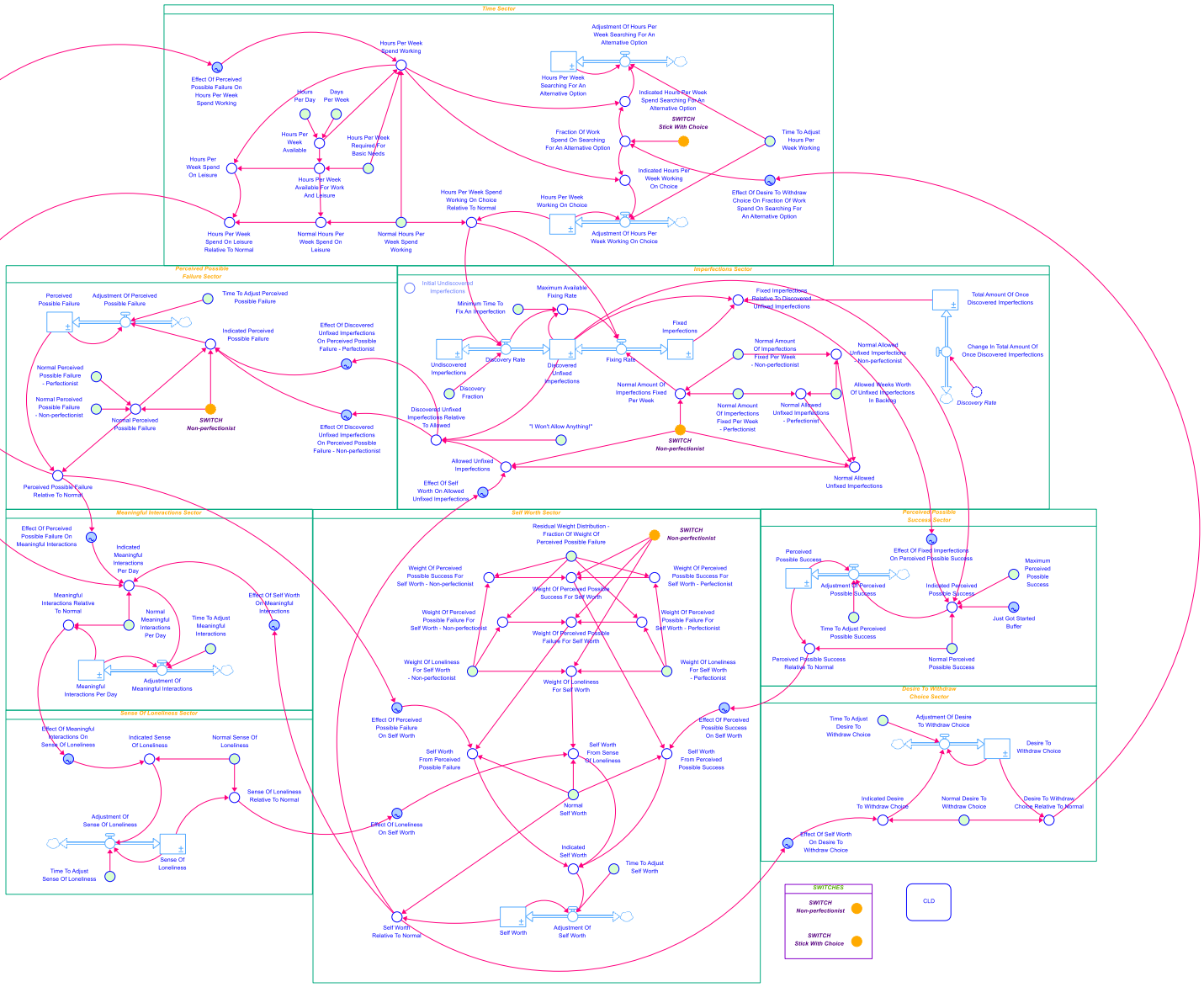
Supplementary materials to

Perfectionism, self-worth and choice.

Ismay Leanne Bax
System Dynamics Group, Department of Geography
University of Bergen
ismay.bax@student.uib.no

Table of contents

Model structure



Model documentation

DESIRE TO WITHDRAW CHOICE SECTOR

Adjustment Of Desire To Withdraw Choice

Equation (Indicated_Desire_To_Withdraw_Choice-Desire_To_Withdraw_Choice) / Time_To_Adjust_Desire_To_Withdraw_Choice
Unit Dimensionless / week
Documentation This flow represents the adjustment of desire to withdraw choice. It is the rate at which the desire to withdraw the choice made is increased or depleted per week.

The equation for this flow is the division of the gap between the indicated desire to withdraw choice and the stock desire to withdraw choice, by the time it takes to adjust desire to withdraw choice.

If the indicated desire to withdraw choice is higher than the stock, the flow adjustment of desire to withdraw choice will be positive and cause the stock to increase. If the indicated desire to withdraw choice is lower than the stock, the flow adjustment of desire to withdraw choice will be negative and cause the stock to decrease. If the indicated desire to withdraw choice is equal to the stock, this flow will equal 0 and not cause a change in the stock.

