



# THE IMPORTANCE OF HUMOR IN THE WORKPLACE

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# LEARNING OUTCOMES

AT THE END OF THIS COURSE, THE STUDENT SHOULD BE ABLE TO:

- EXPLAIN THE DEFINITION & THEORIES OF HUMOR.
- DESCRIBE THE EFFECTS OF HUMOR ON STRESS AND THE IMMUNE SYSTEM
- DISCUSS HUMOR AS A COMPLEMENTARY MEDICINE & COPING
- DESCRIBE THE EFFECTS OF HUMOR & LAUGHTER ON DISEASE
- DISCUSS WAYS TO ENGAGE IN HUMOROUS INTERCHANGES WITH CLIENTS & COLLEAGUES.

# INTRODUCTION

CONSIDERING THE POSITIVE EFFECTS OF HUMOR SHOWN BY RESEARCH, IT IS IMPORTANT FOR RESIDENTIAL CARE FACILITY ADMINISTRATORS TO TAKE HUMOR SERIOUSLY. TO MAKE EVIDENCE-BASED RECOMMENDATIONS, ADMINISTRATORS NEED CURRENT INFORMATION CONCERNING THE EFFECTS OF HUMOR IN GENERAL AND HOW THESE EFFECTS MIGHT WORK DIFFERENTLY IN DIFFERENT TYPES OF CLIENTS. TO THAT EXTENT, THIS COURSE WAS DESIGNED TO HELP ADMINISTRATORS UNDERSTAND WHY AND HOW TO INCORPORATE HUMOR INTO THE CARE OF CLIENTS. THIS CONTINUING EDUCATION COURSE PROVIDES FOUNDATIONAL INFORMATION ON HUMOR THEORIES, DISCUSSES HOW HUMOR MAY IMPACT IMMUNE FUNCTION, AND EXAMINES THE HOLISTIC EFFECTS OF HUMOR ON THE HEALTH OF INDIVIDUALS. IT ALSO LOOKS AT THE EFFECTS OF HUMOR AND LAUGHTER ON DISEASE OUTCOMES AND PROVIDES SUGGESTIONS OF HOW TO INCORPORATE HUMOR INTO OUR OWN LIVES AND INTO THE LIVES OF OTHERS. THIS COURSE IS FOR ANY RESIDENTIAL CARE FACILITY ADMINISTRATOR WHO WORKS WITH CLIENTS AND ANY RESIDENTIAL CARE FACILITY ADMINISTRATOR WHO WANTS TO IMPROVE HIS OR HER KNOWLEDGE OF THERAPEUTIC HUMOR.

# INTRODUCTION

IF LICENSED PHYSICIANS ARE GOING TO RECOMMEND A MEDICATION, THEY NEED TO KNOW WHAT DISEASES THE MEDICATION IS LIKELY TO BE ABLE TO TREAT, THE SIDE EFFECTS OF THAT MEDICATION, WHAT ALLERGIC REACTIONS MIGHT BE TRIGGERED, AND WHAT THE THERAPEUTIC DOSE OF THAT MEDICATION MIGHT BE. HOWEVER, WHEN IT COMES TO A COMPLEMENTARY THERAPY SUCH AS THE USE OF HUMOR, THEY DO NOT HAVE THIS TYPE OF INFORMATION, OR AT LEAST NOT AT THE SAME LEVEL OF DETAIL THAT THEY DO FOR A MEDICATION. BUT THAT DOES NOT MEAN RESIDENTIAL CARE FACILITY ADMINISTRATORS CANNOT USE THE BEST EVIDENCE AVAILABLE TO HELP GUIDE CLIENTS. THE JOKES USED IN THIS TEXT ARE USED FOR ILLUSTRATION OF INFORMATION. IF YOU FIND THE JOKES OR COMMENTS OFFENSIVE, REMEMBER THAT SOMEONE ELSE MIGHT NOT, EVEN THOUGH THAT PERSON FINDS WHAT YOU THINK IS FUNNY TO BE OFFENSIVE OR A POOR ILLUSTRATION OF HUMOR.



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JUST WHAT IS HUMOR? THAT QUESTION HAS BEEN ARGUED BY SCHOLARS FOR YEARS WITHOUT ONE ACCEPTED DEFINITION, EVEN NOW. WHAT IS GENERALLY AGREED UPON, HOWEVER, IS THAT HUMOR AND LAUGHTER ARE UNIVERSAL HUMAN EXPERIENCES, ENJOYED BY VIRTUALLY ALL INDIVIDUALS REGARDLESS OF CULTURE. HOWEVER, CULTURE AFFECTS WHAT A PERSON FINDS FUNNY. A JOKE MAY NOT TRANSLATE WELL EVEN IF PEOPLE OF TWO DIFFERENT CULTURES SHARE A COMMON LANGUAGE, SUCH AS ENGLISH: NOTE THE DIFFERENCE BETWEEN AMERICAN AND BRITISH HUMOR (G. N. MARTIN & SULLIVAN, 2013). EACH OF US HAS OUR OWN VIEW OF WHAT IS AND IS NOT FUNNY. TO HAVE SOME UNDERSTANDING OF THE DIFFICULTY IN DEFINING WHAT HUMOR IS, IT IS IMPORTANT TO EXAMINE HOW IT HAS BEEN DEFINED OVER TIME BY PEOPLE FROM DIFFERENT DISCIPLINES. IN ADDITION, SOME DEFINITIONS HAVE MIXED SEVERAL RELATED CONCEPTS, SUCH AS HUMOR, SENSE OF HUMOR, AND LAUGHTER.

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AS THIS COURSE WILL DEMONSTRATE, HOWEVER, HUMOR IS DEFINED AS AN IMPORTANT ELEMENT IN DAILY FUNCTIONING AND IN MAINTAINING EMOTIONAL AND PHYSICAL HEALTH. HISTORICALLY, THE WORD *HUMOR* DESCRIBED SOMETHING VERY DIFFERENT THAN WHAT MOST PEOPLE THINK OF TODAY. *HUMOR* WAS DERIVED FROM TWO WORDS, THE LATIN WORD *UMOR*, MEANING “MOISTURE,” AND THE MEDIEVAL WORD *HUMOR*, MEANING “FLUID.” WE STILL SEE MEDIEVAL FORM IN MEDICAL USAGE, AS IN THE TERM *VITREOUS HUMOR*, OR THE FLUID FOUND INSIDE THE EYE. THEREFORE A SEARCH OF MEDICAL LIBRARY DATABASES USING THE TERMS *HUMOR* AND *HEALTH* WILL OFTEN BRING UP ARTICLES ON EYEBALLS, NOT EXACTLY WHAT MOST OF US ARE LOOKING FOR WHEN TRYING TO DETERMINE THE EFFECTS OF HUMOR ON HEALTH.

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ANOTHER ANCIENT MEDICAL USE OF THE WORD *HUMOR* AS A TYPE OF FLUID CAN BE FOUND IN HUMORAL THEORY, GALEN'S CLASSICAL THEORY OF HEALTH AND ILLNESS. THE HUMORAL THEORY WAS BASED ON THE FOUR BODY FLUIDS REFERRED TO AS *HUMORS*: BLACK BILE, YELLOW BILE, PHLEGM, AND BLOOD. EACH OF THESE HUMORS WAS ASSOCIATED WITH MOOD: YELLOW BILE WAS ASSOCIATED WITH ANGER; BLACK BILE, WITH MELANCHOLY; PHLEGM, WITH APATHY; AND BLOOD, WITH CONFIDENCE. VARIATIONS IN TEMPERAMENTS AND ILLNESS WERE BELIEVED TO RESULT WHEN THE BODY HUMORS WERE MIXED IN DIFFERENT QUANTITIES. THE COMBINATION OF THESE BODY FLUIDS RESULTED IN A PERSON BEING IN "GOOD HUMOR" OR "BAD HUMOR," AND THIS USE OF THE WORD IS STILL SEEN TODAY, WITH HUMOR IN THIS SENSE BEING EQUATED WITH MOOD (TSOUCALAS, KARAMANOY, SGANTZOS, DEIGEOROGLOU, & ANDROUTSOS, 2015).

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PEOPLE AS DIVERSE AS PHILOSOPHERS, PSYCHOLOGISTS, ANTHROPOLOGISTS, SOCIOLOGISTS, PHYSIOLOGISTS, DRAMATISTS, PLAYWRIGHTS, POETS, PROSE WRITERS, SATIRISTS, COMEDIANS, PHYSICIANS, AND NURSES HAVE ALL ATTEMPTED TO DEFINE HUMOR, FIGURE OUT WHAT MAKES THINGS FUNNY, AND UNDERSTAND WHAT ROLE HUMOR PLAYS IN OUR WELL-BEING. A RECENT ARTICLE BY NICOLE PIEMONTE (2015) ARGUES THAT HUMOR MAY BE USED BY MEDICAL PROFESSIONALS AS A HEALTHY WAY OF FEELING A DISTANCE BETWEEN ONE'S SELF AND THE CLIENT'S PROBLEMS, AND THUS GIVE RESIDENTIAL CARE FACILITY ADMINISTRATORS THE EMOTIONAL DISTANCE TO EXAMINE PROBLEMS WITH PERSPECTIVE. JAMES THURBER STATED THAT "HUMOR IS EMOTIONAL CHAOS REMEMBERED IN TRANQUILITY" (ZHANG, 2016, P. 396). HUMOR ALLOWS US TO SEE OURSELVES AND OUR SITUATIONS FROM DIVERSE, DIFFERENT, CURIOUS, AND EXTRAORDINARY PERSPECTIVES. THUS, THE USE OF HUMOR CAN HELP PROTECT OUR EMOTIONAL WELL-BEING BY PROVIDING SOME DISTANCE BETWEEN OURSELVES AND SOMETHING WE FIND EMOTIONALLY UNPLEASANT, AT LEAST AT SOME LEVEL.



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ACCORDING TO MODERN HUMOR RESEARCHER ROD MARTIN, HUMOR IS A PSYCHOLOGICAL PHENOMENON WITH SEVERAL DISTINCT COMPONENTS. FIRST, THERE IS THE COGNITIVE ASPECT, WHICH OFTEN INVOLVES SOME TYPE OF INCONGRUITY AND TENDS TO BE ASSOCIATED WITH A PLAYFUL, NONSERIOUS FRAME OF MIND AND THE ABILITY TO SENSE THAT THINGS ARE NOT AS IMPORTANT OR SERIOUS AS OTHERS THINK THEY ARE. SECOND, THERE IS AN EMOTIONAL RESPONSE, WHICH MARTIN AND OTHERS CALL MIRTH. THIS RESPONSE IS RELATED TO JOY BUT IS NOT THE SAME AS JOY. THIRD, THERE IS A SOCIAL ASPECT TO HUMOR, IN THAT PEOPLE ARE MORE LIKELY TO HAVE A HUMOR RESPONSE WHEN IN THE COMPANY OF OTHERS WHO ARE HAVING A HUMOR RESPONSE. FINALLY, THERE IS OFTEN AN OUTWARD EXPRESSION OR PHYSICAL REACTION TO HUMOR, WHICH CAN BE VARIOUS THINGS BUT IS COMMONLY EXPERIENCED AS LAUGHTER. LAUGHTER IS ONE WAY OF MAKING OTHERS AWARE OF AN EXPERIENCE OF MIRTH (R. MARTIN & KUIPER, 2016).

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HOWEVER, WHAT MARTIN MOSTLY ALLUDES TO WHEN HE STARTS WITH THE COGNITIVE HUMOR RESPONSE IS THE PART OF HUMOR MANY PEOPLE ARE THINKING OF WHEN THEY TALK ABOUT USING HUMOR AS AN INTERVENTION. AROUND THE MID-NINETEENTH CENTURY, THE WORD *HUMOR* BECAME ASSOCIATED WITH THE TALENT TO MAKE OTHERS LAUGH AND TECHNIQUES THAT ARE USED TO MAKE PEOPLE LAUGH, SUCH AS COMEDY (IBRAHEEM & ABBAS, 2016). SOME SCHOLARS DESCRIBE HUMOR AS SOMETHING THAT MAKES US LAUGH OR EXPERIENCE A HUMOR RESPONSE. THESE DEFINITIONS OF HUMOR STATE THAT HUMOR OR USE OF HUMOR IS BASICALLY A SPECIAL TYPE OF COMMUNICATION (WRITTEN, VERBAL, DRAWN, OR OTHERWISE DISPLAYED), INCLUDING TEASING, JOKES, WITTICISMS, SATIRE, SARCASM, CARTOONS, PUNS, RIDDLES, FUNNY STORIES, HUMOROUS COMMENTS, PERSONAL ANECDOTES, AND CLOWNING, WHICH PRODUCES (OR IS INTENDED TO PRODUCE) A HUMOR RESPONSE (MEYER, 2015).

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VERA ROBINSON (1995), ONE OF THE FIRST NURSES TO WRITE ABOUT THE USE OF HUMOR IN HEALTHCARE SETTINGS, SEEMS TO FALL IN WITH THOSE WHO REGARD HUMOR AS A FORM OF COMMUNICATION. SHE DEFINED HUMOR AS ANY COMMUNICATION THAT IS PERCEIVED AS HUMOROUS AND LEADS TO LAUGHING, SMILING, OR A FEELING OF AMUSEMENT. ROBINSON ALSO DESCRIBES HUMOR AS A COGNITIVE COMMUNICATION THAT LEADS TO AN EMOTIONAL RESPONSE (SUCH AS PLEASURE OR MIRTH) AND CAN RESULT IN A PHYSICAL RESPONSE (SUCH AS LAUGHTER OR SMILING). SO, THERE IS SOMEWHAT OF A CONUNDRUM HERE. IS HUMOR A SPECIAL TYPE OF COMMUNICATION, SUCH AS A JOKE, THAT CAUSES A HUMOR RESPONSE, AS ROBINSON AND OTHERS IMPLY? OR IS HUMOR THE PSYCHOLOGICAL AND PHYSICAL REACTION TO SOMETHING THAT WE PERCEIVE AS FUNNY, WHICH SEEMS TO BE WHERE ROD MARTIN AND OTHERS ARE LEANING? BECAUSE THE WORD *HUMOR* HAS BEEN USED IN BOTH WAYS, PEOPLE ARE UNDERSTANDABLY CONFUSED ABOUT WHICH ASPECT OF HUMOR IS BEING DISCUSSED IN USING HUMOR TO IMPROVE HEALTH. IN ADDITION, SOME OF THESE DEFINITIONS SEEM TO BE FOCUSING ENTIRELY ON HUMOR AS A TYPE OF INTENTIONAL COMMUNICATION DELIBERATELY CREATED TO MAKE SOMEONE EXPERIENCE LAUGHTER OR FEELINGS SUCH AS MIRTH. THIS APPROACH OVERLOOKS UNINTENTIONAL HUMOR STIMULI, WHICH CAN BE FOUND IN SITUATIONS THAT ARE NOT DELIBERATELY CREATED BY ANYONE TO BE HUMOROUS BUT JUST HAPPEN TO BE FOUND HUMOROUS BY PEOPLE INVOLVED IN THE SITUATION.



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ADDING TO THE CONFUSION, ACCORDING TO *WEBSTER'S NEW WORLD COLLEGE DICTIONARY* (HUMOR, 2016), HUMOR IS "THE QUALITY THAT MAKES SOMETHING SEEM FUNNY, AMUSING, OR LUDICROUS." THIS DEFINITION AGREES SOMEWHAT WITH ROBINSON AND OTHERS' VIEWS OF HUMOR. HOWEVER, ANOTHER DEFINITION LISTED IS "THE ABILITY TO PERCEIVE, APPRECIATE, OR EXPRESS WHAT IS FUNNY, AMUSING, OR LUDICROUS" (HUMOR, 2016). THIS DEFINITION SEEMS TO BE MORE RELATED TO WHAT HUMOR RESEARCHERS DESCRIBE AS A SENSE OF HUMOR, WHICH IS AN INDIVIDUAL'S ABILITY TO PERCEIVE AND APPRECIATE SOMETHING AS HUMOROUS. FOR THE PURPOSES OF THIS CHAPTER, HUMOR CAN BE DESCRIBED AS INVOLVING SOME TYPE OF STIMULUS (EITHER INTENTIONAL OR ACCIDENTAL) THAT A PERSON PERCEIVES (COGNITIVE RESPONSE) AS FUNNY. THE TENDENCY TO SEE VARIOUS STIMULI AS BEING FUNNY CAN BE DESCRIBED AS A SENSE OF HUMOR. THIS PERCEPTION LEADS TO MIRTH (EMOTIONAL RESPONSE), AS DESCRIBED BY R. MARTIN AND KUIPER (2016) AND OTHERS. IT CAN ALSO LEAD TO LAUGHTER AND SMILING (PHYSIOLOGICAL RESPONSES). THUS, THE DIFFERENCE BETWEEN HUMOR AND LAUGHTER IS THAT HUMOR IS A STIMULUS THAT CAN LEAD TO SOME TYPE OF HUMOR RESPONSE, WHEREAS LAUGHTER IS A TYPE OF HUMOR RESPONSE.



