

## ONE PER RATER PER CHIMP

Thank you for your participation in this study.

In these surveys, we will be asking you to rate your chimpanzees on various traits and attributes. These ratings are meant to be your subjective assessment. We ask only that you rely on your judgment based on your past experiences, daily interactions with and observations of the chimpanzee.

This survey consists of several sections.

**Personality:** The personality scale asks you to rate individual chimpanzees on a series of traits.

**Subjective Well Being (SWB):** The SWB scale asks you to rate individual chimpanzees on 4 items relating to subjective or psychological well-being.

**Physical Well-Being (PWB):** The PWB scale is a new measure consisting of 7 items related to physical aspects of the chimpanzee's person and some very general assessments of individual heartiness.

For some of you, some of these measures might look familiar, but there have been some modifications, so please read carefully. To ensure the validity of the data, please do not discuss your ratings or reactions with anyone else.

There are also some commentary sheets attached to the end of the survey. If you would like to share some stories or expand on your ratings, please feel free.

For any questions, comments or clarifications, please contact:

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This study has been reviewed and approved by the Chimpanzee SSP committee.

Chimpanzee's Name \_\_\_\_\_

Rater's Name \_\_\_\_\_

Date of Rating \_\_\_\_\_

How long have you known this chimpanzee? \_\_\_\_\_

Years: \_\_\_\_\_

Months: Date (Month/Day/Year): \_\_\_\_\_

## Chimpanzee Personality Trait Assessment

Chimpanzee personality assessments can be made with this questionnaire by assigning a numerical score for all of the personality traits listed on the following pages. Make your judgments on the basis of your own understanding of the trait guided by the short clarifying definition following each trait. The chimpanzee's own behaviors and interactions with other chimpanzees should be the basis for your numerical ratings. Use your own subjective judgment of typical chimpanzee behavior to decide if the chimpanzee you are scoring is above, below, or average for the trait. The following seven-point scale should be used to make your ratings.

- 1 Displays either a total absence or negligible amounts of the trait.**
- 2 Displays small amounts of the trait on infrequent occasions.**
- 3 Displays somewhat less than average amounts of the trait.**
- 4 Displays an about average amount of the trait.**
- 5 Displays somewhat greater than average amounts of the trait.**
- 6 Displays considerable amounts of the trait on frequent occasions.**
- 7 Displays extremely large amount of the trait.**

Please give a rating for each trait even if your judgment seems to be based on a purely subjective impression of the chimpanzee and you are somewhat unsure about it. Indicate your rating by placing a cross in the box under the chosen number.

**Finally, do not discuss your rating of any particular chimpanzee with anyone else. This restriction is necessary in order to obtain valid reliability coefficients for the traits.**

Chimpanzee's Name \_\_\_\_\_

Rater's Initials \_\_\_\_\_

1    2    3    4    5    6    7

fearful	Subject reacts excessively to real or imagined threats by displaying behaviors such as screaming, grimacing, running away or other signs of anxiety or distress.	<input type="checkbox"/>						
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dominant	Subject is able to displace, threaten or take food from other chimpanzees. Or subject may express high status by decisively intervening in social interactions.	<input type="checkbox"/>						
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stable	Subject reacts to its environment including the behavior of other chimpanzees in a calm, even, equable way. Subject is not easily upset by the behaviors of other chimpanzees.	<input type="checkbox"/>						
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stingy/ greedy	Subject is unwilling to share food, favored locations, or other resources in enclosure with others.	<input type="checkbox"/>						
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jealous	Subject is often troubled by others who are in a desirable or advantageous situation such as having food, a choice location, or access to social groups. Subject may attempt to disrupt activities of advantaged chimpanzees.	<input type="checkbox"/>						
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reckless	Subject is rash, or unconcerned about the consequences of its behavior.	<input type="checkbox"/>						
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sociable	Subject seeks and enjoys the company of other chimpanzees and engages in amicable, affable interactions with them.	<input type="checkbox"/>						
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1 2 3 4 5 6 7

timid	Subject lacks self confidence, is easily alarmed, and is hesitant to venture into new social or nonsocial situations.	<input type="checkbox"/>						
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sympathetic	Subject seems to be considerate and kind toward others, as if sharing their feelings or trying to provide reassurance.	<input type="checkbox"/>						
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Playful: other-focused	Subject is eager to engage in lively, vigorous, sportive, or acrobatic behaviors with other chimpanzees.	<input type="checkbox"/>						
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Playful: object-focused	Subject is eager to engage in lively, vigorous, sportive, or acrobatic behaviors without other chimpanzees, using objects or surfaces/structures in their environment.	<input type="checkbox"/>						
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solitary	Subject prefers to spend a considerable amount of time alone. Subject does not seek or even avoids contact with other chimpanzees.	<input type="checkbox"/>						
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active	Subject spends little time idle and seems motivated to spend considerable time either moving around or engaging in some overt, energetic behavior.	<input type="checkbox"/>						
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helpful	Subject is willing to assist, accommodate, or cooperate with other chimpanzees.	<input type="checkbox"/>						
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bullying	Subject is overbearing and intimidating toward other chimpanzees.	<input type="checkbox"/>						
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1 2 3 4 5 6 7

