Adolescent Skincare Practices in the Era of Social Media: A Cross-Sectional Survey of Behaviors, Influences, and Outcomes

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ABSTRACT

Background/Objective: The adolescent skincare market has expanded rapidly in parallel with social media growth, raising concerns regarding routine complexity, safety, and marketing influences. Despite rising engagement with skincare routines among adolescents, there is limited research exploring how social media shapes these behaviors and their potential effects.
Methods: A cross-sectional survey of middle and high school students (n=239) was conducted to collect demographic, behavioral, and product-use data. The survey assessed skincare routine complexity, product usage patterns, social media engagement, and spending behaviors. Associations between social media exposure, spending behaviors, and routine complexity were statistically analyzed.

Results: Most respondents reported daily skincare routines, with increasing complexity and spending among older adolescents. Social media exposure was significantly associated with trying new skincare products and greater routine complexity. Sunscreen use was low, while acne and oil control were the most commonly reported concerns.

Conclusions*:* Social media use was associated with adolescent skincare behaviors, including purchasing patterns and routine complexity. These findings highlight the need for improved education, increased clinical guidance, and greater transparency in marketing practices to promote safe and evidence-based skincare among adolescents.

Keywords*:* Adolescents; Skincare; Social Media; Influencers; Dermatology; Consumer Behavior; Public Health

INTRODUCTION

The skincare industry, particularly within adolescent populations, has undergone a significant transformation in recent years, driven by the dominance of digital culture, evolving beauty standards, and increased exposure to social media content (Wetstone & Grant-Kels, 2025). Platforms such as TikTok and Instagram have facilitated the rapid dissemination of skincare trends, often promoting complex, multi-step routines and products containing active ingredients traditionally intended for adult populations (Vogels,

2022). Skincare among adolescents has evolved into a commercially driven and socially influenced practice, often shaped by unverified viral trends and influencer endorsements (Wetstone & Grant-Kels, 2025; Hossain et al., 2025).

The global skincare industry continues to expand, with adolescents emerging as a key consumer demographic (Statista, n.d.). According to Statista, the global skincare market is projected to generate approximately US$204.0 in revenue in 2026, reflecting the continued growth of the skincare industry and the increasing importance of younger consumer demographics (Statista, n.d).

A survey by the Benchmarking Company found that 76 percent of parents with girls and 65 percent of parents with boys reported their 7- to 17-year-olds have a "skincare routine**."** (The Benchmarking Company, 2024). These trends are consistent with recent industry data indicating that many adolescents discover new beauty and skincare products through social media platforms, reinforcing the growing influence of digital media on skincare behaviors (Stern, 2024).

Despite this growth, concerns have emerged regarding safety, necessity, and evidence base of adolescent skincare routines (Wetstone & Grant-Kels, 2025). Dermatologic risks include irritant or contact dermatitis, over-exfoliation, skin barrier dysfunction, among others (Huang et al., 2018). Social media platforms frequently promote products and regimens without clinical validation, raising potential risks including dermatologic reactions, misuse of active ingredients, and financial burden (Hossain et al., 2025; Wetstone & Grant-Kels, 2025). Existing research has not fully explored how these influences translate into measurable behaviors and outcomes among adolescents, representing a gap in current literature (Wetstone & Grant-Kels, 2025).

The purpose of this study is to evaluate skincare routines, purchasing behaviors, social media influences, and perceived outcomes among middle and high school students. Specifically, this study aims to examine the relationship between social media exposure and routine complexity, product experimentation, and spending patterns.

METHODOLOGY

Research Design and Participants:

This study employed a cross-sectional survey design to assess skincare behaviors and influences among middle and high-school students from approximately five schools across multiple school districts within Fairfield County, Connecticut (n=239). The anonymous survey was distributed electronically through school administration using Google Forms and was available to all eligible middle and high school students within the participating schools. Participation was voluntary, and students chose independently whether to complete the survey. Participants represented a range of ages, genders, and racial/ethnic backgrounds, providing a diverse sample for analysis.

