

Recommendations for Multi-skintoned Emoji ZWJ Sequences for Unicode 14.0

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I. Background

Last year, the ESC recommended Unicode move forward with their first multi-skintoned emojis: 71 variants of “couple holding hands”. This leaves a number of emojis that include two or more people with missing “skintone” variants.

This proposal is to express Google’s intent to support multi-family skintones as early as 13.1.

Skin tone modifiers have many exceptions and implementation details, and many aspects of this have been discussed in past documents. This document is to note **the Emoji Sub-Committee’s recommendation to add 7,225 ZWJ sequences to Emoji 14.0 to support multi-skintone multi-person groupings**. This follows priorities set out in [L2/19-101](#) and reflects vendors’ intention to support these emoji designs from 2021 onward.

II. Proposal Overview

These additional ZWJ sequence are recommended for General Interchange (RGI) using the standard format of person + person format with skintone modifiers.



The Emoji Subcommittee is recommending 7,225 new RGI sequences be added to Emoji 14.0 to fill these gaps and create a meaningful user experience. *Note that the actual number of images can be smaller if the*

vendor chooses to not distinguish by order.

This follows priorities set out in [L2/19-101](#), as well as details of vendors intention to display skintone inclusive emoji designs from 2019 onward.

Because this number of emoji sequences is quite large, the proposal is to add 2 data files: one for testing and one for the sequences. That makes generation and comparison much easier.

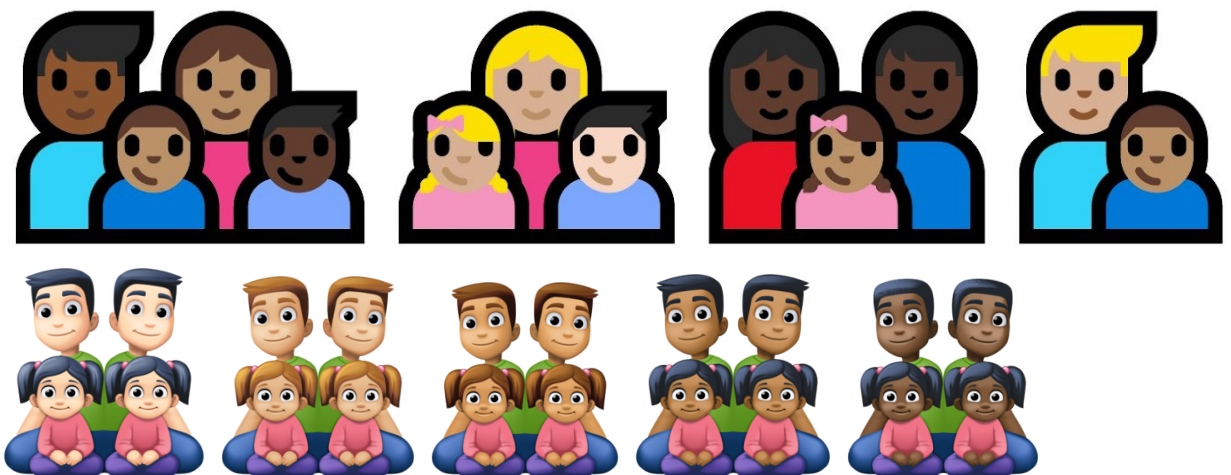
emoji-test-family.txt

emoji-zwj-sequences-family.txt

IV. Selection factors — Inclusion

A. Compatibility

At least one major platform and one android app support non-rgi variations of the family emojis.



Above: Shared skin tone support is not RGI but is supported by Microsoft and Facebook.