Devious or calculating

Subject is adept at forming social relationships for its own advantage, especially using alliances and friendships to increase social standing.

gentle

Subject responds to others in an easy-going, kind, and considerate manner. Subject is not rough or threatening.

affectionate

Subject seems to have a warm attachment or closeness with other chimpanzees. This may entail frequent grooming, touching, embracing, or lying next to others.

excitable

Subject is easily aroused to an emotional state. Subject becomes highly aroused by situations that would cause less arousal in most other chimpanzees.

impulsive

Subject often displays some spontaneous or sudden behavior that could not have been anticipated. There often seems to be some emotional reason behind the sudden behavior.

inquisitive

Subject seems drawn to new situations, objects, or animals. Subject behaves as if it wishes to learn more about other chimpanzees, objects, or persons within its view.

submissive

Subject often gives in or yields to another chimpanzee. Subject acts as if it is subordinate or of lower rank than other chimpanzees.

dependent/  
follower

Subject often relies on other chimpanzees for leadership, reassurance, touching, embracing, and other forms of social support.

1 2 3 4 5 6 7

predictable	Subject's behavior is consistent and steady over extended period of time. Subject normally does little that is unexpected or deviates from its usual behavioral routine.	<input type="checkbox"/>
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sensitive	Subject is able to understand or read the mood, disposition, feelings, or intentions of other chimpanzees often on the basis of subtle, minimal cues.	<input type="checkbox"/>
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defiant to humans	Subject is assertive or contentious towards human caregivers, etc. Subject maintains or repeats these actions despite unfavorable outcomes/loss of desired outcome.	<input type="checkbox"/>
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intelligent	Subject is quick and accurate in judging and comprehending both social and nonsocial situations. Subject is perceptive and discerning about social relationships.	<input type="checkbox"/>
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protective	Subject shows concern for other chimpanzees and often intervenes to prevent harm or annoyance from coming to them.	<input type="checkbox"/>
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friendly	Subject often seeks out contact with other chimpanzees for amiable, genial activities. Subject infrequently initiates hostile behaviors towards other chimpanzees.	<input type="checkbox"/>
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independent	Subject is individualistic and determines its own course of action without control or interference from other chimpanzees.	<input type="checkbox"/>
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1 2 3 4 5 6 7

innovative

Subject engages in new or different behaviors that may involve the use of objects or materials or ways of interacting with others.

      

loving/  
caring

Subject often shows a strong concern or fondness for other chimpanzees. It may be expressed by protecting another chimpanzee or by behaviors such as embracing or touching.

      

hostile

Subject often behaves in an antagonistic or unfriendly manner towards other chimpanzees.

      

cooperative

Subject often acts jointly with other chimpanzees. Examples could be acting together in social interactions toward a common goal or engaging in mutual play or some manipulative activity requiring joint or coordinated action by the participants.

      

socially  
perceptive

Subject often displays an ability to understand the social interactions of other chimpanzees. Subject also seems to understand the intentions, feelings, and likely future behaviors of other chimpanzees in those relationships.

      

peacemaker

Subject is capable or skilled at intervening in aggressive or potentially aggressive relationships between other chimpanzees in a way that reduces the likelihood of fighting.

1 2 3 4 5 6 7

popular	Subject is frequently sought out as a companion by others.	<input type="checkbox"/>						
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nurturing, maternal/ paternal	Subject is warm, receptive, and supportive to infants, as well as younger or new group members.	<input type="checkbox"/>						
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insecure	Subject hesitates to act alone, but rather seeks reassurance from others.	<input type="checkbox"/>						
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loyal	Subject enters into strong and stable relationships and coalitions with others and is steadfast in aiding their friends/allies when called for.	<input type="checkbox"/>						
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exhibition towards humans	Subject seems to enjoy being the center of attention, especially to zoo visitors/patrons. Subject may engage in humorous and/or risky behaviors to get noticed.	<input type="checkbox"/>						
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fickle	Subject's focus of attention or concern frequently changes from one individual or group to another as the subject's attention is divided between different chimpanzees.	<input type="checkbox"/>						
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happy	Subject often seems to be in a state of joy or high contentment or is delighted about something.	<input type="checkbox"/>						
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difficulty forming lasting relationships	Subject seems to have difficulty in maintaining positive relationships over a long period of time and may replace waning relationships with new ones.	<input type="checkbox"/>						
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## Chimpanzee Subjective Well-Being Scale

