

Social Media Use among Adolescents in Guam

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Teens and Social Media Use

- Vast majority of US teens (95%) have access to a home computer or smartphone (Pew Research Center, 2018)
- YouTube, Instagram and Snapchat most popular online platforms among US teens
- Facebook is no longer a dominant platform
- Teen views of social media impact vary
 - 31% Mostly positive (connect with friends/family, easy to find news/info)
 - 45% Neither positive or negative
 - 24% Mostly negative (bully and rumor spreading, harms in-person relations)

Internet Technologies in Guam

- Pacific region
 - Most remote and geographically demanding region for broadband connectivity
- Guam
 - Top 5 mobile subscriber penetration in Pacific Islands (GSMA Intelligence, 2015)
 - Guam will reach 72% smartphone adoption by 2020

Internet Use in Guam

- 2013 survey of 511 Guam residents (Somera et al., 2016)
 - 69% used the Internet first for a recent health information concern
 - Accessing medical and health information on the Internet may provide Guam residents a sense of empowerment
- Chamorro use of social media (San Nicolas-Rocca & Parrish, 2013)
 - 126 of 128 Chamorros used the Internet (online survey)
 - 83 had broadband
 - 118 used cell phone

Study Motivations

- Little research has been conducted on social media use in US-Affiliated Pacific Islands (USAPI)
- USAPI
 - Flag territories of American Samoa, Guam and Commonwealth of the Northern Mariana Islands (CNMI)
 - Freely Associated States of Yap, Pohnpei, Kosrae and Chuk
 - Republic of the Marshall Islands
 - Republic of Belau (also known as Palau)
 - 500,000 residents
- First large scale study of adolescent use of traditional and social media in Guam

Methodology

- Conducted a cross-sectional, paper-and-pencil survey with middle school students (N = 674) in Guam
 - Explore ethnic and gender differences in health-related behaviors
 - Examine traditional and social media use by adolescents in Guam
- Student recruitment from over 10 public schools
- Survey administered from December 2017 to May 2018
 - Demographics
 - Health-related behaviors
 - Traditional and social media use
 - Civic engagement

Demographics

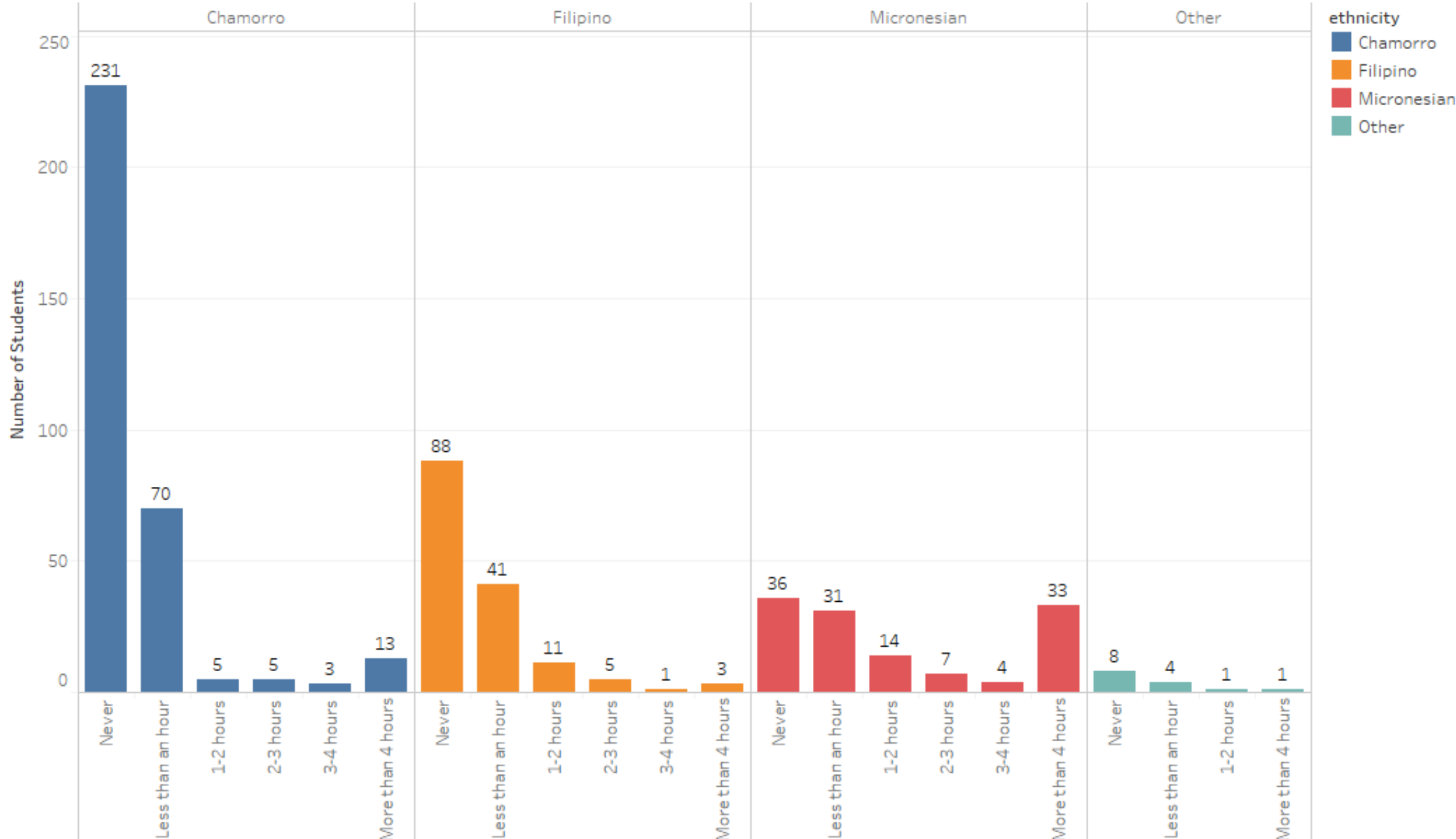
Table 1. Descriptive Statistics (N=615*)

