One of the most important reasons for using positive phrasing is that your readers will more quickly and thoroughly understand what you have to say than if you phrase things in a negative way.

Positive phrasing makes your writing more direct because it takes more words to express something negatively. Positive constructions are livelier and more appealing; we're attracted to the positive.

Rewrite phrases without using no, none, never, and not whenever possible.

FOR EXAMPLE:

We found no significant difference between pre-test and post-test blood sugar levels.

✓ **Blood sugar levels remained constant, before and after testing.**

There was little improvement indicated in the self-assessments of PTSD sufferers after treatment.

✓ **PTSD sufferers indicated that some improvement occurred after treatment, although the degree of that improvement was less than we had hoped.**

We found no evidence that eating shellfish reduces the pain of a repetitive strain injury.

✓ **Now that we know that a high shellfish diet has little impact on alleviating the pain of a repetitive strain injury, we can test other food-based possibilities to see if repetitive strain pain can be reduced by a high-protein diet, a high carbohydrate diet, or a paleo diet.**

You get the idea. Make your writing more appealing by expressing yourself in a positive way whenever possible.

Adapted from https://lexpower.wordpress.com/2010/01/07/why-use-positive-phrasing/

Eliminate ambiguity

💡 Ambiguity is often caused by these devilish words: "It", "This" and "These/those."

Consider:

"Jeff took the baby out of the stroller because he hoped to sell **it** at his garage sale later that day."

Always insert a word to help your reader understand to what the pronoun refers.

Comparative analyses of physician assistants in the military and civilian health sectors provide useful insights into selection and utilization patterns adopted by one sector which may be useful for the other. **This** has implications for how we train military medical workers.

"Wow, that's confusing. Does 'this' refer to the research the analyses, health sectors, insights, or patterns? I could re-read it to figure it out but I probably won't."

Comparative analyses of physician assistants in the military and civilian health sectors provide useful insights into selection and utilization patterns adopted by one sector which may be useful for the other. **This research** has implications for how we train military medical workers.

✓ Better

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Understand that the word limits are real

If you are allowed 150 words to describe a piece of research, be respectful of that limit and do what it takes to make your text fit that goal. One way to do that is to reverse outline your original paper. To do this, simply (well, it's not always simple, but do it anyway) number your paragraphs and write a 1-to-5-word label for each one. The label should indicate specifically what that paragraph's point is. When completed, look at your list of labels. Distill that list into a sentence or two, leaving out anything that isn't absolutely central, and you should end up with a pretty concise story. This might take practice, but it's an essential skill.

400 WORDS ➡

1. Since the publication of its inaugural issue in January 1990, the Journal of Democracy has published well over a thousand articles, exploring all aspects of the workings of democracy and the struggles of democratic movements. But we have been especially concerned with tracking democracy's advances and setbacks around the world. For 25 years, we have been "taking the temperature" of democracy. Since 1998, we have published annually an article summarizing Freedom House's survey of Freedom in the World, and we have featured numerous other essays analyzing democracy's global trajectory, beginning with Samuel P. Huntington's classic 1991 article introducing the concept of the "third wave" of democratization. So it should not be unexpected that we turn to this subject as the central theme of our twenty-fifth anniversary issue.

2. Some may be surprised, however, by the headline on our cover—"Is Democracy in Decline?"—which faithfully reflects the way in which we posed the question to our contributors. For a journal that is unabashedly in favor of democracy, this obviously is not the kind of celebratory theme that might be preferred for marking a historic milestone. Yet this seemed to be the question that everyone was asking as 2015 approached, and we decided that it deserved a thorough examination.

3. Tracing the viewpoints and opinions expressed over the years in the Journal suggests how evaluations of and sentiments about the state of democracy have evolved since 1990. The editors' introduction that Larry Diamond and I wrote for the inaugural issue was animated by the view that democracy was experiencing a "remarkable worldwide resurgence … ". Five eventful years later, we recognized not only that democracy had spread to many more countries but also that it had hugely improved its standing in terms of ideas and organization. We asserted that democracy had "gained enormous ground" with respect to "international legitimacy" and that it now "reign[ed] supreme in the ideological sphere."

4. By 2005, however, our tone had grown far more downbeat, and we acknowledged a darkening mood among supporters of democracy. We attributed this in part to the travails of democracy-building in post-invasion Iraq and to Russia's descent back into authoritarianism, but argued that the overall global trends were mixed and did not justify discouragement among democrats. By 2010, we were prepared to grant that "there now may even be grounds for speaking of an erosion of freedom over the past few years, though its dimensions are very slight."

27 WORDS ✔

1. JOD's history of measuring democracy's status.
2. Asked contributors "Is democracy in decline?"
3. Optimism at the JOD in 1990.
4. By 2005, worries about some erosion of freedom.

36 WORDS ✔

The Journal of Democracy has been measuring democracy's growth worldwide since 1990, when the editors were optimistic about the spread of democracy. By 2015, these editors had begun to seriously question whether democracy was indeed growing. (Plattner, 2015).

Feedback from people NOT in your field

💡 Get feedback from colleagues and supervisors, but more importantly, get feedback from people **not** in your field.

Writing is often afflicted by an author's assumption that the terms and logic s/he chooses will make sense to any interested reader if the reader just reads it carefully.

Squash that assumption. The language you and your scholarly colleagues use is not likely to be as clear to others as it seems to you, and this is certainly the case when your readers are from outside your field. Consider this from computational linguistics:

✓ **"In many projects, lexical preprocessors are used to manage different variants of the project (using conditional compilation) and to define compile-time code transformations (using macros)."**

When I explain to a colleague in computational linguistics that the above is as intelligible to me as "qwertyqwertyqwertyqwerty" is, he has to do some serious work to make sense of his discipline's language to me. (It took him four attempts to come up with something I could understand:)

✓ **"When computers run, they use programs. Because of differences in their hardware and software, computers vary in the flavour of the same program they use."**

Don't forget that your reader wants to understand your work, and it takes **you** translating from 'scholar-ese' to common English to make that happen.

Final Tips

💡 Reduce that first sentence to 30 words of focused summary.

Review your summary to make sure what you've got explicitly answers who this is about/for, what exactly you're doing, why it matters, where it's significant, when (if that is relevant) and how you did what you did.

Eliminate all the context for your research, except for a sentence or two that the reader absolutely needs to understand your work.

FINAL EDITS

💡 Print your summary in a new font; you'll **see** potential for improvement.

Read your summary out loud; you'll **hear** potential for improvement.

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