**SUPPLEMETNAL MATERIALS**

Table S1. Meaning and interpretation of the visual codes, greatly informed by Rose G. et al.31 and Lazard A. et al.32

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|  | **Visual complexity**  | **Meaning** | **Interpretation** |
|  | High object count  | An object is any shape or area that requires attention and is somehow divided from other areas of content. “High” count was 5 or more objects in a single poster. | More is better |
|  | Objects irregular | Asymmetrical along one or more axis | Irregularity is better |
|  | Objects dissimilar | Objects differ from each other in terms of color, shape, orientation, and texture. | Dissimilarity is better |
|  | Object highly detailed | Spatial arrangement of objects is done in a regular manner (i.e. in a pattern), with the opposite extreme of objects randomly distributed across space. | More detail is better |
|  | Areas asymmetrical | Objects are arranged in a non-symmetric way. | Asymmetry is better |
|  | Irregular arrangement | Spatial arrangement of objects done in a regular manner (i.e. in a pattern), with the opposite extreme of objects randomly distributed across space. | Irregularity is better |
| **Craftsmanship**  |  |  |
|  | Design simplicity  | Agreement with at least 2 of the following statements: 1. “The poster does not appear dense”; 2. “The poster layout is easy to grasp”; 3. “Everything goes together on this poster”; 4. “The poster does not appear patchy”; 5. “The poster is well structured” | Less simple is better |
|  | Image diversity | Agreement with at least 2 of the following statements: 1. The layout of the poster is pleasantly varied; 2. The layout is inventive; 3. The design appears creatively inspired; 4. The design makes good use of the entire space; 5. The design is holistically interesting | Diverse is better |
|  | Appropriate color choice | Agreement with at least 1 of the following statements: 1. “The choice of colors was selected with care”; 2. “The various colors in the poster match/look good together”; 3. "The colors are appealing (i.e. not jarring or offensive)” | Appropriate is better |
|  | Professionally designed | Agreement with at least 1 of the following statements: 1. “The poster appears professionally designed with advanced skills”; 2. “The poster has been designed with care”; 3. “The poster design has a clear and unifying concept” | Professional is better |
|  | Dominance of text  | Dominant text can either be a few large characters or clusters of smaller-sized text; either way it captures the viewer’s attention. | Less dominant is better |
|  | Suitable typeface | Suitable typeface is easy to read and fits with the overall style and presentation of the poster. Unsuitable typeface may be due to it being difficult to read, distracting, or in a style poorly matched with the overall poster style. | Suitable is better |
|  | English words or phrases used | English text is that written using the Roman alphabet with recognizable English words or phrases. Does not pertain the words “HIV” or “AIDS.” | English words are better |
|  | Follow-up information provided | Information can include contact information (entity logo, phone number, email address, physical address, QR code) or actual details on services provided, announcements for events, or other details. The name of an entity alone does not constitute as follow-up info. | Contact info is better |
| **Messaging** |  |  |
|  | Humans depicted | Any depiction of a human being whether whole (entire body) or part (e.g. hands). It can include photographs or illustrations | No hypothesis |
|  | Non-human characters depicted | Any non-human or inanimate object that is portrayed as having human functionality or higher thought. May include having a face (eyes and mouth), hands, or certain behaviors. Examples include things like condoms or an HIV virus that have faces or speak. | No hypothesis |
|  | Positive facial expression | The emotional quality of the dominant figure in the poster expresses joy or happiness through gestures or smiling. If there are multiple figures in the poster, emotion can be that of the majority. | Positive is better |
|  | Medical imagery | Includes depiction of personnel or entities related to health and healthcare. Personnel will be depicted by stereotypical symbols of medical professionalism: white lab coat, head mirror, stethoscope, nurses cap. Entities will include those such as hospital or clinic recognized by symbols such as a red cross, caduceus, or ambulance. Note that syringes, especially when use of illicit drugs is implied, is NOT medical imagery. | No hypothesis |
|  | Famous people depicted | Can include politicians, entertainers, or other individuals recognizable to the majority of Chinese audiences. | No hypothesis |
|  | HIV ribbon depicted |  | No hypothesis |
|  | Messaging style |  |  |
|  |  Personal | Poster addresses the viewer directly through addressing (i.e. "you" or "yours") or asks them a direct question. | Personal is better |
|  |  Public service | Poster refers to ways in which testing can help other people or society in general. | Public service message is better |
|  |  Educational | Use of language or imagery whose main goal is to convey facts and information to the viewer.   | Educational is better |
| Tone  |  |  |
|  | Informal, friendly | Use of slang or inside jokes that may not necessarily widely understood by all viewers.  | Informal is better |
|  | Authoritative | Content refers to future outcomes of actions taken (e.g. drug use, unprotected sex) or actions no taken (e.g. not taking an HIV test). | Authoritative is worse |
|  | Motivational | Use of an uplifting or positive message to encourage, comfort, or inspire the viewer. | Motivational is better |
|   | Visual metaphors used | Use of symbols or objects may be used in a way that suggests more than one meaning, especially where the meaning is hidden or would not necessarily be universally recognized. For example, the rainbow as a symbol of the LGBTQ rights has two meanings. | Metaphor use is better |