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ONE THING ALL HUMOR SCHOLARS SEEM TO AGREE ON IS THAT SUCCESSFUL USE OF HUMOR INVOLVES NOT ONLY THE RIGHT STIMULUS BUT ALSO HOW THE RECEIVER PERCEIVES THE MESSAGE OR SITUATION. EACH PERSON MAY INTERPRET A MESSAGE OR SITUATION DIFFERENTLY. AS NOTED EARLIER, A HUMOROUS STIMULUS CAN LEAD TO BOTH AN EMOTIONAL RESPONSE AND A PHYSICAL RESPONSE. HOWEVER, THERE ARE ALSO INTERNAL RESPONSES TO HUMOR THAT CANNOT BE SEEN BY THE NAKED EYE. THE HUMOR RESPONSE BY ANY GIVEN PERSON IS CONTEXTUAL. THE SAME THING THAT CAUSED A HUMOR RESPONSE IN A PERSON IN ONE CASE MAY CAUSE A DIFFERENT REACTION OR LEVEL OF REACTION IN THE SAME PERSON IF IT IS PROVIDED IN A DIFFERENT CONTEXT. AND MOST OF US HAVE EXPERIENCED HUMOR BURNOUT. A JOKE IS OFTEN FUNNY FOR THE FIRST TIME, BUT IF THE SAME JOKE IS TOLD AT A DIFFERENT TIME, IT IS NOT NEARLY AS FUNNY AS BEFORE.

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NOW THAT WE HAVE WADED THROUGH THE MUDDY WATERS CHASING DOWN OUR POOR HUMOR FROG TO DISSECT IT, HOW IS REGULAR HUMOR DIFFERENT FROM THERAPEUTIC HUMOR? THE ASSOCIATION FOR APPLIED AND THERAPEUTIC HUMOR DEFINES THERAPEUTIC HUMOR AS “ANY INTERVENTION THAT PROMOTES HEALTH AND WELLNESS BY STIMULATING A PLAYFUL DISCOVERY, EXPRESSION OR APPRECIATION OF THE ABSURDITY OR INCONGRUITY OF LIFE’S SITUATIONS. THIS INTERVENTION MAY ENHANCE HEALTH OR BE USED AS A COMPLEMENTARY TREATMENT OF ILLNESS TO FACILITATE HEALING OR COPING, WHETHER PHYSICAL, EMOTIONAL, COGNITIVE, SOCIAL OR SPIRITUAL” (ASSOCIATION FOR APPLIED AND THERAPEUTIC HUMOR, N.D.). SO IT APPEARS THAT THERAPEUTIC HUMOR IS NOT SO DIFFERENT IN THE ACTUAL TYPES OF HUMOR STIMULI USED TO PRODUCE A HUMOR RESPONSE, BUT IT IS DIFFERENT IN AIM OR PURPOSE. THERAPEUTIC HUMOR IS USED NOT JUST TO MAKE PEOPLE LAUGH, BUT IN AN ATTEMPT TO MAKE PEOPLE PHYSICALLY AND MENTALLY HEALTHIER. THIS DISTINCTION OF THERAPEUTIC HUMOR IS IMPORTANT BECAUSE IT IS THE BASIS FOR THE PRACTICE OF ADDING HUMOR TO THE COMMUNICATION BETWEEN ADMINISTRATOR AND CLIENT. IT IS ALSO THE BASIS FOR ENCOURAGING OTHERS TO EMPLOY HUMOR IN COPING WITH STRESSORS. ONCE WE UNDERSTAND ITS CORRECT USE AND POSSIBLE SIDE EFFECTS, THERAPEUTIC HUMOR CAN BECOME A WORTHWHILE INTERVENTION TO ADD TO OUR TOOLBOX OF TECHNIQUES TO USE WITH OUR CLIENTS.

# HUMOR

IN MANY TEXTS, HUMOR, SENSE OF HUMOR, AND HUMOR RESPONSE ARE ALL TREATED AS A SINGLE PHENOMENON. HOWEVER, THIS APPROACH REFLECTS A COMMON MISCONCEPTION. THE TERMS *LAUGHTER*, *HUMOR*, AND *SENSE OF HUMOR* SHOULD NOT BE USED INTERCHANGEABLY. TO REALLY UNDERSTAND THIS PROCESS, IT IS BEST TO VIEW THESE CONCEPTS SEPARATELY. A HUMOR STIMULUS IS NEEDED TO GENERATE A HUMOR RESPONSE. A HUMOR RESPONSE INVOLVES A COGNITIVE ABILITY TO RESPOND TO THE HUMOR STIMULUS, WHICH REQUIRES THE PERSON TO HAVE WHAT IS KNOWN AS A SENSE OF HUMOR. LAUGHTER, SMILING, AND OTHER ACTIONS BY THE PERSON WHO PERCEIVES THE HUMOR ARE PHYSIOLOGICAL RESPONSES TO HUMOR (BENNETT & LENGACHER, 2006). THUS, TO GENERATE A HUMOR RESPONSE SUCH AS LAUGHTER, YOU NEED A HUMOROUS STIMULUS AND A SUBJECT WITH A SENSE OF HUMOR WHO IS NOT TOO ANXIOUS OR DEPRESSED OR HAS SOME OTHER BARRIER TO HAVE AN EFFECTIVE HUMOR RESPONSE. EVEN UNDER THE BEST CIRCUMSTANCES, EVERY EXPOSURE TO HUMOR DOES NOT RESULT IN THE BEHAVIOR WE CALL LAUGHTER. IT DEPENDS ON THE PERSON, THEIR SENSE OF HUMOR, AND THE SITUATION THEY ARE CURRENTLY IN.



# HUMOR

IN ADDITION TO LAUGHTER, OTHER BEHAVIORAL RESPONSES CAN OCCUR IN RESPONSE TO HUMOR. SOME OF THESE RESPONSES INCLUDE SMIRKING, SMILING, GRINNING, GIGGLING, AND CHUCKLING. WHEN SOMETHING IS PERCEIVED AS VERY FUNNY, A PERSON MAY START LAUGHING, AND THE LAUGHTER CAN BECOME INCREASINGLY PHYSICAL. HAVE YOU EVER LAUGHED SO HARD YOU CRIED? CAN YOU REMEMBER A TIME YOU LAUGHED SO HARD YOUR ABDOMEN, OR YOUR FACE HURT? IF LAUGHING PRODUCES A NEUROCHEMICAL OR IMMUNOLOGICAL CHANGE IN THE BODY, CAN WE ASSUME THAT SMILING WILL DO THE SAME THING? WHAT WE FEEL WHEN WE SMILE AT SOMETHING IS CERTAINLY NOT THE SAME THING WE FEEL WHEN WE LAUGH SO HARD IT MAKES US OUT OF BREATH. SO WHY DO WE ASSUME THAT THESE TWO RESPONSES CAN HAVE THE SAME EFFECT ON HEALTH? ALSO, SOME OF THESE RESPONSES WE ASSOCIATE WITH HUMOR CAN BE TRIGGERED BY OTHER THINGS THAN HUMOR. FOR EXAMPLE, LAUGHTER MAY BE A RESPONSE TO TICKLING, SURPRISE, EMBARRASSMENT, TENSION, RELIEF AFTER TENSION, OR PLAY. THERE ARE EVEN SOME NEUROLOGICAL CONDITIONS THAT CAUSE PATHOLOGICAL LAUGHTER, WHICH IS NOT FUNNY AT ALL AND TENDS TO EXHAUST THE CLIENT BECAUSE HE OR SHE HAS NO CONTROL OVER IT (GONDIM, THOMAS, CRUZ-FLORES, NASRALLAH, & SELHORST, 2016). THE PRESENCE OF LAUGHTER MAY NOT NECESSARILY INDICATE THE PRESENCE OF HUMOR AND ALL OF THE GOOD THINGS THAT REPORTEDLY GO ALONG WITH EXPOSURE TO HUMOR.



# HUMOR

ONE KNOWN TRIGGER OF LAUGHTER IS THE SOUND OF SHARED LAUGHTER, EITHER LIVE OR VIA A SOUNDTRACK. STUDIES INDICATE THAT THE PHYSICAL RESPONSE WE CALL OR EXPERIENCE AS LAUGHTER IS MORE LIKELY TO OCCUR IN A SOCIAL CONTEXT. THAT IS WHY LAUGH TRACKS HAVE BEEN USED IN SITCOMS AND MAY IMPROVE A HUMOR RESPONSE EVEN IF A PERSON IS ALONE WHILE VIEWING IT (WEBER & QUIRING, 2017). THIS CONTAGIOUS EFFECT OF LAUGHTER HAS BEEN STUDIED BY SEVERAL RESEARCHERS. IN ONE STUDY, WEBER AND QUIRING (2017) SET OUT TO MANIPULATE LAUGHTER IN RESPONSE TO MEDIA. THEY THEORIZED THAT HUMOR RESPONSE AND PEOPLE'S JUDGMENT OF HOW FUNNY A VIDEO DEPEND ON THE EMOTIONAL EXPRESSIONS OF THOSE AROUND THEM. WEBER AND QUIRING PUT RESEARCH ASSISTANTS IN THE AUDIENCE (UNKNOWN TO THE SUBJECTS) TO SEE IF HAVING THESE PERSONS LAUGH WOULD INDUCE MORE LAUGHTER IN THE GROUP COMPARED WITH ANOTHER GROUP WHERE RESEARCH ASSISTANTS WERE SILENT. THIS EXPERIMENT DEMONSTRATED THE CONTAGIOUS RESPONSE OF HUMANS TO LAUGHTER AND ALSO FOUND THAT THE LAUGHTER WAS MORE CONTAGIOUS IN INTROVERTS THAN IN EXTROVERTS.

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ALTHOUGH WE CAN SEE AND EVEN MEASURE LAUGHTER AND OTHER EXTERNAL RESPONSES TO HUMOR, WHAT ABOUT THE EMOTIONAL ASPECT OF THIS PROCESS? IS IT AS IMPORTANT AS THE EXTERNAL PART? MIRTH IS THE WORD MOST HUMOR RESEARCHERS USE TO DESCRIBE THE EMOTION FELT WHEN WE PERCEIVE SOMETHING AS FUNNY (R. MARTIN & KUIPER, 2016). MIRTH IS A UNIQUE EMOTIONAL RESPONSE THAT IS RELATED TO JOY BUT IS SOMEWHAT DIFFERENT BECAUSE OF THE ELEMENT OF FUNNINESS INVOLVED. ACCORDING TO R. MARTIN AND KUIPER (2016), MIRTH IS ACCOMPANIED BY ACTIVATION OF THE PLEASURE CIRCUITS IN THE LIMBIC SYSTEM AS WELL AS VARIOUS AUTONOMIC AND ENDOCRINE RESPONSES, AND IT IS WHAT MAKES HUMOR SO ENJOYABLE. THE EMOTION OF MIRTH MAY OCCUR WITH VARIOUS DEGREES OF INTENSITY, FROM MILD FEELINGS OF AMUSEMENT TO HIGH LEVELS OF HILARITY. IT IS THE EMOTION OF MIRTH THAT IS ATTRIBUTED TO SOME OF THE BIOCHEMICAL CHANGES THAT ARE CONNECTED TO THE USE OF HUMOR. THESE CHANGES OCCUR IN THE BRAIN, AUTONOMIC NERVOUS SYSTEM, AND ENDOCRINE SYSTEM AND INVOLVE A VARIETY OF MOLECULES, MOST SPECIFICALLY, NEUROTRANSMITTERS, HORMONES, OPIOIDS, AND NEUROPEPTIDES.

# HUMOR

MULTIPLE THEORIES HAVE BEEN DEVELOPED TO EXPLAIN HUMOR PHENOMENA, AND WHILE THESE THEORIES ALL USE DIFFERENT APPROACHES TO THE SUBJECT, THEY ARE MOSTLY TRYING TO ANSWER THE QUESTION, WHY IS THIS FUNNY? YET JUST AS THE UNDERLYING CONCEPT REMAINS DIFFICULT TO DEFINE, IT ALSO IS DIFFICULT TO EXPLAIN. THE OLDEST AND LONGEST-HELD THEORY OF HUMOR IS SUPERIORITY THEORY, WHICH ASSUMES THAT ALL HUMOR IS BASED ON A PERSON OR PEOPLE TRYING TO FEEL SUPERIOR TO OTHERS. IT ALSO HOLDS THAT LAUGHTER MOSTLY INVOLVES LAUGHING AT SOMEONE ELSE TO THEIR DETRIMENT. LATER THEORIES FROM THE 1900S INCLUDE SIGMUND FREUD'S IDEAS THAT HUMOR IS RELATED TO EXPRESSION OF FORBIDDEN, AND OFTEN SEXUAL, THOUGHTS. THESE EARLY THEORIES MIGHT SEEM RATHER OMINOUS FROM TODAY'S VANTAGE POINT, BUT THEY HELP EXPLAIN THE NEGATIVE VIEW OF HUMOR AND USE OF HUMOR EXPRESSED BY PHILOSOPHERS, THE CHURCH, AND OTHER AUTHORITIES IN THE PAST.



# HUMOR

SUPERIORITY THEORY IS ONE OF THE OLDEST HUMOR THEORIES AND HAS ATTEMPTED TO EXPLAIN A COMMON AND EASILY RECOGNIZABLE FORM OF HUMOR, AGGRESSIVE STYLE HUMOR. ACCORDING TO THE GREEK PHILOSOPHERS PLATO AND ARISTOTLE, HUMOR IN THE FORM OF COMEDY INVOLVED IMITATING THE WORST ASPECTS OF MAN (MORREALL, 2014). USING THIS TYPE OF HUMOR PRESUMABLY GIVES PLEASURE FROM FEELINGS OF SUPERIORITY WHEN WE OBSERVE THOSE OF LOWER STATUS AND CONTRAST THEIR WAYS WITH OURS. THIS EFFECT MAY BE WHY THE ANCIENT PHILOSOPHERS ALSO ADVOCATED AGAINST USE OF HUMOR, SAYING THAT PEOPLE OF WISDOM SHOULD AVOID OUTBURSTS OF LAUGHTER BECAUSE IT DEFLATED OTHERS.



# HUMOR

UNFORTUNATELY, THE SUPERIORITY THEORY OF HUMOR REIGNED SUPREME FOR CENTURIES AND HAD A LONG-LASTING AND SIGNIFICANT EFFECT ON HOW HUMOR AND COMEDY WERE VIEWED BY SCHOLARS AND PHILOSOPHERS. IT MAY COME AS A SURPRISE TO MANY PEOPLE TODAY, BUT BEFORE 1800 MOST WRITTEN WORK CONCERNING THE USE OF HUMOR VIEWED IT IN A NEGATIVE LIGHT AND USE OF COMEDY AND LAUGHTER WAS WIDELY DISCOURAGED BY THOSE IN AUTHORITY. IT WAS BELIEVED THAT HUMOR WAS AN ACTIVITY BEST AVOIDED BY THE UPPER CLASS WHEN IN PUBLIC, ONE THAT SHOULD BE LEFT TO THE LOWER CLASS AND PRESUMABLY CRUDER PEOPLE. ACCORDING TO A RECENT REVIEW BY MORREALL (2014), EARLY PHILOSOPHERS SUCH AS PLATO THOUGHT THAT LAUGHTER IMPLIED SCORN FOR OTHERS AND THUS SHOULD BE AVOIDED BY PEOPLE OF SUBSTANCE, AND THAT COMEDY SHOULD BE LEFT TO SLAVES OR HIRED ALIENS AND NOT RECEIVE ANY SERIOUS CONSIDERATION. OTHERS ESPOUSED THAT LAUGHTER WAS AN UNNATURAL HABIT THAT HUMANS ACQUIRED AS INFANTS BECAUSE THEIR CARETAKERS TICKLED THEM MERCILESSLY AND BOMBARDED THE POOR BABES WITH ABSURD STIMULI. LAUGHTER WAS VIEWED AS BOTH PSYCHOLOGICALLY AND PHYSICALLY HARMFUL, AND MANY PEOPLE BELIEVED THAT THE ACT OF LAUGHING LED TO DAMAGE TO THE FACE, MAKING PEOPLE UGLY. LAUGHTER WAS ALSO BLAMED FOR INTERFERING WITH RESPIRATION AND BLOOD CIRCULATION, LEADING TO THE BELIEF THAT PEOPLE COULD EASILY LAUGH THEMSELVES TO DEATH.