Desire To Withdraw Choice

Equation Desire_To_Withdraw_Choice(t - dt) + (Adjustment_Of_Desire_To_Withdraw_Choice) * dt
Properties INIT Desire_To_Withdraw_Choice = Indicated_Desire_To_Withdraw_Choice
Unit Dimensionless
Documentation This stock represents the desire an individual has to withdraw the choice that he/she has made. As perfectionists measure their self-worth primarily on accomplishments, perceived possible failure (or the absence of perceived possible success) can cause a decrease in self-worth. When self-worth plummets, perfectionists experience a strong desire to withdraw from the "painful circumstance" (Burns, 1980). As the choice the perfectionist has made brings him/her pain (since the choice made does not live up to the perfectionist's high standards), he/she feels a desire to withdraw from the choice made. This doesn't mean that the choice made is actually withdrawn, but it is fair to assume that if this desire is close to 1 or if this desire is much higher relative to one's normal desire, one would actually withdraw his/her choice when a better alternative option is searched for and eventually found.

The stock is adjusted (both increased and depleted) by the flow adjustment of desire to withdraw choice.

The initial value of desire to withdraw choice is equal to the variable indicated desire to withdraw choice. The value of this variable should be equal to the normal desire to withdraw choice at the outset of the simulation since at the outset (when one has just made his/her choice) one would feel a normal desire to withdraw the choice made – one is not 100% set on the choice made (therefore one has to perceive possible success with the choice made that could increase a perfectionist's self-worth and consequently decrease the desire to withdraw the choice made towards 0), but one is also not less set on the choice made than he/she would normally be.

This stock can range from a dimensionless value of 0 to 1. A dimensionless value of 0 means that an individual feels no desire at all (0%) to withdraw the choice he/she has made. A dimensionless value of 1 means that an individual desires very strongly (100%) to withdraw the choice he/she has made.

Desire To Withdraw Choice Relative To Normal

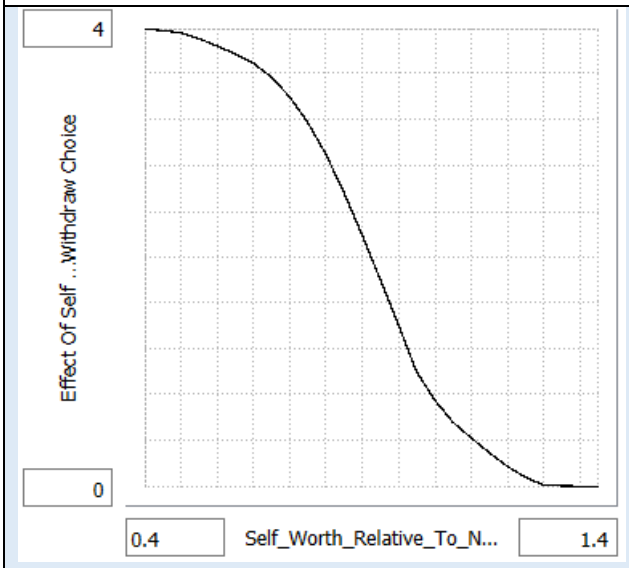
Equation Desire_To_Withdraw_Choice//Normal_Desire_To_Withdraw_Choice
Unit Dimensionless
Documentation This variable represents the desire to withdraw the choice an individual has made relative to the normal desire the individual has to withdraw a choice made. It is the normalized value for desire to withdraw choice.

The equation for desire to withdraw choice relative to the normal desire to withdraw choice is the division of the desire to withdraw choice by the normal desire to withdraw choice.

If the desire to withdraw choice relative to normal is equal to 1, then the desire an individual has to withdraw the choice he/she has made is equal to the normal desire the individual has to withdraw a choice. If the desire to withdraw choice relative to normal is higher than 1, then the desire an individual has to withdraw the choice he/she has made is higher than the normal desire the individual has to withdraw a choice. If the desire to

withdraw choice relative to normal is lower than 1, then the desire an individual has to withdraw the choice he/she has made is lower than the normal desire the individual has to withdraw a choice.

Effect Of Self Worth On Desire To Withdraw Choice



Equation GRAPH(Self_Worth_Relative_To_Normal) Points: (0.4000, 4.000), (0.4400, 3.985), (0.4800, 3.965), (0.5200, 3.915), (0.5600, 3.850), (0.6000, 3.780), (0.6400, 3.700), (0.6800, 3.575), (0.7200, 3.405), (0.7600, 3.180), (0.8000, 2.900), (0.8400, 2.565), (0.8800, 2.195), (0.9200, 1.805), (0.9600, 1.410), (1.0000, 1.000), (1.0400, 0.755), (1.0800, 0.560), (1.1200, 0.425), (1.1600, 0.295), (1.2000, 0.175), (1.2400, 0.080), (1.2800, 0.010), (1.3200, 0.005), (1.3600, 0.000), (1.4000, 0.000)
Unit Dimensionless
Documentation This variable represents the effect of self-worth on desire to withdraw choice. The desire to withdraw choice is dependent on one's self-worth relative to one's normal self-worth. People seek to maintain and protect their self-worth and consequently avoid failure in the domains on which their self-worth is staked (Crocker, 2002). For perfectionists, when self-worth plummets, people experience a strong desire to withdraw from the "painful circumstance" (Burns, 1980), here the choice made.