Inclusion and Exclusion Criteria:

Eligible participants included middle and high school students attending the participating schools. Although the survey instrument included additional age and educational categories, no respondents outside the intended study population completed the survey. Therefore, all analyses were conducted using responses from eligible middle and high school students only.

Data Collection and Procedure:

Data was collected online via Google Forms. The survey was designed to capture information on demographics, skincare routines, product usage, social media engagement, purchasing behaviors, and perceived outcomes. Participants completed the survey anonymously, and responses were compiled into a dataset for analysis. No identifying information was collected, and the data was stored in a password-protected file.

Variables and Measurements:

Variables included demographic characteristics (age, gender, race/ethnicity, and geographic location), as well as skincare routine variables such as frequency of routines, number of products used, and types of products applied. Product usage variables encompassed both specific brands and broader product categories (e.g., cleansers, moisturizers, treatments, and sunscreens), along with respondent awareness of active ingredients. Behavioral variables included motivations for skincare use, such as appearance, acne management, self-care, and peer influence, as well as purchasing behaviors, including sources of product discovery, influence of sponsored content, and monthly spending patterns. Social media engagement was assessed based on platform usage (e.g., TikTok, Instagram, YouTube), frequency of exposure to skincare-related content, and influencer followership. Outcome variables included self-reported effectiveness, satisfaction, and any adverse reactions associated with skincare product use.

Data Analysis:

Descriptive statistics were calculated for all variables using Microsoft Excel. Inferential statistical analyses, including chi-squared tests, were conducted to evaluate associations between social media influence, spending behaviors and routine complexity. For statistical analyses, social media influence was operationalized using participants' responses with the survey question, "Do you use social media platforms for skincare advice?" Participants who answered 'Yes" were classified as the social media influence group, while those who answered "No" were classified as the comparison group. Statistical significance was defined as $p < 0.05$.

Ethical Considerations:

This study was conducted with approval from the administrations of the participating schools prior to survey distribution. Participation was entirely voluntary, and participants were informed of the purpose of the study before beginning the survey. No personally identifiable information was collected, and all responses were stored in password-protected file to maintain confidentiality.

RESULTS

Demographic Characteristics:

A total of n=239 completed the survey. Demographic characteristics of the study population are presented in Table 1. Most of the respondents were female (71.7%), with representation across multiple racial and ethnic groups. High school students comprised 64.6% of the sample, while 35.4% were middle school students.

Table 1. Demographic Characteristics of Respondents

Characteristic	**N (%)**
Gender	
- Female	172 (71.7%)
- Male	62 (25.8%)
- Others	6 (2.5%)
Ethnicity	
- White	135 (56.3%)
- Asian	32 (13.3%)
- Hispanic	31 (12.9%)
- African American	22 (9.2%)
- Others	20 (8.3%)
Grade	
- High School	155 (64.6%)
- Middle School	85 (35.4%)

Skincare Routine Characteristics:

Skincare routine characteristics are summarized in Table 2. A total of 194 of 239 respondents (81.2%) reported using at least one skincare product daily, with 111 respondents (46.4%) using three to four products per day. Routine complexity increased with age, with 49% of high school students reporting the use of three to four products daily compared to approximately 31.7% of middle school students.

Among products categories, moisturizers (172 respondents, 72.0%) and cleansers (164 respondents, 68.6%) were the most commonly used, followed by sunscreen (118 respondents, 49.4%). Knowledge of active ingredients in their skincare products varied among respondents. A total of 160 respondents (66.9%) identified at least one active ingredient in their skincare products, while 102 respondents (42.7%) also selected, "Unsure," indicating uncertainty about the ingredients contained in some or all their products.

Cleansers and moisturizers were the most frequently reported product categories (47.8%), followed by spot treatments (14%) and serums (7%). A subset of respondents (53.6%) reported using products containing active ingredients such as salicylic acid, niacinamide, hyaluronic acid, and vitamin C, with less frequent but notable use of retinoids (5%).

