

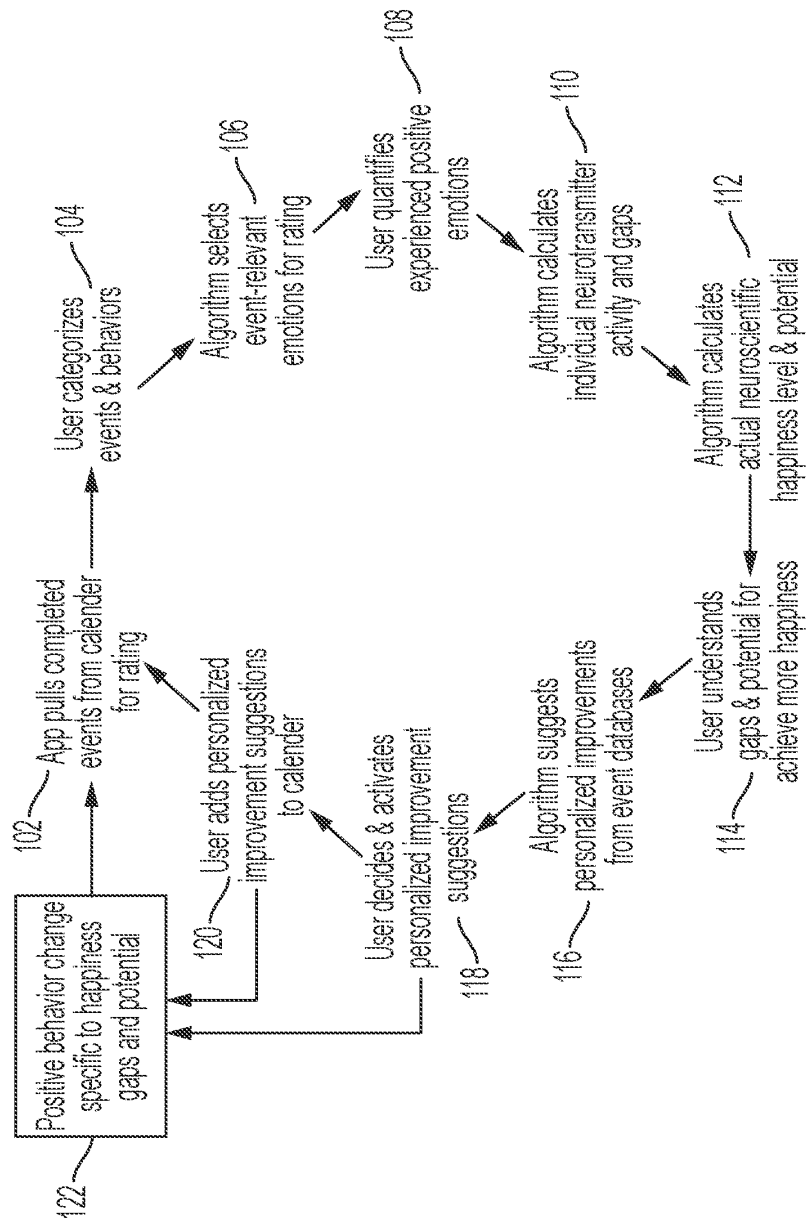


FIG. 1

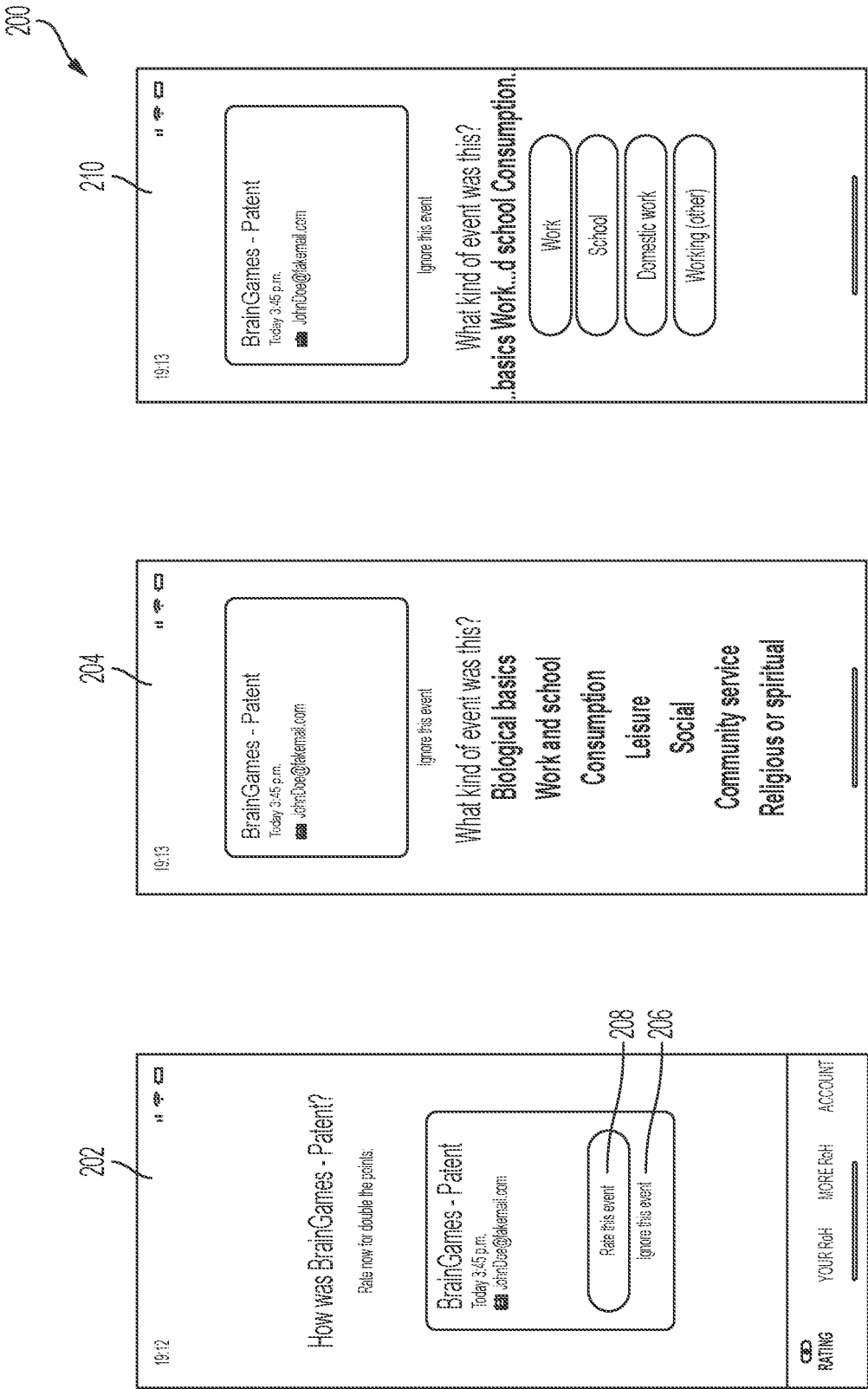


FIG. 2

B - PE - Matrix

Positive Emotions (PE)