B. Expected use

1. Frequency

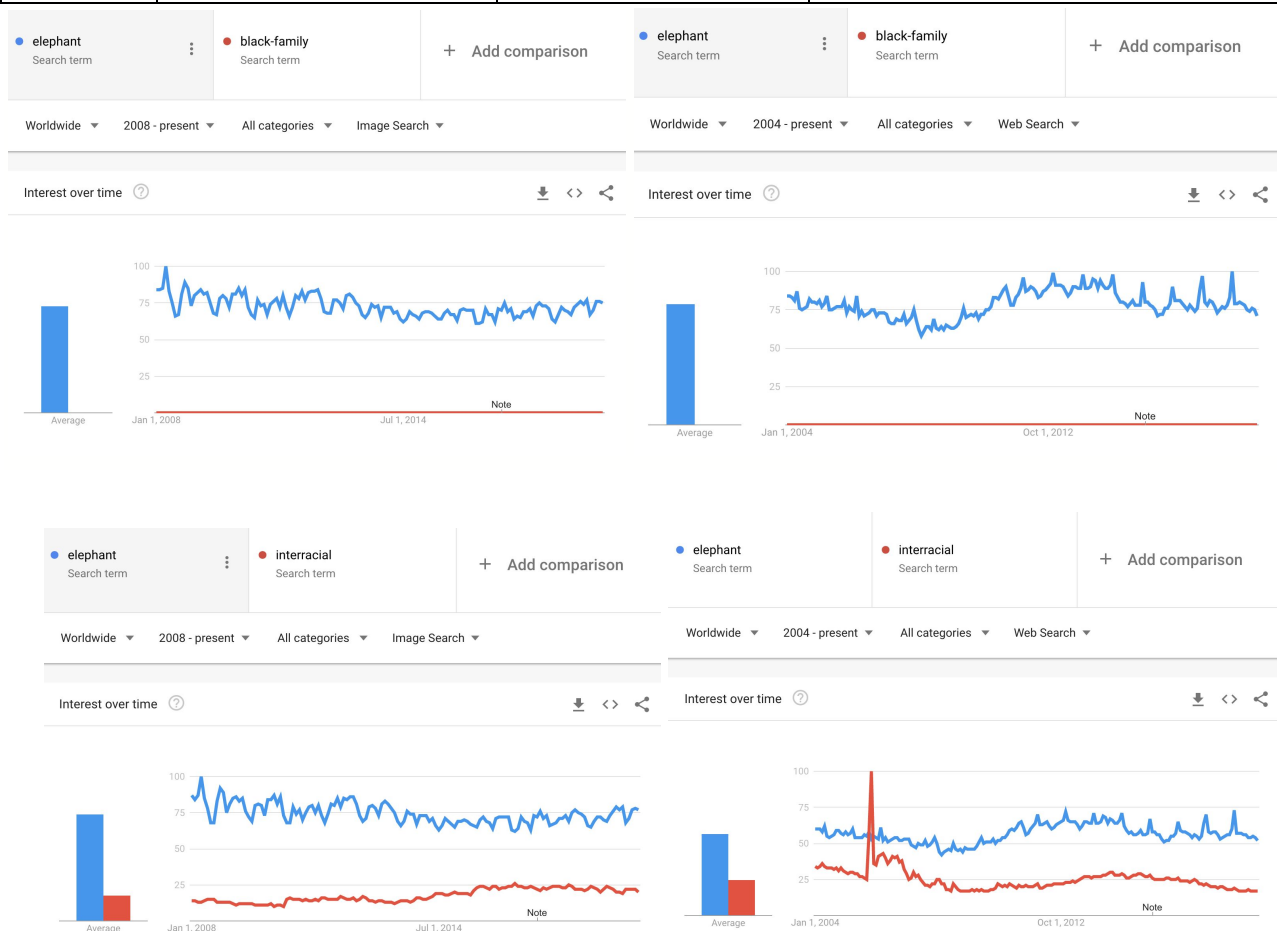
Black families were among the most requested emoji in 2019, according to

Emojipedia: <https://blog.emojipedia.org/top-emoji-requests-2019/>

Search term	Google Search	Bing Search	Google Image Search	Google Trends: Web	Google Trends: Image
black-family	10,030,000,000	7,050,000	1,740,000,000	See below	See below
interracial	543,000,000	181,000,000	537,000,000	See below	See below

Search term	Google Search	Bing Search	Google Image Search
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black-family	black-family All Images About 10,030,000,000 res	black-family All Images 7,050,000 Results	black-family All Images News About 1,740,000,000 results (0.44 se
interracial	interracial All Videos Images About 543,000,000 results	interracial All Images 181,000,000 Results	interracial All Videos News About 537,000,000 results (0.28 seco



Given the support of multi-person multi-skintoned emoji (Couples Holding Hands), the exclusionary impact of not encoding multi-skintoned family groupings is alienating and inexcusable in the year of 2019

2. Multiple usages

Can represent the general concept of love and affection.

3. Use in sequences

N/a this is a ZWJ sequence.

4. Breaking new ground

N/a

C. Image distinctiveness



Above: Magazine covers and children books depicting multi-skintoned families

A multi-skintoned FAMILY 🌈👨👩👧👦 is iconic and symbolic in a manner that is distinct from the existing RGI FAMILY. Unlike the existing emoji which offer no skintone variation, supporting multi-skintones elevates these icons to represent the celebration of love and family — it's just that simple. Love is love no matter if it's between two men, two women, or anyone of any gender or of any race.

