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Addendum to the COVID-19 Panel Survey Report Highlights: Identifying Factors Associated with Risk Behaviors Related to COVID-19

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Key Findings

Additional analysis with the panel survey data was conducted to identify which modifiable and demographic factors were independently associated with risk behaviors related to COVID-19 (i.e., demographic groups less likely to practice physical distancing and good hygiene). We found that **as the respondents' level of perceived threat of COVID-19 and age decreased, the COVID-related risk behavior increased.** Groups who had **lower levels of perceived threat** of COVID-19 included people with **low socioeconomic status (SES)**, those who **had children** in their household, and those who **lacked clarity** regarding the Municipality's policies related to COVID-19. These findings suggest that efforts to decrease overall risk of COVID-19 in Anchorage should consider developing education and communication strategies that heighten awareness of the seriousness and threat of COVID-19 to public health. These strategies could be designed to reach out specifically to people from low SES groups, as well as those with children in their households. Additionally, communication strategies could improve the community's understanding of policies related to COVID-19.

Background and Context

We conducted additional analysis with the panel survey data to determine which factors were associated with risk behaviors related to COVID-19. In doing so, we operationalized COVID-related risk behaviors as follows: (1) having a visitor at home; (2) having physical contact with someone; (3) getting within six feet of someone who doesn't live in the household; (4) touching things outside the home that may have been recently touched by others; and (5) not wearing a mask all or most of the time when outside the home. Respondents were given one "point" for each of the risk behaviors that they reported. Thus, scores for COVID-related risk behaviors range from 0 to 5.

In determining the factors associated with the COVID-related risk behaviors, we focused on factors that could be modified through communication and/or public health education efforts, and we also examined demographic characteristics to help identify specific populations. In terms of the modifiable factors potentially related to risk behaviors, we focused on three items: (1) level of perceived threat of COVID-19; (2) level of knowledge of state mandates and municipality emergency orders related to COVID-19; and (3) level of perceived clarity of municipality's policies related to COVID-19. We scored each of these factors, as indicated in Table 1 below.

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Table 1 Scoring Modifiable Factors Potentially Related to Risk Behaviors Related to COVID-19

Factors	Scoring Range
Level of perceived threat of COVID-19 <ul style="list-style-type: none"> Threat to public health in Alaska (Range 0 [not serious] to 10 [very serious]) Threat to public health in Anchorage (Range 0 [not serious] to 10 [very serious]) 	Total Score: 0 (not serious threat) to 20 (very serious threat)
Level of knowledge... <ul style="list-style-type: none"> About State’s mandates and changes related to COVID-19 (Range 1 [not knowledgeable] to 3 [very knowledgeable]) About MOA’s emergency orders and changes related to COVID-19 (Range 1 [not knowledgeable] to 3 [very knowledgeable]) 	Total Score: 2 (not knowledgeable) to 6 (very knowledgeable)
Level of perceived clarity <ul style="list-style-type: none"> Perception of how clear MOA’s policies were related to COVID-19 (Range 0 [not clear] to 10 [very clear]) 	Total Score: 0 (not clear) to 10 (very clear)

In terms of demographics, we focused on gender, race, age, socioeconomic status (SES) (which includes education and employment status), household size, and whether children under the age of 18 lived in the household.

Results

DEMOGRAPHICS WITH INCREASED RISK FOR COVID-19

- Those who were **younger** (18-45 years) and those who **had children** in their household had significantly **higher** COVID-related risk behavior scores than their counterparts. Those in the younger groups and those with children reported an average of **three risk behaviors**.
- The **lower** the perceived threat of COVID-19, the **higher** the COVID-related risk behavior score.
- The **lower** the level of clarity the respondents had on MOA’s policies related to COVID-19, the **higher** the COVID-related risk behavior score.



Those 18-45 years old and those with children reported an average of 3 COVID-related risk behaviors

FACTORS RELATED TO COVID-19 RISK

- Taking into consideration all modifiable and demographic factors through regression analysis, two factors had significant associations with COVID-19 related risk behavior scores: perceived threat and age:
 - The specific groups who tended to have **lower perceived threat** of COVID-19 included those from **low SES groups** (i.e., no college degrees or not employed) and those who **had children** in their households. Additionally, the **less clear** the respondents were about MOA’s policies related to COVID-19, the **lower** their perceived threat of COVID-19.



As the level of perceived threat of COVID-19 and age decreased, the COVID-related risk behavior increased

Communication Strategies and Recommendations

Given the findings related to risk behaviors, MOA could consider increased coordination and communications with educational organizations such as thread Alaska, summer camps, and the Anchorage School District. Communication strategies related to limiting community transmission could continue to focus on personal responsibility to reduce risk, along with reminders of the potential for exponential growth of the virus. However, targeted messaging specific to groups with higher COVID-19 related risk behaviors may be needed to address the possibility of an increase in household transmission. If not controlled, increased intra-household infections could lead to increased community transmission. High-density households or crowded households with large, multigenerational families in particular, pose a challenge for a new wave of infections. The Anchorage School District has significant assets that could help with targeted communication to families, including families who qualify for free or reduced lunches. Communications regarding the importance of families in mitigating the spread of the virus could be highlighted in targeted messaging, along with behavioral scripts for limiting transmission. MOA could also consider an integrated communications strategy related to COVID messaging. To begin, an inventory of communications assets would be helpful in assessing communications needs, partnerships, resources, capacities, etc. This inventory could help inform the communications strategy. Coordinated efforts regarding communications could also focus on clarity of messages related to state and municipal mandates.