Behaviors (B)	EN	SD	PR	NL	CO	AM	AL	PL	GR
Biological Basics									
Sleeping	1	0	0	0	0	0	0	0	0
Eating/drinking	1	0	0	0	0	0	0	0	0
Having sex	1	1	0	0	0	0	1	1	0
Work & school									
Work	1	0	1	0	1	0	1	1	1
School	1	0	1	0	1	0	1	1	1
Domestic Work	1	0	1	1	1	0	0	1	1
Work (other)	1	0	1	0	1	0	1	1	1
Consumption									
Shopping (in person)	1	0	1	0	0	1	0	1	0
In-person Services	1	0	1	0	0	1	0	1	0
Online Shopping	1	0	1	0	0	1	0	1	0
Shopping (other)	1	1	1	0	0	1	1	1	0
Leisure									
Reading	1	0	0	0	1	1	0	1	1
Reading (online)	1	0	0	0	1	1	0	1	1
Doing sports	1	0	1	0	1	1	1	1	1
Playing music/theatre	1	0	1	0	1	1	1	1	1
Photography	1	0	1	0	1	1	1	1	1
Videography	1	0	1	0	1	1	1	1	1
Watching Entertainment	1	1	0	0	1	1	0	1	0
Listening to music	1	0	0	0	1	1	0	1	0
Playing video games	1	0	1	0	0	1	1	1	0
Social Media	1	1	1	1	0	1	1	1	0
Painting	1	0	1	0	1	0	0	1	1
Meditation	1	0	1	0	1	0	1	1	1
Leisure (other)	1	1	1	0	0	1	1	1	0
Social									
Activities with family	1	0	1	1	1	1	0	1	1
Activities with friends	1	0	1	0	1	1	1	1	1
Social (other)	1	1	1	0	1	1	0	1	1
Community service									
Teaching (school university)	1	0	1	0	1	0	1	1	1
Coaching	1	0	1	0	1	0	1	1	1
Teaching (other)	1	0	1	0	1	0	1	1	1
Child care	1	0	1	0	1	0	1	1	1
Elderly care	1	0	1	0	1	0	1	1	1
Police & Fire Department	1	0	1	0	1	0	1	0	1
Rescue & Healthcare	1	0	1	0	1	0	1	0	1
Military	1	0	1	0	1	0	1	0	1
Community service (other)	1	0	1	0	1	0	1	0	1
Religious or Spiritual	1	0	1	0	1	0	1	0	1