Variable	Frequency	Percent
Gender		
Female	304	49.4
Male	311	50.6
Age		
11	53	8.6
12	221	35.9
13	225	36.6
14	112	18.2
15	4	0.7
Ethnicity		
Chamorro	327	53.2
Filipino	149	24.2
Micronesian	125	20.3
Other	14	2.3

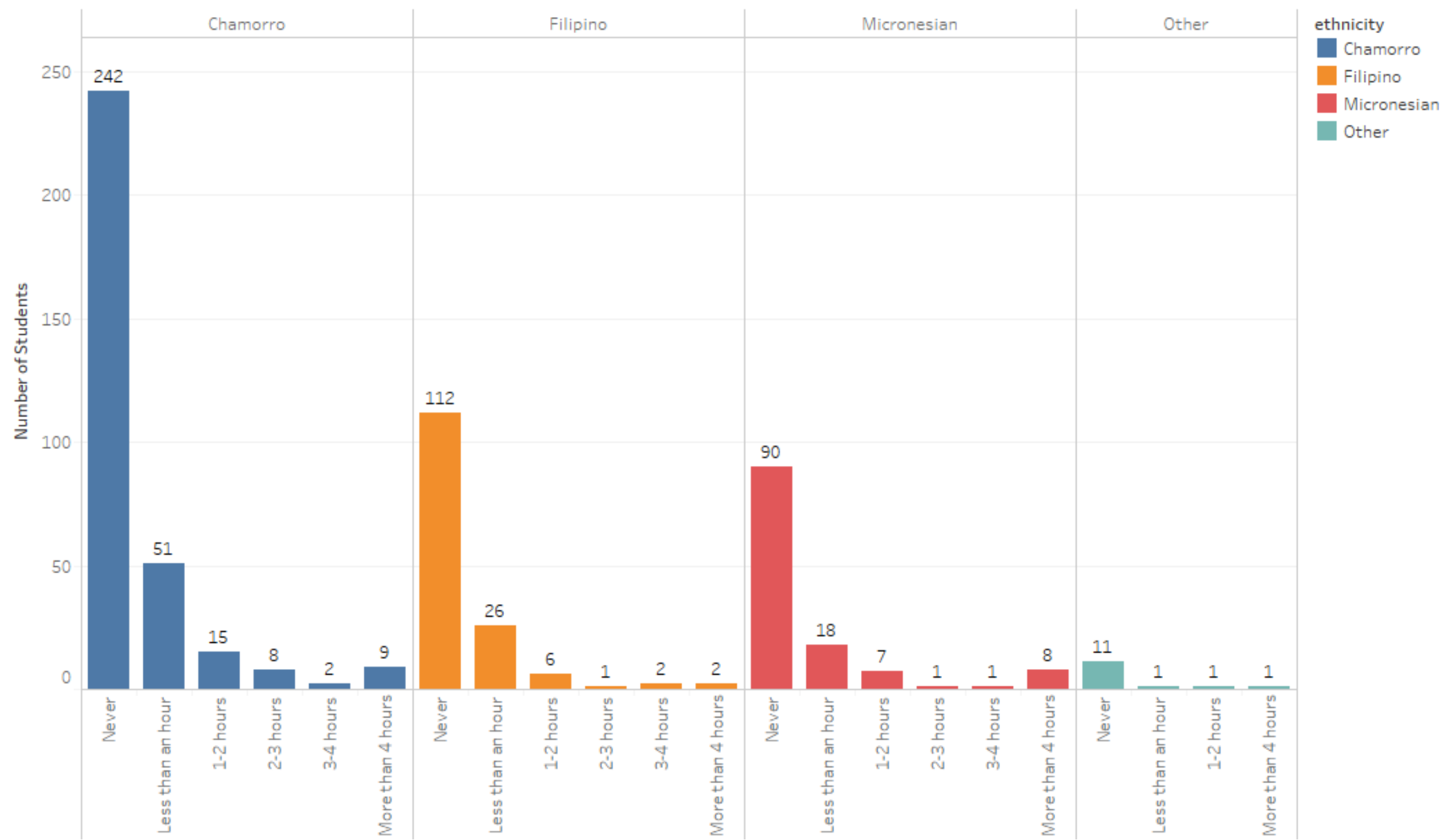
* After listwise deletion of cases



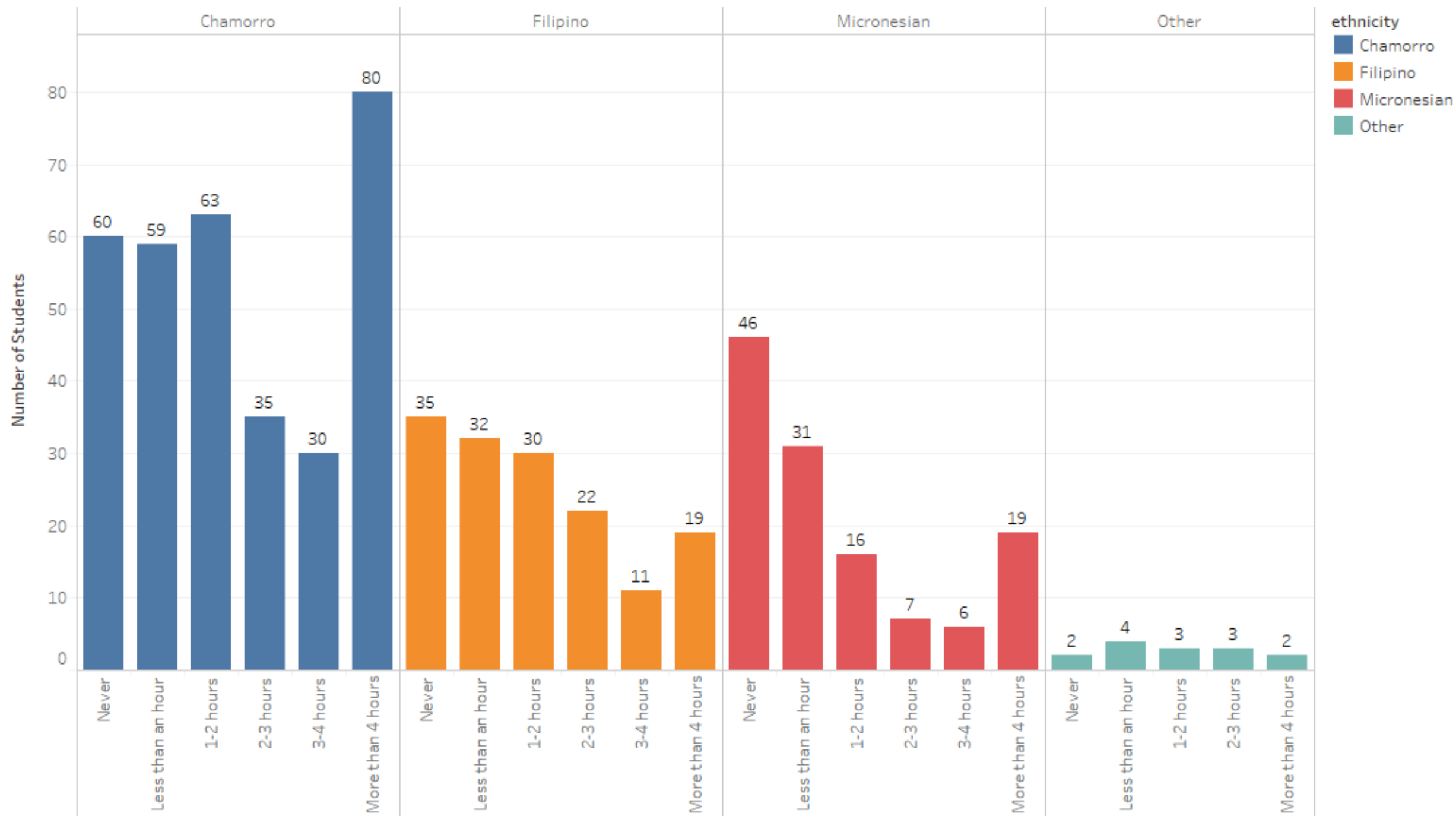
Use of Facebook in a Typical School Day by Ethnicity (N=615)



