

Emotion-situation Knowledge (EK) ©
Production Task and Coding

Dear researchers:

Thank you for your inquiry regarding the Emotion-situation Knowledge (EK) Production Task and the coding scheme. At the time of this writing, the citations for the task and coding are:

Yang, Y., Song, Q., Doan, S. N., & Wang, Q. (2020). Maternal reactions to children's negative emotions: Relations to children's socio-emotional development among European American and Chinese immigrant children. *Transcultural Psychiatry*, 57(3) 408–420.
doi:10.1177/1363461520905997

Doan, S. N., Lee, H.Y., & Wang, Q. (2019). Maternal mental state language is associated with trajectories of Chinese immigrant children's emotion situation knowledge. *International Journal of Behavioral Development*, 43, 1, 43-52.

Yang, Y. & Wang, Q. (2016). The relation of emotion knowledge to coping in European American and Chinese immigrant children. *Journal of Child and Family Studies*, 25, 452–463.
doi: 10.1007/s10826-015-0224-5

Doan, S. N., & Wang, Q. (2010). Maternal discussions of mental states and behaviors: Relations to emotion situation knowledge in European American and immigrant Chinese children. *Child Development*, 81, 5, 1490-1503. doi:10.1111/j.1467-8624.2010.01487.x

Wang, Q. (2008). Emotion knowledge and autobiographical memory across the preschool years: A cross-cultural longitudinal investigation. *Cognition*, 108, 117-135.
doi:10.1016/j.cognition.2008.02.002

Wang, Q., Hutt, R., Kulkofsky, S., McDermott, M., & Wei, R. (2006). Emotion situation knowledge and autobiographical memory in Chinese, immigrant Chinese, and European American 3-year-olds. *Journal of Cognition and Development*, 7, 1, 95-118.

The most recent version of the task is described here, which only includes questions about “people.” Previously, we have used questions about both “people” and “self” (see Wang et al., 2006). The responses are highly consistent between the two kinds of questions. “People” questions draw on to a greater extent general knowledge than personal experiences, which we believe is a better measure of EK (than “self” questions). This task has been successfully used with preschool and school-aged children in different cultures. This version also includes both basic emotions (happy, sad, fear, anger) and self-conscious emotions (shame, pride, guilt).

The coding scheme has evolved to be more refined and comprehensive. The most recent version is included in Yang & Wang (2016). It is more suitable for data from older children. We would

very much appreciate your feedback and suggestions on the coding scheme. In addition, we have translated the task into Chinese and are happy to share this version upon request.

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EK production task (the Sticker Game):

To make the task fun, we tell children that this is the “Sticker Game.” Explain that when children give responses to each set of questions they get a sticker. This helps to keep the child interested through the task.

Ask children to describe situations likely to provoke a particular emotion. Present children with the emotion terms one at a time and ask children for descriptions of situations that may make people experience the emotion in question. After child finishes responses for an emotion, give him/her a sticker.

Ask the child, "(child's name), tell me what makes people (feel) happy?" "What else makes people (feel) happy?" Children will be prompted to respond with as many situations as possible, until they indicate by speech or gesture that their responses are finished.

Emotion terms (7) include: happy, sad, scared/afraid, mad/angry, ashamed, proud, guilty. (With preschool children, we only included the basic emotions).

****Present the terms in a random order.***

(a) If the child indicates that he/she doesn't understand an emotion term and asks: “What does it (emotion term) means?” we will ask: “What do you think it means?” If the child can give appropriate answers, which can be in terms of explaining the emotion term or listing the situations related to the emotion term, we will let the child continue responding.

(b) For the Chinese Americans children, we also cue the terms in both languages.

(c) If the child indicates clearly that he/she does not know the emotion term: “I don't know what it means,” skip it and move on to the next term.

(d) Occasionally, a child interprets the question as what *he/she can do to make* a person feel a certain way (e.g. “you can give them a present”), we follow up by asking: “What sort of situations/things can make a person feel happy?”

(e) If the child gives a response that doesn't seem quite “right,” clarify by prompting him/her for more information: “Can you tell me more about that?” It is particularly important for the more complex terms.

(f) We have encountered the rare situation where, when presented with an emotion, for example, "anger," a child says "Everything that I said for sad." We would ask the child to repeat what he/she said previously, “Like what? I forgot. Can you tell me again?”

(g) It is helpful to repeat what the child says, which is particularly important if children have a quiet voice (it makes the transcription possible), and demonstrate interest.

