Study 1

The following is the first questionnaire as part of a continuing study between the University of Nevada, Reno, and the University of Utah on the relationship between your sensory experience and headaches (or lack thereof).
This questionnaire should take approximately 40 minutes to complete. Please complete this in one sitting. We will not collect any identifiable information from you, except if you would like to enter your name into a raffle to win a $10 Amazon gift card, then you will be asked to leave your name and email address at the end of the study. Thank you for your participation.
If you have any questions or comments, please email shaigh@unr.edu.

Do you have epilepsy or a history of epilepsy?

- ○ Yes
- ○ No

How old are you?

_____

Which gender do you identify with?

- ○ Male
- ○ Female
- ○ Non-binary
- ○ Prefer not to say

Please select which ethnicities you identify with:

- [ ] American Indian or Alaska Native
- [ ] Asian
- [ ] Black or African American
- [ ] Native Hawaiian or Pacific Islander
- [ ] White
- [ ] Other _____
- [ ] Prefer not to say

Which hand is your dominant hand?

- ○ Right
- ○ Left
- ○ Neither / ambidextrous

Do you have a neurological disease or psychiatric problems (for example, traumatic brain injury, multiple sclerosis, autism, schizophrenia, bipolar, depression, anxiety)?

- ○ Yes
- ○ No

What is your diagnosis?

_____

Have you ever had a significant head injury including concussion or neck injury?

- ○ Yes, head injury
- ○ Yes, neck injury
- ○ Neither

When was your most recent head injury?

_____

Please describe what happened and how you felt after the head injury.

_____

_____

_____

_____

_____

When was your most recent neck injury?

_____

Please describe what happened and how you felt after the neck injury.

_____

Do you take daily medications?

- ○ Yes
- ○ No

If yes, what are the medications and what are they for?

_____

Do you have a parent or sibling who has migraines or epilepsy?

- ○ Yes, they have migraines
- ○ Yes, they have epilepsy
- ○ Neither

Next, you will be asked about your typical sensory experience. (The order of the following questionnaires was randomized to avoid fatigue effects.)

This questionnaire is designed to assess your response to environmental odors. Please select the appropriate response for each statement.

(Bailer, J., Rist, F., Witthöft, M., & Paul, C. (2004). Validation of a screening instrument for multiple chemical sensitivity (MCS): The Chemical Odor Sensitivity Scale (COSS). *Psychotherapie, Psychosomatik, Medizinische Psychologie*, *54*(11), 396–404.

Bailer, J., Witthöft, M., & Rist, F. (2006). The Chemical Odor Sensitivity Scale: reliability and validity of a screening instrument for idiopathic environmental intolerance. *Journal of Psychosomatic Research*, *61*(1), 71–79.

Demarquay, G., Royet, J. P., Giraud, P., Chazot, G., Valade, D., & Ryvlin, P. (2006). Rating of olfactory judgements in migraine patients. *Cephalalgia*, *26*(9), 1123–1130.

Szarek, M. J., Bell, I. R., & Schwartz, G. E. (1997). Validation of a brief screening measure of environmental chemical sensitivity: the chemical odor intolerance index. *Journal of Environmental Psychology*, *17*(4), 345–351.)

How frequently do you feel ill when exposed to the odor of pesticides?

- ○ Almost Never
- ○ Rarely
- ○ Sometimes
- ○ Often
- ○ Almost Always

How frequently do you feel ill when exposed to the odor of paint?

- ○ Almost Never
- ○ Rarely
- ○ Sometimes
- ○ Often
- ○ Almost Always

How frequently do you feel ill when exposed to the odor of perfume?

- ○ Almost Never
- ○ Rarely
- ○ Sometimes
- ○ Often
- ○ Almost Always

How frequently do you feel ill when exposed to the odor of car exhaust?

- ○ Almost Never
- ○ Rarely
- ○ Sometimes
- ○ Often
- ○ Almost Always

How frequently do you feel ill when exposed to the odor of new carpeting?

- ○ Almost Never
- ○ Rarely
- ○ Sometimes
- ○ Often
- ○ Almost Always

How frequently do you feel ill when exposed to smoke?

- ○ Almost Never
- ○ Rarely
- ○ Sometimes
- ○ Often
- ○ Almost Always

How frequently do you feel ill when exposed to the smell of petrol at petrol stations?

- ○ Almost Never
- ○ Rarely
- ○ Sometimes
- ○ Often
- ○ Almost Always

How frequently do you feel ill when exposed to the smell of detergents?