# HUMOR

THE CHRISTIAN CHURCH BUILT ON THE VIEWS OF EARLY PHILOSOPHERS AND OTHERS. THE ONE TIME THAT GOD LAUGHS IN THE BIBLE IS DESCRIBED IN A SCORNFUL WAY, AS SITTING IN HEAVEN WITH HIS ANOINTED HOST AND LAUGHING WITH DERISION AT THEIR ENEMIES (PSALM 2:2-5). IT IS A COMMON MISCONCEPTION THAT THE BIBLE SUPPORTS THE VIEW THAT LAUGHTER IS THE BEST MEDICINE. IN REALITY, THE VERSE IS "A MERRY HEART DOETH GOOD LIKE A MEDICINE: BUT A BROKEN SPIRIT DRIETH THE BONES" (PROVERBS 17:22, KING JAMES VERSION). ALTHOUGH A CHEERFUL ATTITUDE WAS VIEWED AS BEING HEALTHIER THAN A DEPRESSIVE ATTITUDE, THIS VIEW IS NOT REALLY AN ENDORSEMENT OF HUMOR, COMEDY, OR LAUGHTER. GIVEN THESE NEGATIVE ATTITUDES ABOUT HUMOR AND LAUGHTER, IT SHOULD COME AS NO SURPRISE THAT WHEN OLIVER CROMWELL AND THE PURITANS CAME TO RULE IN MID-SEVENTEENTH CENTURY ENGLAND, THEY OUTLAWED COMEDY, ALONG WITH SEVERAL OTHER ENJOYABLE ACTIVITIES, SUCH AS SPORTS, GAMES OF CHANCE, WEARING OF COLORFUL CLOTHING, AND THE CELEBRATION OF CHRISTMAS. OF COURSE, THESE SAME PURITANS BROUGHT THEIR IDEAS OF PROPRIETY WITH THEM TO NEW ENGLAND, WIDELY DISCOURAGING PUBLIC ACTS OF COMEDY OR LAUGHTER IN WHAT LATER BECAME THE UNITED STATES (MORREALL, 2014). AS YOU CAN SEE, THE SUPERIORITY THEORY OF HUMOR WAS WIDELY INFLUENTIAL, BUT IT MOSTLY ADDRESSES ONLY A CERTAIN TYPE OF HUMOR, WHICH IS KNOWN TODAY AS AGGRESSIVE STYLE HUMOR, AND DOES NOT ADEQUATELY EXPLAIN OTHER TYPES OF HUMOR. THIS IS WHY THIS PARTICULAR THEORY HAS MOSTLY FALLEN OUT OF FAVOR (LEFCOURT & MARTIN, 2012). LATER THEORIES ATTEMPT TO BE MORE INCLUSIVE OF BOTH POSITIVE AND NEGATIVE TYPES OF HUMOR. HOWEVER, NONE OF THESE THEORIES HAVE REACHED GENERAL ACCEPTANCE, AND MOST DO NOT ADEQUATELY EXPLAIN ALL TYPES OF HUMOR.

# HUMOR

IN THE 1960 TRANSLATION OF HIS BOOK *JOKES AND THEIR RELATION TO THE UNCONSCIOUS*, FREUD DIFFERENTIATED BETWEEN HUMOR, WHICH HE VIEWED AS A TYPE OF DEFENSE MECHANISM, AND JOKES, WHICH WERE A SOCIALLY ACCEPTABLE WAY OF SATISFYING MAN'S NEED TO EXPRESS IMPULSES THAT ARE NOT VIEWED AS SOCIALLY ACCEPTABLE (FREUD, 1905/1960). FREUD THEORIZED THAT JOKING GIVES PLEASURE BY PERMITTING BRIEF GRATIFICATION OF SOME HIDDEN OR FORBIDDEN WISH WHILE AT THE SAME TIME REDUCING THE ANXIETY OCCURRING FROM THE INHIBITION OF THE WISH. FREUD SAW JOKING AS A WAY FOR ADULTS TO THINK LIKE CHILDREN AND ESCAPE THE CONSTRAINTS OF RATIONALITY AND LOGIC. FREUD ALSO DIFFERENTIATED BETWEEN WHAT HE CONSIDERED INNOCENT AND TENDENTIOUS JOKES. TENDENTIOUS JOKES ARE THOSE THAT HAVE SEXUAL OR AGGRESSIVE CONTENT AND THE ABILITY TO ELICIT HOWLING LAUGHTER. INNOCENT JOKES HAVE LESS EMOTIONAL IMPACT AND TEND TO CAUSE A CHUCKLE OR LESS. ACCORDING TO FREUD (1905/1960), SEXUAL HUMOR ALLOWS US TO DISGUISE SEXUAL AGGRESSION AND HOSTILITY. POETIC METAPHORS, DOUBLE ENTENDRES, AND GRAPHIC IMAGES THAT OVERTLY PORTRAY ONE OBJECT WHILE REMINDING THE VIEWER OF MALE OR FEMALE SEX ORGANS HAVE ALL BEEN USED TO CONVEY A SEXUAL POINT OR IMAGE WHILE STILL ALLOWING THE USER TO SHIELD THE YOUNG AND NAÏVE FROM THE BRUNT OF THE JOKE. FREUD'S THEORY SAYS HUMOR CAN HELP MEET A HUMAN NEED IN A SOCIALLY ACCEPTABLE WAY BY ALLOWING FOR THE RELEASE OF BUILT-UP SEXUAL TENSION AND NERVOUS ENERGY. THIS LATTER PART OF FREUD'S THEORY IS ALSO REFERRED TO AS RELIEF THEORY (MORREALL, 2014).



# HUMOR

RELIEF THEORY ALSO VIEWS HUMOR AND ITS HUMOR RESPONSE OF LAUGHTER AS A WAY TO SAFELY AND EFFECTIVELY RELEASE NERVOUS ENERGY. LIKE FREUD'S THEORY, RELIEF THEORY SUPPORTS THE VIEW THAT LAUGHTER MAY BE ELICITED BY DIRTY JOKES BECAUSE THESE JOKES ATTEMPT TO DEAL WITH THE TENSION OF SEXUAL INHIBITIONS. BUT RELIEF THEORY RECOGNIZES THAT THIS IS NOT THE ONLY TYPE OF NERVOUS ENERGY PEOPLE HAVE, AND IT CAN BE USED IN A VARIETY OF SITUATIONS TO RELEASE PENT-UP ANXIETIES. FOR INSTANCE, LAUGHTER MAY BE USED DURING THE ANXIOUS TIME SURROUNDING DEATH, AND IT IS SOMETIMES CALLED GALLOWS HUMOR (MORREALL, 2014). THE FOLLOWING IS AN EXAMPLE OF RELIEF, OR GALLOWS, HUMOR DURING A FUNERAL. DURING THE FUNERAL PREPARATIONS FOR HER HUSBAND, THE WIFE ASKED THE RABBIS OFFICIATING TO ADD A LITTLE HUMOR BECAUSE HUMOR WAS SOMETHING IMPORTANT TO HER HUSBAND. HER HUSBAND, JOE, LOVED TO TALK. AT THE FUNERAL, ONE OF THE RABBIS DESCRIBED HIS FIRST MEETING WITH JOE. HE SHARED HOW JOE TOOK HIM ON A TOUR OF THE AREA AND STATED, "AND HE TALKED, AND HE TALKED, AND HE TALKED." GIGGLES COULD BE HEARD THROUGHOUT THE FUNERAL HOME BECAUSE THOSE WHO KNEW JOE WELL COULD IDENTIFY WITH HOW HE TALKED. THE GIGGLES RESULTED IN LESS TENSION FOR THE BEREAVED.



# HUMOR

IN RELIEF THEORY, PEOPLE LAUGH WHEN PHYSICAL ENERGIES BUILD, AND INDIVIDUALS ARE NOT ABLE TO CHANNEL THAT ENERGY INTO OTHER ACCEPTABLE OUTLETS. LAUGHTER OCCURS WITH MANY EVENTS IN OUR LIVES. WE LAUGH WHEN WE ARE NERVOUS. WE LAUGH AT THINGS WE FIND HUMOROUS. WE CAN ALSO LAUGH WHEN WE ARE FRIGHTENED OR FIND THINGS INCONGRUOUS TO WHAT WE EXPECTED (MORREALL, 2014). LAUGHTER AS A FORM OF RELIEF MAY HAVE BEEN OUR ANCESTORS' WAY OF SIGNALING THE END OF A SIGNIFICANT THREAT. THIS RELIEF RESPONSE IS COMMONLY USED IN THE FILM INDUSTRY, WHEN TENSION AND SUSPENSE BUILD TO A CRESCENDO AND THEN AN ASIDE OR SIGHT GAG IS INTERJECTED TO ALLOW A RELEASE. IN LIFE, RELIEF LAUGHTER CAN ALLOW A PERSON TO COPE WITH STRESSFUL OR DANGEROUS SITUATIONS.

# HUMOR

PARADOX AND METACOMMUNICATION THEORY STATES THAT HUMOR IS BEST UNDERSTOOD AS A TYPE OF COMMUNICATION CONNECTED TO PARADOX, PLAY, AND THE RESOLUTION OF LOGICAL PROBLEMS (BERGER, 2016). IT IS RELATED TO OTHER COGNITIVE THEORIES OF HUMOR THAT VIEW THE PUNCH LINE OF A JOKE AS A COMBINATION OF COMMUNICATION AND METACOMMUNICATION, WHERE WE ARE UNEXPECTEDLY CONFRONTED BY AN EXPLICIT-IMPLICIT REVERSAL OR ARE EXPECTING ONE THING AND GIVEN ANOTHER. BERGER REFERS TO THIS THEORY AS BEING SEMIOTIC, OR RELATED TO THE SCIENCE OF SIGNS. HE CONTENDS THAT A COMIC FILM, FOR EXAMPLE, IS A SERIES OF SIGNS AND CODES THAT PEOPLE INTERPRET TO MAKE MEANING. HOW PEOPLE PROCESS THIS INTERPRETATION (COGNITIVE WORK) IS THE FOCUS OF SEMIOTIC ANALYSIS THAT CAN LEAD TO THE RESPONSE KNOWN AS HUMOR. BERGER ALSO SUPPORTS THAT HUMOR CAN BE USED AS A COPING STRATEGY TO SHIFT PERSPECTIVES OR CHANGE THE VIEW OF A SITUATION OR EVENT. HUMOR IS SEEN TO WORK AS A BUFFER IN TWO DIFFERENT WAYS. FIRST, BY CHOOSING TO VIEW THE SITUATION IN A HUMOROUS WAY, THE SITUATION BECOMES LESS THREATENING. SECOND, USING HUMOR CAN MAKE STRESSFUL SITUATIONS APPEAR LESS INFLUENTIAL.

# HUMOR

BERGER (2016) ALSO LOOKED AT SEVERAL HUMOR TECHNIQUES AND ASSIGNED THEM NUMBERS. FROM THIS, HE CAN ANALYZE A JOKE OR OTHER HUMOR STIMULI AND SAY, IN THIS JOKE, NUMBER 1, 6, AND 10 ARE USED, AND THUS CREATE A SORT OF A FORMULA THAT EXPLAINS WHICH HUMOR TECHNIQUES WERE USED IN THAT PARTICULAR PIECE OF HUMOR. IN ADDITION, BERGER ATTEMPTED TO CATEGORIZE VARIOUS HUMOR TECHNIQUES. HE HAS IDENTIFIED 45 TECHNIQUES USED TO STIMULATE A HUMOR RESPONSE BUT STATED THAT NEARLY ALL COULD BE CLASSIFIED UNDER ONE OF FOUR CATEGORIES:

- HUMOR BASED ON LANGUAGE, WITH EXAMPLES SUCH AS INSULTS, EXAGGERATION, IRONY, AND OVER LITERALNESS
- HUMOR BASED ON LOGIC, WITH EXAMPLES SUCH AS ABSURDITY, UNMASKING, MISTAKES, AND REVERSAL
- HUMOR BASED ON IDENTITY, WITH EXAMPLES SUCH AS IMITATION, STEREOTYPING, AND IMPERSONATION
- HUMOR BASED ON ACTION, WITH EXAMPLES SUCH AS SLAPSTICK AND OTHER FORMS OF PHYSICAL COMEDY



# HUMOR

MANY THEORISTS CLAIM THAT INCONGRUITY IS THE MAIN INGREDIENT OF HUMOR, AND IT CAN BE FOUND IN THE PUNCH LINE OF MOST JOKES. IT ALSO CAN BE FOUND IN SITUATIONAL HUMOR, WHEN THINGS SUDDENLY ARE NOT WHAT WE EXPECTED, AND WE FIND IT FUNNY. ACCORDING TO MORREALL (2014), INCONGRUITY THEORY HOLDS THAT HUMOR IS A REACTION TO SOMETHING THAT VIOLATES A PERSON'S NORMAL EXPECTATIONS:

- FOR EXAMPLE, IF I HEAR A KNOCK AT MY FRONT DOOR AND GO TO ANSWER IT, MY EXPECTATION IS THAT SOMEONE IS OUT THERE WHO WANTS TO INTERACT WITH ME – VISIT WITH ME, ASK ME FOR DIRECTIONS, GIVE ME SOME NEWS, DELIVER A PACKAGE, ETC. IF, WHEN I OPEN THE DOOR, IT'S A DELIVERY PERSON HOLDING A PACKAGE, THAT'S A NORMAL EXPERIENCE. IF, ON THE OTHER HAND, I OPEN THE DOOR TO FIND THE NEIGHBOR'S DOG WHAPPING HER TAIL AGAINST MY DOOR, THAT'S INCONGRUOUS. (ADAPTED FROM MORREALL, 2014, P. 124)

# HUMOR

INCONGRUITY INCLUDES THE ABILITY TO PERCEIVE ABSURDITY EVEN IN SERIOUS SITUATIONS. CURRENTLY, INCONGRUITY THEORY IS ONE OF THE MOST POPULAR HUMOR THEORIES AND CAN BE APPLIED TO BOTH INTENTIONAL COMMUNICATION-STYLE HUMOR AND NONINTENTIONAL SITUATIONAL HUMOR. THIS THEORY ENCOMPASSES THE ELEMENT OF SURPRISE THAT COMES WITH A CONFLICT OF IDEAS OR EMOTIONS AND RESULTS IN A BURST OF LAUGHTER. IN A JOKE, THE PUNCH LINE GENERATES A SURPRISE, AND AN INCONGRUOUS SITUATION LEADS TO LAUGHTER OR HUMOROUS RESPONSE. FOR A JOKE TO BE UNDERSTOOD ACCORDING TO THIS THEORY, A COGNITIVE PROCESS OCCURS. THE PERSON TELLING THE JOKE SETS UP THE SITUATION THAT HAD AN EXPECTED OUTCOME. HOWEVER, THE OUTCOME IS NOT WHAT IS EXPECTED. WHEN THE PERSON REALIZES THAT THE ENDING IS DIFFERENT THAN EXPECTED, HE OR SHE PROCESSES THIS INFORMATION AND “GETS THE JOKE” (MORREALL, 2014).

# HUMOR

AN EXAMPLE OF THIS THEORY IS ALSO SEEN IN FRACTURED COMMUNICATION OR THE MISUSE OF WORDS. THE FOLLOWING CHARTING EXAMPLES ILLUSTRATE INCONGRUITY THEORY IN THIS WAY:

- “DISCHARGE STATUS: ALIVE, BUT WITHOUT PERMISSION. ”
- “CLIENT ATE WHOLE TRAY ”
- “BY THE TIME SHE WAS ADMITTED TO THE HOSPITAL, HER RAPID HEART HAD STOPPED, AND SHE WAS FEELING MUCH BETTER.”
- “PATIENT REFERRED TO HOSPITAL BY PRIVATE PHYSICIAN WITH GREEN STOOLS.”
- “MYCOSTATIN VAGINAL SUPPOSITORIES. INSERT DAILY UNTIL EXHAUSTED.”



# HUMOR

ANOTHER THEORY HOLDS THAT PLAY IS AN ESSENTIAL PART OF HUMOR. PLAY THEORY PURPORTS THAT THE ENJOYMENT OF HUMOR IS BASED ON THE AROUSAL OF A PLAYFUL MOOD. PLAYFULNESS LEADS TO INCREASED SPONTANEITY AND ENJOYMENT, WHICH ALLOWS THE MIND TO PROCESS EXPERIENCES AS MORE HUMOROUS THAN IT CAN WHEN YOU ARE SERIOUS. IF THIS PROPOSITION IS TRUE, THEN ADDING A SENSE OF PLAYFULNESS TO CARE SETTINGS MIGHT RESULT IN MORE ENJOYMENT AND IMPROVED RELATIONSHIPS BETWEEN ALL INDIVIDUALS WITH WHOM THE PROVIDER COMES IN CONTACT (WARREN & MCGRAW, 2014).