Gender-based differences were observed, with female respondents more likely to report higher product usage compared to male respondents.

Table 2. Skincare Routine Characteristics and Product Usage Patterns

Variable	**N (%)**
Use at least one skincare product daily	194 (81.2%)
Use of 3-4 skincare products daily	111 (46.4%)
Use more than 2 skincare products daily	121 (50.6%)
Identified at least one listed active ingredient	160 (66.9%)

Purchasing Behavior and Spending Patterns:

Purchasing behaviors and spending patterns are summarized in Table 3. Overall, 21.3% of respondents reported spending more than $50 per month on skincare products, while 46.4% reported spending more than $25 per month. Additionally, 29.4% of respondents reported monthly expenditures between $10 and $25. 58.8% of respondents reported purchasing skincare products at least once every two months, with drugstores and specialty beauty retailers identified as the most common purchase locations. Social media

and peer/family influence were cited by 70.6% of respondents as primary sources of product discovery, whereas only 19.9% reported dermatologist guidance.

Differences in purchasing behavior were observed across spending groups. Among lower spenders (≤ $50/month), price was a more influential factor in purchasing decisions, whereas higher spenders (> $50/month) were less influenced by price and more influenced by brand recognition and product-related factors.

The relationship between spending level and influencing factors is illustrated in Figure 1. Figure 1 displays the distribution of respondents selecting each purchasing factor after stratifying respondents into spending groups (≤$50/month and >$50/month), so the counts within each category sum to the overall respondent totals reported in Table 3.

Brand recognition (116 respondents, 48.5%), price (98 respondents 41.0%), and social media (97 respondents, 40.6%) were among the most commonly reported factors influencing skincare purchases, while dermatologist recommendations were reported less frequently (80 respondents, 33.5%). Because respondents could select more than one factor influencing their skincare purchases, percentages do not sum to 100%.

Figure 1. Factors influencing skincare purchasing decisions stratified by monthly spending category (≤$50/month vs. >$50/month). Bars represent the number of respondents selecting each purchasing factor. Respondents could select multiple factors.