- ○ Almost Never
- ○ Rarely
- ○ Sometimes
- ○ Often
- ○ Almost Always

Are there any smells that you know you are particularly sensitive to (they make you feel ill and/or you actively avoid)

_____

_____

_____

_____

_____

Are there any smells that you have found that trigger your headaches?

_____

_____

_____

_____

_____

This questionnaire is designed to assess your response to environmental sounds. Please select the appropriate response for each statement.
(Khalfa, S., Dubal, S., Veuillet, E., Perez-Diaz, F., Jouvent, R., & Collet, L. (2002). Psychometric normalization of a hyperacusis questionnaire. *Orl*, *64*(6), 436–442.)

Do you ever use earplugs or earmuffs to reduce your noise perception (Do not consider the use of hearing protection during abnormally high noise exposure situations)?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you find it harder to ignore sounds around you in everyday situations?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you have trouble reading in a noisy or loud environment?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you find it difficult to listen to conversation in noisy places?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Has anyone you know ever told you that you tolerate noise or certain kinds of sound badly?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Are you particularly sensitive to or bothered by street noise?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you find the noise unpleasant in certain social situations (e.g. night clubs, pubs or bars, concerts, firework displays, cocktail receptions)?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

When someone suggests doing something (going out, going to the cinema, going to a concert, etc.), do you immediately think about the noise you are going to have to put up with?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you ever turn down an invitation or not go out because of the noise you would have to face?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do noises or particular sounds bother you more in a quiet place than in a slightly noisy room?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do stress and tiredness reduce your ability to concentrate in noise?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Are you less able to concentrate in noise towards the end of the day?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do noise and certain sounds cause you stress and irritation?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you have difficulty understanding what is being said on the telephone?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you have difficulty understanding what is being said in rooms that have an echo?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you have a difficult time understanding fast speech?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you have problems following a series of spoken instructions? Do you need to hear only one instruction at a time?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you have problems following long conversations. Do you tend to miss things that were said?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you need more time than others to process spoken information?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you have problems paying attention when people talk to you?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

Do you have problems understanding the person who is speaking even when looking at them?

- ○ Yes, a lot
- ○ Yes, quite a lot
- ○ A little
- ○ No

This questionnaire is designed to find out how susceptible to motion sickness you are and what sorts of motion are most effective in causing that sickness. Sickness here means feeling queasy or nauseated or actually vomiting.

(Jeong, S.-H., Oh, S.-Y., Kim, H.-J., Koo, J.-W., & Kim, J. S. (2010). Vestibular dysfunction in migraine: effects of associated vertigo and motion sickness. *Journal of Neurology*, *257*(6), 905–912.

Golding, J. F. (1998). Motion sickness susceptibility questionnaire revised and its relationship to other forms of sickness. *Brain Research Bulletin*, *47*(5), 507–516.)

Do you regard yourself as susceptible to motion sickness?

- ○ Not at all
- ○ Slightly
- ○ Moderately
- ○ Very much so

As a child (before age 12), how often did you travel or experience:

	Never	1 to 4 trips	5 to 10 trips	11 or more trips
Cars	○	○	○	○
Buses or coaches	○	○	○	○
Trains	○	○	○	○
Aircraft	○	○	○	○
Small boats	○	○	○	○
Ships e.g cruise liners	○	○	○	○
Swings	○	○	○	○
Roundabouts on playgrounds	○	○	○	○
Rollercoasters	○	○	○	○

As a child (before age 12), how often did you feel sick or nauseated due to traveling on or experiencing:

	Never	Rarely	Sometimes	Frequently	Always
Cars	○	○	○	○	○
Buses or coaches	○	○	○	○	○
Trains	○	○	○	○	○
Aircraft	○	○	○	○	○
Small boats	○	○	○	○	○
Ships e.g cruise liners	○	○	○	○	○
Swings	○	○	○	○	○
Roundabouts on playgrounds	○	○	○	○	○
Rollercoasters	○	○	○	○	○

As a child (before age 12), how often did you vomit due to traveling on or experiencing:

	Never	Rarely	Sometimes	Frequently	Always
Cars	○	○	○	○	○
Buses or coaches	○	○	○	○	○
Trains	○	○	○	○	○
Aircraft	○	○	○	○	○
Small boats	○	○	○	○	○
Ships e.g cruise liners	○	○	○	○	○
Swings	○	○	○	○	○
Roundabouts on playgrounds	○	○	○	○	○
Rollercoasters	○	○	○	○	○

Over the last 10 years, how often have you travelled or experienced:

	Never	1 to 4 trips	5 to 10 trips	11 or more trips
Cars	○	○	○	○
Buses or coaches	○	○	○	○
Trains	○	○	○	○
Aircraft	○	○	○	○
Small boats	○	○	○	○
Ships e.g cruise liners	○	○	○	○
Swings	○	○	○	○
Roundabouts on playgrounds	○	○	○	○
Rollercoasters	○	○	○	○

Over the last 10 years, how often have you felt sick or nauseated due to traveling on or experiencing:

	Never	Rarely	Sometimes	Frequently	Always
Cars	○	○	○	○	○
Buses or coaches	○	○	○	○	○
Trains	○	○	○	○	○
Aircraft	○	○	○	○	○
Small boats	○	○	○	○	○
Ships e.g cruise liners	○	○	○	○	○
Swings	○	○	○	○	○
Roundabouts on playgrounds	○	○	○	○	○
Rollercoasters	○	○	○	○	○

Over the last 10 years, how often have you vomited due to traveling on or experiencing:

	Never	Rarely	Sometimes	Frequently	Always
Cars	○	○	○	○	○
Buses or coaches	○	○	○	○	○
Trains	○	○	○	○	○
Aircraft	○	○	○	○	○
Small boats	○	○	○	○	○
Ships e.g cruise liners	○	○	○	○	○
Swings	○	○	○	○	○
Roundabouts on playgrounds	○	○	○	○	○
Rollercoasters	○	○	○	○	○

This questionnaire is designed to assess your response to fear of pain. Please select the appropriate response for each statement.

(Benatto, M. T., Bevilaqua-Grossi, D., Carvalho, G. F., Bragatto, M. M., Pinheiro, C. F., Straceri Lodovichi, S., … Florencio, L. L. (2019). Kinesiophobia is associated with migraine. *Pain Medicine*, *20*(4), 846–851.

Bränström, H., & Fahlström, M. (2008). Kinesiophobia in patients with chronic musculoskeletal pain: differences between men and women. *Journal of Rehabilitation Medicine*, *40*(5), 375–380.

Miller, R. P., Kori, S. H., & Todd, D. D. (1991). The Tampa Scale: a measure of kinisophobia. *The Clinical Journal of Pain*, *7*(1), 51.)

Please indicate your level of agreement with the following statements

I'm afraid of getting hurt if I exercise

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

If I tried to overcome this fear, my pain would increase

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

My body is telling me that there is something very wrong happening with me

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

My pain would probably be relieved if I exercise

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

People are not taking my medical condition seriously

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree
- ○ NA

The injury put my body at risk for the rest of my life

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree
- ○ NA

Pain always means that my body is hurt

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

I'm afraid of getting hurt by accident

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

The safest attitude is just to be careful to not make any unnecessary movement

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

I wouldn't feel so much pain if something really dangerous was not happening

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

Although I feel pain, I would be better if I was physically active

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

Pain warns me when to stop exercising in order not to get hurt

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

It is not really safe for a person with problems similar to mine to be physically active

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

I cannot do all the things normal people do because I easily get hurt

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

Although something causes me a lot of pain, I don't think it is dangerous

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

Nobody should exercise when in pain

- ○ Strongly disagree
- ○ Disagree
- ○ Agree
- ○ Strongly agree

This questionnaire is designed to assess your response to environmental light. Please select the appropriate response for each statement.
(Cortez, M. M., Digre, K., Uddin, D., Hung, M., Blitzer, A., Bounsanga, J., … Katz, B. J. (2019). Validation of a photophobia symptom impact scale. *Cephalalgia*, *39*(11), 1445–1454.)

How severe do you consider your light sensitivity overall, on an average day-to-day basis?

- ○ Not severe at all
- ○ Somewhat severe
- ○ Very severe
- ○ Unbearably severe

How unpleasant is strong light during a headache?

- ○ Not unpleasant at all
- ○ Slightly unpleasant
- ○ Very unpleasant
- ○ Unbearably unpleasant

How much stronger is your sensitivity to light during a typical headache attack, compared to when you are headache free?

- ○ No different
- ○ Slightly stronger
- ○ Much stronger
- ○ Unbearably stronger

How often does strong light provoke a headache?

- ○ Never
- ○ Rarely
- ○ Often
- ○ Always

How unpleasant is strong light during your headache free periods?

- ○ Not unpleasant at all
- ○ Somewhat unpleasant
- ○ Very unpleasant
- ○ Unbearably unpleasant
- ○ I have not had a free headache period in the last month

How difficult do you find it to function under fluorescent lighting?