# HUMOR

HAVE YOU EVER WALKED INTO A ROOM AND EXPERIENCED A SENSE OF TENSION THAT FELT VERY UNCOMFORTABLE? MAYBE SOMEONE JUST HAD A FIGHT WITH SOMEONE ELSE, OR MAYBE SOMEONE WAS DYING OR IN A LOT OF PAIN. WHATEVER THE PROBLEM, THE ROOM FELT FULL OF NEGATIVE VIBES. IF A SENSE OF PLAYFULNESS, DONE WITH SENSITIVITY AND RESPECT, WERE TO BE BROUGHT INTO THIS ENVIRONMENT, THEORETICALLY IT COULD HELP LIGHTEN THE MOOD. TAKE THE FOLLOWING SITUATION AS AN EXAMPLE:

A RESIDENT IS VERY ILL, AND THE FACILITY DOCTOR DOES NOT WANT TO LEAVE THE RESIDENT FOR LONG. THE DOCTOR MISSED DINNER. WHILE THE DOCTOR IS SITTING WITH THE RESIDENT, THE FACILITY ADMINISTRATOR WALKS IN TO CHECK ON THE RESIDENT. THE DOCTOR COMPLAINS OF BEING HUNGRY AND ASKS THE ADMINISTRATOR TO BRING SOMETHING TO EAT. DIETARY SERVICE IS CLOSED, AND THERE IS NOTHING ON THE UNIT EXCEPT CUSTARD AND JUICE. THE DOCTOR DESIRES SOMETHING MORE SUBSTANTIAL, BUT NONE OF THE STAFF HAVE ANYTHING MORE TO OFFER. THE DOCTOR, PROBABLY BECAUSE OF HUNGER, BECOMES MORE IRRITABLE. THE ADMINISTRATOR REMEMBERS THAT THE HUMOR CART HAS A RUBBER CHICKEN. THE ADMINISTRATOR GETS THE CHICKEN, PUTS A BLUE RIBBON AROUND ITS NECK, FOLDS IT INTO A DISH, PUTS A SILVER COVER OVER IT, AND BRINGS IT TO THE DOCTOR. THE DOCTOR'S EYES LIGHT UP WHEN SEEING THE DISH; THE DOCTOR TAKES THE COVER OFF AND THE CHICKEN UNFOLDS. IN ANGER, THE DOCTOR SAYS, "WHAT THE HELL IS THIS?" THE ADMINISTRATOR LOOKS AND SAYS, "I THINK IT IS CHICKEN CORD N' BLUE." AT THAT, THE DOCTOR STARTS TO LAUGH, AND THE ADMINISTRATOR AND THE DOCTOR LAUGH TOGETHER. THE ADMINISTRATOR THEN BRINGS THE CUSTARD AND JUICE, WHICH THE DOCTOR ACCEPTS WITH A MORE CHEERFUL ATTITUDE.

# HUMOR

BENIGN VIOLATION THEORY, A RELATIVELY NEWER HUMOR THEORY, TAKES WORK FROM PRIOR THEORIES AND INTEGRATES THEM TO PROPOSE THAT A HUMOR RESPONSE OCCURS WHEN THREE THINGS ARE PRESENT:

- THE SITUATION IS A VIOLATION.
- THE SITUATION IS PERCEIVED AS BEING BENIGN.
- BOTH PERCEPTIONS OCCUR AT THE SAME TIME.

A VIOLATION IS ANYTHING THAT THREATENS ONE'S BELIEFS OR EXPECTATIONS OF WHAT THE WORLD SHOULD BE, WHICH BUILDS ON INCONGRUITY THEORY IN SOME ASPECT. ACTIONS THAT BREAK SOCIAL AND CULTURAL NORMS CAN BE VIEWED AS VIOLATIONS. BREAKING NORMS MAY GO ALONG WITH EXPRESSION OF THINGS THAT WE NORMALLY REPRESS, AS IN FREUD'S VIEW OF HUMOR. HOWEVER, ACCORDING TO BENIGN VIOLATION THEORY, FOR THESE THINGS TO BE VIEWED AS HUMOROUS, THEY MUST ALSO BE VIEWED AS BEING NON-THREATENING OR BENIGN TO THE TARGET AUDIENCE.



# HUMOR

ONE EXAMPLE OF BENIGN VIOLATION THEORY IS THAT OF PLAY FIGHTING AND TICKLING, WHICH CAN PRODUCE LAUGHTER IN HUMANS AND OTHER PRIMATES. IF THESE ACTIONS ARE SEEN BOTH AS A VIOLATION AND NONTHREATENING, THEY ARE FUNNY. IF, HOWEVER, THE TICKLING ATTACK STOPS (NO VIOLATION) OR THE ATTACK BECOMES TOO AGGRESSIVE, THE LAUGHTER WILL STOP. IN TERMS OF VERBAL HUMOR, THIS SITUATION EXPLAINS WHY A JOKE THAT IS VIEWED BY THE RECEPTOR AS EITHER TOO TAME (NO VIOLATION) OR TOO RISQUÉ (NOT BENIGN) MAY NOT ELICIT LAUGHTER (WARREN & MCGRAW, 2015).

# HUMOR

ALTHOUGH WE FREQUENTLY THINK OF HUMOR AS A POSITIVE THING, MANY PEOPLE FORGET THAT HUMOR CAN HAVE SOME NEGATIVE ASPECTS. HUMOR CAN BE USED TO ENHANCE SELF OR RELATIONSHIPS, BUT IT CAN ALSO BE USED IN DETRIMENTAL OR INJURIOUS WAYS (ZEIGLER-HILL, MCCABE, & VRABEL, 2016). ADMINISTRATORS NEED TO BE AWARE OF THE POSSIBLE NEGATIVE ASPECTS SO THAT THEY CAN GAIN A BROADER PERSPECTIVE AND INCREASE AWARENESS THAT NEGATIVE HUMOR CAN HURT THE INDIVIDUAL PRODUCING THE HUMOR OR THE PERSON RECEIVING THE HUMOROUS MESSAGE.

# HUMOR

SELF-ENHANCING HUMOR IS A POSITIVE TYPE OF HUMOR USED TO PROTECT THE SELF FROM A SITUATION THAT IS VIEWED AS NEGATIVE OR THREATENING IN SOME WAY. IT IS OFTEN USED WITHOUT THE PERSON EVEN REALIZING THEY ARE DOING IT, AS AN UNCONSCIOUS DEFENSE MECHANISM. THIS TYPE OF HUMOR CAN BE USED BY THE PERSON AS A WAY TO REFRAME A STRESSFUL SITUATION AND THUS AVOID BEING OVERWHELMED BY NEGATIVE EMOTIONS. IT CAN ALSO INVOLVE MAKING YOURSELF THE TARGET OF THE JOKE IF IT IS DONE IN A GOOD-NATURED WAY. THIS TYPE OF HUMOR RELATES BACK TO FREUD AND THE RELIEF THEORY'S VIEW THAT HUMOR CAN WORK AS A DEFENSE MECHANISM AND AS A WAY TO RELIEVE TENSION (ZEIGLER-HILL ET AL., 2016).



# HUMOR

LIKE SELF-ENHANCING HUMOR, AFFILIATIVE HUMOR IS ANOTHER POSITIVE HUMOR STYLE. HOWEVER, INSTEAD OF BEING USED PRIMARILY TO PROTECT THE USER FROM NEGATIVE EMOTIONS OR SITUATIONS, THIS TYPE OF HUMOR IS USED TO HELP OTHERS FEEL BETTER IN A STRESSFUL SITUATION AND TO CREATE BETTER RELATIONSHIPS BETWEEN THE USER AND OTHERS. THE PURPOSE OF AFFILIATIVE HUMOR IS TO BRING PEOPLE TOGETHER BY HELPING THEM SEE THE HUMOR IN EVERYDAY LIFE. THIS PURPOSE MAY BE ACCOMPLISHED BY RELATING FUNNY STORIES OR USING OTHER MEANS TO HELP PUT PEOPLE AT EASE DURING A DIFFICULT SITUATION. IT REQUIRES THE USER TO HAVE A CERTAIN LEVEL OF SELF-ACCEPTANCE AND COMFORT WITH THE SITUATION AND A POSSIBLY UNCONSCIOUS DESIRE TO PUT OTHERS AT EASE (ZEIGLER-HILL ET AL., 2016).

# HUMOR

FOR A MORE CLINICALLY FOCUSED EXAMPLE, PATIENTS WITH CANCER CAN USE THIS TYPE OF HUMOR TO DEFLECT ATTENTION AWAY FROM THE CANCER AND ALLOW OTHERS TO RELAX WITH THE CANCER SURVIVOR.

ANN, AN ADULT RESIDENTIAL FACILITY ADMINISTRATOR, MET HER NEW CLIENT, MR. JONES, A QUIET MAN WHO HAD A GORGEOUS HEAD OF HAIR. HIS CHEMOTHERAPY HAD THE POTENTIAL TO CAUSE HAIR LOSS, AND ANN VOICED HER CONCERN ABOUT HOW HE MIGHT REACT IF THIS WERE TO HAPPEN. MR. JONES JUST SMILED AND SAID HE COULD HANDLE IT.

THE NEXT DAY, ANN RETURNED FOR A FOLLOW-UP VISIT. MRS. JONES OPENED THE DOOR, LOOKING QUITE UPSET. MR. JONES SAT IN THE COMMON AREA, WEARING A HAT AND SCOWLING. "WHAT'S WRONG?" ASKED ANN.

# HUMOR

MR. JONES GROWLED, “YOU SAID I MIGHT LOSE HAIR, BUT THIS IS RIDICULOUS!” HE PULLED OFF HIS HAT – HE WAS TOTALLY BALD!

ANN GASPED, AND THEN SHE NOTICED MR. JONES BREAK INTO A GRIN. SHE LOOKED AT HIS WIFE, WHO WAS ALSO SMILING – AND HOLDING UP HIS TOUPEE! (P. 27)

AS YOU CAN SEE, THIS JOKE HELPED THE CLIENT BOTH DECREASE THE STRESS INVOLVED IN DEALING WITH A SERIOUS DIAGNOSIS AND DEVELOP A BETTER RELATIONSHIP WITH HIS NEW FACILITY ADMINISTRATOR. BUT HE COULD NOT HAVE DONE THIS IF HE HAD NOT BEEN COMFORTABLE AND RELATIVELY ACCEPTING OF BOTH HIS BALDNESS AND USE OF A TOUPEE.



# HUMOR

SELF-DEFEATING HUMOR IS USED IN A SELF-DEPRECIATING MANNER TO GAIN ACCEPTANCE FROM OTHERS. IT CREATES NEGATIVE FEELINGS IF THE PERSON IS PUTTING THEMSELVES IN A NEGATIVE LIGHT JUST TO TRY TO FIT INTO A GROUP. IT MIGHT BE SEEN WHEN A PERSON LAUGHS WITH OTHERS BUT DOES NOT REALLY FEEL LIKE LAUGHING, PARTICULARLY WHEN THE JOKE INVOLVES RIDICULING THEMSELVES OR OTHER MEMBERS OF A GROUP THAT THEY IDENTIFY WITH. AN EXAMPLE OF USING THIS TYPE OF HUMOR IS A WOMAN WHO SHARES JOKES ABOUT DUMB BLONDE WOMEN WITH HER MALE COWORKERS TO FIT IN. SELF-DEFEATING HUMOR MAY BE VIEWED AS DENIAL OR REPRESSION OF ONE'S TRUE FEELINGS AS A MEANS OF GAINING APPROVAL FROM OTHERS. IT IS THEORIZED THAT THIS TYPE OF HUMOR IS ASSOCIATED WITH DEPRESSION AND ANXIETY AND IS NEGATIVELY CORRELATED WITH PSYCHOLOGICAL WELL-BEING AND SELF-ESTEEM (ZEIGLER-HILL ET AL., 2016).

# HUMOR

AGGRESSIVE STYLE HUMOR WORKS AS A WAY OF DISTANCING ONESELF FROM OTHERS. IT MAY BE USED TO PROVIDE A PSYCHOLOGICAL BARRIER FOR PEOPLE WITH LOW SELF-ESTEEM OR TO ENHANCE THE SOCIAL STANDING OF ONE GROUP WHO FEELS THREATENED IN SOME WAY BY ANOTHER GROUP. IT IS A NEGATIVE FORM OF HUMOR THAT WORKS BY INSULTING OR MAKING FUN OF OTHER PEOPLE OR GROUPS OF PEOPLE. IT FREQUENTLY RELIES ON USE OF STEREOTYPES OF GENDER OR RACE OR CLASS GROUPINGS. A PERSON WHO USES THIS TYPE OF HUMOR MAY OBTAIN A HUMOR RESPONSE FROM THOSE NOT IN THE GROUP WHO ARE BEING TARGETED FOR RIDICULE, WHEREAS THOSE IN THE TARGET GROUP WILL LIKELY HAVE A NEGATIVE RESPONSE TO THIS TYPE OF HUMOR. THE PERSON USING THIS HUMOR MAY NOT REALIZE THE NEGATIVE EFFECTS HE OR SHE IS HAVING. AGGRESSIVE HUMOR IS ASSOCIATED WITH HOSTILITY, ANGER, AND AGGRESSION AND IS NEGATIVELY RELATED TO CONSCIENTIOUSNESS AND RELATIONSHIP SATISFACTION (ZEIGLER-HILL ET AL., 2016). THIS TYPE OF HUMOR IS ALSO CALLED DISPARAGEMENT HUMOR, BECAUSE IT INVOLVES DISPARAGEMENT OF A GROUP OR GROUPS OF PEOPLE AS THE METHOD OF ELICITING A HUMOR RESPONSE IN A SEPARATE GROUP OF PEOPLE (FORD, RICHARDSON, & PETIT, 2015). WHEN ONE IS LOOKING AT THE DIFFERENT DEFINITIONS OF HUMOR, IT IS APPARENT THAT THERE ARE MANY THOUGHTS ABOUT WHAT HUMOR IS. THIS IS ONE REASON WHY RESEARCHING HUMOR IS DIFFICULT. DEFINING AND MEASURING HUMOR ITSELF IS YET A WORK IN PROGRESS.

# HUMOR

OUR DAY MAY BE BOMBARDED BY RADIO HOSTS' WITTY COMMENTS OR JOKES AND TELEVISION PROGRAMS IN THE FORMS OF SITCOMS, BLOOPER SHOWS, STAND-UP COMEDY, POLITICAL SATIRE, AND HUMOROUS ADVERTISEMENTS. WE MIGHT PICK UP A NEWSPAPER AND READ THE COMICS, GLANCE AT CARTOONS, OR READ A HUMOROUS REPORT OF AN EVENT. PERHAPS WE WILL WATCH A FUNNY MOVIE OR READ A HUMOROUS BOOK. VARIOUS SITUATIONS MIGHT OFFER HUMOR IN ANY GIVEN DAY. HOWEVER, HOW WE EXPERIENCE THIS HUMOR AND WHETHER A GIVEN STIMULUS WILL CAUSE A HUMOR RESPONSE IN US DEPENDS ON BOTH INTERNAL AND EXTERNAL FACTORS. OUR HISTORY, CULTURE, AND CURRENT EMOTIONAL STATE CAN ALL INFLUENCE OUR RESPONSE. AND AS PREVIOUS RESEARCH HAS DEMONSTRATED, OUR RESPONSE CAN ALSO BE INFLUENCED BY THE HUMOR RESPONSES OF THOSE AROUND US (R. MARTIN & KUIPER, 2016).



# HUMOR

MOST OF THE HUMOR AND LAUGHTER EXPERIENCED BY HUMANS COMES NOT FROM DELIBERATE COMEDY, BUT RATHER ARISES SPONTANEOUSLY FROM OUR NATURAL ENVIRONMENT. IT MIGHT OCCUR FROM WATCHING A CAT AT PLAY OR CHATTING WITH A FRIEND OR COWORKER. INTERPERSONAL HUMOR MIGHT HAPPEN IN A FORMAL OR INFORMAL SITUATION, AND IT MIGHT HAPPEN BETWEEN LOVERS, FAMILY, FRIENDS, MANAGERS, DOCTORS, NURSES, STORE CLERKS, OR COMPLETE STRANGERS STANDING IN LINE AT THE GROCERY STORE. IT IS THIS SPONTANEOUS TYPE OF HUMOR THAT IS MOST OFTEN EXPERIENCED IN THE CARE SETTING. IT IS STAFF MEMBERS SHARING A LAUGH ABOUT A DIFFICULT SUBJECT OR CLIENT. IT IS THE SOCIAL WORKER REACHING OUT IN A HUMOROUS MANNER TO HELP THE FAMILY DEAL WITH NEW SITUATIONS AND CHANGES IN LIFESTYLE. IT IS THE NURSE GENTLY ENCOURAGING THE NEWLY DIAGNOSED PATIENT WITH DIABETES TO ADMINISTER HIS OR HER OWN INSULIN. IT IS THE CONNECTION THAT OCCURS WITH A SMILE BETWEEN THE CARE PROVIDER AND THE CLIENT (R. MARTIN & KUIPER, 2016).