While the existing encoding for family is sufficient in conveying the “idea of a family”, a visualization of a family where everyone doesn't all look the same says something entirely new and insufficiently represented in emoji form. Families, whether formed by birth or adoption or foster care or a mix of all three, don't always look the same.

D. Completeness

Short of people wrestling and people with bunny ears this would complete RGI support of existing multi-person emojis to have multi-skintone support.

V. Selection factors — Exclusion

F. Overly specific

No, this is a fairly generic and iconic.

G. Open-ended

No, this is not part of a set of similar items.

H. Already representable

No.

I. Logos, brands, UI icons, signage, specific people, deities

Not applicable. There are no logos, brands, signage or otherwise among the proposed characters.

J. Transient

Not applicable.

K. Faulty comparison

Justification for encoding the proposed emoji does not depend on analogy with other emoji that were encoded only for compatibility reasons.

L. Exact Images

An exact image is not required.

VI. Chart

Many multi-person ZWJ Sequences that are Recommended for General Interchange (RGI) use a standard format of WOMAN (or MAN) + WOMAN (or MAN). These scale simply by adding skintone modifiers to each sequence create a skintone variant options. The Emoji Subcommittee recommends the addition of the following 26 Family ZWJ Sequences + associated skin tones.

Note: that the skin-tone modifiers are omitted from the charts. The full number of images is 7,225 variants/permutations. If users cannot control the order of skintone in repeated genders, there are 4225 combinations.

Number	Code	Emoji	CLDR Short Name	Number of Variants	Variants w/out order
1	U+1F46A		family	125	75
?????					
2	U+1F468 U+200D U+1F469 U+200D U+1F466		family: man, woman, boy	125	125

					
3	U+1F468 U+200D U+1F469 U+200D U+1F467		family: man, woman, girl	125	125
					
4	U+1F468 U+200D U+1F469 U+200D U+1F467 U+200D U+1F466		family: man, woman, girl, boy	625	625
					
5	U+1F468 U+200D U+1F469 U+200D U+1F466 U+200D U+1F466		family: man, woman, boy, boy	625	375



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[U+1F468 U+200D](#)
[U+1F469 U+200D](#)
[U+1F467 U+200D](#)
[U+1F467](#)



family: man, woman, girl, girl

625

375



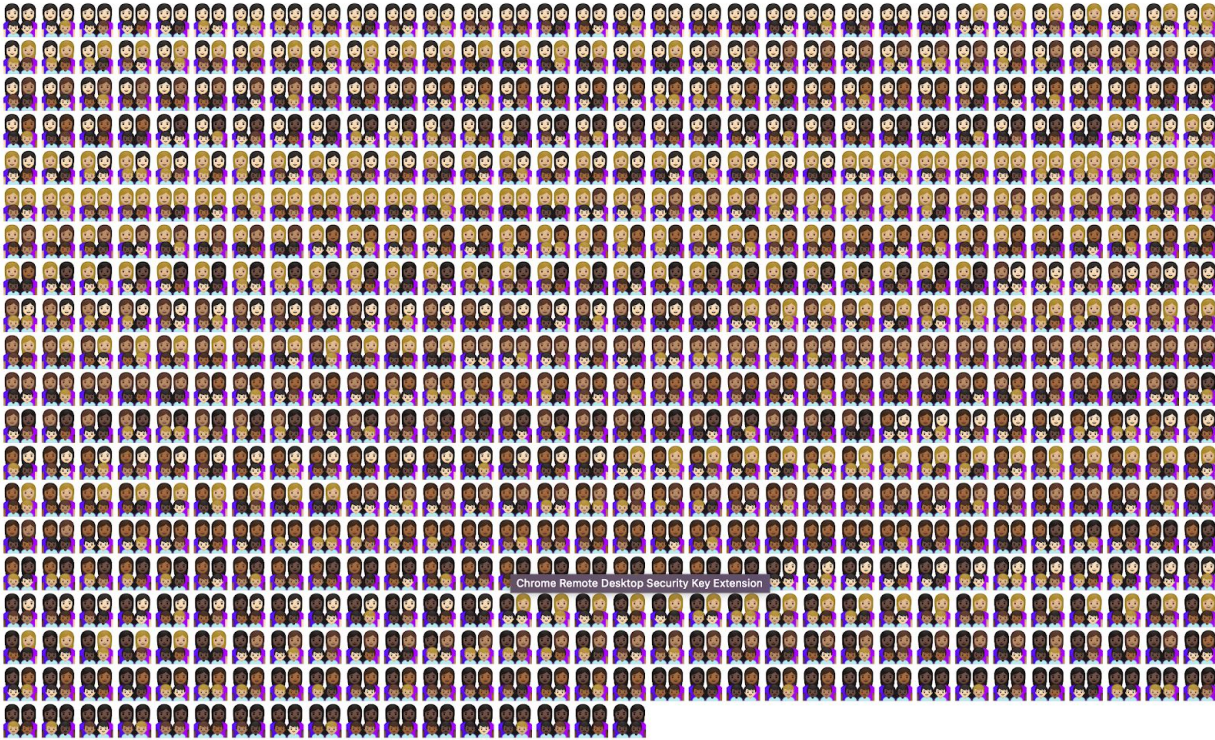
7	U+1F468 U+200D U+1F468 U+200D U+1F466		family: man, man, boy	125	75
					