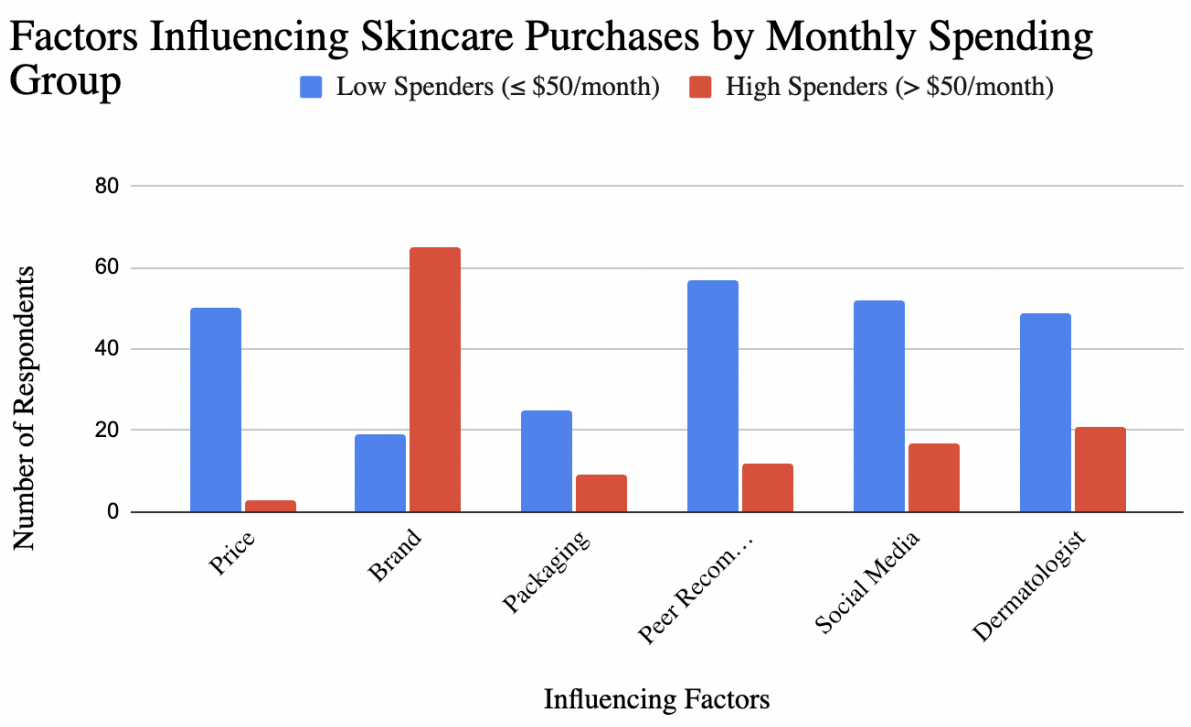


Table 3. Skincare Purchasing Behavior and Monthly Spending Patterns

Variable	N (%)
Monthly skincare spending in excess of $25	109 (46.4%)
Brand as a factor in purchase	116 (48.5%)
Price as a factor in purchase	98 (41.0%)
Tried a "viral" or trending product	105 (43.9%)

Skin Concerns and Reported Outcomes:

Self-reported skin concerns and outcomes are presented in Table 4. Acne was the most commonly reported skin concern, with 155 of 239 respondents (64.9%) selecting it. Dryness and oiliness were each reported by 91 respondents (38.1%), followed by clogged pores (84 respondents, 35.1%) and redness (52 respondents. 21.8%). Because participants could select multiple skin concerns, percentages do not sum to 100%.

Among the 236 respondents who answered the question on skin type, 29 of 236 (12.3%) identified their skin type as sensitive, and 28 of 236 respondents (11.9%) reported having allergies to skincare ingredients.

Overall, 53.5% of respondents reported perceived improvement in their skin following the adoption of a skincare routine. Figure 2 includes the 118 respondents who answered both the questions on daily skincare product use and diagnosed skin conditions. Among these respondents, those with a diagnosed skin condition were more likely to report using a higher number of skincare products than those without a diagnose skin condition (Figure 2). Among respondents with diagnosed skin conditions, 55% reported not visiting a dermatologist within the past 12 months.

Figure 2: Daily skincare product use among respondents with and without a self-reported diagnosed skin condition. Bars represent the number of respondents using 0, 1–2, 3–4, 5–6, or 7–9 skincare products daily.