When one's self worth is equal to one's normal self-worth (and the normalized value is equal to 1), the effect of self-worth on desire to withdraw choice is also equal to 1 and one's indicated desire to withdraw choice will not deviate from the normal desire to withdraw choice.

When one's self worth is higher relative to one's normal self-worth (and the normalized value is higher than 1), the effect of self-worth on desire to withdraw choice decreases decreasingly towards zero (as the self-worth relative to normal increases from 1 to 1.333333333). When one feels more worthy as a person (than normal) and perceives that he/she makes satisfactory choices with regard to the standards the perfectionist has, the desire to withdraw the choice made disappears. At first the effect will decrease faster but the higher the self-worth relative to the normal self-worth becomes (where small changes will make less of a difference), the slower the effect will decrease. Desire to withdraw choice can decrease to a minimum of zero times its normal value.

However, when one's self worth is lower relative to one's normal self-worth (and the normalized value is lower than 1), the effect of self-worth on desire to withdraw choice increases decreasingly towards 4 (as self-worth relative to normal decreases from 1 to 0.4 and where the normal desire to withdraw is equal to 0.25 and the stock desire to withdraw choice ranges from 0 to 1 in this model). When one feels less worthy as a person (than normal) and perceives that he/she makes unsatisfactory choices with regard to the standards the perfectionist has, the desire to withdraw the choice made intensifies. At first the effect will increase faster but the lower the self-worth relative to the normal self-worth becomes (where small changes will make less of a difference), the slower the effect will increase. Desire to withdraw choice can increase to a maximum of 4 times its normal value.

Indicated Desire To Withdraw Choice

Equation Normal_Desire_To_Withdraw_Choice*Effect_Of_Self_Worth_On_Desire_To_Withdraw_Choice
Unit Dimensionless
Documentation This variable represents the indicated desire the individual has to withdraw the choice made by him/her. As perfectionists measure their self-worth primarily on accomplishments, perceived possible failure (or the absence of perceived possible success) can cause a decrease in self-worth. When self-worth plummets,

perfectionists experience a strong desire to withdraw from the "painful circumstance" (Burns, 1980). As the choice the perfectionist has made brings him/her pain (since the choice made does not live up to the perfectionist's high standards), he/she feels a desire to withdraw from the choice made. This doesn't mean that the choice made is actually withdrawn, but it is fair to assume that if the stock desire to withdraw choice is close to 1 or if this desire is much higher relative to one's normal desire, one would actually withdraw his/her choice when a better alternative option is searched for and eventually found.

The equation for indicated desire to withdraw choice is the product of the normal desire to withdraw choice by the effect of self-worth on desire to withdraw choice. If the effect of self-worth on desire to withdraw choice is equal to 0, there will be no (0%) indicated desire to withdraw the choice made. If the effect of self-worth on desire to withdraw choice is equal to 1, the indicated desire to withdraw the choice made will be equal to one's normal desire to withdraw a choice made. If the effect of self-worth on desire to withdraw choice is higher than 1, the indicated desire to withdraw the choice made will be higher than one's normal desire to withdraw a choice made.

Normal Desire To Withdraw Choice

Equation 0.25
Unit Dimensionless
Documentation This parameter represents the normal desire to withdraw a choice made. The dimensionless value for this parameter is set at 0.25 based on interviews (N=7) held with both perfectionists (n=4) and non-perfectionists (n=3). The average values for both groups did not differ significantly from each other, thus one value is chosen to represent the normal desire to withdraw a choice made for both perfectionists and non-perfectionists.

Time To Adjust Desire To Withdraw Choice

Equation 1
Unit Week
Documentation This parameter represents the time to adjust an individual's desire to withdraw the choice that he/she has made. It is assumed that one can adjust the desire to withdraw the choice made in 1 week time. One doesn't want to make split second decisions based on temporary emotions but think a little about in what measure one actually desires to withdraw a choice based on steadier feelings of self-worth. This desire develops over time. However, one doesn't want to mull it over too much either since if there is a desire to withdraw the choice made, and one wants to act on that desire, he/she needs to give him-/herself the opportunity to do that. Therefore, one adjusts the desire to withdraw choice quite quickly but not too quickly, thus I assume that 1 week time is appropriate.

IMPERFECTIONS SECTOR

I Won't Allow Anything!

Equation 2
Unit Dimensionless
Documentation When an individual does not allow any imperfections (either because he/she is not capable of fixing any imperfections per week, or because he/she wants to fix all imperfections immediately and does not allow any weeks' worth of work in his/her backlog), then he/she would feel the maximum effects of discovered unfixed imperfections on perceived possible failure.