8	U+1F468 U+200D U+1F468 U+200D U+1F467		family: man, man, girl	125	75
					
9	U+1F468 U+200D U+1F468 U+200D U+1F467 U+200D U+1F466		family: man, man, girl, boy	625	375
					
10	U+1F468 U+200D U+1F468 U+200D U+1F466 U+200D U+1F466		family: man, man, boy, boy	625	225



11	U+1F468 U+200D U+1F468 U+200D U+1F467 U+200D U+1F467		family: man, man, girl, girl	625	225
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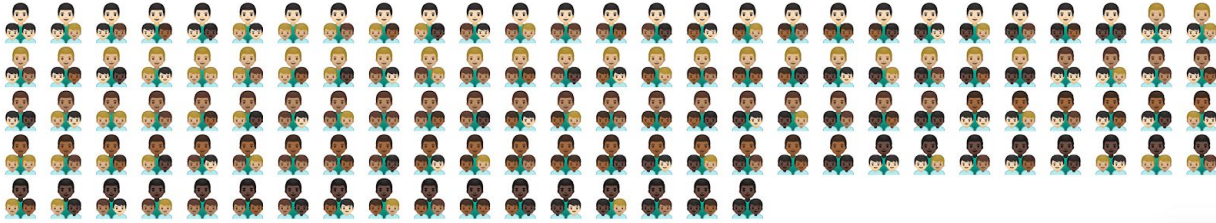
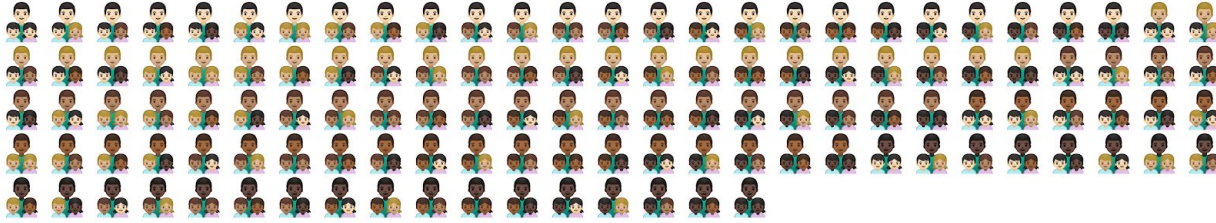


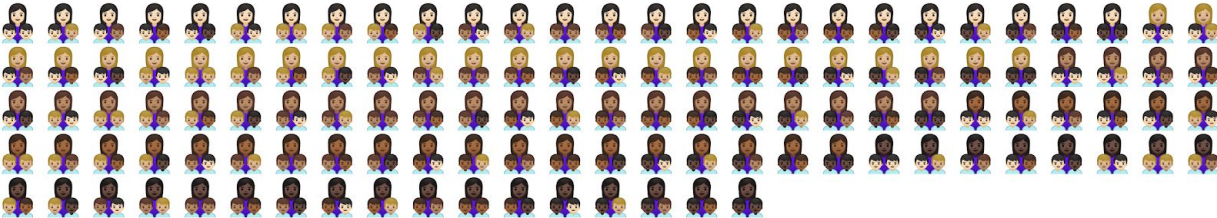
12	U+1F469 U+200D U+1F469 U+200D U+1F466		family: woman, woman, boy	125	75
					