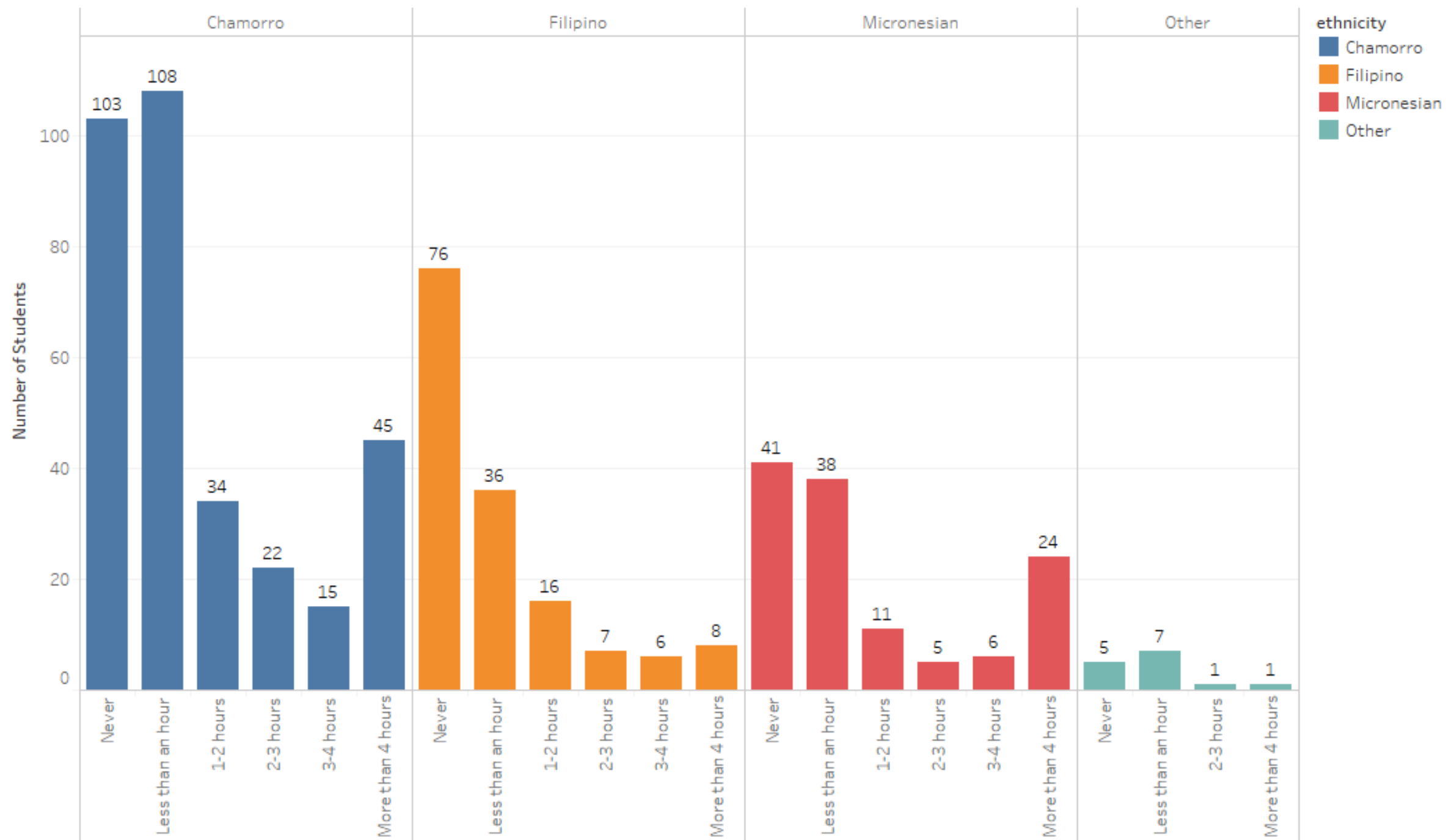
Use of Twitter in a Typical School Day by Ethnicity (N=615)