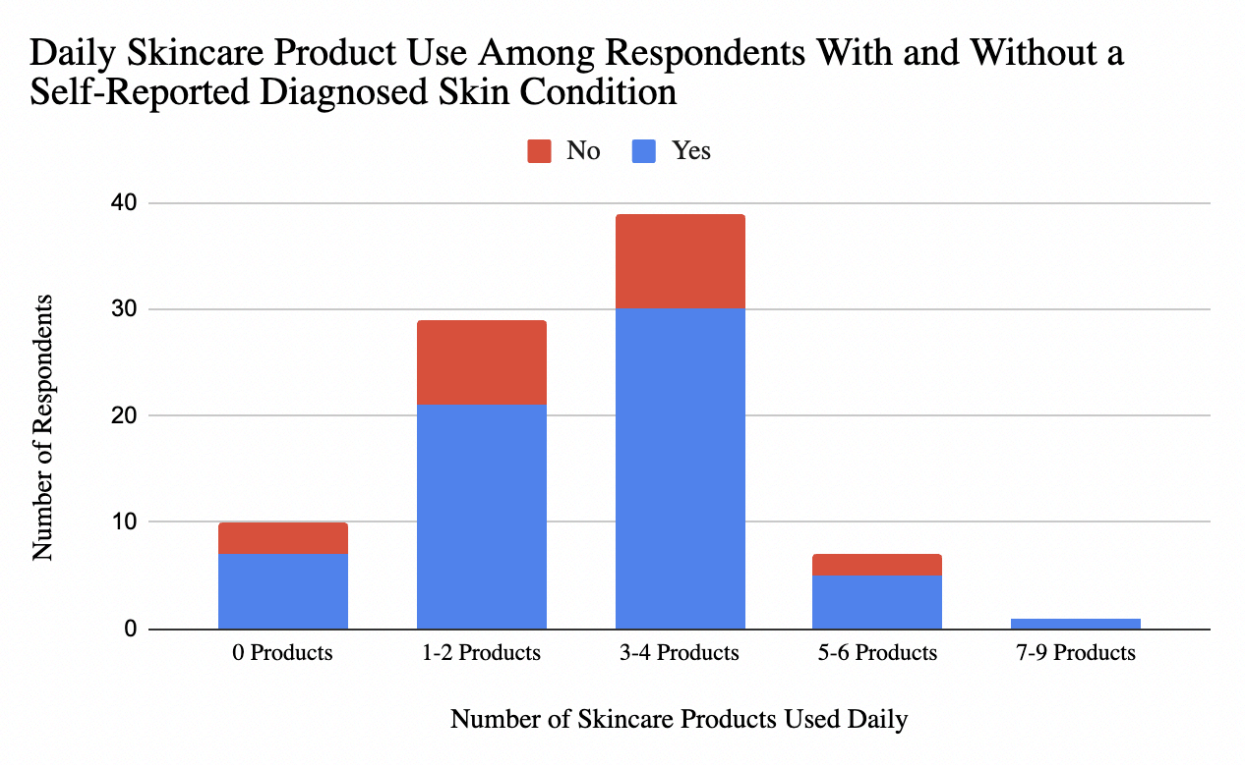


Table 4. Self-Reported Skin Concerns and Skincare Outcomes

Outcome / Concern	**Respondents, n (%)**
Acne	155 (64.9%)
Dryness	91 (38.1%)
Oiliness	91 (38.1%)
Redness	52 (21.8%)
Dark spots	29 (12.1%)
Wrinkles	15 (6.3%)
Clogged pores	84 (35.1%)
Irritation	38 (15.9%)
Under eye bags	40 (16.7%)
Pigmentation	21 (8.8%)
Hair concerns	28 (11.7%)
Other	7 (2.9%)