# HUMOR

HUMOR DEFIES A SINGLE SPECIFIC DEFINITION. IT IS A RESPONSE TO STIMULI THAT CAUSES POSITIVE CHANGES. THE CHANGE MAY BE ONE OF MOOD, ATTITUDE, HOPE, OR PERHAPS A CONNECTION TO OTHERS. AND JUST AS THERE ARE MULTIPLE DEFINITIONS OF HUMOR, THERE ARE ALSO MULTIPLE THEORIES OF HUMOR. THE MOST POPULAR ONE AMONG RESEARCHERS IS INCONGRUITY THEORY (WATSON, 2015). HOWEVER, IN REVIEWING THE THEORIES PRESENTED, IT IS POSSIBLE TO SEE THE AREAS OF VALIDITY IN EACH OF THEM. JOKES OFTEN ARE FUNNY BECAUSE OF THE ELEMENT OF INCONGRUITY. AT TIMES, THE RELIEF OF TENSION LEADS TO A LAUGH TO LIGHTEN THE MOOD OR CHANGE A PERSPECTIVE. THE ELEMENT OF PLAY AND RECOGNITION THAT SOMETHING IS MEANT TO BE FUNNY INCORPORATES THE COGNITIVE PROCESS OF UNDERSTANDING WITH THE SOCIAL ASPECTS OF RESPONSE TO OTHERS. THEORY ALSO PREDICTS THAT TO PERCEIVE AN EVENT AS FUNNY, WE MUST BELIEVE THAT IT IS A VIOLATION OF OUR ASSUMPTIONS BUT THAT THIS VIOLATION IS BENIGN OR NONTHREATENING. WHATEVER THEORY WE BELIEVE, WE KNOW THAT HUMOR HAS PHYSICAL AND PSYCHOSOCIAL VALUE.

# STRESS & THE IMMUNE SYSTEM

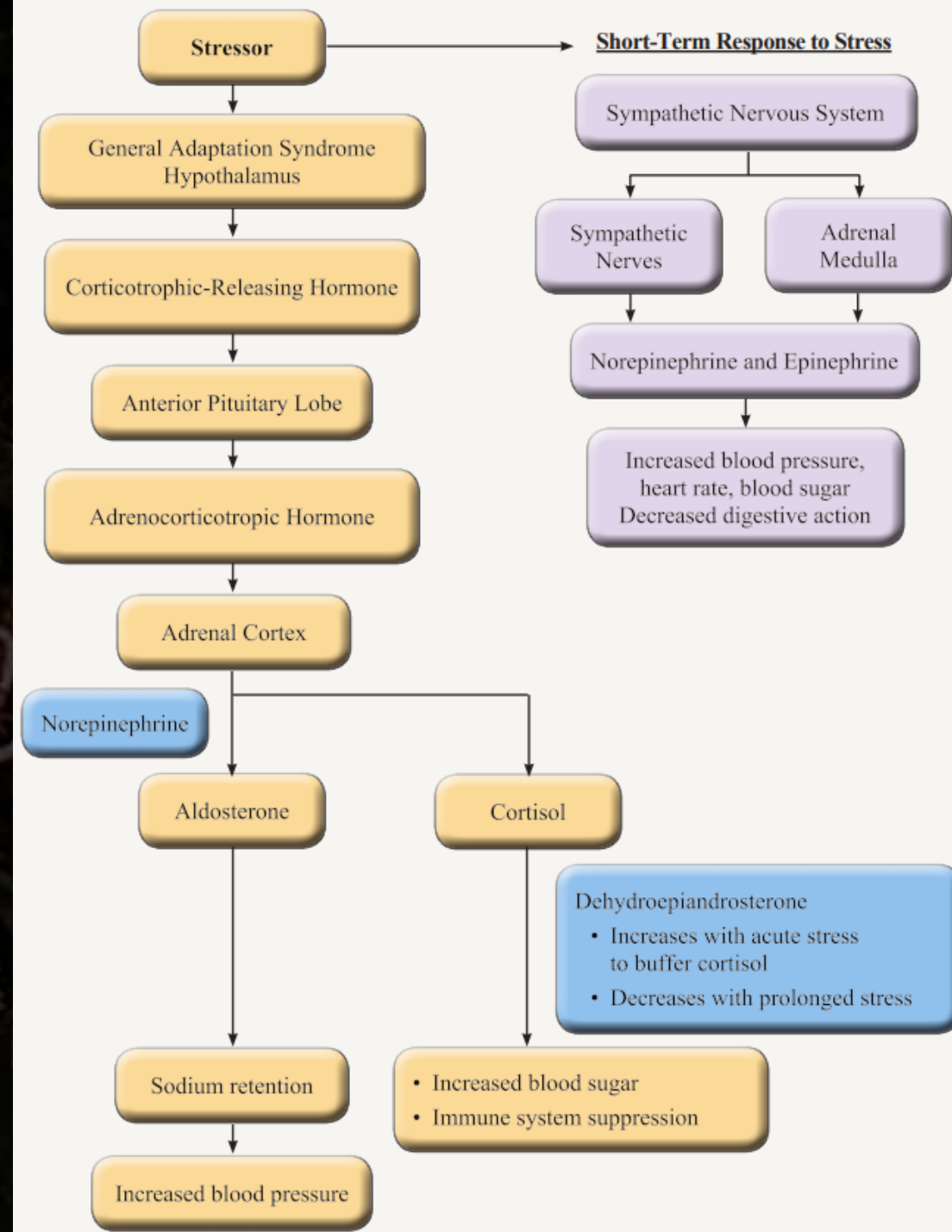
STRESSFUL LIFE EVENTS CAUSE THE AUTONOMIC NERVOUS SYSTEM TO PREPARE FOR A FIGHT-OR-FLIGHT RESPONSE. THE BODY'S PHYSIOLOGICAL STRESS REACTION IS DIAGRAMMED IN FIGURE 2-1. THIS BASIC STRESS RESPONSE WAS ORIGINALLY CALLED THE GENERAL ADAPTATION SYNDROME BY HANS SELYE IN 1936, BUT OVER TIME RESEARCHERS HAVE LEARNED THAT THIS RESPONSE IS MORE COMPLICATED AND INVOLVES MORE PARTS OF THE NEUROENDOCRINE AND IMMUNE SYSTEM THAN WAS IMAGINED IN THE 1930S (FINK, 2017). CURRENT RESEARCH TENDS TO REFER TO THIS SAME CONCEPT AS THE STRESS RESPONSE SYSTEM (NESSE, BHATNAGAR, & ELLIS, 2016). DURING THE ALARM REACTION PHASE OF THE STRESS RESPONSE, THE HYPOTHALAMUS-PITUITARY-ADRENAL (HPA) AXIS IS ACTIVATED. THE ANTERIOR PITUITARY GLAND RELEASES ADRENOCORTICOTROPIC HORMONE (ACTH) THAT, IN TURN, INCREASES THE SECRETION OF CORTISOL FROM THE ADRENAL GLAND INTO THE SYSTEMIC CIRCULATION. ACTH AND THE SUBSEQUENT RELEASE OF CORTISOL HAVE NUMEROUS EFFECTS ON THE BODY, INCLUDING INCREASING BLOOD PRESSURE; AFFECTING HOW WE PROCESS FATS, CARBOHYDRATES, AND PROTEINS; AND IMPAIRING IMMUNE SYSTEM RESPONSE TO PATHOGENS. EPINEPHRINE AND NOREPINEPHRINE ARE RELEASED BECAUSE OF STIMULATION OF THE ADRENAL MEDULLA. THE MUSCULOSKELETAL SYSTEM ALSO BECOMES INVOLVED WHEN AN INDIVIDUAL EXPERIENCES A STRESSFUL LIFE EVENT. THE MUSCLES BECOME TENSE, AND THE PERSON MAY DEVELOP A HEADACHE; CLENCH THE JAW; GRIND THE TEETH; OR EXPERIENCE TIGHTNESS IN THE NECK, SHOULDER, AND BACK MUSCLES. THE DIGESTIVE SYSTEM IS AFFECTED, AND CHANGES IN APPETITE, ABDOMINAL DISCOMFORT, NAUSEA, VOMITING, AND DIARRHEA MAY OCCUR.



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## PHYSIOLOGICAL STRESS REACTION >>>>>

AS THE ADRENAL GLAND INCREASES ITS SECRETION OF CORTISOL, INCREASED HEART RATE AND BLOOD PRESSURE ENHANCE BLOOD FLOW TO THE SKELETAL MUSCLES, WHICH ENABLES THE PERSON TO FLEE THE SITUATION. THE CORTISOL INCREASE ALSO INCREASES APPETITE AND INCREASES FAT ABSORPTION AND BREAKDOWN TO PROVIDE ENERGY TO THE MUSCLES (NESSE ET AL., 2016). THE BODY HAS A BUILT-IN FEEDBACK LOOP THAT IS SUPPOSED TO TURN OFF THIS STRESS RESPONSE WHEN WE ARE NO LONGER BEING EXPOSED TO THE STRESSOR. A COMPLEX FEEDBACK MECHANISM WITHIN THE IMMUNE AND ENDOCRINE SYSTEMS HELPS TO REGULATE HPA FUNCTION, PREVENTING EXCESSIVE SECRETION OF CORTISOL AND ACTH. PRODUCTION OF DEHYDROEPIANDROSTERONE, A STEROID THAT HELPS BUFFER THE BODY AGAINST THE EFFECTS OF EXCESS CORTISOL, ALSO INCREASES. THIS BUFFER WORKS AS A PROTECTIVE MECHANISM DURING TIMES OF ACUTE STRESS (VAN ZUIDEN ET AL., 2017).



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AS A SHORT-TERM RESPONSE TO AN IMMEDIATE THREAT, THIS FIGHT-OR-FLIGHT SYNDROME WORKED WELL WHEN HUMANS WERE HUNTERS AND GATHERERS. IT ALLOWED THE BODY TO QUICKLY CHANGE FROM QUIET WAITING TO A RAPID PHYSICAL RESPONSE. HOWEVER, LIKE FEVER OR PAIN, OUR PHYSIOLOGICAL RESPONSE TO STRESS IS USEFUL ONLY IN CERTAIN SITUATIONS, PRIMARILY THOSE RELATED TO ISOLATED ACUTE STRESSFUL EVENTS WHERE A FIGHT-OR-FLIGHT RESPONSE IS A REALISTIC OPTION. WHEN ACTIVATED IN RESPONSE TO CHRONIC STRESSORS THAT MAY NOT BE AMENABLE TO FIGHT OR FLIGHT, THIS RESPONSE CAN LEAD TO OVERSTIMULATION OF THE HPA AXIS AND TO PHYSIOLOGICAL CHANGES THAT HAVE DETRIMENTAL EFFECTS ON THE BODY (NESSE ET AL., 2016). BECAUSE THE STRESSOR DOES NOT NECESSARILY GO AWAY, THE INTERNAL FEEDBACK MECHANISM MAY NOT WORK AS WELL AS WITH ACUTE STRESSORS. FOR EXAMPLE, WITH LONG PERIODS OF STRESS, DEHYDROEPIANDROSTERONE LEVELS FALL, LEAVING HIGH CORTISOL LEVELS UNCHECKED. HIGH LEVELS OF CORTISOL CAN CREATE IMMUNOSUPPRESSION, LEAVING THE BODY MORE SUSCEPTIBLE TO INFECTION AND DISEASE (VAN ZUIDEN ET AL., 2017).

# STRESS & THE IMMUNE SYSTEM

AS NOTED IN THE PREVIOUS SECTION, BOTH ACUTE AND CHRONIC STRESS LEAD TO ACTIVATION OF THE NEUROENDOCRINE SYSTEM. WHEN THE CENTRAL NERVOUS SYSTEM (CNS) PERCEIVES A THREAT, A PROCESS IS STARTED THAT LEADS TO SECRETION OF CORTICOTROPIN-RELEASING FACTOR AND ACTIVATION OF BOTH THE SYMPATHETIC AND PARASYMPATHETIC NERVOUS SYSTEMS. THE PRIMARY NEUROTRANSMITTER FOR THE SYMPATHETIC NERVOUS SYSTEM IS NOREPINEPHRINE (ALSO KNOWN AS NORADRENALINE), AND ACETYLCHOLINE IS THE PRIMARY NEUROTRANSMITTER FOR THE PARASYMPATHETIC NERVOUS SYSTEM (WOOD & VALENTINO, 2017). IN ADDITION TO THESE CLASSICAL RESPONSES, RECENT RESEARCH HAS IDENTIFIED A THIRD SYSTEM ACTIVATED BY THE STRESS RESPONSE. THIS SYSTEM IS CALLED THE PEPTIDERGIC SYSTEM AND IS PRIMARILY LOCATED IN THE GASTROINTESTINAL TRACT. THIS SYSTEM HELPS EXPLAIN WHY GASTROINTESTINAL DISTURBANCES ARE COMMON IN ACUTE OR CHRONIC STRESS SITUATIONS. THE MAIN PEPTIDES OF THIS SYSTEM ARE VASOACTIVE INTESTINAL PEPTIDE, SUBSTANCE P, AND CALCITONIN GENE-RELATED PEPTIDE (DI GIOVANGIULIO ET AL., 2015). STRESS ACTIVATION OF THE CNS AND THE NEUROENDOCRINE SYSTEM ALSO LEADS TO CHANGES IN THE IMMUNE SYSTEM (DHABHAR, 2014). MOST IMMUNE SYSTEM CELLS HAVE SURFACE RECEPTORS FOR THESE VARIOUS NEUROTRANSMITTERS AND NEUROPEPTIDES, WHICH ALLOW THESE SUBSTANCES TO ATTACH TO THE IMMUNE SYSTEM CELL WALLS AND CAUSE INTERCELLULAR CHANGES. THESE CHANGES CAN UPREGULATE OR DOWNREGULATE THE IMMUNE CELL'S PRODUCTION OF CYTOKINES. CYTOKINES ARE A GENERAL CLASS OF IMMUNE SYSTEM MOLECULES THAT CONTAINS SUBCLASSES OF CHEMOKINES, INTERFERONS, AND INTERLEUKINS (ILS). ILS ARE GO-BETWEEN MESSENGER MOLECULES THAT ARE DESIGNED TO SEND MESSAGES FROM ONE TYPE OF IMMUNE CELL TO ANOTHER (DHABHAR, 2014).