Table S2. Descriptive characteristics of the full sample (N=507) including participants who provided the same answer for every poster (i.e. uninformative data).

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| --- | --- | --- |
| **Characteristic** | **Restricted sample** | **Full Sample** |
|  | **% (95% CI)1** | **% (95% CI)1** |
| Total | 414 | 507 |
| Age (median, range) | 26 (16-49) | 26 (16-54) |
| Married2 | 8.5 (6-11.7) | 9.1 (6.8-12) |
| College educated | 78.7 (74.8-82.7) | 75.7 (71.7-79.4) |
| Low income | 31.6 (27.2-36.4) | 31.4 (27.4-35.6) |
| Occupation3 |  |  |
|  | Lower skilled | 6.8 (4.6-9.7) | 8.9 (6.6-11.8) |
|  | Higher skilled  | 67.9 (63.1-72.3) | 65.5 (61.1-69.6) |
|  | Student | 22.9 (19-27.4) | 22.7 (19.2-26.6) |
|  | Unemployed | 2.4 (1.2-4.5) | 2.8 (1.6-4.7) |
| Rural residency status4 | 39.1 (34.4-43.8) | 40.6 (36.3-45.1) |
| Orientation5 |  |  |
|  | Gay | 75.4 (70.9-79.4) | 75.7 (71.7-79.4) |
|  | Bisexual | 21.7 (17.9-26.1) | 20.9 (17.5-24.8) |
|  | Other | 2.9 (1.6-5.1) | 3.2 (1.9-5.2) |
| Male gender identity6 | 86 (82.2-89.1) | 84.8 (81.3-87.8) |
| Has stable male partner | 31.4 (27-36.1) | 33.7 (29.7-38.1) |
| Had sex with another man in past 6 months | 74.9 (70.4-78.9) | 74.2 (70.1-77.9) |
| 1. CI: confidence interval of a proportion. 2. Marriage to the opposite sex (i.e. to a woman) |
| 3. Lower skilled laborer included those who indicated any of the following: laborer, farmer, or sex worker. Higher skilled laborers included those who indicated any of the following as their occupation: civil servant, office worker, service staff, or technician. |
| 4. Rural residence: refers to China’s national household registration system (the *huko* system) through which citizens access legal status and social services. Hukous are classified as urban or rural and can sometimes proxy for the environment in which one was born and raised.51 |
| 5. Those who indicated "other" or "unsure" in response to a question about their sexual orientation were classified as “Other” for this variable. |
| 6. Those who indicated "female," "transgender," or "other" in response to a question about their gender identity was classified as non-male. |