For both perfectionists and non-perfectionists, the maximum effect of discovered unfixed imperfections on perceived possible failure would be felt for a value of 2 or higher discovered unfixed imperfections relative to allowed. Therefore, the parameter "I won't allow anything" has been given the dimensionless value of 2, to provoke this maximum effect.

This parameter was introduced after indirect extreme conditions testing as the allowed unfixed imperfections would be 0 when an individual would not able to fix any imperfections per week. This resulted in unrealistic behavior (where the individual would not perceive possible failure). As an individual would perceive very high amounts of possible failure when they are incapable of fixing anything, this parameter (in combination with the IF, THEN, ELSE function for discovered unfixed imperfections relative to allowed) ensures that the behavior that results from the model structure is still realistic in real life.
This also holds true for when allowed weeks' worth of unfixed imperfections in backlog would be zero. When one does not allow anything, but still discovers unfixed imperfections, than he/she would feel the maximum effect of those discovered unfixed imperfections on perceived possible failure.

Allowed Unfixed Imperfections

Equation Normal_Allowed_Unfixed_Imperfections*Effect_Of_Self_Worth_On_Allowed_Unfixed_Imperfections *(1-"SWITCH_Non-perfectionist") + Normal_Allowed_Unfixed_Imperfections*"SWITCH_Non-perfectionist"
Unit Imperfections
Documentation This variable represents the amount of unfixed imperfections an individual allows the choice that he/she makes to maximally have. In between zero imperfections and this amount, the choice is perceived to be fine and not leading to failure. This variable is synonymous to the high standards the perfectionist has. Perfectionists often adjust their standards based on their self-worth and feelings that they must do better (Burns, 1980; Ramsey & Ramsey, 2002), whereas non-perfectionists are assumed not to do this.

The equation for allowed unfixed imperfections therefore is accompanied by the SWITCH non-perfectionist. The equation is the product of a perfectionist's normal allowed unfixed imperfections, by the effect of self-worth on allowed unfixed imperfections, by 1 minus the SWITCH non-perfectionist (1 minus SWITCH non-perfectionist is written in between brackets so that the SWITCH is subtracted from the value 1), to which the product of a non-perfectionist's normal allowed unfixed imperfections by the SWITCH non-perfectionist is added.

If the SWITCH non-perfectionist is off and equals 0, the part of the equation that is active (the part of the equation that doesn't equal 0 due to the product by the SWITCH), is the first part that captures the allowed unfixed imperfections for perfectionists. If the SWITCH non-perfectionist is on and equals 1, the part of the equation that is active, is the second part that captures the allowed unfixed imperfections for non-perfectionists which is not affected by self-worth.

Allowed Weeks Worth Of Unfixed Imperfections In Backlog

Equation 10
Unit Weeks
Documentation This parameter represents the allowed weeks' worth of unfixed imperfections in the backlog. As imperfections are embedded in choices and one can't fix all imperfections immediately after discovering them, a certain allowed amount of imperfections needs to be determined. I assume this is done both on the normal amount of imperfections an individual can fix per week, and some time measure that indicates how many weeks' worth of unfixed imperfections in his/her backlog is still manageable to have and thus is allowed. This parameter represents that time measure.

It is assumed that the allowed weeks' worth of unfixed imperfections in backlog is 10 weeks. This value depends on the context in which the individual and the choice he/she has made operates. This value is used for both perfectionists and non-perfectionists in this model. However, it would not be so strange if perfectionists allow a shorter time measure compared to non-perfectionists (the latter being less strict in their standards). In this model I have chosen to use the same value for both perfectionists and non-perfectionists since a perfectionist's standards (normal allowed unfixed imperfections) are already higher (they allow less unfixed imperfections) than that of a non-perfectionist due to a difference in the normal amount of imperfections fixed per week between perfectionists and non-perfectionists.

Change In Total Amount Of Once Discovered Imperfections

Equation Discovery_Rate
Unit Imperfections / Weeks
Documentation The change in total amount of once discovered imperfections is the inflow to the stock total amount of once discovered imperfections and is equal to the discovery rate.

Discovered Unfixed Imperfections

Equation Discovered_Unfixed_Imperfections(t - dt) + (Discovery_Rate - Fixing_Rate) * dt
Properties INIT Discovered_Unfixed_Imperfections = 0
Unit Imperfections
Documentation This stock represents the discovered unfixed imperfections that are embedded in the choice the individual has made and that are discovered, yet unfixed, by the individual. These discovered unfixed imperfections can be regarded as some form of known unknowns (Dunning, 2011). In this case these known unknowns would be imperfections that are relevant to the choice, that the individual knows exist and that the individual needs to fix but does not yet know how to fix. It takes time to fix imperfections.

It is assumed that all discovered unfixed imperfections that are relevant to the choice can be fixed by the individual working on the choice.

This stock is increased by discovery rate and depleted by fixing rate.

The initial value of discovered unfixed imperfections is zero. At the outset (when one has just made his/her choice) it is assumed that no imperfections are discovered or fixed yet, and that all imperfections are still undiscovered.