- ○ Not difficult at all
- ○ Somewhat difficult
- ○ Very difficult
- ○ Unbearably diffucult
- ○ I avoid or am not exposed to fluorescent lighting for reasons unrelated to light sensitivity

How difficult is it for you to look at a computer screen for any period of time?

- ○ Not difficult at all
- ○ Somewhat difficult
- ○ Very difficult
- ○ Unbearably difficult
- ○ I do not use a computer for reasons unrelated to light sensitivity (e.g. do not own a computer)

How much does light sensitivity impact your ability to read?

- ○ No impact
- ○ Minor impact
- ○ Major impact
- ○ Unable to read
- ○ I do not, or have not, read in the last month for reasons unrelated to light sensitivity (e.g. are too busy to read)

How much does light sensitivity impact your ability to watch television?

- ○ No impact
- ○ Minor impact
- ○ Major impact
- ○ Unable to watch television
- ○ I have not watched television in the last month for reasons unrelated to light sensitivity (e.g. do not own a television or are too busy)

How much does light sensitivity affect your ability to watch movies in a theater?

- ○ No impact
- ○ Minor impact
- ○ Major impact
- ○ Unable to go to theater
- ○ I have not watched movies in a theater for reasons unrelated to light sensitivity (e.g. don't like theaters or too busy)

How much does light sensitivity affect your ability to go shopping (i.e. grocery and department stores)?

- ○ No imact
- ○ Minor impact
- ○ Major impact
- ○ Unable to go shopping
- ○ I do not go shopping for reasons unrelated to light sensitivity (e.g. cannot afford to shop, someone else does the shopping)

How much does light sensitivity impact your ability to do housework or to work outside the home?

- ○ No impact
- ○ Minor impact
- ○ Major impact
- ○ Unable to do housework or to do work outside the home
- ○ I do not do housework, or work outside the home, for reasons unrelated to light sensitivity

How much does light sensitivity impact your ability to go walking?

- ○ No impact
- ○ Minor impact
- ○ Major impact
- ○ Unable to walk about
- ○ I do not go walking for reasons unrelated to light sensitivity (e.g. prefer other activities)

How much does light sensitivity impact your ability to drive?

- ○ No impact
- ○ Minor impact
- ○ Major impact
- ○ Unable to drive
- ○ I do not drive for reasons unrelated to light sensitivity (e.g. do not have a license)

What effect does light sensitivity have on your ability to drive (check all that apply)?

- [ ] Cannot drive at night because of light sensitivity
- [ ] Can drive in daytime, but need to wear sunglasses
- [ ] Can drive only short distances because of light sensitivity

How much does light sensitivity impact your ability to ride in a vehicle (bus or car)?

- ○ No impact
- ○ Minor impact
- ○ Major impact
- ○ Unable to ride in a vehicle
- ○ If you do not ride in vehicles (bus or car) for reasons unrelated to light sensitivity

Do you wear sunglasses to decrease headaches?

- ○ Yes
- ○ No

Where do you wear sunglasses?

- ○ Outdoors
- ○ Indoors
- ○ Both

This questionnaire is designed to assess your response to tactile sensations. Please select the appropriate response for each statement.
(Lipton, R. B., Bigal, M. E., Ashina, S., Burstein, R., Silberstein, S., Reed, M. L., … Group, A. M. P. P. A. (2008). Cutaneous allodynia in the migraine population. *Annals of Neurology*,

63(2), 148–158.)

How often do you experience increased pain or an unpleasant sensation on your skin during your most severe type of headache when you engage each of the following?

Combing your hair

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Pulling your hair back (e.g. ponytail)

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Shaving your face

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Wearing eyeglasses

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Wearing contact lenses

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Wearing earrings

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Wearing a necklace

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Wearing tight clothing

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Taking a shower (when shower water hits your face)

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Resting your face or head on a pillow