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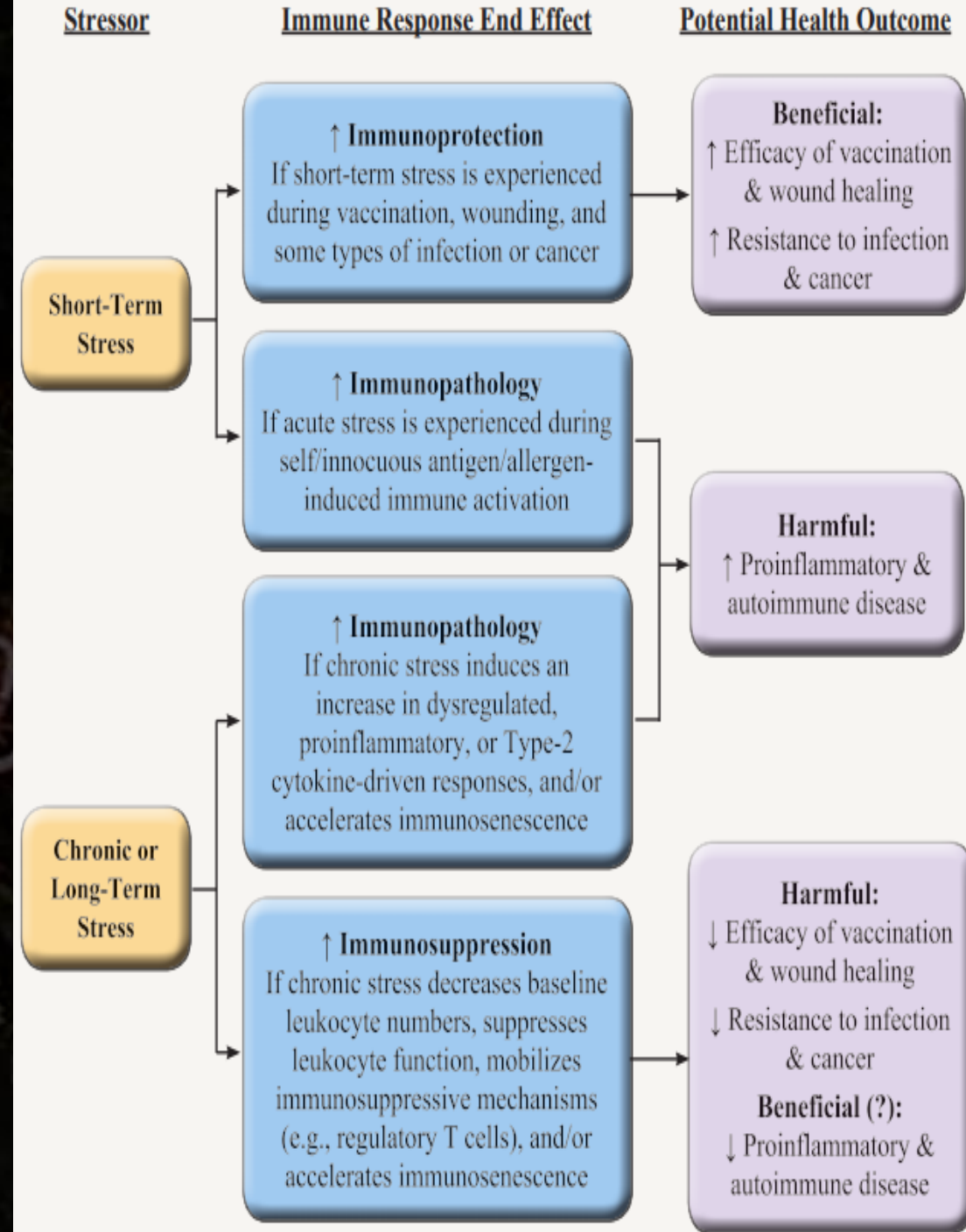
THE NEUROENDOCRINE SYSTEM AND THE IMMUNE SYSTEM COMMUNICATE AND CAN UPREGULATE OR DOWNREGULATE EACH OTHER THROUGH A BIDIRECTIONAL FLOW OF NEUROTRANSMITTERS, CYTOKINES, AND NEUROHORMONES. *IMMUNE RESPONSES*, WHILE COMPLICATED, CAN BE THOUGHT OF IN SIMPLE TERMS AS BEING IMMUNO-PROTECTIVE, IMMUNOPATHOLOGICAL, AND IMMUNOREGULATORY OR INHIBITORY. *IMMUNO-PROTECTIVE RESPONSES* ARE THOSE THAT PROMOTE WOUND HEALING, FIGHT PATHOGENS, AND PROVIDE CELL-MEDIATED IMMUNITY SUCH AS THAT SEEN WITH VACCINE-INDUCED IMMUNITY. *IMMUNOPATHOLOGICAL RESPONSES* ARE THOSE THAT ARE DIRECTED AGAINST THE SELF, AS SEEN IN VARIOUS AUTOIMMUNE DISEASES. ALSO INCLUDED IN IMMUNOPATHOLOGICAL RESPONSES ARE CHRONIC INFLAMMATORY RESPONSES THAT HAVE BEEN LINKED TO DISEASES AS VARIED AS CARDIOVASCULAR DISEASE, OBESITY, AND DEPRESSION. *IMMUNOREGULATORY RESPONSES* ARE THOSE THAT INVOLVE THE IMMUNE SYSTEM'S ABILITY TO SELF-REGULATE. THIS FUNCTION IS PRIMARILY DESIGNED TO KEEP PROINFLAMMATORY, ALLERGIC, AND AUTOIMMUNE RESPONSES UNDER CONTROL, BUT OVERSTIMULATION OF THIS FUNCTION MAY ALSO SUPPRESS ANTITUMOR IMMUNITY (DHABHAR, 2014). ALTHOUGH SHORT-TERM STRESS CAN LEAD TO IMMUNOENHANCEMENT, CHRONIC STRESS HAS MOSTLY NEGATIVE EFFECTS ON THE IMMUNE SYSTEM (FIGURE 2-2). A REVIEW BY DHABHAR (2014) DEMONSTRATES THAT CHRONIC STRESS HAS BEEN SHOWN TO DECREASE CELL-MEDIATED IMMUNITY, ANTIBODY PRODUCTION, NATURAL KILLER (NK) CELL ACTIVITY, LEUKOCYTE PROLIFERATION, T-CELL ACTIVITY, AND ACTIVITY OF MACROPHAGES. CHRONIC STRESS LEADS TO ACCELERATION OF IMMUNE CELL AGING, WHICH CAN RESULT IN SUPPRESSION OF IMMUNOPROTECTIVE ACTIVITIES AND EXACERBATION OF IMMUNE DYSREGULATION AND PATHOLOGY. THUS, CHRONIC STRESS TENDS TO DECREASE THE EFFECTIVENESS OF THE IMMUNE SYSTEM TO FIGHT PATHOGENS AND SPEED WOUND HEALING WHILE INCREASING AUTOIMMUNE AND INFLAMMATORY RESPONSES. CHRONIC STRESS MAY ALSO INCREASE SUSCEPTIBILITY TO CERTAIN TYPES OF CANCER BY SUPPRESSING PROTECTIVE T CELLS AND THEIR RELATED CYTOKINES AND BY INCREASING THE RESPONSE OF SUPPRESSOR T CELLS.



# STRESS & THE IMMUNE SYSTEM

## POTENTIAL HEALTH OUTCOMES OF STRESS >>>>>

RESEARCH IS FOCUSED ON EXAMINING THE VARIOUS MECHANISMS UNDERLYING THE CONNECTION BETWEEN STRESS AND SPECIFIC HEALTH OUTCOMES. IN ADDITION TO THE WELL-KNOWN EFFECTS OF STRESS ON UPPER GASTROINTESTINAL MUCOSA AND SUBSEQUENT GASTRIC ULCERATION, OTHER DISEASE PROCESSES HAVE BEEN SHOWN TO HAVE A SIGNIFICANT STRESS-RELATED COMPONENT. FOR INSTANCE, STRESS CAN PLAY A KEY ROLE IN INCREASING INTESTINAL INFLAMMATION IN INFLAMMATORY BOWEL DISEASE THROUGH CNS EFFECTS ON THE PEPTIDERGIC SYSTEM AND GUT MUCOSAL IMMUNE SYSTEM (MARTIN-VILLA, 2014). SUBSTANCE P, ANOTHER CNS NEUROPEPTIDE THAT CAN BE INCREASED BY STRESS, HAS A ROLE IN PAIN PERCEPTION AND IN NEUROGENIC INFLAMMATION, WHICH MAY HELP EXPLAIN PART OF THE ROLE OF STRESS IN INCREASED PAIN PERCEPTION (MASHAGI ET AL., 2016). AND INCREASES IN VASOPRESSIN HAVE BEEN SHOWN TO FURTHER INCREASE THE STRESS RESPONSE IN HUMANS, INCREASING THE RELEASE OF CORTISOL IN RESPONSE TO SOCIAL STRESSORS (BEUREL & NEMEROFF, 2014).



# STRESS & THE IMMUNE SYSTEM

IN ADDITION TO THE IMMEDIATE ACTIONS OF STRESS-RELATED BIOCHEMICAL CHANGES, RISK FACTORS FOR STRESS-RELATED ILLNESSES INCLUDE A MIX OF PERSONAL, INTERPERSONAL, AND SOCIAL VARIABLES. THESE RISK FACTORS MAY EXPLAIN WHY DIFFERENT PEOPLE REACT DIFFERENTLY TO THE SAME STRESSOR. THESE FACTORS CAN INCLUDE LACK OR LOSS OF SOCIAL SUPPORT OR AN ACTUAL OR PERCEIVED LOSS OF CONTROL OVER ONE'S PHYSICAL ENVIRONMENT. A STRESS RESPONSE CAN OCCUR WITH NEGATIVE LIFE EVENTS, SUCH AS THE DEATH OF A LOVED ONE OR LOSS OF A JOB. BUT A STRESS RESPONSE CAN ALSO OCCUR WITH LIFE EVENTS THAT ARE VIEWED AS POSITIVE, SUCH AS GETTING MARRIED, BECOMING A PARENT, OR ENTERING INTO RETIREMENT. IT HAS BEEN FOUND THAT PEOPLE WHO ARE DEPENDENT ON OTHERS, SUCH AS CHILDREN OR OLDER ADULTS, AND THOSE WHO ARE SOCIALLY DISADVANTAGED BECAUSE OF RACE, GENDER, EDUCATIONAL LEVEL, OR SIMILAR FACTORS ARE AT GREAT RISK FOR DEVELOPING STRESS-RELATED DISEASES (GALLO ET AL., 2014). THIS EFFECT IS SUPPORTED BY A REVIEW OF THE RELATIONSHIP BETWEEN EARLY CHILDHOOD TRAUMA AND HIGHER RISK OF ADULT ILLNESSES. IT HAS BEEN DOCUMENTED THAT THESE CHILDREN HAVE A HIGHER RISK OF VARIOUS MENTAL ILLNESSES AND PHYSICAL ILLNESSES SUCH AS RHEUMATOID ARTHRITIS (RA), CARDIOVASCULAR DISEASE, LUNG DISEASE, METABOLIC SYNDROME, AND CANCER. ALTHOUGH THE EXACT MECHANISMS ARE STILL BEING DETERMINED, THUS FAR THE ROLE OF STRESS BIOCHEMICALS SUCH AS C-REACTIVE PROTEIN, INTERLEUKIN-6 (IL-6), AND TUMOR NECROSIS FACTOR-ALPHA (TNF-ALPHA) APPEARS TO BE AT LEAST PARTIALLY CAUSATIVE (BAUMEISTER, AKHTAR, CIUFOLINI, PARIANTE, & MONDELLI, 2016).

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BECAUSE OUR NATURAL FIGHT-OR-FLIGHT RESPONSE TO STRESS DOES NOT WORK WELL WITH CHRONIC STRESS, OVER TIME HUMANS HAVE DEVELOPED VARIOUS COPING MECHANISMS TO HELP DEAL WITH CHRONIC STRESS. UNFORTUNATELY, MANY OF THE COMMON COPING MECHANISMS INVOLVE ACTIVITIES THAT, IN THE SHORT TERM, HELP DECREASE THE ANXIETY RELATED TO CHRONIC STRESS BUT IN THE LONG RUN CAUSE HIGHER RISK OF VARIOUS STRESS-RELATED DISEASE PROCESSES. MANY PEOPLE DEAL WITH CHRONIC STRESS BY EATING CERTAIN TYPES OF FOOD; USING ALCOHOL, MEDICATIONS, OR STREET DRUGS; SMOKING; OR ALL OF THESE. FOR EXAMPLE, STUDIES HAVE DEMONSTRATED THAT CHRONIC STRESS CAN LEAD TO PEOPLE SELECTIVELY CHOOSING FOODS HIGHER IN FAT AND SUGAR, WHICH CAUSE REWARD-RELATED CHANGES IN NEUROTRANSMITTERS IN THE BRAIN. THESE FOODS HAVE BEEN SHOWN TO DECREASE THE ACUTE PHYSIOLOGICAL STRESS RESPONSE, ACTING AS A TYPE OF SHORT-TERM ANTI-ANXIETY INTERVENTION, AND THUS HAVE LED TO THE TERM *COMFORT FOOD* (MORRIS, BEILHARZ, MANIAM, REICHEL, & WESTBROOK, 2015). BUT WHILE THESE COMMON COPING MECHANISMS RESULT IN A SHORT-TERM STRESS-RELIEVING EFFECT, WHEN USED TOO FREQUENTLY THEY PLACE THE PERSON AT EVEN HIGHER RISK OF VARIOUS STRESS-RELATED DISEASES PROCESSES SUCH AS CORONARY HEART DISEASE, STROKE, DIABETES, DYSLIPIDEMIA, AND HYPERTENSION (GALLO ET AL., 2014). OUR GOAL THEN BECOMES HELPING OURSELVES AND OUR CLIENTS TO USE OTHER COPING MECHANISMS THAT DO NOT LEAD TO LONG-TERM NEGATIVE HEALTH OUTCOMES YET HELP PEOPLE TO DEAL WITH CHRONIC STRESSORS AND FEELINGS OF ANXIETY.



# STRESS & THE IMMUNE SYSTEM

HUMOR HAS BEEN USED BY HUMANS FOR CENTURIES FOR VARIOUS REASONS, AND SOMETIMES THOSE REASONS INVOLVE DEALING WITH EMOTIONAL DISCOMFORT, STRESS, AND ANXIETY. THE EFFECTIVENESS OF HUMOR AS A COPING MECHANISM AND THE EFFECTS OF HUMOR ON STRESS AND PHYSIOLOGICAL FUNCTION ARE AREAS OF RESEARCH THAT HAVE GROWN OVER TIME. SEVERAL STUDIES HAVE USED SOME TYPE OF RETROSPECTIVE RESEARCH DESIGN, LOOKING AT HOW A PERSON NORMALLY COPE BY USING SOME TYPE OF COPING STYLE QUESTIONNAIRE, TO SEE IF PEOPLE WHO COPE WITH STRESSORS USING HUMOR HAVE LESS STRESS THAN THOSE WHO DO NOT. IN A STUDY OF OCCUPATIONAL STRESS IN FIREFIGHTERS, IT WAS REPORTED THAT TRAUMATIC EVENTS SIGNIFICANTLY PREDICTED BURNOUT, POSTTRAUMATIC STRESS DISORDER, AND ABSENTEEISM. IN ADDITION, IT WAS FOUND THAT HUMOR COPING HELPED DECREASE THE EFFECT OF THE TRAUMATIC EVENTS ON BURNOUT AND POSTTRAUMATIC STRESS DISORDER, BUT NOT ON ABSENTEEISM (SLITER, KALE, & YUAN, 2013). IN A STUDY OF STRESS AND ITS EFFECTS ON PREGNANCY OUTCOMES, WOMEN WHO HAD EXPERIENCED THE STRESS OF HURRICANE KATRINA WERE EXAMINED TO SEE HOW THIS UNIQUE STRESSOR AFFECTED PREGNANCY OUTCOMES AND IF VARIOUS TYPES OF COPING COULD REDUCE THE EFFECTS OF THIS STRESS ON PREGNANCY OUTCOMES. WOMEN WITH SIGNIFICANT HURRICANE EXPOSURE EXPERIENCED INCREASED INDUCTIONS OF LABOR AND HAD INCREASED PERCEIVED STRESS. STRESS PERCEPTION WAS RELATED TO INCREASED INCIDENCE OF PREGNANCY-INDUCED HYPERTENSION AND GESTATIONAL DIABETES. BOTH OF THESE CONSEQUENCES LINE UP WITH WHAT IS KNOWN ABOUT THE STRESS RESPONSE IN HUMANS. HOWEVER, IT WAS FOUND THAT WOMEN WHO USED PLANNING, ACCEPTANCE, HUMOR, INSTRUMENTAL SUPPORT, AND VENTING COPING STYLES HAD SIGNIFICANTLY REDUCED PREGNANCY COMPLICATIONS. THIS STUDY ALSO FOUND THAT WOMEN WHO USED DENIAL AS A PRIMARY COPING MECHANISM HAD HIGHER RATES OF GESTATIONAL DIABETES (ONI, HARVILLE, XIONG, & BUEKENS, 2015).

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A STUDY OF 200 PEOPLE MEASURED VARIOUS COPING STYLES DURING A PHYSICAL EXAMINATION USING THE BRIEF COPE SCALE. THIS STUDY FOUND THAT YOUNGER PEOPLE WERE MORE LIKELY TO USE EMOTIONAL SUPPORT, INSTRUMENTAL SUPPORT, AND HUMOR TO COPE, WHEREAS OLDER PEOPLE SCORED HIGHER FOR USE OF DENIAL. THIS STUDY ALSO NOTED THAT USE OF HUMOR COPING WAS SIGNIFICANTLY ASSOCIATED WITH HIGHER SYSTOLIC BLOOD PRESSURE, WHICH IS COUNTERINTUITIVE IF HUMOR COPING HELPS TO DECREASE STRESS. FOR THIS STUDY, AGE, MALE SEX, AND HUMOR ALL WERE SIGNIFICANTLY RELATED TO HIGHER SYSTOLIC BLOOD PRESSURE (ITO & MATSUSHIMA, 2017). HOWEVER, THIS STUDY WAS CONDUCTED USING A SAMPLE OF PEOPLE FROM JAPAN, AND IT APPEARS THAT THE EFFECTIVENESS OF HUMOR AS A COPING STYLE MIGHT HAVE CULTURAL IMPLICATIONS.

# STRESS & THE IMMUNE SYSTEM

ANOTHER STUDY SUPPORTS THIS HYPOTHESIS BECAUSE A STUDY OF HUMOR COPING IN TWO DIFFERENT CULTURES FOUND THAT HUMOR USE DECREASED WORKPLACE STRESS FOR A GROUP OF AUSTRALIAN EMPLOYEES BUT NOT FOR A GROUP OF CHINESE EMPLOYEES. THE AUTHORS NOTED THAT THESE TWO CULTURES VIEWED HUMOR DIFFERENTLY, AND THAT THE CHINESE, HAVING A MORE EMOTIONALLY CONTROLLED CULTURE, OFTEN VIEWED THE USE OF HUMOR AS INAPPROPRIATE IN THE WORKPLACE. HUMOR WAS MEASURED USING THE HUMOR STYLES QUESTIONNAIRE (MARTIN, PUHLIK-DORIS, LARSEN, GRAY, & WEIR, 2003), WHICH MEASURES FOUR HUMOR STYLES: AFFILIATIVE, SELF-ENHANCING, AGGRESSIVE, AND SELF-DEFEATING. ANOTHER INTERESTING FINDING FROM THIS STUDY WAS THAT ONLY POSITIVE FORMS OF HUMOR (AFFILIATIVE HUMOR AND SELF-ENHANCING HUMOR) WERE RELATED TO DECREASED SELF-REPORTED STRESS, WHEREAS NEGATIVE FORMS OF HUMOR (AGGRESSIVE HUMOR AND SELF-DEFEATING HUMOR) WERE NOT RELATED TO STRESS IN EITHER SAMPLE (WANG ET AL., 2017). THIS FINDING IS SUPPORTED BY ADDITIONAL WORK BY ROD MARTIN AND OTHERS, WHICH INDICATES THAT NEGATIVE THINKING INTERFERES WITH A PERSON'S ABILITY TO BE CHEERFUL AND USE MORE POSITIVE FORMS OF HUMOR, AND THAT HABITUAL USE OF NEGATIVE FORMS OF HUMOR ENDS UP INCREASING LEVELS OF DEPRESSION (RNIC, DOZOIS, & MARTIN, 2016). LOOKING AT THE POSSIBLE BENEFITS OF HUMOR COPING IN A CLINICAL POPULATION, A STUDY OF 22 PATIENTS WITH FIBROMYALGIA FOUND THAT USE OF DISPOSITIONAL (POSITIVE) HUMOR WAS ASSOCIATED WITH REDUCED DISTRESS AND PHYSICAL SYMPTOMS. THIS SAME PAPER REPORTS ON TWO OTHER STUDIES USING LARGER NONCLINICAL SAMPLES (COLLEGE STUDENTS) AND SUPPORTS THAT SELF-REPORTED USE OF HUMOR AS A COPING MECHANISM IS RELATED TO DECREASED REPORTS OF STRESS. IN THE COLLEGE STUDENTS, BOTH DISPOSITIONAL HUMOR AND AGGRESSIVE HUMOR DEMONSTRATED STRESS-BUFFERING EFFECTS (FRITZ, RUSSEK, & DILLON, 2017).