This stock theoretically ranges from 0 discovered unfixed imperfections to the initial value of undiscovered imperfections, but as fixing rate depletes the stock while imperfections are still being discovered, the stock discovered imperfections will not reach the initial value of undiscovered imperfections (unless fixing rate would be 0 imperfections per week and discovery rate would be bigger than 0 imperfections per week).

Discovered Unfixed Imperfections Relative To Allowed

Equation IF Allowed_Unfixed_Imperfections > 0 THEN Discovered_Unfixed_Imperfections//Allowed_Unfixed_Imperfections ELSE "\"I_Won't_Allow_Anything!\""
Unit Dimensionless
Documentation This variable represents the amount of discovered unfixed imperfections relative to the amount of allowed unfixed imperfections. It is a normalized value for discovered unfixed imperfections.

For perfectionists I assume that the amount of discovered unfixed imperfections relative to the amount of allowed unfixed imperfections is more realistic as an influence of perceived possible failure, than discovered unfixed imperfections relative to fixed imperfections would be.

As a perfectionist myself, I have very high standards. I need those standards in order to see myself as a worthwhile person (what would I be without my standards?!), and I want to achieve them otherwise I won't feel good about myself. I very well know that not everything is perfect, therefore I allow some measure of imperfection in my choices. However, if that boundary is crossed, the choice that I made is simply not good enough. At that point, I don't care about the imperfections that are already fixed. I care about the choice being not up to scratch, and because of that it will possibly fail in what I expect from it.

The equation for discovered unfixed imperfections relative to allowed unfixed imperfections is an IF, THEN, ELSE function. IF the allowed unfixed imperfections are more than 0, THEN this equation equals the division of the stock discovered unfixed imperfections by the allowed unfixed imperfections. ELSE (thus when the allowed unfixed imperfections are 0 imperfections), this equation is equal to the parameter "I won't allow anything" which ensures that the maximum effect of discovered unfixed imperfections on perceived possible failure would be felt.

If the discovered unfixed imperfections relative to allowed is equal to 1, then the amount of discovered unfixed imperfections is equal to the amount of maximum allowed unfixed imperfections. If the discovered unfixed imperfections relative to allowed is higher than 1, then the amount of discovered unfixed imperfections is higher than the amount of maximum allowed unfixed imperfections. If the discovered unfixed imperfections relative to allowed is lower than 1, then the amount of discovered unfixed imperfections is lower than the amount of maximum allowed unfixed imperfections.

Discovery Fraction

Equation 0.1
Unit Dimensionless / week
Documentation This parameter represents the discovery fraction. It is the fraction by which undiscovered imperfections are discovered per week. For different contexts (different choices) the discovery fraction would differ. For this model a value of 0.1 is assumed. This value means that 10% of the undiscovered imperfections are discovered each week.

A discovery fraction is assumed to be more realistic compared to a set amount of imperfections discovered per week. The more imperfections are discovered, the more difficult it becomes to discover the remaining imperfections. The discovery rate is expected to show exponential decay in which less and less imperfections are discovered each next time round until there are no imperfections left to discover (or one does not spend time working on the choice made anymore).

Discovery Rate

Equation Undiscovered_Imperfections*Discovery_Fraction*
Hours_Per_Week_Spend_Working_On_Choice_Relative_To_Normal
Unit Imperfections / week
Documentation This flow represents the outflow of undiscovered imperfections by which that stock is being depleted, and the inflow of discovered unfixed imperfections by which that stock is being increased. It is the rate

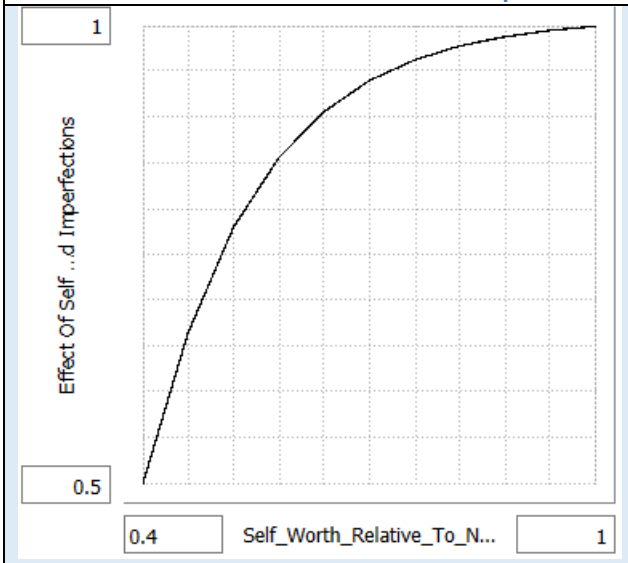
at which imperfections embedded in the choice are discovered by the individual per week.

The equation for this flow is the product of undiscovered imperfections by the discovery fraction by the hours per week spend working on the choice the individual has made relative to one's normal hours per week spend working.

If an individual spends no hours per week working on the choice relative to normal, then no imperfections would be discovered. However, if an individual spends twice as many hours per week working on the choice relative to normal, then twice as many imperfections would be discovered compared to the amount of imperfections that would normally be discovered at that point in time. Likewise, when there are no undiscovered imperfections left to be discovered, then no imperfections should be discovered.