300

FIG. 3

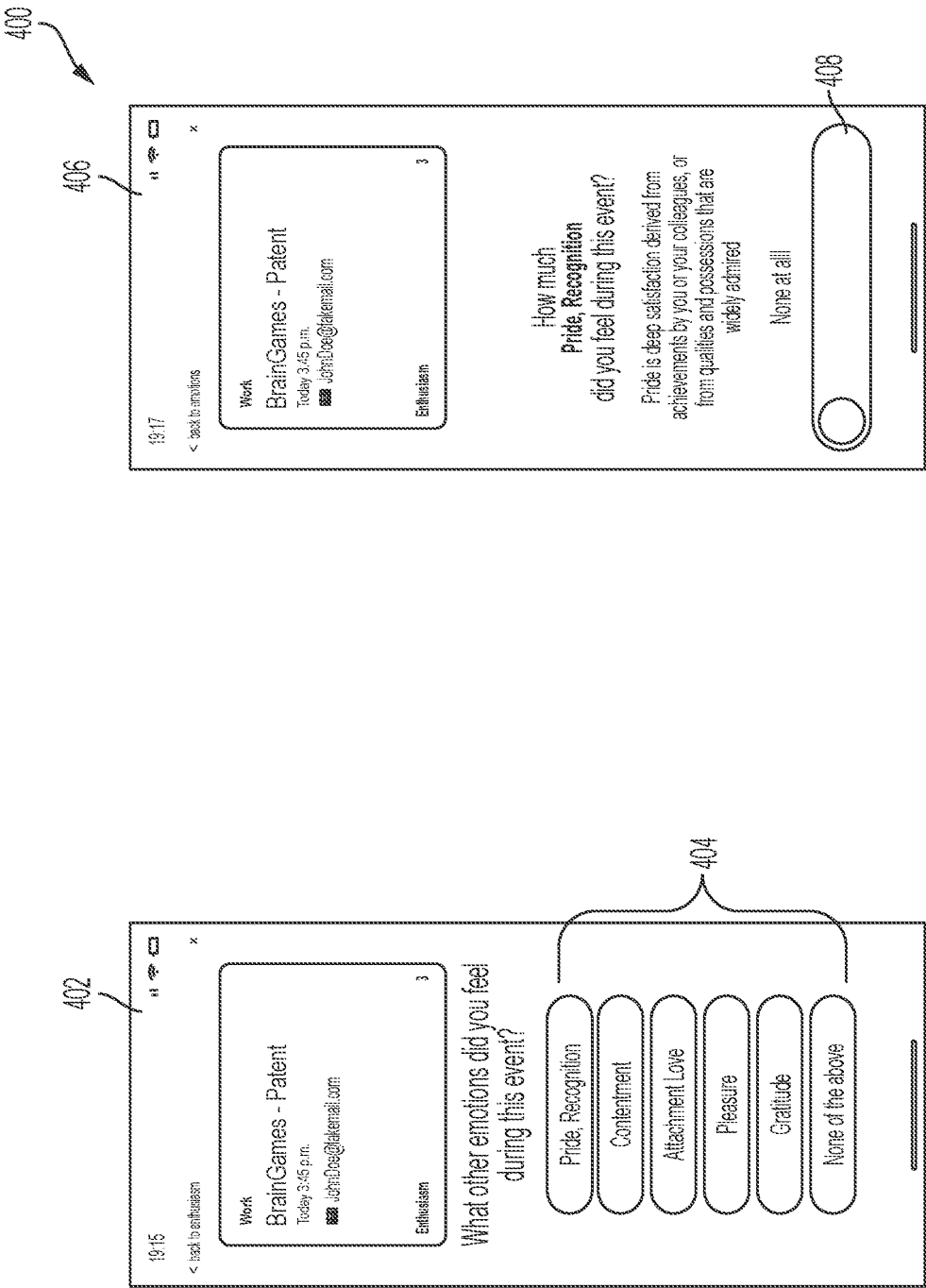


FIG. 4

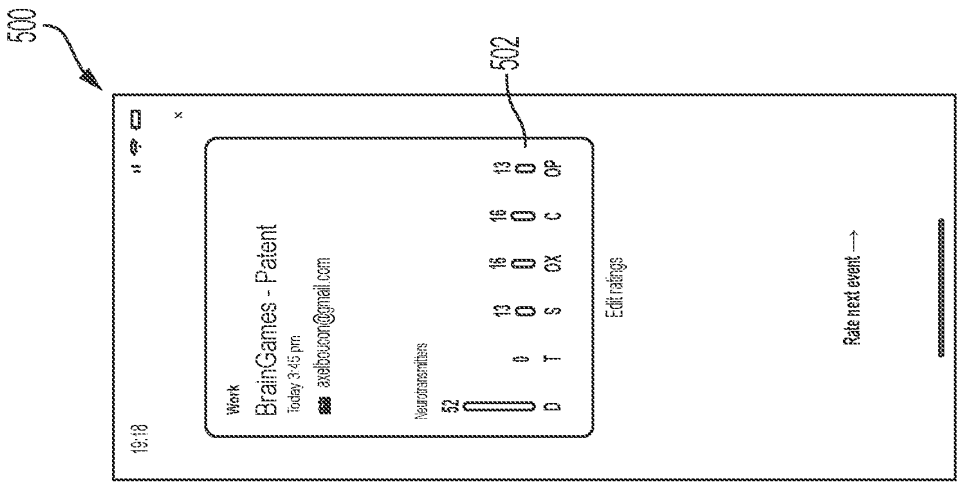


FIG. 5

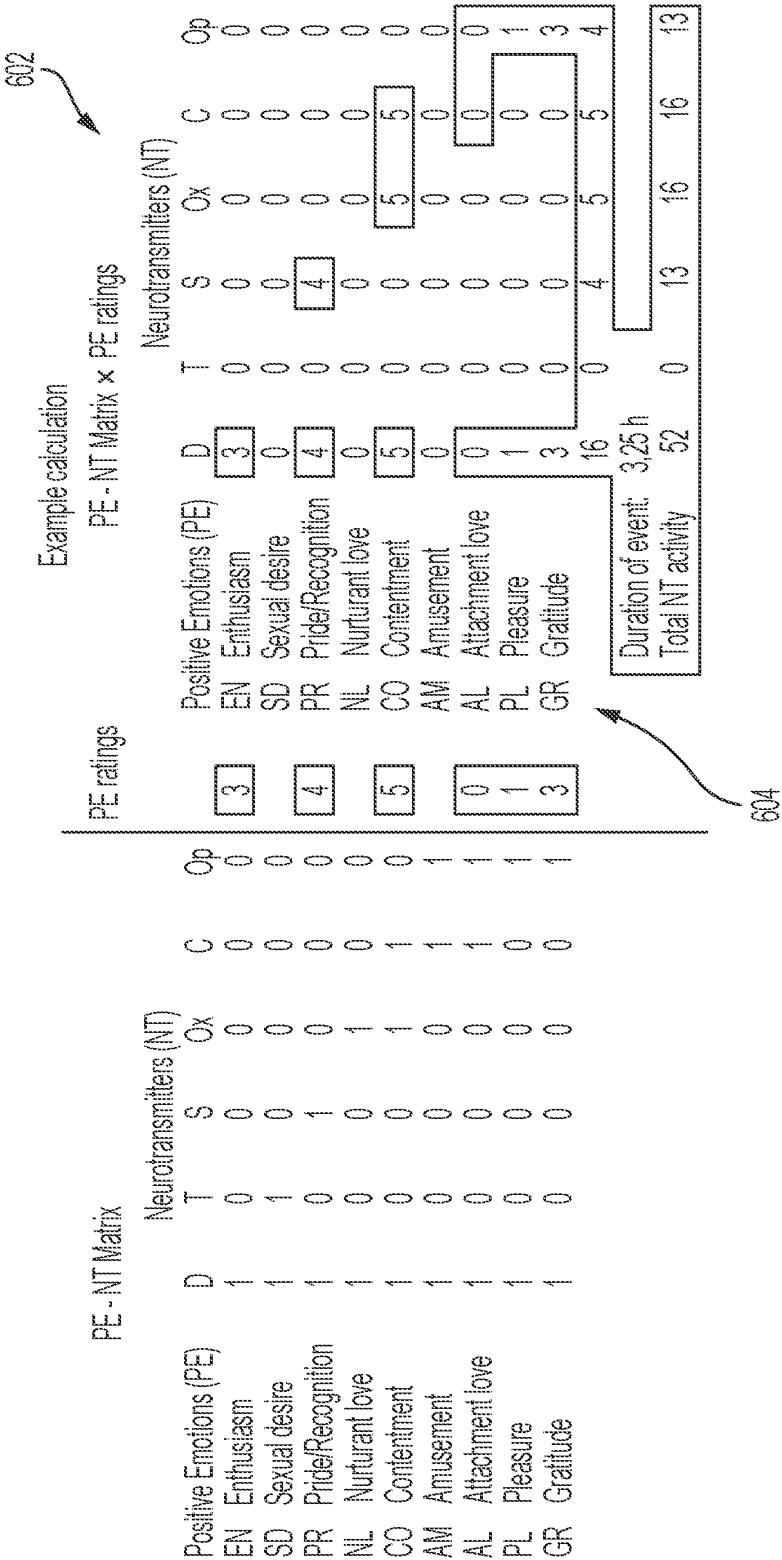


FIG. 6

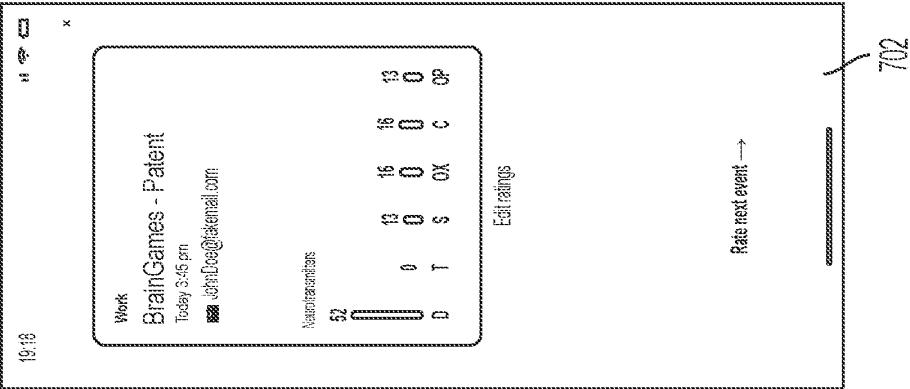
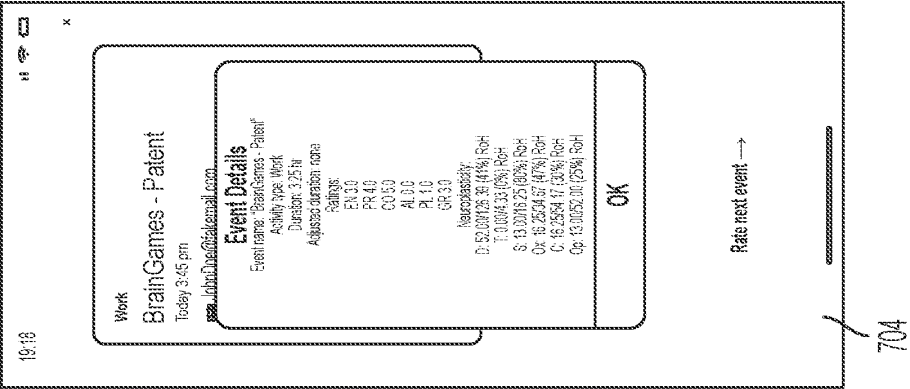


FIG. 7

Theoretical RoHimax Values - Input

Awake hours per day	24
Assessment coverage	100%
Assessments above Dopamine hurdle rate	100%
Number emotions	9
Total number of neurotransmitter triggered	20
Multiplier Dopamine	9
Multiplier Testosterone	1
Multiplier Serotonin	1
Multiplier Oxytocin	2
Multiplier Cannabinoids	3
Multiplier Opioid	4
Rating maximum per emotion	8

Awake time covered by emotion assessment, 100% = 16h per day completely covered by emotion assessment
Assessed time passing Dopamine hurdle rate of >1, 100%

800

802

Theoretical RoHimax Values

	Day	Week	Months	Quarter	Year
		7	30	120	365
Theoretical maximum Dopamine	1,728	12,096	51,840	207,360	630,720
Theoretical maximum Testosterone	192	1,344	5,760	23,040	70,080
Theoretical maximum Serotonin	192	1,344	5,760	23,040	70,080
Theoretical maximum Oxytocin	384	2,688	11,520	46,080	140,160
Theoretical maximum Cannabinoids	576	4,032	17,280	69,120	210,240
Theoretical maximum Opioids	768	5,376	23,040	92,160	280,320
Theoretical RoHimax total	3,840	26,880	115,200	460,800	1,401,600

Theoretical RoHimax Values - sleep adjusted - Input

Awake hours per day	16
Assessment coverage	100%
Assessments above Dopamine hurdle rate	100%
Number emotions	9
Total number of neurotransmitter triggered	20
Multiplier Dopamine	9
Multiplier Testosterone	1
Multiplier Serotonin	1
Multiplier Oxytocin	2
Multiplier Cannabinoids	3
Multiplier Opioids	4
Rating maximum per emotions	8

Default setting at 6h, assuming 6 hours of sleep a night (scientifically proven healthy minimum), to be manually adjusted
Awake time covered by emotion assessment, 100% = 16h per day completely covered by emotion assessment
Assessed time passing Dopamine hurdle rate of >1, 100%

804

Theoretical RoHimax Values - sleep adjusted

	Day	Week	Months	Quarter	Year
		7	30	120	365
Theoretical maximum Dopamine	1,296	9,072	38,880	155,520	473,040
Theoretical maximum Testosterone	144	1,008	4,320	17,280	52,560
Theoretical maximum Serotonin	144	1,008	4,320	17,280	52,560
Theoretical maximum Oxytocin	288	2,016	8,640	34,560	105,120
Theoretical maximum Cannabinoids	432	3,024	12,960	51,840	157,680
Theoretical maximum Opioids	576	4,032	17,280	69,120	210,240
Theoretical RoHimax	2,880	20,160	86,400	345,600	1,051,200