13	U+1F469 U+200D U+1F469 U+200D U+1F467		family: woman, woman, girl	125	75
					
14	U+1F469 U+200D U+1F469 U+200D U+1F467 U+200D U+1F466		family: woman, woman, girl, boy	625	375
					
15	U+1F469 U+200D U+1F469 U+200D U+1F466 U+200D U+1F466		family: woman, woman, boy, boy	625	225



16	U+1F469 U+200D U+1F469 U+200D U+1F467 U+200D U+1F467		family: woman, woman, girl, girl	625	225
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17	U+1F468 U+200D U+1F466		family: man, boy	25	25
					
18	U+1F468 U+200D U+1F466 U+200D U+1F466		family: man, boy, boy	125	75
					
19	U+1F468 U+200D U+1F467		family: man, girl	25	25
					
20	U+1F468 U+200D U+1F467 U+200D U+1F466		family: man, girl, boy	125	125
					
21	U+1F468 U+200D U+1F467 U+200D U+1F467		family: man, girl, girl	125	75
					

22	U+1F469 U+200D U+1F466		family: woman, boy	25	25
					
23	U+1F469 U+200D U+1F466 U+200D U+1F466		family: woman, boy, boy	125	75
					
24	U+1F469 U+200D U+1F467		family: woman, girl	25	25
					
25	U+1F469 U+200D U+1F467 U+200D U+1F466		family: woman, girl, boy	125	125
					
26	U+1F469 U+200D U+1F467 U+200D U+1F467		family: woman, girl, girl	125	75
					

V. Proposed ZWJ Sequences

List of new sequences proposed for addition in the Emoji 14.0 data files. This proposal encompasses a total of 7225 new sequences. In lieu of a complete chart, we have compiled a sample list to represent the 25 sequences to accommodate a two person family. The actual data files will be generated algorithmically.

U+1F469 U+200D U+1F466		family: woman, boy
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1F466 200D 1F3FB 200D 1F469 200D 1F3FD; Emoji_ZWJ_Sequence; family: (👩🏻👦🏻) Woman: Light Skin Tone, Boy: Light Skin Tone);
1F466 200D 1F3FC 200D 1F469 200D 1F3FB; Emoji_ZWJ_Sequence; family: (👩🏻👦🏼) Woman: Light Skin Tone, Boy: Med-Light Skin Tone);
1F466 200D 1F3FD 200D 1F469 200D 1F3FB; Emoji_ZWJ_Sequence; family: (👩🏻👦🏽) Woman: Light Skin Tone, Boy: Med Skin Tone);
1F466 200D 1F3FE 200D 1F469 200D 1F3FB; Emoji_ZWJ_Sequence; family: (👩🏻👦🏾) Woman: Light Skin Tone, Boy: Med-Dark Skin Tone);
1F466 200D 1F3FF 200D 1F469 200D 1F3FB; Emoji_ZWJ_Sequence; family: (👩🏻👦🏿) Woman: Light Skin Tone, Boy: Dark Skin Tone);

1F466 200D 1F3FB 200D 1F469 200D 1F3FC; Emoji_ZWJ_Sequence; family: (👩🏼👦🏻) Woman:Med-Light Skin Tone, Boy: Light Skin Tone);
1F466 200D 1F3FC 200D 1F469 200D 1F3FC; Emoji_ZWJ_Sequence; family: (👩🏼👦🏼) Woman:Med-Light Skin Tone, Boy: Med-Light Skin Tone);
1F466 200D 1F3FD 200D 1F469 200D 1F3FC; Emoji_ZWJ_Sequence; family: (👩🏼👦🏽) Woman:Med-Light Skin Tone, Boy: Med Skin Tone);
1F466 200D 1F3FE 200D 1F469 200D 1F3FC; Emoji_ZWJ_Sequence; family: (👩🏼👦🏾) Woman:Med-Light Skin Tone, Boy: Med-Dark Skin Tone);
1F466 200D 1F3FF 200D 1F469 200D 1F3FC; Emoji_ZWJ_Sequence; family: (👩🏼👦🏿) Woman:Med-Light Skin Tone, Boy: Dark Skin Tone);