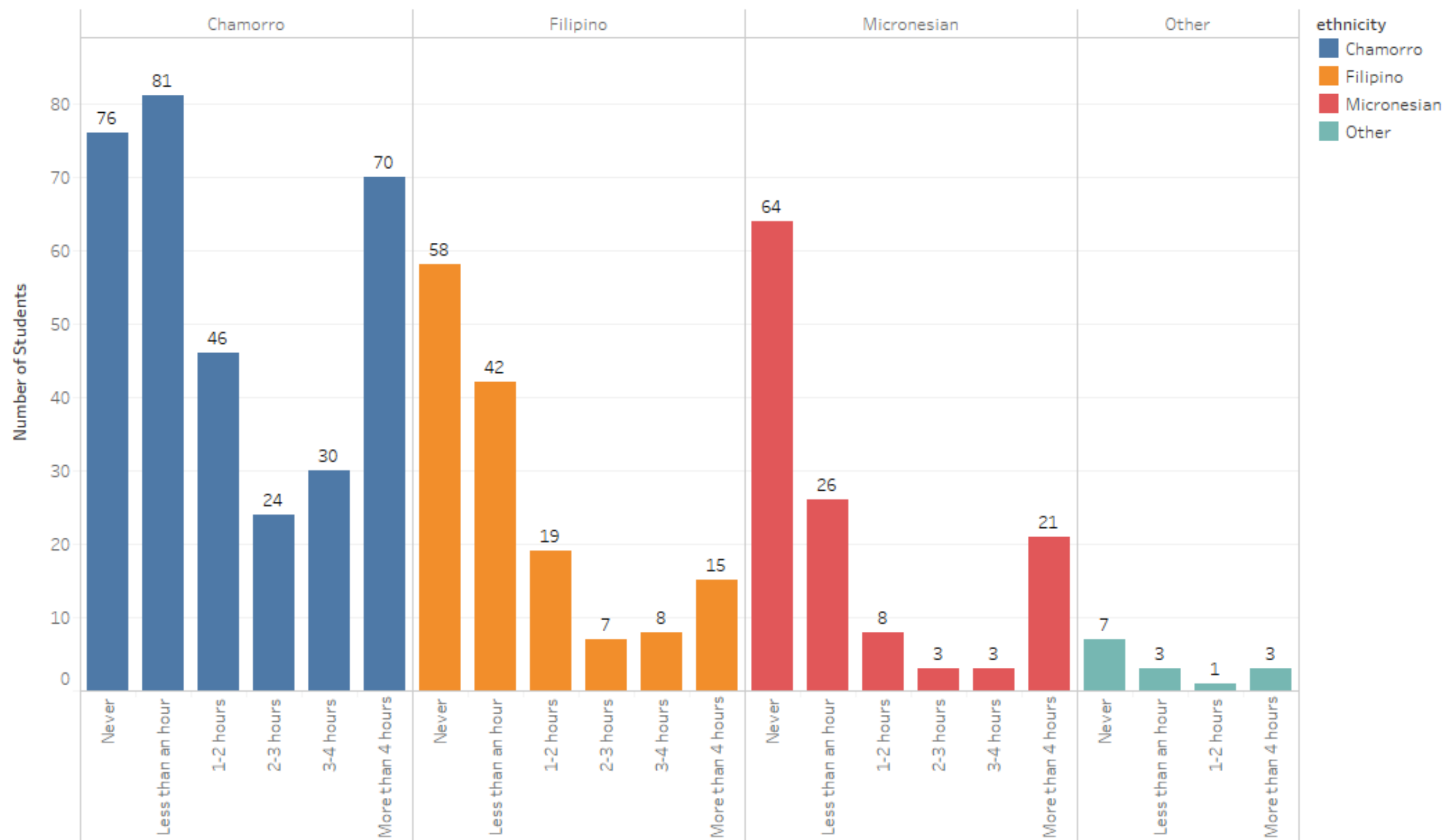
Use of Instagram in a Typical School Day by Ethnicity (N=615)