FIG. 8A

Real-world RoHmax Values - all adjustments- Input						
Awake hours per day	18	Default setting at 6h, assuming 6 hours of sleep a night (scientifically proven healthy minimum), to be manually adjusted				
Assessment coverage	100%	Awake time covered by emotion assessment, 100% = 18h per day completely covered by emotion assessment				
Assessments above Dopamine hurdle rate	100%	Assessed time passing Dopamine hurdle rate of >1. 100%				
Number emotions	9					
Total number of neurotransmitter triggered	20					
Multiplier Dopamine	9					
Multiplier Testosterone	1					
Multiplier Serotonin	1					
Multiplier Oxytocin	2					
Multiplier Cannabinoids	3					
Multiplier Opioids	4					
Rating maximum Dopamine - adjusted	5	Desensitization (maximum of & will not be maintained neurologically, adjusted average peak level for sustained stimulation)				
Rating maximum Testosterone - adjusted	6	Desensitization (maximum of & will not be maintained neurologically, adjusted average peak level for sustained stimulation)				
Rating maximum Serotonin - adjusted	5	Desensitization (maximum of & will not be maintained neurologically, adjusted average peak level for sustained stimulation)				
Rating maximum Oxytocin - adjusted	6	Desensitization (maximum of & will not be maintained neurologically, adjusted average peak level for sustained stimulation)				
Rating maximum Cannabinoids - adjusted	6	Desensitization (maximum of & will not be maintained neurologically, adjusted average peak level for sustained stimulation)				
Rating maximum Opioids - adjusted	4	Desensitization (maximum of & will not be maintained neurologically, adjusted average peak level for sustained stimulation)				
Adjustment Testosterone (4h/d max)	-84	Adjusted for 4h sexual desire a day as maximum				
Adjustment Testosterone OR Oxytocin	-24	Oxytocin adjusted for time of Testosterone release (parallel release not observed, sequential release observed regularly/strongly)				
Adjustment Testosterone OR Cannabinoids	-24	Cannabinoids adjusted for time of Testosterone release (parallel release not observed, sequential release observed regularly/strongly)				
Adjustment Dopamine for Testosterone specifics	-110					
806						
Real-world RoHmax Values - all adjustments	Day	Week	Months	Quarter	Year	
		7	30	120	365	
Real-world maximum Dopamine	700	4,900	21,000	84,000	255,500	Maximum RoH and neurotransmitter values used as a reference in the RoH app
Real-world maximum Testosterone	24	168	720	2,880	8,760	
Real-world maximum Serotonin	30	630	2,720	10,800	32,850	
Real-world maximum Oxytocin	192	1,344	5,760	23,040	70,080	
Real-world maximum Cannabinoids	300	2,100	9,000	36,000	109,500	
Real-world maximum Opioids	288	2,016	8,640	34,560	105,120	
Real-world RoHmax	1,594	11,158	47,820	191,280	581,810	