1F466 200D 1F3FB 200D 1F469 200D 1F3FD; Emoji_ZWJ_Sequence; family: (👩🏽👦🏻) Woman:Med Skin Tone, Boy: Light Skin Tone);
1F466 200D 1F3FC 200D 1F469 200D 1F3FD; Emoji_ZWJ_Sequence; family: (👩🏽👦🏼) Woman:Med Skin Tone, Boy: Med-Light Skin Tone);
1F466 200D 1F3FD 200D 1F469 200D 1F3FD; Emoji_ZWJ_Sequence; family: (👩🏽👦🏽) Woman:Med Skin Tone, Boy: Med Skin Tone);
1F466 200D 1F3FE 200D 1F469 200D 1F3FD; Emoji_ZWJ_Sequence; family: (👩🏽👦🏾) Woman:Med Skin Tone, Boy: Med-Dark Skin Tone);
1F466 200D 1F3FF 200D 1F469 200D 1F3FD; Emoji_ZWJ_Sequence; family: (👩🏽👦🏿) Woman:Med Skin Tone, Boy: Dark Skin Tone);

1F466 200D 1F3FB 200D 1F469 200D 1F3FE; Emoji_ZWJ_Sequence; family: (👩🏾👦🏻) Woman:Med-Dark Skin Tone, Boy: Light Skin Tone);
1F466 200D 1F3FC 200D 1F469 200D 1F3FE; Emoji_ZWJ_Sequence; family: (👩🏾👦🏼) Woman:Med-Dark Skin Tone, Boy: Med-Light Skin Tone);
1F466 200D 1F3FD 200D 1F469 200D 1F3FE; Emoji_ZWJ_Sequence; family: (👩🏾👦🏽) Woman:Med-Dark Skin Tone, Boy: Med Skin Tone);
1F466 200D 1F3FE 200D 1F469 200D 1F3FE; Emoji_ZWJ_Sequence; family: (👩🏾👦🏾) Woman:Med-Dark Skin Tone, Boy: Med-Dark Skin Tone);
1F466 200D 1F3FF 200D 1F469 200D 1F3FE; Emoji_ZWJ_Sequence; family: (👩🏾👦🏿) Woman:Med-Dark Skin Tone, Boy: Dark Skin Tone);

1F466 200D 1F3FB 200D 1F469 200D 1F3FF; Emoji_ZWJ_Sequence; family: (👩🏿👦🏻) Woman:Dark Skin Tone, Boy: Light Skin Tone);
1F466 200D 1F3FC 200D 1F469 200D 1F3FF; Emoji_ZWJ_Sequence; family: (👩🏿👦🏼) Woman:Dark Skin Tone, Boy: Med-Light Skin Tone);
1F466 200D 1F3FD 200D 1F469 200D 1F3FF; Emoji_ZWJ_Sequence; family: (👩🏿👦🏽) Woman:Dark Skin Tone, Boy: Med Skin Tone);
1F466 200D 1F3FE 200D 1F469 200D 1F3FF; Emoji_ZWJ_Sequence; family: (👩🏿👦🏾) Woman:Dark Skin Tone, Boy: Med-Dark Skin Tone);
1F466 200D 1F3FF 200D 1F469 200D 1F3FF; Emoji_ZWJ_Sequence; family: (👩🏿👦🏿) Woman:Dark Skin Tone, Boy: Dark Skin Tone)

VI. Vendor Implementation

Since the addition of skintone related ZWJ Sequences in Emoji 1.0, the encoding of skintone has matured every year. However, the implementation seems random to the average person when some people based emojis support skintone and others do not. Many emoji additions list one skintone option as Recommended for General Interchange (RGI), while others six.

While Microsoft has supported variants for multi-skintoned families for over four years, additional advancements in font technology will allow other vendors to intake the surplus of expanding variants of existing multi-person emojis to be more diverse.

Implementation will follow existing patterns for multi-person, multi-skintoned emojis which easily scale with the addition of these new couple emojis.

Additionally, Facebook's [messaging app](#) has also gone ahead and implemented non-RGI emojis to support a subset of skintone modifiers for some family emojis.

Google has expressed desire to support all 7,000+ new emojis and to be compliant with Unicode procedure would want them to be fully aligned to Unicode guidelines.

VII. Reference Documents

- <https://www.unicode.org/L2/L2018/18228-inter-skintone-emoji.pdf>
- <https://www.unicode.org/L2/L2019/19101-esc-rgi-priorities.pdf>
- <https://www.unicode.org/L2/L2019/19265-handshake.pdf>
- <https://www.unicode.org/emoji/charts/full-emoji-list.html#family>
- <http://www.unicode.org/L2/L2018/18223r-uts51-skin-tone-gender.pdf>

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