Use of Snapchat in a Typical School Day by Ethnicity (N=615)



Use of WhatsApp in a Typical School Day by Ethnicity (N=615)



Predicting Frequent Facebook Use

Table 4. Odds Ratios Predicting Frequent Facebook User (N=601)

Variables	Factor change	Standard error
Demographics		
Male		
Age		
Chamorro	0.10***	0.42
Filipino	0.07***	0.63
Social Media		
Twitter	1.84***	0.13
Snapchat	1.63***	0.12
Instagram		
WhatsApp		
Pseudo R ²		0.36

Note: Values shown as odds ratios. Frequent Facebook User is defined as using Facebook 3 or more hours during a weekday.

* p<.10, ** p<.05, *** p< .01, two-tailed test

Predicting Frequent Instagram Use

Table 2. Odds Ratios Predicting Frequent Instagram User (N=601)

Variables	Factor change	Standard error
Demographics		
Male		
Age		
Chamorro	2.89 ^{***}	0.42
Filipino	2.44 [*]	0.47
Social Media		
Facebook		
Twitter	1.38 ^{**}	0.13
Snapchat	1.99 ^{***}	0.09
WhatsApp	1.51 ^{***}	0.07
Pseudo R ²		0.39

Note: Values shown as odds ratios. Frequent Instagram User is defined as using Instagram 3 or more hours during a weekday.

* p<.10, ** p<.05, *** p< .01, two-tailed test



Predicting Frequent Snapchat Use

Table 3. Odds Ratios Predicting Frequent Snapchat User (N=601)

Variables	Factor change	Standard error
Demographics		
Male	0.65	0.31
Age		
Chamorro	0.58**	0.45
Filipino	0.55***	0.52
Social Media		
Facebook	1.96***	0.11
Twitter		
Instagram	4.17***	0.11
WhatsApp	2.00***	0.08
Pseudo R ²		0.43

Note: Values shown as odds ratios. Frequent Snapchat User is defined as using Snapchat 3 or more hours during a weekday.

* p<.10, ** p<.05, *** p< .01, two-tailed test



Predicting Frequent WhatsApp Use

Table 5. Odds Ratios Predicting Frequent WhatsApp User (N=601)

Variables	Factor change	Standard error
Demographics		
Male		
Age	1.35**	0.14
Chamorro		
Filipino		
Social Media		
Facebook		
Twitter	1.25*	0.12
Snapchat	1.53***	0.09
Instagram	1.71***	0.08
Pseudo R ²		0.35

Note: Values shown as odds ratios. Frequent WhatsApp User is defined as using WhatsApp 3 or more hours during a weekday.

* p<.10, ** p<.05, *** p< .01, two-tailed test

Implications

- Ethnicity closely related to social media use among adolescents
 - Greater use of Facebook and Snapchat by Micronesian adolescents
 - Instagram and WhatsApp very popular among Chamorro adolescents
 - Instagram most used by Filipino adolescents
- Twitter is rarely used among Guam adolescents
- WhatsApp strongly correlated with age

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- Chantay Benitez
 - Research Associate, University of Guam