# STRESS & THE IMMUNE SYSTEM

THE IDEA OF NEGATIVE AND POSITIVE TYPES OF HUMOR COPING HAS BEEN REVIEWED BY VIVONA (2014), WHO NOTED THAT USE OF HUMOR IS NOT INHERENTLY A GOOD OR BAD THING BUT INSTEAD DEPENDS ON THE WAY THE HUMOR IS BEING USED. FOR EXAMPLE, HUMOR CAN BE USED IN THE WORKPLACE TO IMPROVE EFFICIENCY, DECREASE WORKPLACE MONOTONY, PROVIDE A SENSE OF BELONGING, AND REDUCE WORK-RELATED STRESS. BUT IT CAN ALSO BE USED TO OSTRACIZE, EMBARRASS, AND EXCLUDE COWORKERS, AND THE DECIDING FACTORS BETWEEN POSITIVE AND NEGATIVE USES OF HUMOR ARE THE HUMOR OR JOKING BEHAVIOR USED AND THE PURPOSE OF THIS BEHAVIOR.

# STRESS & THE IMMUNE SYSTEM

ACCORDING TO PSYCHONEUROIMMUNOLOGY THEORY, INTERVENTIONS THAT CAN MODERATE THE EFFECTS OF STRESS ON NEUROENDOCRINE FUNCTION COULD SUBSEQUENTLY CAUSE CHANGES IN THE IMMUNE SYSTEM, BECAUSE THESE SYSTEMS ARE CAPABLE OF UPREGULATING AND DOWNREGULATING EACH OTHER. THE FIELD OF STUDY THAT EXAMINES THE INTERFACE BETWEEN THE NEUROENDOCRINE SYSTEM AND THE IMMUNE SYSTEM HAS BEEN TERMED *AFFECTIVE IMMUNOLOGY*, INDICATING THE IMPORTANCE OF THE EFFECT OF EMOTIONS ON IMMUNE FUNCTION, AND VICE VERSA (D'ACQUISTO, 2017). BECAUSE THE IMMUNE SYSTEM CAN AFFECT HEALTH OUTCOMES, THE POSSIBLE EFFECT OF HUMOR ON IMMUNE FUNCTION IS AN IMPORTANT POSSIBLE MECHANISM TO INVESTIGATE. SEE TABLE 2-1 FOR A REVIEW OF IMMUNE SYSTEM COMPONENTS AND THEIR BASIC FUNCTIONS. SEVERAL STUDIES HAVE BEEN CONDUCTED TO DETERMINE WHETHER SENSE OF HUMOR, EXPOSURE TO HUMOR, OR HUMOR RESPONSES SUCH AS LAUGHTER CAN DECREASE STRESS, IMPROVE ONE OR MORE MEASURES OF IMMUNE FUNCTION, OR BOTH. THE EFFECT OF STRESS ON IMMUNE FUNCTION VARIES DEPENDING ON ACUTE OR CHRONIC CONDITIONS. FOR EXAMPLE, ACUTE STRESS TENDS TO RELEASE CATECHOLAMINES (EPINEPHRINE), WHICH MOBILIZES RESERVES OF VARIOUS IMMUNE CELLS, WHICH CAN RESULT IN HIGHER NUMBERS OF IMMUNE SYSTEM CELLS IN PERIPHERAL BLOOD SAMPLES. ACUTE STRESS ALSO TENDS TO INCREASE OTHER IMMUNE MEASURES SUCH AS SECRETORY OR SALIVARY IMMUNOGLOBULIN A (SIGA). BUT CHRONIC STRESS LEADS TO IMMUNOPATHOLOGY, SUCH AS INCREASES IN SYSTEMIC INFLAMMATORY MEDIATORS SUCH AS C-REACTIVE PROTEIN AND IL-6 (DHABHAR, 2014).

# STRESS & THE IMMUNE SYSTEM

TO DETERMINE WHETHER PEOPLE WITH A BETTER SENSE OF HUMOR OR WHO NATURALLY USED HUMOR AS A COPING STYLE HAD BETTER IMMUNE FUNCTION, EARLY STUDIES FREQUENTLY USED SIGA AS A MEASURE OF IMMUNE FUNCTION. SIGA SERVES AS A FIRST-LINE DEFENSE FOR THE BODY AND MAKES UP THE LARGEST AMOUNT OF IMMUNOGLOBIN IN THE BODY. SIGA CAN BE FOUND IN VARIOUS SECRETIONS SUCH AS SALIVA, SWEAT, AND BREAST MILK, AND IS THOUGHT TO BE THE BASIS FOR THE IMPROVED IMMUNE FUNCTION SEEN IN BABIES WHO ARE BREASTFED. IT IS ALSO REGARDED AS A FIRST-LINE DEFENSE AGAINST TOXINS AND PATHOGENS THAT ENTER THROUGH THE GASTROINTESTINAL TRACK, AND FOR UPPER RESPIRATORY AND EAR INFECTIONS (JAVED ET AL., 2017). BECAUSE SALIVA CAN BE OBTAINED MORE EASILY THAN BLOOD SAMPLING, SIGA HAS BEEN USED IN MANY DIFFERENT IMMUNE FUNCTION STUDIES OVER THE YEARS. MOST EARLY STUDIES OF SENSE OF HUMOR AND SIGA WERE CONDUCTED IN COLLEGE STUDENTS. A REVIEW OF THESE STUDIES REPORTS MIXED RESULTS BUT IN GENERAL TENDED TO SUPPORT THE IDEA THAT PEOPLE WITH A BETTER SENSE OF HUMOR HAD HIGHER LEVELS OF SIGA (DOWLING, HOCKENBERRY, & GREGORY, 2003). HOWEVER, IT WAS NOT KNOWN IF THIS WOULD HOLD TRUE IN A CLINICAL POPULATION.



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TO DETERMINE WHETHER A SENSE OF HUMOR WAS ABLE TO ACT AS A MODERATOR OF STRESS IN A PEDIATRIC CANCER POPULATION, 43 CHILDREN UNDERGOING TREATMENT FOR ACUTE LYMPHOCYTIC LEUKEMIA WERE USED AS THE SAMPLE. SENSE OF HUMOR, STRESSORS RELATED TO CHILDHOOD CANCER, AND PSYCHOSOCIAL ADJUSTMENT WERE MEASURED USING SELF-REPORT SCALES. INCIDENCE OF INFECTION WAS DOCUMENTED VIA HEALTH DIARIES AND CLINIC RECORDS. IMMUNE FUNCTION WAS MEASURED USING SIGA AND ABSOLUTE NEUTROPHIL COUNTS. THE RESULTS OF THIS STUDY FOUND THAT A SENSE OF HUMOR WAS POSITIVELY CORRELATED WITH PSYCHOSOCIAL ADJUSTMENT TO CANCER. SPECIFICALLY, COPING HUMOR WAS RELATED TO CANCER ADJUSTMENT BUT NOT HUMOR APPRECIATION OR HUMOR CREATION SCORES. ALSO, CHILDREN WITH HIGH HUMOR COPING SCORES HAD LESS INCIDENCE OF INFECTION, BUT THIS DID NOT APPEAR TO BE DUE TO IMPROVED SIGA. NO SIGNIFICANT CORRELATION WAS FOUND BETWEEN SENSE OF HUMOR AND SIGA LEVELS OR NEUTROPHIL COUNTS. SO, THIS STUDY DOES NOT SUPPORT THAT SENSE OF HUMOR IS RELATED TO HIGHER LEVELS OF SIGA BUT COPING HUMOR MAY BE RELATED TO REDUCED INCIDENCE OF INFECTION IN A RATHER HIGH-RISK PEDIATRIC POPULATION. THE AUTHORS CONCLUDED THAT COPING HUMOR MAY ACT AS A MODERATOR OF CHILDHOOD CANCER STRESSORS ON INCIDENCE OF INFECTION (DOWLING ET AL., 2003).

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PERHAPS THE BEST-KNOWN AND MOST FREQUENTLY CITED STUDIES IN THIS AREA HAVE BEEN CONDUCTED BY LEE BERK'S TEAM AT LOMA LINDA UNIVERSITY. IN A SERIES OF SMALL STUDIES, THIS GROUP DOCUMENTED THE FOLLOWING EFFECTS OF A HUMOR VIDEO ON SEVERAL IMMUNE OUTCOMES IN A SAMPLE OF MALE MEDICAL STUDENTS (BERK ET AL., 2001):

- IMMUNOGLOBULIN G INCREASES WITH HEARTY LAUGHTER AND REMAINS ELEVATED FOR 24 HOURS.
- IMMUNOGLOBULIN A AND IMMUNOGLOBULIN M ALSO INCREASE, AND LEVELS STAY ELEVATED INTO THE NEXT DAY.
- MIRTHFUL LAUGHTER INCREASES NK CELL ACTIVITY AND INCREASES THE ACTUAL NUMBER OF CELLS.
- GAMMA-INTERFERON INCREASES TWOFOLD AS SUBJECTS WATCH A HUMOR VIDEO.

ALONG WITH THESE CHANGES IN THE AMOUNTS OF IMMUNOGLOBULIN A, IMMUNOGLOBULIN G, IMMUNOGLOBULIN M, T CELLS, AND NK CELLS, CORTISOL SECRETION DECREASED. AS CORTISOL INCREASES IN THE BODY, IMMUNE DEFENSES DECREASE. THEREFORE, A DECREASE IN CORTISOL SHOULD INCREASE THE IMMUNE SYSTEM'S ABILITY TO RESPOND. THE LEVEL OF B CELLS ALSO INCREASED WHEN SUBJECTS WATCHED A COMEDY VIDEO. THIS RESULT IS NOT SURPRISING BECAUSE B CELLS ARE RESPONSIBLE FOR THE PRODUCTION OF IMMUNOGLOBULINS (BERK ET AL., 1989, 2001).

# STRESS & THE IMMUNE SYSTEM

CHRONIC STRESS CAN LEAD TO PHYSIOLOGICAL CHANGES AND DETRIMENTAL EFFECTS ON THE BODY (NESSE ET AL., 2016). CHRONIC STRESS HAS BEEN SHOWN TO DECREASE IMMUNE FUNCTION, WHICH MAY INCREASE SUSCEPTIBILITY TO CERTAIN TYPES OF CANCER AND VIRUSES (BENNETT & LENGACHER, 2009; DHABHAR, 2014). CHRONIC STRESS HAS A CLINICALLY SIGNIFICANT IMPACT ON THE GASTROINTESTINAL SYSTEM, LEADING TO INCREASED ACID AND DAMAGE FROM THIS ACID, AND CAN PLAY A KEY ROLE IN INCREASING SYMPTOMS IN INFLAMMATORY BOWEL DISEASE (MARTIN-VILLA, 2014). CHRONIC STRESS LEADS TO INCREASES IN SYSTEMIC INFLAMMATION THAT CAN EXACERBATE SYMPTOMS IN PEOPLE WITH A RANGE OF DISEASES, SUCH AS RA, CHRONIC OBSTRUCTIVE PULMONARY DISEASE, AND SLE (DHABHAR, 2014). CHRONIC STRESS CAN ALSO INCREASE LEVELS OF VARIOUS PAIN MEDIATORS THAT CAN CAUSE INCREASED SENSITIVITY TO PAIN. ALL THESE FACTORS INDICATE THAT FINDING EFFECTIVE WAYS TO AVOID AND HANDLE CHRONIC STRESS IS IMPORTANT BOTH IN THE CARE OF CLIENTS AND FOR THE ADMINISTRATOR AS A PART OF HEALTHY SELF-CARE. AS NOTED EARLIER, HUMANS HAVE DEVELOPED VARIOUS COPING MECHANISMS TO DEAL WITH CHRONIC STRESS, BUT MANY INVOLVE BASICALLY NONHEALTHY ACTIVITIES SUCH AS OVEREATING, USE OF ALCOHOL, AND SMOKING. THESE ACTIONS TEND TO INCREASE THE RISK OF VARIOUS STRESS-RELATED DISEASES, SUCH AS ULCERS, CORONARY HEART DISEASE, STROKE, DIABETES, DYSLIPIDEMIA, AND HYPERTENSION (GALLO ET AL., 2014). ADMINISTRATORS NEED TO HELP THEMSELVES AND THEIR CLIENTS USE HEALTHIER COPING MECHANISMS TO DEAL WITH CHRONIC STRESS.



# STRESS & THE IMMUNE SYSTEM

THE TENDENCY TO USE COPING HUMOR AND A SENSE OF HUMOR ARE PERSONALITY CHARACTERISTICS THAT HAVE BEEN LINKED TO DECREASED STRESS AND POSSIBLY IMPROVED HEALTH OUTCOMES IN SOME STUDIES (FRITZ ET AL., 2017; ONI ET AL., 2015; SLITER ET AL., 2013). HOWEVER, IT IS NOT KNOWN IF IT IS POSSIBLE TO CHANGE A PERSON'S BASIC SENSE OF HUMOR (MARTIN & KUIPER, 2016). SO, ALTHOUGH IT IS HELPFUL TO KNOW THAT PEOPLE WHO HAVE A GOOD SENSE OF HUMOR OR NATURALLY COPE BY USING HUMOR (OR BOTH) MIGHT BE MORE RESILIENT TO THE NEGATIVE HEALTH EFFECTS OF CHRONIC STRESS, IT MAY NOT BE POSSIBLE TO CHANGE OUR CLIENT'S OR OUR OWN SENSE OF HUMOR. USING VARIOUS HUMOR STIMULI TO PRODUCE A HUMOR RESPONSE IS SOMETHING THAT CAN BE USED AS AN INTERVENTION TO DECREASE THE EFFECTS OF CHRONIC STRESS ON HEALTH OUTCOMES. FACILITY ADMINISTRATORS CAN ALSO EDUCATE INTERESTED CLIENTS ABOUT THE USE OF HUMOR AND ITS EFFECTS ON STRESS AND HEALTH OUTCOMES. ALTHOUGH HUMOR SHOULD NOT BE USED IN PLACE OF MEDICAL TREATMENTS AS CURATIVE THERAPY FOR VARIOUS DISEASES, IT CAN HELP MODIFY THE NEGATIVE EFFECTS OF CHRONIC STRESS ON VARIOUS HEALTH OUTCOMES. HUMOR AND LAUGHTER HAVE BEEN SHOWN TO REDUCE SELF-REPORTED STRESS LEVELS (BENNETT ET AL., 2003; KIM ET AL., 2009; SÁNCHEZ ET AL., 2017), IMPROVE VARIOUS PHYSIOLOGICAL MEASURES OF STRESS (BERK ET AL., 1989; KAWABATA ET AL., 2017; SÁNCHEZ ET AL., 2017), AND IMPROVE VARIOUS IMMUNE RESPONSES (BENNETT ET AL., 2003; BERK ET AL., 2001; RYU ET AL., 2015; TAKAHASI ET AL., 2001). PERHAPS THE MOST CLINICALLY PROMISING RESULTS THUS FAR DEMONSTRATED THAT HUMOR AND LAUGHTER WERE ABLE TO SIGNIFICANTLY REDUCE INFLAMMATORY CYTOKINES IN PEOPLE WITH RA (MATSUZAKI ET AL., 2006).