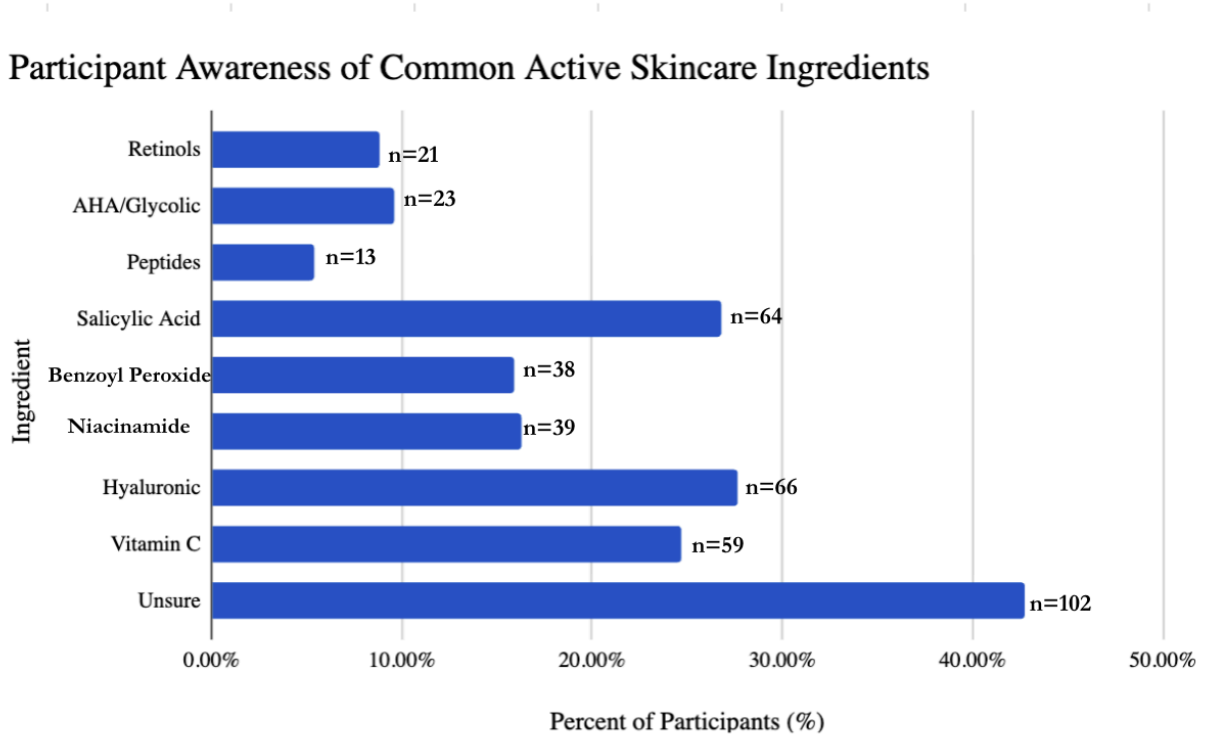
Social Media Influence and Engagement:

Social media engagement was widespread among respondents. 45.6% reported having tried a skincare product or trend encountered through social media. High school students demonstrated greater engagement with social media–driven skincare trends compared to middle school students.

Influencer accounts were followed by 39.8% of respondents, while 54.0% reported using social media as a source of skincare advice. Peer influence was also reported by 40.4% of respondents, suggesting overlap between social and interpersonal sources of information.

Ingredient awareness is further illustrated in Figure 3, which shows that while some respondents were familiar with commonly used ingredients such as salicylic acid and hyaluronic acid, a substantial proportion of respondents reported uncertainty regarding active ingredients in their skincare products.

Figure 3: Participant awareness of common active skincare ingredients. Respondents could select more than one ingredient as well as "Unsure." Therefore, percentages do not sum to 100% and respondents selecting "Unsure" may also have identified one or more active ingredients.



Statistical Analysis:

There was a significant association between using social media platforms for skincare advice and trying a new skincare product based on a social media trend/celebrity recommendations $\chi^2(1) = 50.80$, $p < .001$, Cramer's V = 0.46. A marginal association was observed between school level and skincare product purchase frequency – teens aged 16–18 purchase skincare products significantly more often than those aged 13–15, $\chi^2(3) = 7.80$, $p = .050$, Cramer's V = 0.20.

Descriptively, Hispanic/Latino respondents more frequently reported purchasing skincare products from drugstores, whereas White respondents more frequently reported purchasing from special beauty retailers. Because respondents could select multiple purchase locations, formal statistical comparisons were not performed. Additionally, the number of over-the-counter skincare products used daily was significantly associated with the number of reported skin concerns, $\chi^2(15) = 30.56$, $p = .010$, Cramer's V = 0.21.

DISCUSSION

Restatement of Key Findings:

This study examined adolescent skincare practices, with a focus on routine complexity, purchasing behaviors, social media influence, and perceived outcomes. The findings indicate that skincare use is highly prevalent among adolescents, with over 80% of respondents reporting daily routines and a substantial proportion engaging in multi-step regimens. Routine complexity, product use, and spending were all observed to increase with age.

Social media emerged as a prominent factor associated with adolescent skincare behaviors, with nearly half of respondents reporting trying products or trends encountered online and over half using social media as a source of skincare advice. Additionally, significant associations were identified between social media influence and increased spending, product experimentation, and routine complexity.