The questions on this form are intended to measure the Subjective Well-Being (SWB) of chimpanzees in captivity. A more familiar term to primatologists is “psychological well-being” often defined as the absence of pathological, abnormal, or undesirable behaviors such as excessive aggression or other asocial behaviors, repetitive and stereotyped behaviors, lethargy, and boredom. Behaviors whose presence has been interpreted as indicating psychological well-being include successful breeding and infant care, and presence of “species-specific” behaviors. Overall good health and normal levels of physiological measures such as cortisol and testosterone are also sometimes included as part of the definition.

There is nothing wrong with these measures of psychological well-being. However, their usefulness is largely limited to questions about the negative end of the psychological well-being continuum. The current concern about the care of captive non-human primates makes it understandable that research on psychological well-being should be focused on manifestations of poor psychological well-being that occur in primates living in unsatisfactory environmental and social conditions. But imagine defining happiness or positive mental health in humans the same way psychological well-being is measured in non-human primates. The result would be absurd, bordering on the comical. In fact, psychologists have been studying the positive end of the psychological well-being dimension for over 40 years, referring to the concept as “subjective well-being” (SWB).

Measures of Subjective Well-Being (SWB) in humans are almost always made by having the human primate subjects answer questions relating to how satisfied and happy they are about different aspects of their lives. Three dimensions have emerged from these human studies of SWB that appear to be applicable to chimpanzees: 1) the proportion of the time a person is happy, 2) the pleasure that a person receives from social contacts, and 3) the success a person has in achieving various goals. Since we are unable to ask chimpanzees to fill out questionnaires, we are doing the next best thing, namely asking you to fill out the questionnaire as a surrogate for the chimpanzee.

The first three questions on the following questionnaire ask you to put yourself in the place of each of your chimpanzees and rate them on these three dimensions. The fourth question is more global: it asks you to make an overall judgment about how much you would like to be each of the chimpanzees in your zoo.

Applying some of the questions to your chimpanzees may be difficult. Try to do your best even if it is based on vague intuitions and feelings you have about the chimpanzees. After all it is a subjective scale as the name implies. Remember that judging some of the personality traits was difficult. Yet the overall reliability of the personality traits was better than that for humans judging other humans. Subjective does not necessarily mean unreliable.

After the SWB data are received, we will send each zoo a summary of the results for its chimpanzees. An overall summary of results for the entire sample will then be distributed. That data will be added to the rapidly growing database that has grown out of the ChimpanZoo database.

In overall descriptions we will not describe the SWB of individual zoos for several reasons. Among those reasons, between zoo differences that occur will be mainly attributable to differences in age, sex, and personality of individual chimpanzees. Also, scientifically rigorous between zoo comparison would require that different zoos be rated by the same set of observers to begin to draw comparisons. We point this out to allay any concerns you may have about your chimpanzees being observed as less happy than chimpanzees at some other zoo, thus reflecting poorly on your zoo or your husbandry. This will simply not happen.

As far as we know, no other research program has tried to measure SWB, in the human sense, for non-human primates. We all certainly appreciate the similarities between humans and chimpanzees. Furthermore, previous data from the ChimpanZoo personality and SWB data have shown a positive correlation between SWB and lifespan in orangutans, similar to some studies of SWB in humans.

## Assessment of Subjective Well-Being in Chimpanzees

This questionnaire has four questions, all relating to the subjective well-being of the chimpanzees at your zoo. Each question asks about a different personality dimension or trait relating to subjective well-being. The following scale should be used to make your ratings.

- 1 Displays either total absence or negligible amounts of the trait or state.
- 2 Displays small amounts of the trait on infrequent occasions.
- 3 Displays somewhat less than average amounts of the trait.
- 4 Displays about average amounts of the trait.
- 5 Displays somewhat greater than average amounts of the trait.
- 6 Displays considerable amounts of the trait on frequent occasions.
- 7 Displays extremely large amounts of the trait.

Please give a rating for each item even if your judgment seems to be based on a purely subjective impression of the chimpanzee and you are somewhat unsure about it. Indicate your rating by placing a cross in the box underneath the chosen number.

