

Identifying Measuring Influences of Food & Vegetable Consumption & Physical Activity on Intercollegiate Athlete

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Abstract:-

The motto of this study is to identify influence of food and vegetable consumption and physical activity on intercollegiate athlete. A sample of 25 intercollegiate athlete participated in an open ended survey. Qualitative data were collected related to the factor impacting athletes fruit and vegetable consumption (FVC) and maintenance of physical activity after college. Individual characteristic (taste performance health and expense) and the physical environment (availability and accessibility) were the most significant level of influence on athletes FVC and when anticipating future maintenance of physical activity, athletes mostly reported individual level influence (outcome expectation, intrinsic motivation etc) with mention of family and friend influence.

Keywords:- Student Athletes; Physical Activity Maintenance; Nutrition; Multiple Health Behavior.

Introduction:-

Although college athletes are at-risk for the same health behaviors as their non-athlete counterparts, the underlying mechanisms motivating athletes' adoption of certain lifestyle behaviors are likely unique. The primary research objective was to gather a preliminary understanding of the multilevel influences motivating college athletes' health behavior; specifically, athletes' Food and vegetable consumption and physical activity maintenance following the end of their sport career. When risky behavior co-occurs, the negative health related outcomes multiply, and health-care and disability costs increase dramatically. On the other hand, healthy behavior also co-occur, and intervention research reports the natural adoption of untargeted healthy behaviors following the promotion of a similar behavior relative to physical activity, evidence among former athletes concedes that, unless activity is continued, the health benefits of prior athletic participation are not maintained. The availability/accessibility and preference of fruit and vegetables are the most commonly reported influences on participating athletes' consumption, which is similar to previous evidence among youth populations. Specific to the physical environment, research examining fruit and vegetable availability in relation to college students' FVC found higher intake among those living in residence halls, compared to college students living off campus or with their parents. However, due to varying physical environments, these relationships may vary across distinct college campuses. When anticipating influences on their physical activity maintenance after college, the majority of athletes reported relevant to health, fitness, and body image; which supports previous physical activity maintenance research among adult office workers and adult women. The current study is among the first to specifically target college-aged athletes' physical activity maintenance. Intrinsic motivation, or motivation derived from internal satisfaction, was consistently reported as motivating participating athletes' physical activity maintenance after their formal sport career ends. Although there is no current evidence directly comparable to college-aged athletes, previous evidence has highlighted the significance of intrinsic motivation in relation to women's regulation of physical activity. One relative theoretical approach to understanding intrinsic or internal motivation as it relates to sustained regular physical activity is Deci and Ryan's Self-Determination Theory (SDT).

The availability of fruit and vegetables within the physical environment has been measured both objectively and subjectively. Fruit and vegetable availability has been objectively assessed by counting

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venues selling fruits &/or vegetables via residence and venue addresses. Subjectively, individuals' perceived ease/difficulty of accessing fruits and vegetables have been self-reported with various Likert scales. Specific to college campuses, the nutritional content and purchasing sources of specific foods has been examined with detailed food inventories. Relevant to student athletic dining halls, which are offered specifically to athletes on many college campuses, research has used the Athletic Dining Hall Questionnaire to capture athletes' perception of the foods provided. However, such inclusive dining halls are not offered on every campus, and this is only one of many food environments college athletes are exposed to (e.g., home, neighborhood, etc.). A more holistic assessment specific to fruit and vegetable availability within the home and community environments has been reported and validated among youth populations. Given the unique social and physical environments experienced, further validation among various athlete populations is warranted. Results provide initial insight into the future assessment of emerging behavioral determinants, with hopes of informing progressive examinations and intervention research targeting college-aged athletes' healthy lifestyle adoption and maintenance.

Methodology:-

Informed consent preceded all study procedures, which were approved by the University Institutional Review Board. College student intercollegiate athletes were recruited via flyers, emails, and coach-faculty partnerships (*i.e.*, team and classroom recruitment). After signing consent forms, athletes were asked to complete a pencil/paper survey and participate in a corresponding focus group discussion (≈ 90 minutes). Participating athletes were ensured their participation was voluntary and confidential, and received an unconditional monetary compensation (\$25) for their participation. Data were collected in September/October of 2014.

Procedures:-

Participating athletes were first given 15 to 20 minutes to complete a series of open-ended questions relevant to the most salient influences on their multiple health behaviors. Guided by the holistic framework of the Social Ecological Model (SEM), athletes were asked to report the influences on their health behaviors relevant to themselves and within their surrounding social and physical environments. Participants reported the barriers and enablers to their current alcohol intake and FVC, as well as the anticipated influences on their maintenance of physical activity following the end of their formal sport career. Once surveys were completed, participants participated in a corresponding focus group. During the 90-minute focus group, the lead author led participating athletes through each survey question. Participants were encouraged to expand on and/or adjust their initial written response(s). This two-step assessment ensured clarity of all survey questions and allowed athletes to elaborate on the meaning and reasoning of their answers. The focus group was digitally recorded, and a research assistant took handwritten notes. The moderator's guide included 10 questions with relevant probe questions. The general topics included athletes' perceived barriers/enablers to excessive alcohol consumption, daily FVC, and future maintenance of physical activity. The digital recording and written responses were transcribed and conceptualized into underlying themes.

Conclusion:-

Certain limitations of the current research are noteworthy. The sample size was relatively small and mostly female, only representing certain intercollegiate sports and limiting generalizations. The methodology was descriptive, limiting conclusive inferences and direct study comparisons. The current research is a preliminary examination of the factors influencing college-aged athletes' health behavior, and is among the first to gather prospective information about athletes' future maintenance of physical activity. Results may be informative to future assessments among similar populations. Similar

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investigations are suggested among additional sports, with attention to differences between team and individual focused sports.

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