Clinical and Public Health Considerations:

The findings highlight a gap between adolescent skincare practices and dermatologic best practices. Despite the high prevalence of reported skin concerns, a substantial proportion of adolescents, particularly those with diagnosed conditions, reported not seeking professional dermatologic care. The observed increase in routine complexity, particularly among older adolescents, raises important considerations regarding product appropriateness and safety. Many respondents reported using products containing active ingredients such as retinoids and exfoliating acids, which are typically formulated for adult populations (Alvarez et al., 2025). Self-directed or socially guided approaches to skincare management may be associated with an increased risk of inappropriate product use, delayed treatment, and exacerbation of existing skin conditions.

Only 16.8% of respondents reported regularly using sunscreen, a finding that is particularly notable given its well-established role in preventing skin cancer and photoaging, suggesting that common practices do not align with evidence-based dermatologic recommendations (Alvarez et al., 2025).

From a public health standpoint, these findings emphasize the importance of early education on evidence-based skincare practices, including the use of gentle products, avoidance of unnecessary additives, and consistent sunscreen application.

Role of Social Media and Influencers:

Social media platforms, particularly TikTok and Instagram, were strongly associated with adolescent skincare behaviors in this study and are widely used by adolescents for skincare-related content (Vogels, 2022; Wetstone & Grant-Kels, 2025). The data indicate that adolescents frequently rely on influencers and peer-generated content for product recommendations and skincare guidance (Hossain et al., 2025).

While social media can increase awareness and accessibility of skincare information, it also introduces risks related to misinformation, overconsumption, and the promotion of unnecessary or potentially harmful products (Wetstone & Grant-Kels, 2025; Hossain et al., 2025). Influencer-driven trends, including multi-step routines and the use of potent active ingredients, may be associated with the adoption of practices that are not developmentally appropriate for adolescent skin.

The observed association between social media use for skincare advice and increased spending highlights the potential commercial impact of digital platforms on adolescent consumers, consistent with previous research demonstrating that social media and influencer credibility influence perceptions of beauty products and purchasing intentions (Hossain et al., 2025). These findings underscore the need for improved transparency in sponsored content and greater emphasis on media literacy among adolescents.

Because this study used a cross-sectional design, the direction of these associations cannot be determined. It is therefore not possible to conclude whether social media use contributes to increased skincare engagement or whether adolescents with greater interest in skincare are more likely to seek skincare-related content online.

LIMITATIONS

This study has several important limitations. First, the use of self-reported survey data introduces the potential for recall bias and response bias, particularly in areas such as spending, product usage, and perceived outcomes. Another limitation is that the study population was drawn from approximately five schools across multiple school districts within a single geographic county (Fairfield County, Connecticut), which may limit the generalizability of the findings to broader adolescent populations. Despite these limitations, the study provides valuable insights into emerging patterns in adolescent skincare practices and highlights areas for further investigation. Further longitudinal or experimental studies are needed to

better understand the directionality or the observed associations and to determine whether social media exposure contributes to changes in adolescent skincare behaviors overtime.

CONCLUSION

Adolescent skincare practices are strongly influenced by social media and are characterized by increasing routine complexity and product use. Low sunscreen use and limited ingredient awareness suggest a gap between behaviors and evidence-based recommendations. These findings highlight the need for improved education and guidance regarding age-appropriate skincare for this population.

ACKNOWLEDGEMENTS

I would like to sincerely thank Dr. Kathleen Suozzi (Yale School of Medicine) for her mentorship, guidance, and support throughout this research project. Her expertise and encouragement were invaluable to the completion of this study.