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

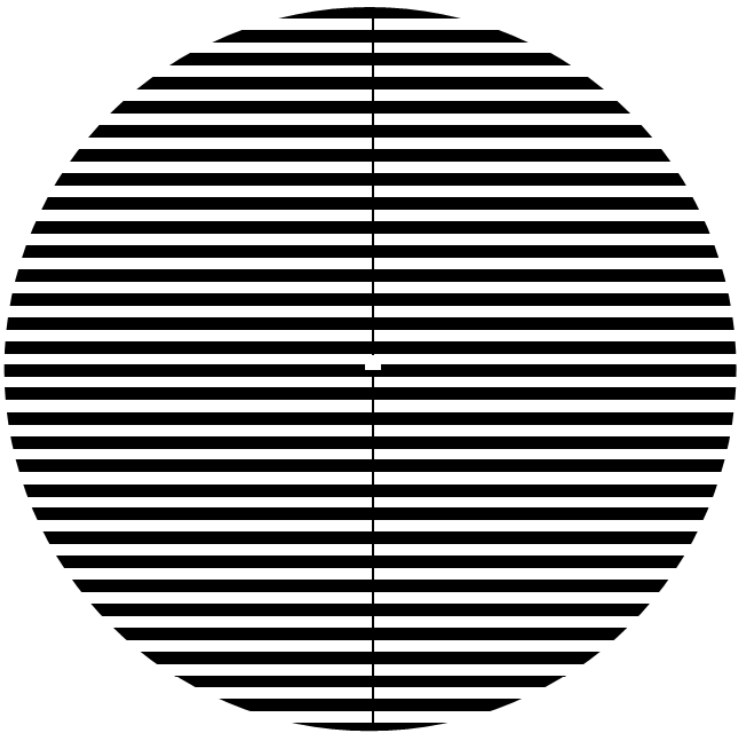
Exposure to heat (e.g. cooking, washing your face with hot water)

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Exposure to cold (e.g. using an ice pack, washing your face with cold water)

- ○ Does not apply to me
- ○ Never
- ○ Rarely
- ○ Less than half the time
- ○ Half the time or more

Next you will see a striped pattern on the screen for 5 seconds. Please look at the center of the pattern. If this causes you extreme discomfort, please look away.



Did you experience any of the following (select all that apply)?

- [ ] Pain/discomfort
- [ ] Shadowy shapes amongst the lines
- [ ] Shimmering of the lines
- [ ] Flickering
- [ ] Colors
- [ ] Blur
- [ ] Bending of lines
- [ ] Nausea/Dizziness
- [ ] Unease
- [ ] Other
- [ ] None of the above

Please describe what you experienced

_____

Next you will be asked about any headaches or migraines you have.
(Headache Classification Committee of the International Headache Society (IHS) The International Classification of Headache Disorders, 3rd edition. (2018). *Cephalalgia*, *38*(1), 1–211. https://doi.org/10.1177/0333102417738202)

How you ever been diagnosed with having migraines?

- ○ Yes
- ○ No

Have you ever had a headache?

- ○ Yes
- ○ No

Please answer the questions regarding your most severe headaches

On a scale of -10, on average, how painful are your worst headaches?

	No pain				Hurts, but is bearable				As bad as it can be		
	0	1	2	3	4	5	6	7	8	9	10
Rate the headache pain											

If you had to describe the worst head pain, is it ... (select all that apply)

- [ ] Throbbing
- [ ] Pulsating
- [ ] Pounding
- [ ] Burning / Pressing
- [ ] Steady
- [ ] Sharp
- [ ] Tight
- [ ] Dull
- [ ] Ache

Is the pain typically on one or both sides of the head?

- ○ One
- ○ Both

Which side?

- ○ Left
- ○ Right

During your worst headaches, do you have... (select all that apply)

- [ ] Nausea / Vomiting
- [ ] Teary eyes
- [ ] Eyelid drop
- [ ] Facial sweating
- [ ] Nasal congestion
- [ ] Facial or forehead flushing or sweating
- [ ] Sensation of fullness in ear
- [ ] Restlessness or agitation
- [ ] None of these

During your worst headaches, are you very sensitive to... (select all that apply)

- [ ] Light
- [ ] Noise
- [ ] Strong smells
- [ ] Light touches on the face, arm, or leg
- [ ] None of these

Do you notice any changes in your worst head pain in response to physical activity (e.g. walking up stairs)?

- ○ Yes
- ○ No

In response to physical activity, does your head pain get...

- ○ Better
- ○ Same
- ○ Worse

How long do your worst headaches typically last without medication or when using medication was unsuccessful? Please indicate if this is in minutes, hours, days etc.

_____

_____

_____

_____

_____

Thinking back on the headaches you have just described, how many of these headaches have you had in your lifetime?

- ○ 1-4
- ○ 5 or more

Before or during your worst headaches, do you notice any changes in your... (select all that apply)

- [ ] Vision
- [ ] Hearing
- [ ] Pins and needles
- [ ] Difficulties with speech or balance
- [ ] None of these

Can you describe this sensation?