A discovery fraction is assumed to be more realistic compared to a set amount of imperfections discovered per week. The more imperfections are discovered, the more difficult it becomes to discover the remaining imperfections. The discovery rate is expected to show exponential decay in which less and less imperfections are discovered each next time round until there are no imperfections left to discover (or one does not spend time working on the choice made anymore).

Effect Of Self Worth On Allowed Unfixed Imperfections



Equation GRAPH(Self_Worth_Relative_To_Normal) Points: (0.4000, 0.5000), (0.4600, 0.6650), (0.5200, 0.7800), (0.5800, 0.8560), (0.6400, 0.9065), (0.7000, 0.9405), (0.7600, 0.9630), (0.8200, 0.9785), (0.8800, 0.9885), (0.9400, 0.9955), (1.0000, 1.0000)
Unit Dimensionless
Documentation This variable represents the effect of self-worth on the amount of allowed unfixed imperfections. The amount of allowed unfixed imperfections is dependent on a perfectionist's self-worth relative to his/her normal self-worth. According to Burns (1980) perfectionistic attitudes and their emotional consequences reinforce each other. As perfectionists measure their self-worth primarily in terms of accomplishments and self-worth lies at the root of their achievement oriented behavior, a perfectionist will conclude that he/she "must do better" when he/she perceives a lower self-worth relative to his/her normal self-worth (Burns, 1980; Pyszczynski & Cox, 2004; Ramsey & Ramsey, 2002). This reinforces perfectionists' irrational belief that one must be perfect in order to be accepted. As one adjusts his/her perfectionistic standards however, it becomes increasingly harder to meet them, which will influence one's self-worth in a non-preferable way even further.

When a perfectionist's self-worth is equal or higher to his/her normal self-worth (and the normalized value is equal to or higher than 1), the effect of self-worth on allowed unfixed imperfections will also equal 1 and the allowed unfixed imperfections will not deviate from the normal allowed unfixed imperfections.

However, when a perfectionist's self-worth is lower to his/her normal self-worth (and the normalized value is lower than 1), the effect of self-worth on allowed unfixed imperfections will decrease increasingly towards 0.5 (as self-worth relative to normal decreases from 1 to 0.4). This represents the above mentioned feeling of "I must do better" which reinforces itself each next time round as the more extreme a perfectionists standards

become they also become increasingly difficult to meet, which further damages a perfectionist's own self-worth, which again will cause a perfectionist to increase his/her standards. For this model I have assumed that a perfectionist will lower the amount of allowed unfixed imperfections by half (which would imply that his/her standard has doubled).

Fixed Imperfections

Equation Fixed_Imperfections(t - dt) + (Fixing_Rate) * dt
Properties INIT Fixed_Imperfections = 0
Unit Imperfections
Documentation This stock represents the fixed imperfections that are embedded in the choice the individual has made and that are discovered and fixed by the individual. These fixed imperfections can be regarded as some form of known knowns (Dunning, 2011). In this case these known knowns would be imperfections that are relevant to the choice, that the individual knows exist, that the individual knows how to fix and consequently has fixed.

This stock is increased by fixing rate.

The initial value of fixed imperfections is zero. At the outset (when one has just made his/her choice) it is assumed that no imperfections are discovered or fixed yet, and that all imperfections are still undiscovered.

This stock ranges from 0 fixed imperfections to the initial value of undiscovered imperfections.

Fixed Imperfections Relative To Discovered Unfixed Imperfections

Equation IF Discovered_Unfixed_Imperfections>0 THEN Fixed_Imperfections//
Discovered_Unfixed_Imperfections ELSE
Fixed_Imperfections//Total_Amount_Of_Once_Discovered_Imperfections
Unit Dimensionless
Documentation This variable represents the amount of fixed imperfections relative to the amount of discovered unfixed imperfections. It is a normalized value for fixed imperfections.

For perfectionists I assume that the amount of fixed imperfections relative to the discovered unfixed imperfections is more realistic as an influence of perceived possible success, than fixed imperfections relative to some sort of goal of fixed imperfections would be.

As a perfectionist myself, when I would set a goal of imperfections that I want to fix and I work really hard to achieve it, I cannot enjoy a feeling of success even if I achieve that goal while I know there are still a lot more imperfections that need to be fixed (when the relative value of fixed imperfections to unfixed imperfections would be smaller than 1). I worry more over the unfixed imperfections than be proud of achieving the goal. However, if I work really hard to fix a lot of imperfections and I perceive that the imperfections that I have fixed relative to the imperfections that are yet to be fixed, is going "the right way" (they are relatively equal or I have fixed more imperfections in total than that are left to be fixed), then I can enjoy a feeling of success of the work that I have done and perceive that the choice that I made will possibly be a success.