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APPENDIX

Survey Questionnaire

Demographic and Socioeconomic:

1. How old are you?

- 10-12
- 13-15
- 16-18
- 19-22
- 22+

2. What is your gender?

- Male
- Female
- Non-binary
- Prefer not to say
- Other: Please specify

3. What is your race/ethnicity?

- White
- Black or African American
- Hispanic or Latino
- Asian
- Native American or Alaska Native
- Native Hawaiian or Pacific Islander

- Prefer not to say
- Other: Please specify

4. What grade are you in?

- Middle School
- High School
- College
- Graduate School
- Not in school
- Other: Please specify

Consumer Habits:

5. How often do you purchase skincare products?

- Never
- Once a week
- Once every 2 weeks
- Once a month
- Once every 6 months

6. Where do you primarily purchase your skincare products? (check multiple if applicable)

- Drugstore (CVS, Rite Aid, Walgreens)
- Department Store (Macy's, Target, Nordstrom, etc.)
- Skincare specialty store (Sephora, Ulta Beauty, Blue Mercury)
- Online
- Other: Please specify

7. What is your average cost per month on skincare products? (check multiple if applicable)

- $0 - $10
- $10 - $25
- $25 - $50
- $50 - $100
- $100 - $200
- $200 +

8. What influences your skincare purchases the most? (check multiple if applicable)

- Price
- Brand
- Packaging
- Peer Recommendations
- Social Media
- Dermatologist

- Other: Please specify

9. Where do you get most of your skincare advice/recommendations from? (check multiple if applicable)
- Friends/Family
- Dermatologist
- Social Media
- Online articles
- Other: Please specify

10. In the last 18 months, have you tried a new skincare product based on a social media trend/celebrity recommendation?
- Yes (please specify how many)
- No

Skincare Routine:

11. How many skincare products do you use daily?
- 0 products
- 1-2 products
- 3-4 products
- 5-6 products
- 7-9 products
- 10+ products

12. How many non-prescribed/over the counter skincare products do you use regularly?
- 0 products
- 1-2 products
- 3-4 products
- 5-6 products
- 7-9 products
- 10+ products

13. Which skincare products do you use regularly? (check multiple if applicable)
- Cleanser
- Toner
- Moisturizer
- Sunscreen
- Acne Treatment
- Serums
- Face masks

- At home chemical peels
- Other: Please specify

14. Do any of your skincare products contain the following, to your knowledge? (check multiple if applicable)

- Retinols
- AHA/glycolic acid
- Peptides
- Salicylic Acid
- Benzoyl Peroxide
- Niacinamide
- Hyaluronic Acid
- Vitamin C
- Unsure

Perception and Concerns

15. What are your top skin concerns? (check multiple if applicable)

- Acne
- Dryness
- Oiliness
- Redness
- Dark spots
- Wrinkles
- Blackheads/Clogged pores
- Sensitivity/Irritation
- Under eye bags
- Pigmentation
- Hair Concerns
- Other: Please specify

16. Has your skincare routine helped improve the skin concerns you are addressing?

- Yes
- No
- Somewhat

17. Have you ever tried a skincare trend from social media?

- Yes: Please list an example(s)
- No

Social Media:

18. What kind of accounts do you follow on social media?
- Professional (Dermatologist, Nurse Practitioner, other medical provider)
- Peer
- Influencer

19. Do you use social media platforms for skincare advice:
- Yes: Which ones? (Instagram, Tiktok, Facebook, Youtube, Snapchat)
- No

Medical History and Skin Type:

20. How would you describe your skin type:
- Oily
- Dry
- Combination
- Normal
- Sensitive

21. Do you have any allergies to skincare ingredients?
- Yes
- No

22. Do you have any diagnosed skin conditions? (check multiple if applicable)
- Acne
- Eczema
- Rosacea
- Psoriasis
- Alopecia or other hair loss
- None
- Other: Please specify

23. How many times have you visited a dermatologist for a skin related issue in the last 12 months?
- Never
- 1-3 times (Please specify the diagnosis)
- 3-10 times (Please specify the diagnosis)
- 10+ times (Please specify the diagnosis)

24. Did you have to visit a dermatologist because of effects driven by excessive use of products?

- Yes
- No