# STRESS & THE IMMUNE SYSTEM

OTHER STUDIES USING VARIOUS FORMS OF SIMULATED LAUGHTER HAVE DEMONSTRATED THAT NONHUMOR-BASED LAUGHTER MAY ALSO BE ABLE TO PRODUCE DECREASED SELF-REPORTED STRESS AND IMPROVED MOOD. SIMULATED LAUGHTER PROGRAMS SUCH AS LAUGHTER YOGA HAVE BEEN SHOWN TO REDUCED SELF-REPORTED STRESS LEVELS AND IMPROVE MOOD BUT DO NOT APPEAR TO AFFECT PHYSIOLOGICAL MEASURES OF STRESS (CHANG ET AL., 2013; FARIFTEH ET AL., 2014; HEO ET AL., 2016; HSIEH ET AL., 2015). CONCERNING THE EFFECTS OF SIMULATED LAUGHTER ON IMMUNE FUNCTION, THE RESULTS ARE MORE MIXED. ONE STUDY DEMONSTRATED THAT SIMULATED LAUGHTER COULD SLOW THE NATURAL DECREASE OF SIGA IN BREAST MILK (RYU ET AL., 2015), BUT ANOTHER STUDY REPORTED THAT SIMULATED LAUGHTER DID NOT SIGNIFICANTLY AFFECT SEVERAL DIFFERENT IMMUNE MEASURES IN BREAST CANCER SURVIVORS (CHO & OH, 2011). FINALLY, FACILITY ADMINISTRATORS NEED TO EDUCATE CLIENTS THAT HUMOR, AND LAUGHTER HAVE NOT BEEN DEMONSTRATED TO HAVE A SIGNIFICANT EFFECT ON BETA-ENDORPHINS, SO THE PHYSIOLOGICAL PROCESS IS STILL UNKNOWN (BENNETT & LENGACHER, 2009). HOWEVER, LAUGHTER APPEARS TO REDUCE PAIN LEVELS AND SHOULD BE CONSIDERED AS A COMPLEMENTARY THERAPY TO HELP WITH BOTH ACUTE AND CHRONIC PAIN (MANNINEN ET AL., 2017).

# STRESS & THE IMMUNE SYSTEM

ALTHOUGH MANY STUDIES ARE CONTROVERSIAL BECAUSE OF LIMITED SAMPLE SIZES AND RESEARCH METHODOLOGIES, THERE IS A GROWING BODY OF EVIDENCE THAT HUMOR AND LAUGHTER CAN POSITIVELY AFFECT SOME IMMUNE FUNCTION OUTCOMES. EVIDENCE ALSO SHOWS THAT BOTH REGULAR LAUGHTER AND SIMULATED LAUGHTER CAN DECREASE STRESS AND IMPROVE MOOD. FINALLY, THERE IS EVIDENCE THAT LAUGHTER CAN DECREASE PAIN LEVELS, BUT MOST OF THESE STUDIES HAVE USED REGULAR LAUGHTER, NOT SIMULATED LAUGHTER. BECAUSE MOST STUDIES HAVE BEEN SMALL AND SOME HAVE BEEN LIMITED BY METHODOLOGICAL CHALLENGES, MORE RESEARCH ON ALL THESE EFFECTS IS NEEDED.

- HUMOR AND LAUGHTER (REGULAR AND SIMULATED) IMPROVE MOOD AND DECREASE STRESS LEVELS.
- PHYSIOLOGICAL CHANGES FROM REGULAR LAUGHTER OCCUR.
- LAUGHTER CAN INCREASE IMMUNOGLOBULIN LEVELS, BOOST IMMUNE CELL LEVELS, AND IMPROVE THE IMMUNE SYSTEM'S ABILITY TO KILL CANCER CELLS AND VIRUSES.
- LAUGHTER CAN DECREASE PHYSIOLOGICAL STRESS MARKERS, SUCH AS CORTISOL LEVELS.
- HOW LONG THESE VARIOUS PHYSIOLOGICAL CHANGES LAST AND WHETHER THEY ARE LARGE ENOUGH TO BE CLINICALLY SIGNIFICANT ARE NOT KNOWN.
- ENDORPHIN RELEASE WITH HUMOR HAS NOT BEEN DOCUMENTED BY THE AVAILABLE RESEARCH.
- SOME MECHANISM ACTIVATED BY HUMOR ASSISTS WITH PAIN CONTROL. THAT MECHANISM HAS NOT YET BEEN IDENTIFIED.



# HUMOR AS A COMPLEMENTARY MEDICINE

THE DIAGNOSIS OF A CHRONIC AND POSSIBLY LIFE-LIMITING DISEASE LEAVES PEOPLE FEELING THREATENED AND OUT OF CONTROL. PEOPLE WHOSE DISEASE PROCESSES CANNOT YET BE WELL CONTROLLED BY TRADITIONAL MEDICAL TREATMENT ARE AT HIGHEST RISK OF THESE FEELINGS. IN RESPONSE, PEOPLE OFTEN TURN TO COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM) IN AN ATTEMPT TO BE HEALTHIER, TO FEEL MORE NORMAL, AND TO FEEL AS IF THEY ARE DOING SOMETHING ON THEIR OWN BEHALF THAT MAY HELP CURE THE DISEASE (OR AT LEAST SLOW ITS PROGRESSION). OTHERS MAY TURN TO CAM OUT OF DISTRUST OF REGULAR PHARMACEUTICAL OR MEDICAL TREATMENTS, WHICH CAN ALSO LEAD THEM TO SEEK WHAT THEY VIEW AS MORE NATURAL METHODS OF HEALING (GOLDMAN & CORNWELL, 2015). THIS CHAPTER WILL REVIEW RECENT RESEARCH CONCERNING TRENDS IN THE USE OF ALTERNATIVE TECHNIQUES SUCH AS HUMOR AND REVIEW WHAT HAS BEEN PUBLISHED CONCERNING HOW A SENSE OF HUMOR MAY PLAY A ROLE IN HEALTH OUTCOMES.

# HUMOR AS A COMPLEMENTARY MEDICINE

BREAST CANCER IS THE PRIMARY EXAMPLE BECAUSE MOST OF THE RESEARCH IN THIS AREA HAS BEEN DONE WITH SURVIVORS OF BREAST CANCER. DEALING WITH LIFE-THREATENING DISEASES CAUSES HIGH LEVELS OF ANXIETY AND FEAR. INDIVIDUALS' VIEWS OF THEMSELVES, THEIR LIFE, AND HOW THEY FIT WITHIN SOCIETY ARE CHALLENGED. HUMOR IS ONE WAY TO DECREASE THE LEVEL OF STRESS EXPERIENCED.

- HUMOR IS A USEFUL TOOL IN DECREASING STRESS THROUGH THE FOLLOWING:
  - CHANGING ONE'S PERSPECTIVE
  - ALLOWING A PERSON TO DISSOCIATE FROM THE PROBLEM FOR A BRIEF PERIOD
  - SHARING WITH OTHERS
  - OFFERING SOME RELIEF FROM INTENSE EMOTIONS
  - HAVING A SENSE OF EMOTIONAL AND PHYSICAL LIFTING OR LIGHTENING

# HUMOR AS A COMPLEMENTARY MEDICINE

- DURING PERIODS OF VERY HIGH LEVELS OF STRESS OR FEAR, HUMOR MAY NOT BE APPROPRIATE.
- IT IS IMPORTANT TO HAVE A LEVEL OF RAPPORT DEVELOPED BEFORE ATTEMPTING HUMOR IN LIFE-THREATENING SITUATIONS.
- MODELING BEHAVIOR, SUCH AS WEARING A SILLY BUTTON OR BEING PLAYFUL, GIVES THE CLIENT PERMISSION TO DO THE SAME.
- A RESIDENTIAL CARE FACILITY ADMINISTRATOR CAN ASK ABOUT A CLIENT'S USE OF HUMOR AS A COPING MECHANISM BUT ALSO MUST BE SENSITIVE TO THE CLIENT'S EMOTIONAL STATUS.
- ALTHOUGH THERE MAY BE A TIME WHEN HUMOR IS NOT APPROPRIATE, THERE ALMOST ALWAYS IS A TIME WHEN IT IS.



# DISEASE OUTCOMES

IF HUMOR, LAUGHTER, OR BOTH ARE TO BE USED TO HELP TREAT SPECIFIC DISEASE SYMPTOMS, KNOWLEDGE OF HOW HUMOR AND LAUGHTER AFFECT VARIOUS BODY SYSTEMS IS REQUIRED. UNFORTUNATELY, LESS RESEARCH HAS BEEN DONE IN THIS AREA THAN IS NEEDED. BUT PEOPLE WITH LIFE-THREATENING DISEASES ARE WILLING TO TRY DIFFERENT APPROACHES, PARTICULARLY WHEN MEDICAL TREATMENTS ARE NOT LIKELY TO PRODUCE A CURE. IT MAKES SENSE THAT ANYONE UNDER A LOT OF STRESS WOULD FIND HUMOR A MEANS OF CHANGING PERSPECTIVE, TAKING A BREAK FROM THE ANXIETY AND FEARS OF DEALING WITH SEVERE DISEASE PROCESSES. AS IN THE USE OF MORE TRADITIONAL MEDICATIONS, WHERE ONE MEDICATION CAN HAVE DIFFERENT EFFECTS ON DIFFERENT SYSTEMS AND ALSO SIDE EFFECTS, THE VARIOUS POSSIBLE EFFECTS OF HUMOR AND LAUGHTER SHOULD BE CONSIDERED. THIS CHAPTER WILL OUTLINE WHAT IS KNOWN ABOUT HOW HUMOR AND LAUGHTER AFFECT DIFFERENT BODY SYSTEMS AND THEN APPLY THIS INFORMATION TO RELEVANT OUTCOMES FOR VARIOUS DISEASE PROCESSES CONNECTED TO EACH SYSTEM.

# DISEASE OUTCOMES

JOHN, A 67-YEAR-OLD RETIRED FACTORY WORKER WHO HAS A HISTORY OF COPD AND IS OBESE, HAS RECENTLY EXPERIENCED A MILD MI. AFTER BEING SUCCESSFULLY TREATED AND RELEASED FROM THE HOSPITAL, HE HAS RECEIVED DAILY LOW-DOSE ASPIRIN, ATORVASTATIN, AND AN ANGIOTENSIN-CONVERTING ENZYME INHIBITOR. JOHN HAS ALSO BEEN ASSIGNED TO GO TO CARDIAC REHABILITATION AND TOLD TO STOP SMOKING AND TO START A LOW-CALORIE, LOW-CHOLESTEROL DIET. HE IS NOT HAPPY WITH ALL THESE MEDICATIONS AND INSTRUCTIONS ABOUT HIS LIFESTYLE. HE ASKS YOU, AS A FRIEND OF THE FAMILY, CAN HE TREAT HIMSELF IN A MORE NATURAL WAY SO THAT HE DOES NOT HAVE TO TAKE ALL THESE MEDICATIONS AND STOP DOING THINGS HE HAS DONE ALL HIS LIFE? HE HAS HEARD THAT LAUGHTER WORKS JUST LIKE EXERCISE, AND HE WOULD LIKE TO TRY IT INSTEAD OF THE OTHER THINGS HIS DOCTOR HAS PRESCRIBED.

# DISEASE OUTCOMES

## QUESTIONS

- WHAT DOES THE RESEARCH HAVE TO SAY ABOUT THE EFFECTS OF LAUGHTER ON POST-MI CLIENTS?
- CAN LAUGHTER BE USED IN PLACE OF HIS MEDICATIONS OR CARDIAC REHABILITATION OR LIFESTYLE CHANGES?
- WHAT CONTRAINDICATIONS MIGHT PROHIBIT THIS CLIENT FROM USING LAUGHTER AS A THERAPY?



# DISEASE OUTCOMES

## RESPONSES

- LAUGHTER DOES HAVE PHYSIOLOGICAL EFFECTS ON THE CARDIOVASCULAR SYSTEM, BUT THE EFFECTS THUS FAR MEASURED SEEM VERY SMALL, AND AT THIS POINT THERE IS NO DOCUMENTATION OF HOW LONG THESE EFFECTS MIGHT LAST.
- LAUGHTER CANNOT REALLY BE EXPECTED TO REPLACE CARDIAC REHABILITATION, A LOW-CALORIE DIET, OR THE MEDICATIONS ORDERED FOR THIS CLIENT. ON THE OTHER HAND, LAUGHTER THERAPY MIGHT BE A HELPFUL ADDITIONAL TREATMENT THAT MAY ACT TO DECREASE THE RECURRENCE OF MI IN CLIENTS WHO HAVE NO CONTRAINDICATIONS. THE EFFECTS OF LAUGHTER ON FEWER EPISODES OF ARRHYTHMIAS, LOWER BLOOD PRESSURE, LESS ANGINA, AND A SIGNIFICANTLY LOWER INCIDENCE OF REPEAT MI HAVE BEEN DEMONSTRATED IN AT LEAST ONE STUDY.
- FOR THIS CLIENT, LAUGHTER SHOULD BE INTRODUCED WITH CAUTION BECAUSE INTENSE LAUGHTER HAS BEEN SHOWN TO DECREASE LUNG FUNCTION IN SOME PEOPLE WITH COPD.

# DISEASE OUTCOMES

THERE SEEMS TO BE MORE WRITTEN IN THE POPULAR MEDIA ABOUT THE BENEFICIAL EFFECTS OF HUMOR THAN THE RESEARCH TO DATE SUPPORTS. HOWEVER, FOR A FEW DISEASE PROCESSES, LAUGHTER SEEMS TO HAVE SIGNIFICANT POTENTIAL AS A USEFUL COMPLEMENTARY THERAPY TO PROLONG HEALTHY LIFE. MORE RESEARCH IS NEEDED, BUT THE USE OF LAUGHTER IN POST-MI TREATMENT SEEMS TO SHOW THAT IN THE RIGHT CLIENT POPULATION, LAUGHTER MAY BE A VERY WORTHWHILE ADJUNCT TREATMENT. AS WITH ALL TREATMENTS, THE POSSIBILITY OF SIGNIFICANT SIDE EFFECTS EXISTS IN CERTAIN CLIENTS, SO ADMINISTRATORS NEED TO BE AWARE OF THESE POSSIBLE EFFECTS AND DO FOLLOW-UP INVESTIGATIONS IN CLIENTS WHO REPORT UNUSUAL SYMPTOMS AFTER LAUGHTER.

# PRACTICE INTERVENTIONS

SOMETIMES HUMOR HAPPENS SPONTANEOUSLY AND WORKS AS A MEANS OF CONNECTION BETWEEN THE RESIDENTIAL CARE FACILITY ADMINISTRATOR AND THE CLIENT OR BETWEEN THE ADMINISTRATOR AND THE FACILITY STAFF. EITHER WAY, IT IS HELPFUL FOR RESIDENTIAL CARE FACILITY ADMINISTRATORS TO PRACTICE PUTTING MORE HUMOR INTO THEIR LIVES TO INCREASE THE LIKELIHOOD OF USING HUMOR MORE OFTEN WITH CLIENTS AND COWORKERS. SOME TECHNIQUES FOR INCREASING THE AMOUNT OF HUMOR IN LIFE INVOLVE CREATING A MORE LIGHT-HEARTED ENVIRONMENT THROUGH THE ADDITION OF PLAYFUL TOYS AND TOOLS. SOME STRATEGIES INCLUDE PRACTICING BEHAVIORS SUCH AS JOURNALING, JOKE TELLING, OR STORYTELLING. OTHER TECHNIQUES INVOLVE LOOKING WITHIN, PLAYING WITH MIND-SET AND PERSPECTIVE. EVEN THOUGH HUMOR CAN BE THERAPEUTIC, THERE ARE TIMES WHEN HUMOR IS APPROPRIATE AND TIMES WHEN IT IS NOT. THERE ARE ALSO CERTAIN TYPES OF HUMOR THAT DO NOT HAVE A PLACE IN THE WORKPLACE. BOTTOM LINE: ADMINISTRATORS SHOULD BE SENSITIVE TO OTHERS AND HONOR THEIR ABILITY TO FIND FUNNY THINGS IN EVERYDAY EXPERIENCES.



# PRACTICE INTERVENTIONS

- TO ADD HUMOR TO THE WORKPLACE TO HELP CLIENTS, ADMINISTRATORS MUST FIRST HAVE HUMOR IN THEIR OWN LIVES.
  - BE ALERT TO WAYS OF ADDING HUMOR.
  - REMEMBER TO TAKE YOURSELF LIGHTLY WHILE TAKING WORK SERIOUSLY.
- WHEN PUTTING HUMOR IN CLIENT CARE, ADMINISTRATORS SHOULD DO THE FOLLOWING:
  - BE SENSITIVE
  - BE ALERT.
  - DEVELOP RAPPORT.
  - LOOK FOR OPPORTUNITIES TO LIGHTEN THE TENSION.
  - SMILE (IT MAKES YOU FEEL BETTER AND HELPS THOSE AROUND YOU).
- AVOID THE FOLLOWING TYPES OF HUMOR:
  - PUT-DOWN, SARCASTIC HUMOR
  - ETHNIC JOKES
  - ANTI-JOKES
  - GALLOWS OR BLACK HUMOR (THIS HUMOR MIGHT BE APPROPRIATE WITH COWORKERS, BUT IT IS NOT APPROPRIATE WITH CLIENTS)
- BE SURE IT IS THE RIGHT TIME. CLIENTS AND STAFF NEED TO BE EMOTIONALLY RECEPTIVE TO HUMOR, AND THERE ARE TIMES WHEN HUMOR IS JUST NOT APPROPRIATE.
- USE INTERVENTIONS TO PREVENT COMPASSION FATIGUE
  - ALTHOUGH IT IS IMPORTANT TO TAKE WORK SERIOUSLY, TAKE YOURSELF LIGHTLY.
  - LOOK FOR THE FUNNY SIDE OF LIFE.

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