The equation for fixed imperfections relative to discovered unfixed imperfections is an IF, THEN, ELSE function. IF the discovered unfixed imperfections are bigger than zero imperfections, I will look at the total amount of imperfections that I have fixed relative to the imperfections that are yet to be fixed and THEN the equation for fixed imperfections relative to discovered unfixed imperfections is equal to the division of the stock fixed imperfections by the stock discovered unfixed imperfections. ELSE - thus if the discovered imperfections is equal to zero imperfections and all imperfections have been fixed - I will look at the total amount of imperfections that I have fixed relative to the total amount of once discovered imperfections (which would be relatively equal as all imperfections have been fixed). In that case, when absolutely no discovered unfixed imperfections are left and all have been fixed – and one would finish working on the choice – the perceived possible success would go back to its normal value. This equation and rationale makes sense with regard to an extreme conditions test.

If the fixed imperfections relative to discovered unfixed imperfections is equal to 1, then the amount of fixed imperfections is equal to the amount of discovered unfixed imperfections. If the fixed imperfections relative to discovered unfixed imperfections is higher than 1, then the amount of fixed imperfections is higher than the amount of discovered unfixed imperfections. If the fixed imperfections relative to discovered unfixed imperfections is lower than 1, then the amount of fixed imperfections is lower than the amount of discovered unfixed imperfections.

Fixing Rate

Equation MIN(Normal_Amount_Of_Imperfections_Fixed_Per_Week* Hours_Per_Week_Spend_Working_On_Choice_Relative_To_Normal, Maximum_Available_Fixing_Rate)
Unit Imperfections / week
Documentation This flow represents the outflow of discovered unfixed imperfections by which that stock is being depleted, and the inflow of fixed imperfections by which that stock is being increased. It is the rate at which imperfections embedded in the choice which are already discovered, are fixed by the individual per week.

The equation for the flow fixing rate is a MIN function. The amount of imperfections per week that are fixed is equal to 1) the product of the normal amount of imperfections fixed per week by the hours per week spend working on the choice made relative to one's normal hours per week spend working, or to 2) the maximum available fixing rate.

An individual either solves the normal amount of imperfections per week with regard to the hours per week spend working on the choice relative to normal (if an individual spends no hours per week working on the choice relative to normal, then no imperfections would be fixed. However, if an individual spends twice as many hours per week working on the choice relative to normal, then twice as many imperfections would be fixed compared to the normal amount of imperfections that would be fixed per week), or an individual solves the maximum available amount of imperfections per week when that amount is lower than the normal amount of imperfections one would usually fix with regard to the relative hours worked on the choice.

The MIN function makes sure that not more imperfections are fixed per week then there actually are available to fix each week.

Initial Undiscovered Imperfections

Equation 100
Unit Imperfections
Documentation Different contexts would provide a different amount of imperfections embedded in a choice. Furthermore, it is impossible to give a value to something that is an unknown unknown. Nevertheless, the parameter initial undiscovered imperfections is given a value of 100 imperfections.

Maximum Available Fixing Rate

Equation Discovery_Rate+Discovered_Unfixed_Imperfections/Minimum_Time_To_Fix_An_Imperfection
Unit Imperfections / week
Documentation This variable represents the maximum available fixing rate at any point in time. It is the maximum rate available at which imperfections embedded in the choice can be fixed by the individual working on the choice. An individual can't fix more imperfections per week than what is maximally available.

The equation for maximum available fixing rate is the sum of the discovery rate and the division of the number of discovered unfixed imperfections by the minimum time it takes to fix an imperfection.

Minimum Time To Fix An Imperfection

Equation 1
Unit Week
Documentation This parameter represents the minimum time it takes to fix an imperfection. When an imperfection is newly discovered it is still unknown to the individual how to fix it. It is assumed that the minimum time it takes to fix an imperfection is 1 week as the individual first has to find out how to fix the imperfection and thereafter actually has to fix it.

Normal Allowed Unfixed Imperfections

Equation "Normal_Allowed_Unfixed_Imperfections_-_Perfectionist"*(1-"SWITCH_Non-perfectionist") + "Normal_Allowed_Unfixed_Imperfections_-_Non-perfectionist"*"SWITCH_Non-perfectionist"
Unit Imperfections
Documentation This variable represents the normal amount of unfixed imperfections an individual allows the choice that he/she makes to have. As perfectionists and non-perfectionists differ in their normal allowed unfixed imperfections due to the assumption that perfectionists are able to fix less imperfections per week compared to non-perfectionists (as it takes more time to fix something until it meets the high standards of a perfectionist), a SWITCH function has been implemented in the equation for normal allowed unfixed imperfections.

The equation for normal allowed unfixed imperfections is the product of the normal allowed unfixed imperfections for perfectionists by 1 minus the SWITCH non-perfectionist (1 minus SWITCH non-perfectionist is written in between brackets so that the SWITCH is subtracted from the value 1), to which the product of normal

allowed unfixed imperfections for non-perfectionists by the SWITCH non-perfectionist is added.