**Finally, do not discuss your rating of any particular chimpanzee with anyone else. This restriction is necessary in order to obtain valid reliability coefficients for the traits.**

Chimpanzee's Name \_\_\_\_\_

Rater's Name \_\_\_\_\_

Date of Rating \_\_\_\_\_

1    2    3    4    5    6    7

1. Estimate the amount of time this chimpanzee is happy, contented, enjoying itself or otherwise in a positive mood. Assume that at other times the chimpanzee is unhappy, bored, frightened, or otherwise in a negative mood.

<input type="checkbox"/>						
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2. Estimate the extent to which social interactions with other chimpanzees are satisfying, enjoyable experiences as opposed to being a source of fright, distress, frustration or some other negative experience. It is not the number of social interactions that should be estimated, but the extent to which social interactions that do occur are a positive experience. Use all social interactions of the chimpanzee as a basis for your judgment.

<input type="checkbox"/>						
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3. Estimate the extent to which this chimpanzee is effective or successful in achieving desired social interactions, achieving a desired dominance status, and having access to desirable locations, devices, or materials in the enclosure. Each chimpanzee will presumably have its own set of goals different from those of other chimpanzees.

<input type="checkbox"/>						
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4. Imagine that you could be one of the chimpanzees in your zoo for a week. You would be exactly like that chimpanzee. You would behave the same way as that chimpanzee, would perceive the world the same way as that chimpanzee, and would feel things the same way as that chimpanzee. How much would you want to be *this* particular chimpanzee?

<input type="checkbox"/>						
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## Chimpanzee Physical Well-Being Scale

The following items are intended to provide us with a very general sense of the physical attributes and well-being of these chimpanzees. We are not interested in specific health history or events of any chimpanzee, only a very general sense of each chimpanzee's physical state in relation to other chimpanzees. In humans there is a rich body of research exploring the relationship between some aspects of physical well-being and personality and SWB. If some potential health issues can be predicted in chimpanzees as can be done in humans, interventions could be tailored to individual chimpanzees.

As with the SWB data, we will not describe the SWB of individual zoos in general descriptions. Again, between-zoo differences will be mainly attributable to differences in age, sex, and characteristics of individual chimpanzees. Also, scientifically rigorous between zoo comparison would require, among other things, that the environmental factors at each zoo would need to be similar (for example, the climate of the region or the native plants and animals). We point this out to allay any concerns you may have about your chimpanzees being observed as less physically robust than chimpanzees at some other zoo, thus reflecting poorly on your zoo or your husbandry. This will simply not happen.

Assessments on physical aspects *in relation to an average chimpanzee* can be made with this questionnaire by assigning a numerical score for each of the items. Use your own subjective judgment of typical chimpanzee behavior and health to decide if the chimpanzee you are scoring is above, below, or average for the trait. The following seven-point scale should be used to make your ratings.

- 1 **Displays either total absence or negligible amounts of the trait or state.**
- 2 **Displays small amounts of the trait on infrequent occasions.**
- 3 **Displays somewhat less than average amounts of the trait.**
- 4 **Displays about average amounts of the trait.**
- 5 **Displays somewhat greater than average amounts of the trait.**
- 6 **Displays considerable amounts of the trait on frequent occasions.**
- 7 **Displays extremely large amounts of the trait.**

Please give a rating for each trait even if your judgment seems to be based on a purely subjective impression of the chimpanzee and you are somewhat unsure about it. Again, we are not asking you to look into the chimpanzees' medical history or past veterinary reports. We are asking you only for a general impression given your experience with this chimpanzee. Indicate your rating by placing a cross in the box under the chosen number. **Please do not discuss your rating of any particular chimpanzee with anyone else. This is necessary to obtain valid reliability coefficients.**

Chimpanzee's Name \_\_\_\_\_

Rater's Name \_\_\_\_\_

Date of Rating \_\_\_\_\_

1    2    3    4    5    6    7

strong	Subject exhibits more physical strength than other chimpanzees.	<input type="checkbox"/>						
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size	Subject is physically larger than other chimpanzees.	<input type="checkbox"/>						
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vulnerable	Subject is prone to be physically or emotionally hurt as a result of dominance displays, highly assertive behavior, aggression, or attack by another chimpanzee.	<input type="checkbox"/>						
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<b>In the last 6 months</b>								
Robustly healthy (a)	In the last 6 months, the subject has been very healthy and hearty.	<input type="checkbox"/>						
Susceptible to Illness (a)	In the last 6 months, the subject has been very healthy and hearty.	<input type="checkbox"/>						

<b>In the last 2 years</b>								
Robustly healthy (b)	In the last 2 years, the subject has been very healthy and hearty.	<input type="checkbox"/>						
Susceptible to Illness (b)	In the 2 years, the subject has been very healthy and hearty.	<input type="checkbox"/>						



