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Advanced Certificate in Dive Health Risk Perception

## Risk Perception and Decision Making

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Risk Perception and Decision Making Glossary

### A

**Adaptive Tactics:** Strategies employed by individuals to mitigate risk and make informed decisions based on changing circumstances. These tactics may involve adjusting behavior, seeking additional information, or altering plans to minimize potential hazards.

**Assessment:** The process of evaluating risks associated with a particular activity or situation. This involves identifying potential threats, analyzing their likelihood and severity, and determining appropriate responses to manage or avoid these risks.

**Attribution Bias:** A cognitive bias that affects how individuals perceive and interpret risks. This bias can lead to assigning blame or responsibility to others while downplaying one's own role in risky situations.

### B

**Benefit-Cost Analysis:** A method used to evaluate the potential benefits and costs of a decision or action. This analysis helps individuals weigh the advantages and disadvantages of different choices to make informed decisions.

### C

**Conservatism Bias:** A cognitive bias that causes individuals to maintain their existing beliefs or attitudes despite new information that may challenge these views. This bias can influence risk perception and decision-making by limiting openness to alternative perspectives.

**Decision-Making:** The process of choosing between different options or courses of action. Effective decision-making involves assessing risks, considering consequences, and selecting the most favorable outcome based on available information.

### D

**Discounting:** The tendency to prioritize immediate rewards or benefits over long-term consequences. This bias can impact risk perception by undervaluing future risks in favor of immediate gratification.

### E

**Emotional Bias:** The influence of emotions on risk perception and decision-making. Emotional biases can lead individuals to overestimate or underestimate risks based on their emotional reactions to a situation.

**Experience:** Personal encounters with risks or hazards that shape an individual's perception and understanding of potential dangers. Experience can influence decision-making by providing valuable insights into effective risk management strategies.

**Expertise:** Specialized knowledge or skills that inform an individual's ability to assess risks and make informed decisions. Expertise can enhance risk perception by offering a deeper understanding of complex issues or scenarios.

## F

**Framing:** The way in which information is presented or communicated can influence how individuals perceive risks and make decisions. Different frames can emphasize certain aspects of a situation while downplaying others, shaping risk perception accordingly.

## G

**Group Dynamics:** The interactions and relationships within a group that influence collective risk perception and decision-making. Group dynamics can impact individual behavior by shaping social norms, expectations, and pressures.

## H

**Heuristic:** Mental shortcuts or rules of thumb that individuals use to simplify complex decision-making processes. Heuristics can help streamline risk assessment but may also lead to biases or errors in judgment.

## I

**Information Processing:** The cognitive mechanisms involved in encoding, storing, and retrieving information related to risk perception and decision-making. Effective information processing enhances an individual's ability to assess risks accurately and make informed choices.

## J

**Justification:** Providing reasons or explanations to support a decision or action. Justification plays a role in risk perception by rationalizing choices and addressing potential doubts or uncertainties.

## K

**Knowledge:** Understanding or awareness of relevant information that informs risk perception and decision-making. Knowledge can help individuals identify potential risks, assess their severity, and develop

appropriate strategies to mitigate these hazards.

## L

**Loss Aversion:** The tendency to prioritize avoiding losses over acquiring gains. Loss aversion can influence risk perception by emphasizing potential negative outcomes and shaping decision-making to minimize losses rather than maximize gains.

## M

**Mental Models:** Cognitive frameworks or representations of how the world works that guide perception, understanding, and decision-making. Mental models influence risk perception by shaping how individuals interpret and respond to risks in different situations.

## N

**Neglect of Probability:** Focusing on the severity of potential outcomes while neglecting the likelihood of these events occurring. This bias can skew risk perception by overestimating rare but severe risks compared to more common but less severe hazards.

## O

**Overconfidence:** Excessive belief in one's abilities or judgments that can lead to overestimating the accuracy or reliability of decisions. Overconfidence can impact risk perception by fostering a false sense of security or invulnerability.

## P

**Perception:** The process of interpreting sensory information to make sense of the world. Risk perception involves evaluating potential threats, hazards, or uncertainties to inform decision-making and behavior.

**Probability:** The likelihood of a specific event or outcome occurring. Understanding probabilities is essential for assessing risks, predicting potential consequences, and making informed decisions based on available information.

## Q

**Quantitative Risk Assessment:** A systematic method for evaluating risks using numerical data and statistical analysis. Quantitative risk assessment provides a quantitative measure of risk levels, allowing for more precise comparisons and decisions.

## R

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**Regret Theory:** A decision-making theory that considers how individuals anticipate and react to feelings of regret. Regret theory plays a role in risk perception by influencing choices that minimize potential regrets or losses.

S

**Scenario Planning:** A strategic tool for anticipating and preparing for future risks or uncertainties. Scenario planning involves creating alternative scenarios or narratives to explore different outcomes and develop robust strategies for managing risks.

T

**Time Horizon:** The period over which risks or decisions are considered. Different time horizons can impact risk perception by prioritizing short-term gains or losses over longer-term consequences.

U

**Uncertainty:** Lack of knowledge or predictability regarding potential outcomes or events. Uncertainty can complicate risk perception and decision-making by introducing unknown variables or factors that may influence the situation.

V

**Value-Based Decision Making:** Making choices based on personal values, beliefs, or priorities. Value-based decision-making considers ethical, moral, or emotional factors in addition to factual information when assessing risks and selecting courses of action.

W

**Wishful Thinking:** The tendency to believe in favorable outcomes despite evidence or indications to the contrary. Wishful thinking can distort risk perception by encouraging individuals to focus on desired results rather than realistic probabilities.

X

**Xenophobia:** Fear or aversion towards people or cultures perceived as foreign or different. Xenophobia can influence risk perception by shaping attitudes towards unfamiliar or unfamiliar situations, leading to biased decision-making based on stereotypes or prejudices.

Y

**Yield Curve:** A graphical representation of interest rates over different maturities. The yield curve provides insights into economic conditions and market expectations, helping investors assess risks and make

informed decisions about investment opportunities.

## Z

**Zero-Risk Bias:** The tendency to prefer options with zero risks or uncertainties, even when other choices may offer greater benefits or advantages. Zero-risk bias can impact decision-making by prioritizing perceived safety over potential rewards or benefits.