FIG. 8B

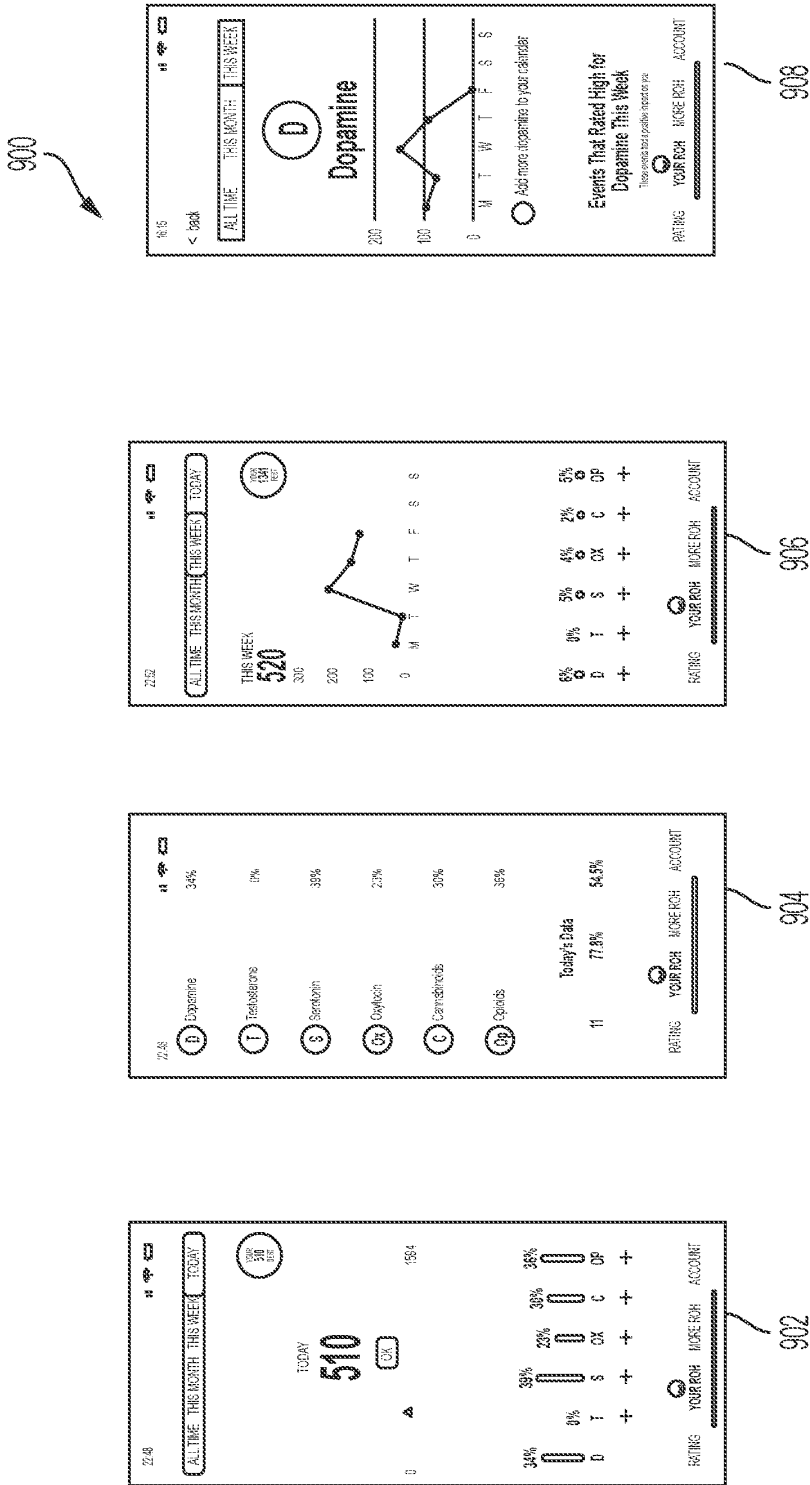


FIG. 9

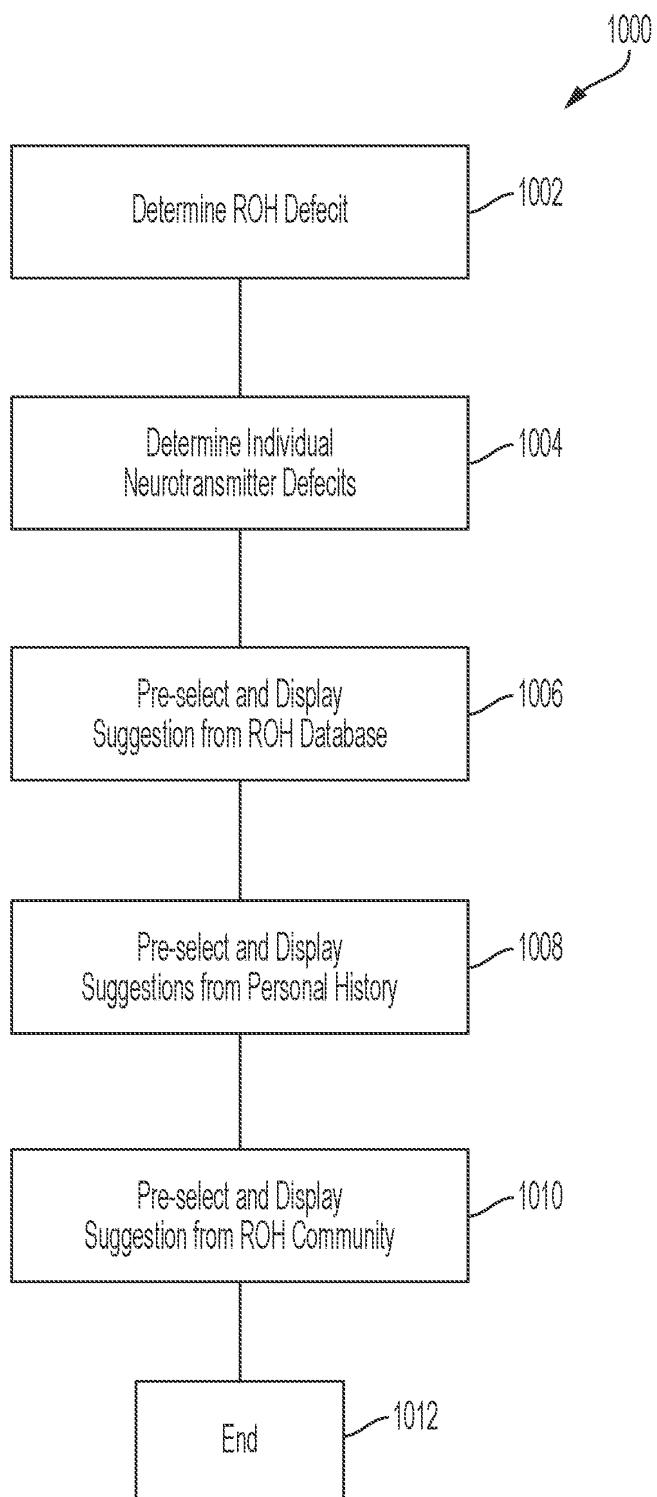


FIG. 10

1106 Understimulation	1108 Optimum	Dopamine 1102 Peak 1110	1100
Stop activities you do not like or do not excite you	Learn	Learn entirely new things	
Avoid routine	Spend time with people you like or who excite you	Do calendar planning with the only focus to increase ROH	
Avoid being bored	Everything and everyone that excites you (don't care what others say)	Be playfully competitive, e.g. you against your personal record, you against nature, all team sports, band/orchestra	
Avoid people you do not like (reasons do not matter)	Everything that is new but does not worry or scare you	Eternal memories; design and do activities you never would like to forget. Always add a grain of uncertainty	TO FIG. 11B
Avoid extreme competitive pressure by others	Embrace uncertainty - allow to be surprised	Ruthlessly cut time-wasted. Cut all activities <3 rating	
Avoid extreme pressure on yourself by yourself	Any physical activity, in particular if exhausting	Ruthlessly cut time-wasted. Cut interacting with people delivering <3 ratings or resolve pending issues with them	
Avoid totally risk-free environments	Consider ROH in your calendar planning	Sleep enough (6-8 hours). Sleep is active happiness management. Increasing Your RoH by cutting on sleep only works short-term but it is devastating long-term	
Increase nutrition or add nutritional supplements rich in Phenylalanine or Tyrosine	Sleep enough (6-8 hours). Sleep is active happiness management. Increasing Your RoH by cutting on sleep only works short-term but it is devastating long-term		
If Dopamine levels remain low over a longer-period of time please see your therapist or physician	Dopamine is the critical cofactor for all positive emotions. That means any positive emotions releases Dopamine.		

FIG. 11A

1104 — Testosterone

Overstimulation	Understimulation	Optimum
Reflect upon, only sporadically consume or try to avoid behaviors that are designed to be addictive (e.g. Instagram, Youtube, video gaming)	It might be simply missed - we rarely journal activities linked to sexual desire. Put it in from now on (encrypt it!).	It might be simply missed - we rarely journal activities linked to sexual desire. Put it in from now on (encrypt it!).
Reflect upon, only sporadically use or try to avoid taking stimulating drugs	Avoid routine	Sexual desires are fundamentally blocked by social and educational norms. Allow yourself to think and reflect outside the norms
Reflect upon, only sporadically use stimulating food (e.g. high fat, sugar), beverages (e.g. sugar, caffeine)	If you are in a partnership, reflect why you do not experience sexual desire.	Be honest to yourself what is sexually attracting you (don't care what others say)
Reflect upon, only sporadically use stimulating nutritional supplements (e.g. Phenylalanine, Tyrosine)	If you are in a partnership but too stressed, reserve a dedicated date for the two of you	Design scenes or reflect situations in your mind that trigger your sexual desire. Talk about it to your partner, if it feels appropriate
Sleep enough (6-8 hours). Sleep is active happiness management. Increasing Your RoH by cutting on sleep only works short-term but it is devastating long-term	If you are in a partnership with your kids, organize a nanny while you meet your partner in a hotel nearby	Get experimental. Whatever you do, always think about the other side, never hurt someone (emotionally, physically)
Dopamine is the critical cofactor for all positive emotions. That means any positive emotions releases Dopamine.	You don't need a partner to enjoy sexual desire. Try to trigger your sexual desire by yourself if you miss it	Enhance Testosterone by pushing dopamine: Embrace uncertainty-allow to be surprised. Be spontaneous.
	Always check: What do you miss? Do not compensate missing love/partnership with sexual desire	Always check: What do you miss? Do not compensate missing love/partnership with sexual desire
	Hormone level and certain medications critically influence sexual desire. Check with your physician.	
	Hormone level and certain medications critically influence sexual desire. Check with your physician.	

FROM
FIG.
11ATO
FIG.
11C

FIG. 11B

FROM
FIG. 11B

Peak	Overstimulation
Enhance beyond Testosterone: passion, risk, surprise (Dopamine), positive recognition to each other (Serotonin), touch (Oxytocin), laugh & embrace orgasm (opioids)	Reflect upon and potentially reduce the time spend with pornography. It negatively influences your hurdle to enjoy sexual desire naturally/normally.
Talk about your wishes. And just live them in reality.	Reflect upon and potentially adjust your time on dating apps (e.g. Grindr, Tinder). It negatively influences your hurdle to enjoy sexual desire naturally/normally.
Eternal memories: design and do activities you never would like to forget. Always add uncertainty	Reflect upon and potentially adjust the amount of drugs you use to enhance sexual desire. It destroys your ability to enjoy natural sexual desire.
	Always check: What do you miss? Do not mix up missing sexual desire and missing love/partnership.