关于情绪的情境知识(贴纸游戏)

告诉孩子这是一个“贴纸游戏”。解释给孩子听每当他/她们对下列的问题作出回答时，他/她们就可以拿到一张贴纸。然后，问孩子下列的每一种情绪是在什么情境下产生的。访问员每一次只告诉孩子一个情绪，并要孩子描述能让人体验这个情绪的情境。对每一个情绪，当孩子给出所有他/她们能想得出的情境后，给他/她们一个贴纸。(若给予更多的贴纸能够让孩子有更好的表现，可以这么做)。

问孩子：“(孩子的名字)，什么能让人(感到)高兴？”、“还有什么让人(感到)高兴？”继续提示孩子，让他/她们列出越多的情境越好，直到他/她们用语言或动作表示回答完了为止。

情绪(七种)包括：高兴/开心、难过/伤心、害怕、生气、羞愧/丢脸、骄傲、内疚

(a)

若孩子表示不明白某一个情绪并问：“什么是(情绪)？”，访问员可以问孩子：“你觉得它是指什么？”若孩子给的答案合理，包括解释这个情绪是什么或列出适当的请境，访问员可以让孩子继续作答。

(b) 访问员也可以用英语来提问。

(c)

若孩子清楚地表示不明白某一个情绪：“我不知道(情绪)是什么”，直接跳到下一个情绪，不需要向孩子解释那个情绪是指什么。

(d)

在孩子把问题理解为他/她们可以做什么来让人有上述的情绪时(例如，“你可以给他/她们礼物”),访问员可以接着问孩子：“什么情况可以让人(感到)高兴？”

(e)

若孩子给的答案不太正确时，请提示以便让孩子提供更多的讯息：“可以再多告诉我一些吗？”

(f)

若在问小孩其中一个情绪时，比如“生气”，小孩回答“和我刚刚回答“难过/伤心”的答案一样”，在这个情况下，访问员必须让小孩再重复一遍刚才的答案“象什么呢？我忘记了，再告诉我一遍”。

(g) 记得重复孩子的答案，特别是当他/她们对这个活动感兴趣但声量不大时。

*

在不同的孩子之间，以上七个情绪的提问顺序必须打乱，有所变化；访问员可以随意安排七个情绪提问的顺序。

Coding Scheme for Emotion Knowledge

For each emotion, we categorize children's responses into distinct categories (see list below). We count the number of responses children provided for each category of each emotion, as well as their total number of responses.

The categories were generated from our data (Yang & Wang, 2016). Some of them may be combined or dropped if the frequency is very low. New ones may be developed from a different data set.

The number of responses and/or the number of unique categories for each emotion can be used to index EK. The latter may be a more sensitive measure for older children.

There are five common categories cross emotions, including Descriptive, Behavioral Manifestation, Empathy, Uncodable, and Incorrect. Descriptive refers to the answers that describe the target emotion with a similar word or phrase. For instance, if a child responded "scary things" or "spooky stuff" to the question "What makes people feel scared," these responses are coded as Descriptive. Behavioral Manifestation refers to the answers about facial or behavioral expressions for a particular emotion. The answer of "crying" is coded as Behavioral Manifestation for the question "What makes people feel sad?" An answer of "laugh" is coded as Behavioral Manifestation for the question "What makes people feel happy?" Empathy is used to code the answers in which the child shared the feelings of others. One example answer of Empathy is "I'm happy when my father is happy." Uncodable is used when children's responses were hard to understand due to reasons such as inaudibility. When children's answers are clearly incorrect for the target emotion, they are coded as Incorrect.

Happy:

1. Engaging in Desirable Activities
2. Showing efficacy and Mastery (2a: personal efficacy and mastery; 2b: social success) (e.g., achieves or performs successfully)
3. Receiving Desirable Objects (3a: without explicit other person; 3b: with explicit other person)
4. Pleasant Sights, Events, or States (e.g, sunny day, flowers, being lucky, weather, Christmas)
5. Pleasant Animals
6. Participating in Social Activities (e.g, family gathering, party)
7. Being Praised
8. Being Treated Kindly
9. Descriptive
10. Altruism
11. Behavioral Manifestations (description of behavioral emotion, e.g., smile for happiness, cry for sadness)
12. Getting New Friends
13. Absence of Negative Events (e.g., mom didn't go to work)
14. Pleasant people (e.g., mom, dad, friend)
15. Getting Animals
16. Being Allowed to Engage in Activity
17. Getting Family Members
- U. Uncodeble (the transcription doesn't make sense)

- I. Incorrect
- E. Empathy

Sad:

- 1a. Unable to Engage in Desirable Activities
- 1b. Unable to Engage in Social Activities
2. Demonstrating Inefficacy (e.g., fails, makes error, cannot perform)
3. Unable to Get or Loss or Destruction of Desirable Objects
- 4a. Getting Hurt (Physically)
- 4b. Getting Hurt (Emotionally)
5. Leaving, Moving from Familiar Environment
6. Separated from Significant Others
7. Death or Sickness of a Loved One, or a Loved One getting hurt (people)
8. Being Punished
9. Being Punished Unjustly
10. Being Denied Desirable Objects or Activities (e.g. can't have something, can't do something)
11. Possessions Being Destroyed or Taken Away
12. Social Rejection (e.g., someone not listening to you, someone not allowing you to play together)
13. Being Forced to Do Something
14. Social Conflict
15. Behavioral Manifestation
16. Descriptive
17. Unpleasant activity, object, sight, or place
18. Loss or Sickness of Animals
- U. Uncodable
- I. Incorrect
- E. Empathy