_____

_____

_____

_____

_____

How many times has this happened?

- ○ 1-2 times
- ○ 3 or more times

How long does this sensation last?

_____

Does the headache always follow this sensation?

- ○ Yes
- ○ No

Do you ever have similar sensations with no headache or with a different kind of headache?

- ○ Yes
- ○ No

Thinking back to your worst headaches, that you just described, when was the last one?

_____

How long have you had your worst headaches? (per week, month, year)

_____

Have they changed in frequency?

- ○ Yes
- ○ No

Can you think of any reason why?

_____

When do you typically get bad headaches? (check all that apply).

- [ ] Morning
- [ ] Afternoon
- [ ] Evening
- [ ] During sleep
- [ ] During the weekend
- [ ] Beginning of the week
- [ ] Middle of the week
- [ ] End of the week
- [ ] Caused by bright lights
- [ ] During or after sex
- [ ] During emotional stress
- [ ] After emotional stress
- [ ] During physical exertion
- [ ] After not eating for several hours
- [ ] After napping/ oversleeping
- [ ] After drinking alcohol

- [ ] Before menstrual cycle
- [ ] During menstrual cycle
- [ ] After menstrual cycle
- [ ] After bending head downward
- [ ] No pattern

What helps your headaches (check all that apply).

- [ ] Sleeping
- [ ] Rest
- [ ] Eating
- [ ] Spinal adjustments
- [ ] Improving posture
- [ ] Dark quite room
- [ ] Medications
- [ ] Drinking coffee
- [ ] Muscle massage
- [ ] Cold packs

☐ Nothing helps

(HIT:

Bayliss, M. S., Dewey, J. E., Dunlap, I., Batenhorst, A. S., Cady, R., Diamond, M. L., & Sheftell, F. (2003). A study of the feasibility of Internet administration of a computerized health survey: The Headache Impact Test (HIT™). *Quality of Life Research*, *12*(8), 953–961.

Kosinski, M., Bayliss, M. S., Bjorner, J. B., Ware, J. E., Garber, W. H., Batenhorst, A., … Tepper, S. (2003). A six-item short-form survey for measuring headache impact: The HIT-6™. *Quality of Life Research*, *12*(8), 963–974.)

When you have headaches, how often is the pain severe?

- ○ Never
- ○ Rarely
- ○ Sometimes
- ○ Very Often
- ○ Always

How often do headaches limit your ability to do usual daily activities including household work, work, school, or social activities?

- ○ Never
- ○ Rarely
- ○ Sometimes
- ○ Very Often
- ○ Always

When you have a headache, how often do you wish you could lie down?

- ○ Never
- ○ Rarely
- ○ Sometimes
- ○ Very Often
- ○ Always

In the past 4 weeks, how often have you felt too tired to do work or daily activities because of your headaches?

- ○ Never
- ○ Rarely
- ○ Sometimes
- ○ Very Often
- ○ Always

In the past 4 weeks, how often have you felt fed up or irritated because of your headaches?

- ○ Never
- ○ Rarely
- ○ Sometimes
- ○ Very Often
- ○ Always

In the past 4 weeks, how often did headaches limit your ability to concentrate on work or daily activities?

- ○ Never
- ○ Rarely
- ○ Sometimes
- ○ Very Often
- ○ Always

(MIDAS:

Stewart, W. F., Lipton, R. B., Dowson, A. J., & Sawyer, J. (2001). Development and testing of the Migraine Disability Assessment (MIDAS) Questionnaire to assess headache-related disability. *Neurology*, *56*(suppl 1), S20–S28.

Stewart, W. F., Lipton, R. B., Kolodner, K. B., Sawyer, J., Lee, C., & Liberman, J. N. (2000). Validity of the Migraine Disability Assessment (MIDAS) score in comparison to a diary-based measure in a population sample of migraine sufferers. *Pain*, *88*(1), 41–52.)

On how many days in the last 3 months did you miss work or school because of your headaches?

_____

How many days in the last 3 months was your productivity at work or school reduced by half or more because of your headaches? (Do not include days you counted in question 1 where you missed work or school.)

_____

On how many days in the last 3 months did you not do household work (such as housework, home repairs and maintenance, shopping, caring for children and relatives) because of your headaches?

_____

How many days in the last 3 months was your productivity in household work reduced by half of more because of your headaches? (Do not include days you counted in question 3 where you did not do household work.)

_____

On how many days in the last 3 months did you miss family, social or leisure activities because of your headaches?

_____

Thank you for your time.