FIG. 11C

Serotonin 1202 1200		
Understimulation	Optimum	Peak
Don't get depressed not feeling recognized - it is the most pressing need in today's society. Almost everyone faces this challenge. You are not alone.	All activities that have the potential to provide social recognition by yourself (self-confirmed self-esteem) or by others (interpersonal self-esteem)	Self-esteem: Focus on activities that take a longer time and take a high level of persistence. Huge Serotonin peak upon achievement
Rigorously avoid people increasing their self-esteem on your expense.	Pride on others: Join activities important for your beloved ones.	Self-esteem: Focus on activities targeting highly ambitious objectives that go beyond monetary value. Huge Serotonin peak upon achievement
Rigorously avoid people putting pressure on you or confront them with the issue. Be aware that this could be your mother, father, partner, best friend.	Celebrate your success and achievements	Self-esteem: Achieve big successes in a cooperative, pro-social and fair manner. Huge serotonin peak upon achievement
Stop comparing you to others. You are special and unique.	Don't increase your self-esteem at the expense of others - it triggers Dopamine not Serotonin. Never bully individuals with fragile self-esteem, it triggers depression!	Self-esteem: Take pride to defend and fight for the weakest, the poor, the handicapped
Reflect every evening what you have achieved already. Beginning with the fact that you are here because you won the first, the most challenging race being born	Reflect media that are built to compare and put pressure on you and consume them based on your reflection (e.g. instagram)	Pride on others: Join activities important for your beloved ones. Join the activities without any expectations to reduce the pressure on your beloved ones.
Avoid media that are built to compare and put pressure on you (e.g. instagram)		Pride on others: Celebrate achievements of your beloved - as many and as intensive you can
Increase nutrition or add nutritional supplements rich in Tryptophane		Pride on others: Mentor your beloved ones to be successful. For them, not for you. Stay humble in the back enjoying their success provides a huge Serotonin peak
If Serotonin levels remain low over a longer-period of time please see your therapist or physician		

TO
FIG.
12B

FIG. 12A

1204  Oxytocin

	Overstimulation	Understimulation	Optimum
	Reflect upon and potentially adjust the amount of drugs you use to push Serotonin, e.g. Ecstasy, MDMA. It destroys your ability to enjoy real pride and recognition.	Increase all activities with positive physical interaction, e.g. hugging, touching, kissing - important: only works if both/all parties have a positive experience	Increase all activities with positive physical interaction, e.g. hugging, touching, kissing - important: only works if both/all parties have a positive experience
	Check? Pathologically exceeded pride can be experienced as hubris, a foolish pride or dangerous overconfidence often in combination with arrogance.	Eating together. Feeding each-other is a strong booster for Oxytocin release rarely practiced anymore	Eating together. Feeding each-other is a strong booster for Oxytocin release rarely practiced anymore
	Check: What do you miss? Don't use success in business or monetary wealth as a fake surrogate for social recognition	If you do not have a family or kids, do not worry. Contentment is a great and very effective source for Oxytocin as well	Any positive activity with your direct family, spouse, kids, mother, father, sister, brother, grandmother, grandfather
FROM FIG. 12A	Don't increase your self-esteem at the expense of others - it triggers Dopamine not Serotonin. Never bully individuals with fragile self-esteem, it triggers depression!		Any care giving or teaching activity for young or helpless individuals such as children, handicapped or elderly people
	Be honest to yourself how many people really admire you because of the good person you are and not the money or power you have.		Throughout your life build contentment as the second very effective source of Oxytocin. It will become in particular important when you age or the kids move out

TO
FIG.
12C

FIG. 12B

FROM
FIG. 12B

Peak	Overstimulation
Increase all activities with positive physical interaction, e.g. hugging, touching, kissing - important: only works if both/all parties have a positive experience	Helicopter mother, momanager: stop overprotecting your kids for the sake of managing your fear to lose them. You are not responsible for their happiness. They are.
If you are a woman: Giving birth is the peak-of-the-peaks	Helicopter father: stop overprotecting your kids for the sake of managing your fear to lose them. You are not responsible for their happiness. They are.
If you are a man: hugging your baby or kids is the peak-of-the-peaks	Hyper-jealous farther and partner: be aware, Oxytocin drives jealousy and aggressive defense of the family in men. Reflect it, control it and then stop acting like a fool.
Eternal memories: design and do activities with your kids and family you never would like to forget. Carefully add uncertainty - keeping them safe is critical	Caring for the family can lead to Oxytocin desensitization driving guilt and depression. Please take a break: Oxytocin only works if all parties have a positive experience
Build and enjoy contentment - it is primarily a result of reflection and the decision to live peaceful, release everything that makes us feel anxious and dissatisfied	

FIG. 12C

Cannabinoids 

Understimulation	Optimum	Peak	Overstimulation
A lot of activities can boost cannabinoids. You can get them from friendship, contentment or amusement	A lot of activities can boost cannabinoids. You can get them from friendship, contentment or amusement	Eternal memories: design and do activities with your friends you never would like to forget. Add a lot of uncertainty, add fun, add some risk, but don't hurt anyone.	Reflect upon and reduce cannabis consumption to a minimum. It suppresses fears instead of addressing them, induces memory loss, suppresses your greatness
if you miss friends, amuse yourself	All activities with true friends and - to a lesser extent - with people you are positive about	Given the emotional intensity necessary to maintain and enjoy a true friendship, be aware that high ratings in cannabinoids come from very few best friends	The more friends you claim to have (e.g. social media "friends") the lesser will be your cannabinoid release. Instead you release Serotonin (recognition)
	Play. Go out, play with your best friends!	Build real friendships: mutual commitment to each other's happiness; reciprocal liking; intimacy; shared activity; common values & mutual respect	Be aware that digital friends (social media) can trigger Cannabinoid release. You have to know them in real-life#
	All activities that make you laugh - Laugh as much as you can	Build and enjoy contentment - it is primarily a result of reflection and the decision to live peaceful, release everything that makes us feel anxious and dissatisfied	Don't laugh at the expense of others. It is not releasing cannabinoids. It is not amusement but short-term, negative pride = zero neuroplasticity.
	Entertain yourself optimally with others joining	Just watch, listen to and learn from kids having fun playing with each other, laughing. Kids are ultimate leaders in releasing cannabinoids	

TO
FIG. 13B

FIG. 13A

Opioids  1304

Understimulation	Optimum	Peak	Overstimulation
Reflect what are activities that you like, you enjoy. Try to increase the amount of these activities over time.	All activities that you enjoy or like - with euphoria being the extreme. Use any positive person or friend as an amplifier.	Reach euphoria and ecstasy in your life. Without opioid-stimulating drugs.	Don't do drugs or behaviors overstimulating pleasure. They increasing your hurdle rate to experience pleasure to levels that can't be achieved naturally.
If you do not experience any pleasure over a longer period of time and you can't change it by yourself, please see your therapist or physician	Leave a certain level of surprise and uncertainty to your activities because "unexpected pleasure" drives much more neuroplasticity than "planned pleasure".	Eternal memories: design and do activities with your family or friends you never would like to forget. Add a grain of uncertainty, make it an adventure, add fun.	Check, reflect, potentially adjust: Do you enjoy the pleasure during the activity per se (ok!) or do you only crave for the pleasure feeling at the end (emerging addiction!)?
	Orgasmic pleasure is the best build-in drug we have in our body. So, have an orgasm once in a while.	Orgasmic pleasure is the best build-in drug we have in our body. So, let's have more orgasms and more intensive ones. Works best with joint orgasms by the way.	
	Start understanding gratitude - it is first of all a mindset only then it can turn into activities. Reflect your life once a day and be grateful on what you have got & achieved.	Provide unexpected pleasure to others understanding how much it will give to them	
	Show appreciation and return kindness	Fully embrace gratitude, as the highest positive emotion: appreciation, affirmation of goodness, understanding that gratitude is gratis & outside ourselves	