Fear:

1. Perceiving a Physical Threat to Self (1a) or Others (1b) (e.g., car accident)
2. Experiencing Undesirable Sensory Stimuli (e.g., dark, thunder, lightening)
3. Encountering Animate Beings (e.g., animals, monsters; maybe real or fictional)
4. Nightmares, Bad Dreams
5. Being Removed from Familiar Surroundings or Persons (e.g., is lost)
6. Negative Unexpected Events (e.g. you turn off the light, but then you see it's still on)
7. Perceiving a Social Threat to Self or Others (afraid of other people not liking you)
8. Being Scared by Others (playful)
9. Descriptive
10. Fear of Punishment/ Admonishment
11. Strangers
12. Failing Adult Expectations
13. Demonstrating Inefficacy without Explicit Adult Reference
14. Doing New Things
15. Behavioral Manifestations
16. Unpleasant activity, object, sight, or place
- U. Uncodable
- I. Incorrect

E. Empathy

Anger:

1. Being Mad at Oneself for Doing Something Wrong (e.g., hurting oneself accidentally)
2. Being Punished
3. Social conflict
4. (a) Unable to get or Loss or Destruction of Desirable Objects (b) Possessions Being Taken Away or Destroyed by Others
5. Forced to Do Something
6. Being Intruded Upon
7. Being Hurt by Someone Physically
8. Demonstrating Inefficacy (they didn't accomplish)
9. Being Hurt by Someone Emotionally
10. Descriptive
11. Someone Else Doing Something One is Not Supposed To
12. Being Punished Unjustly
13. (a) Unable to Engage in Desirable Activities (b) Unable to Engage in Social Activities (c) Being Denied Desirable Objects or Activities
14. Behavioral Manifestation
15. Jealousy
16. Social Rejection
17. Unpleasant activity, object, sight, or place
18. Significant other Being Hurt
19. Their Pets Being Hurt or Taken Away
20. Loss or Sickness of Pet
- U. Uncodable
- I. Incorrect
- E. Empathy

Shame:

1. Shyness
2. Conducting Wrong Deeds
3. (a) Insecurity and Personal Failure (self-image) (b) Failure Compared to Others
4. Regret and Desire to Make Amends (regret)
5. Public Humiliation, Embarrassment
6. Public Incompetence
7. Being Rebuked or Punished
8. Having Mistakes or Wrong Deeds Pointed Out
9. Social Rejection or Abandonment
10. Menace to Privacy
11. Public Knowledge of Wrong Deeds
12. Hurting Someone Physically
13. Hurting Someone Emotionally
14. Descriptive
15. Resisting Authority
16. Behavioral Manifestation
- U. Uncodable
- I. Incorrect

E. Empathy

Pride:

- 1a. Showing Efficacy and Mastery
- 1b. Showing Social Success
2. Significant Others Showing Efficacy and Mastery
3. Being Praised
4. (a) Doing Good Deeds (b) significant other doing good deeds
5. Favorable Downward Social Comparisons (e.g. owning a toy that nobody has, doing better than everyone else)
6. Receiving or Allowed to do Something
7. Achieving Milestones (everyone would achieve, without skill, e.g., turn to 7 years old, go to kindergarten.)
8. Having a New Family Member
9. Behavioral Manifestation
10. Being able to do something
11. Descriptive
- U. Uncodable
- I. Incorrect
- E. Empathy

Guilt:

1. Moral Norm Violation
2. Conducting Wrong Deeds
3. Feeling of Regret or Desire to Make Amends (regret)
4. Being Rebuked or Punished
5. Being Privileged (e.g. when you get something and somebody else doesn't)
6. Getting Caught Doing Something Wrong
7. Consequence of a Crime (e.g. "when you kill somebody and the police says you're guilty." Keep in mind guilty in this case is understood as a consequence for a crime, imposed by legal authorities, rather than a feeling.)
8. Resisting Authority (don't listen)
9. Hurting Someone Physically
10. Hurting Someone Emotionally
11. Take Away or Destroy Someone's Object
12. Failing at Another's Request or Demand (tried but failed)
13. Demonstrating Inefficacy, No Explicit Other
14. Descriptive
15. Behavioral Manifestation
16. Hurt or Take Away Animals
- U. Uncodable
- I. Incorrect
- E. Empathy