FIG. 13B

FROM
FIG. 13A

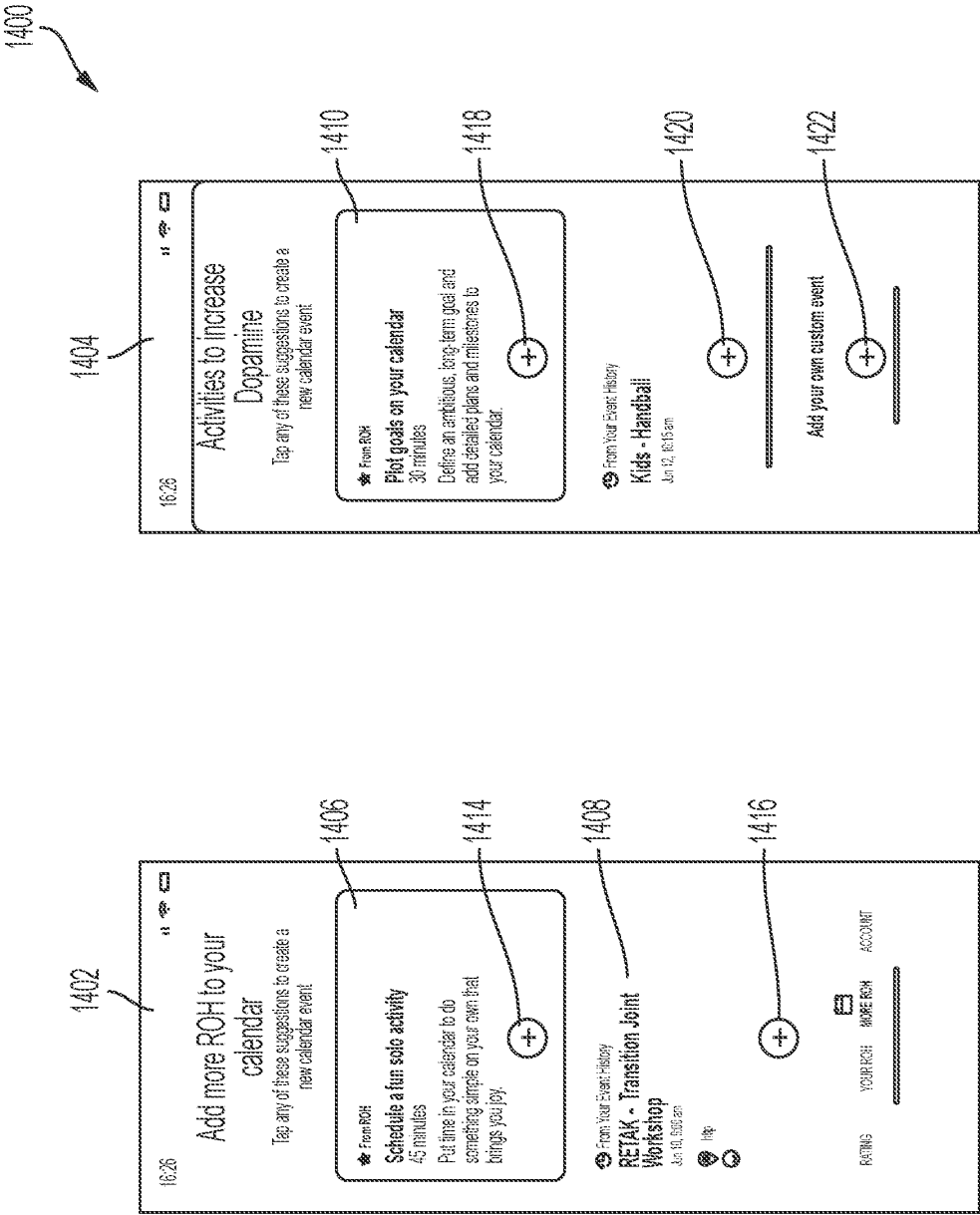


FIG. 14

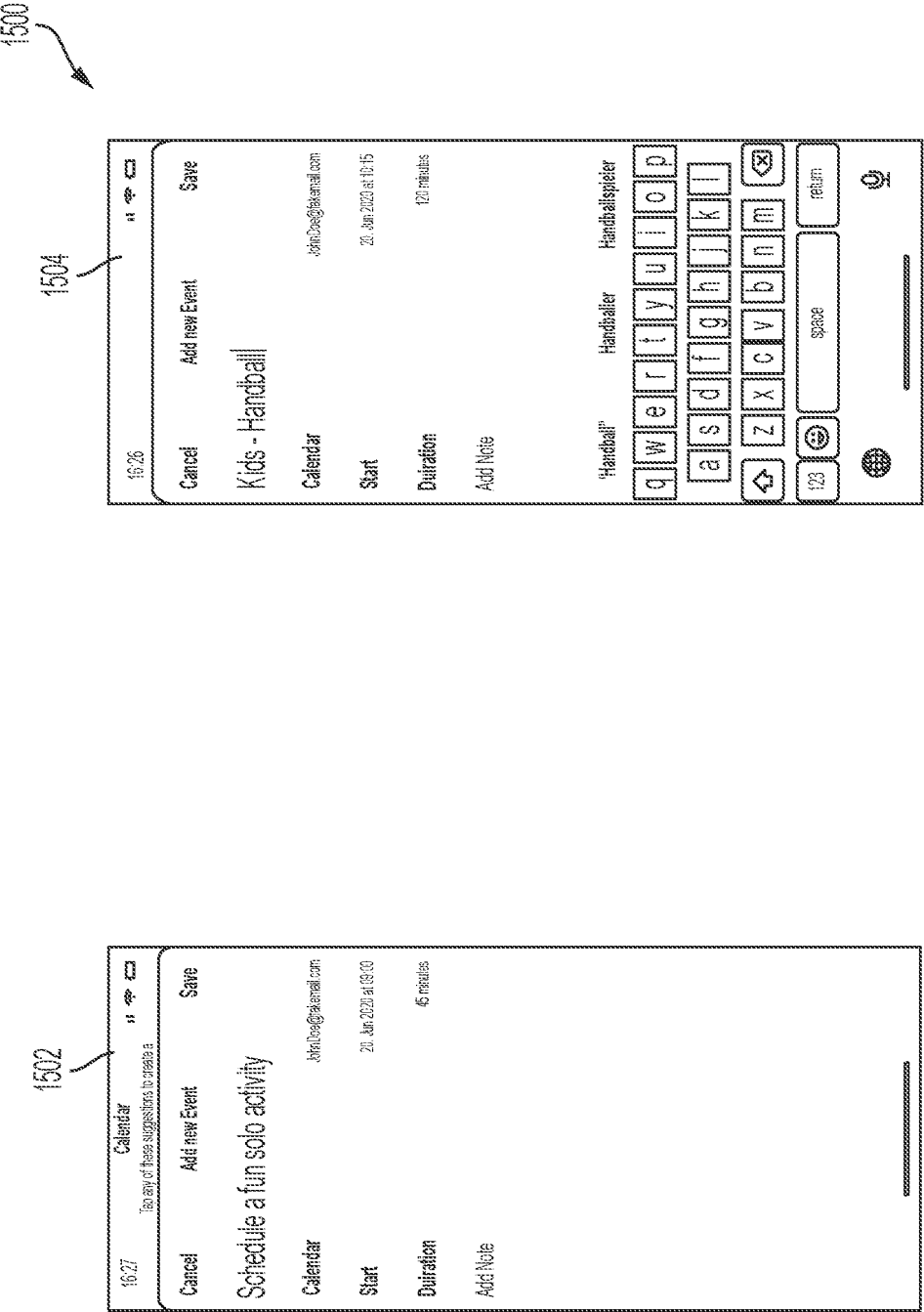


FIG. 15

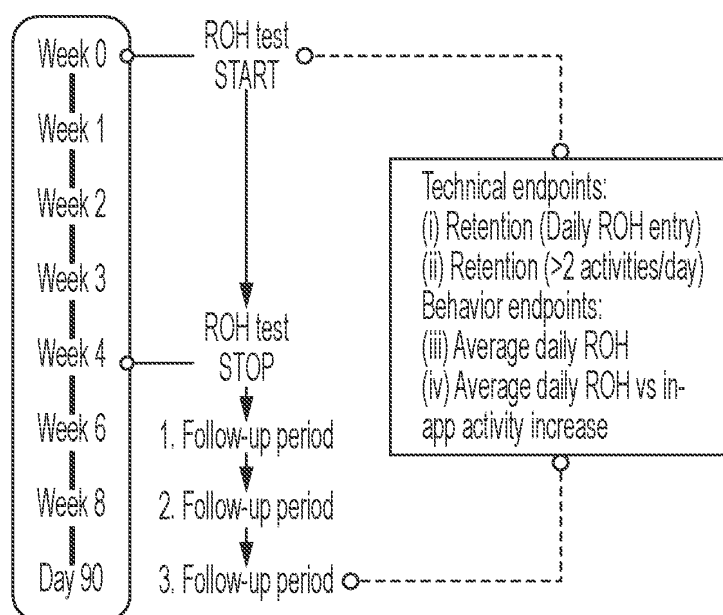


FIG. 16

	1	2	3	4	5	6	7	8	9
A				Retention vs Rating started		Retention vs ROH Installed		Retention vs Randomized	
B		Number of participants		Daily ROH recording	>2 In-app activities/day	Daily ROH recording	>2 In-app activities/day	Daily ROH recording	>2 In-app activities/day
C	Contacted	100							
D	Interested in trial	84							
E	Selected & randomized	50							
F	ROH onboarding session	50							
G	ROH app received	50							
H	ROH app installed	43							
I	Rating started	33	ROH test - START						
J	Continuous rating at 28 days	17	ROH test - STOP	52%	38%	40%	29%	34%	25%
K	Continuous rating at 42 days	11	1. Follow-up period	33%	29%	26%	22%	22%	19%
L	Continuous rating at 56 days	8	2. Follow-up period	24%	16%	19%	12%	16%	11%
M	Continuous rating at 90 days	8	3. Follow-up period	24%	not measured	19%	not measured	16%	not measured

FIG. 17

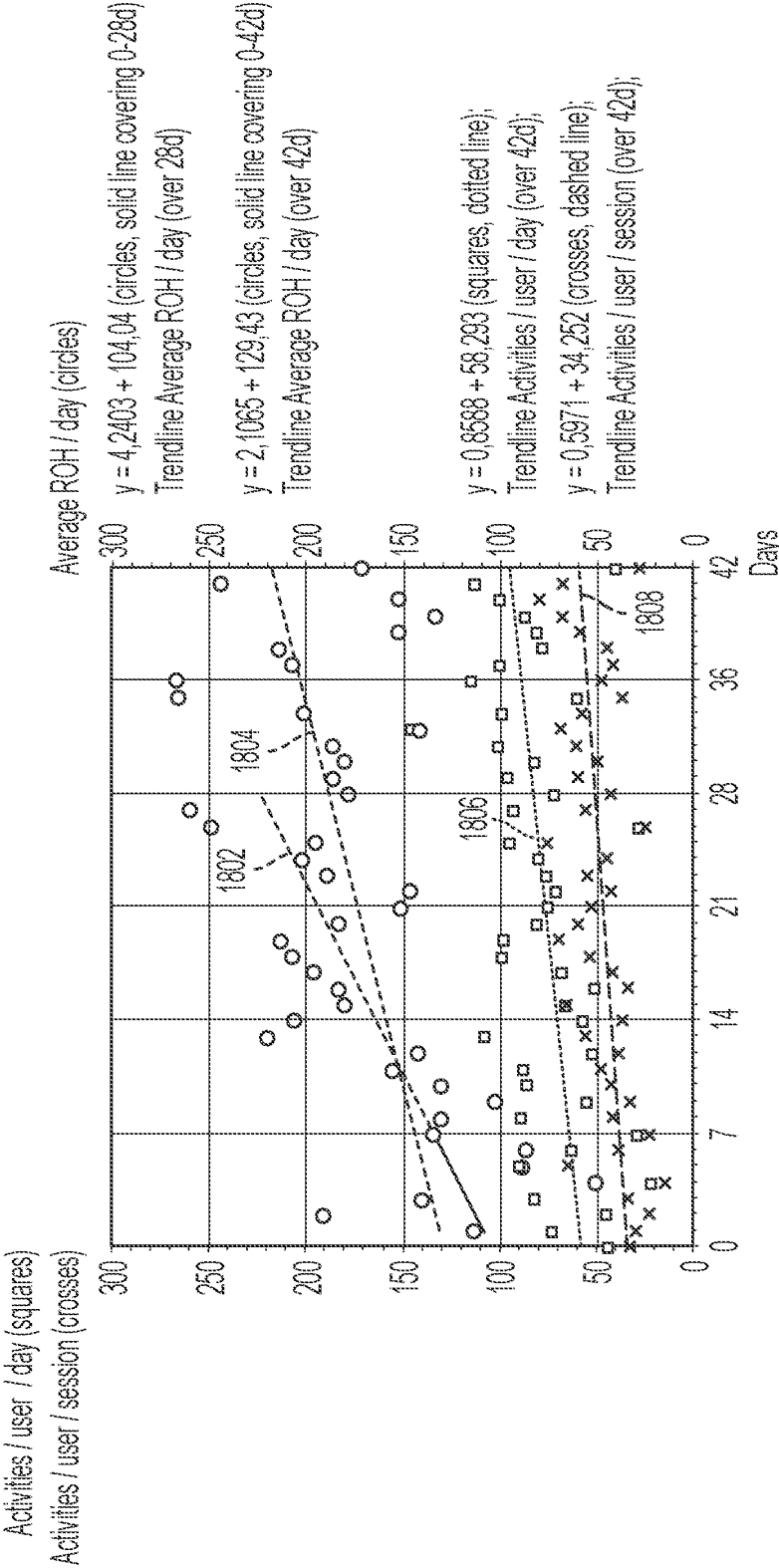


FIG. 18

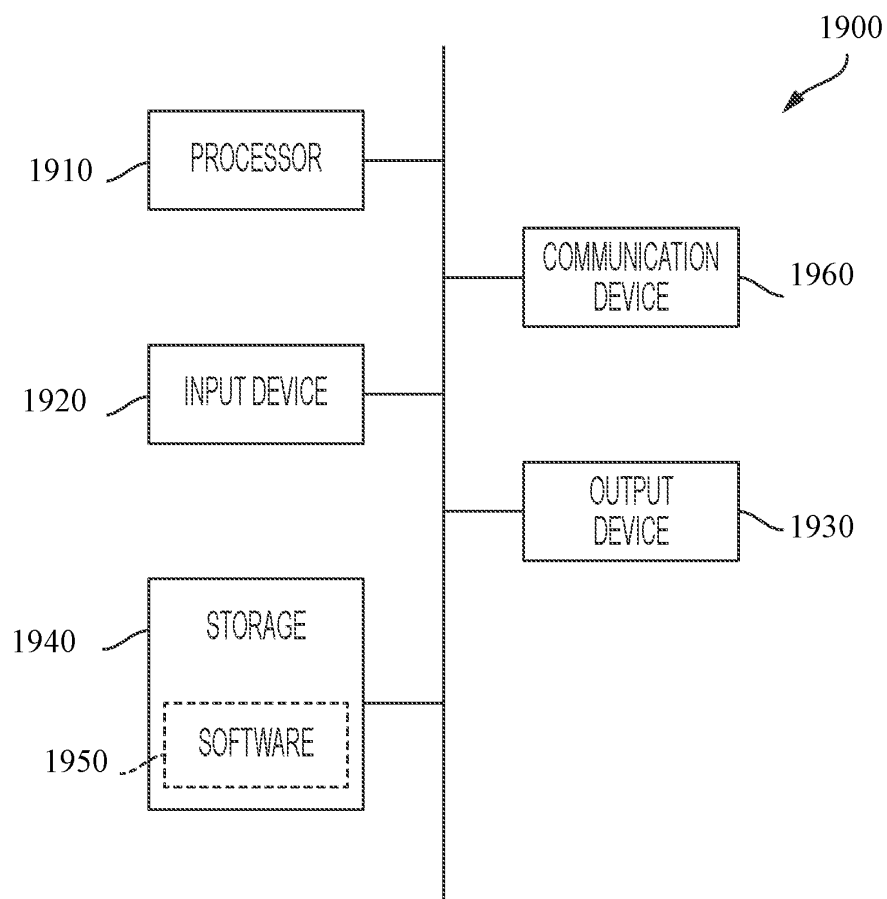


FIG. 19