If the SWITCH non-perfectionist is off and equals 0, the part of the equation that is active (the part of the equation that doesn't equal 0 due to the product by the SWITCH), is the first part that captures the normal amount of allowed unfixed imperfections for perfectionists. If the SWITCH non-perfectionist is on and equals 1, the part of the equation that is active, is the second part that captures the normal amount of allowed unfixed imperfections for non-perfectionists.

Normal Allowed Unfixed Imperfections – Non-perfectionist

Equation "Normal_Amount_Of_Imperfections_Fixed_Per_Week_-_Non-perfectionist"*Allowed_Weeks_Worth_Of_Unfixed_Imperfections_In_Backlog
Unit Imperfections
Documentation This variable represents the normal amount of unfixed imperfections a non-perfectionist allows the choice that he/she makes to have.

The equation for normal allowed unfixed imperfections for non-perfectionists is the product of the normal amount of imperfections a non-perfectionist can fix every week by the allowed weeks' worth of unfixed imperfections in the backlog (the latter thus being measured in weeks).

Normal Allowed Unfixed Imperfections - Perfectionist

Equation "Normal_Amount_Of_Imperfections_Fixed_Per_Week_-_Perfectionist"*Allowed_Weeks_Worth_Of_Unfixed_Imperfections_In_Backlog
Unit Imperfections
Documentation This variable represents the normal amount of unfixed imperfections a perfectionist allows the choice that he/she makes to have. This variable is synonymous to the high standards a perfectionist normally has.

The equation for normal allowed unfixed imperfections for perfectionists is the product of the normal amount of imperfections a perfectionist can fix every week by the allowed weeks' worth of unfixed imperfections in the backlog (the latter thus being measured in weeks).

Normal Amount Of Imperfections Fixed Per Week

Equation "Normal_Amount_Of_Imperfections_Fixed_Per_Week_-_Perfectionist"*(1-"SWITCH_Non-perfectionist") + "Normal_Amount_Of_Imperfections_Fixed_Per_Week_-_Non-perfectionist"*"SWITCH_Non-perfectionist"
Unit Imperfections / week
Documentation This variable represents the normal amount of imperfections an individual will fix per week. As perfectionists will fix an imperfection until it is perfect and complies with their standards, and non-perfectionist will fix an imperfection until it is good enough so it does not influence the choice made in a bad way, it is assumed that perfectionists are able to fix less imperfections per week compared to non-perfectionists (simply because it takes more time to fix something until it meets the high standards of a perfectionist).

As the normal amount of imperfections fixed per week is assumed to differ for perfectionists and non-perfectionists, a SWITCH function has been implemented in the equation for normal amount of imperfections fixed per week. The equation for normal amount of imperfections fixed per week is the product of the normal amount of imperfections fixed per week for perfectionists by 1 minus the SWITCH non-perfectionist (1 minus SWITCH non-perfectionist is written in between brackets so that the SWITCH is subtracted from the value 1), to which the product of the normal amount of imperfections fixed per week for non-perfectionists by the SWITCH non-perfectionist is added.

If the SWITCH non-perfectionist is off and equals 0, the part of the equation that is active (the part of the equation that doesn't equal 0 due to the product by the SWITCH), is the first part that captures the normal amount of fixed imperfections per week for perfectionists. If the SWITCH non-perfectionist is on and equals 1, the part of the equation that is active, is the second part that captures the normal amount of fixed imperfections per week for non-perfectionists.

Normal Amount Of Imperfections Fixed Per Week – Non-perfectionist

Equation 3
Unit Imperfections / week
Documentation This parameter represents the normal amount of imperfections a non-perfectionist will fix per week. As perfectionists will fix an imperfection until it is perfect and complies with their standards, and non-perfectionist will fix an imperfection until it is good enough so it does not influence the choice made in a bad

way, it is assumed that perfectionists are able to fix less imperfections per week compared to non-perfectionists (simply because it takes more time to fix something until it meets the high standards of a perfectionist). It is assumed that non-perfectionists are 50% more productive than perfectionists in fixing imperfections each week (when only regarding quantity of fixed imperfections). The normal amount of imperfections fixed per week for non-perfectionists is assumed to be 3 imperfections per week.

Normal Amount Of Imperfections Fixed Per Week - Perfectionist

Equation 2
Unit Imperfections / week
Documentation This parameter represents the normal amount of imperfections a perfectionist will fix per week. As perfectionists will fix an imperfection until it is perfect and complies with their standards, and non-perfectionist will fix an imperfection until it is good enough so it does not influence the choice made in a bad way, it is assumed that perfectionists are able to fix less imperfections per week compared to non-perfectionists (simply because it takes more time to fix something until it meets the high standards of a perfectionist). It is assumed that non-perfectionists are 50% more productive than perfectionists in fixing imperfections each week (when only regarding quantity of fixed imperfections). The normal amount of imperfections fixed per week for perfectionists is assumed to be 2 imperfections per week.

Total Amount Of Once Discovered Imperfections

Equation Total_Amount_Of_Once_Discovered_Imperfections(t - dt) + (Change_In_Total_Amount_Of_Once_Discovered_Imperfections) * dt
Properties INIT Total_Amount_Of_Once_Discovered_Imperfections = 0
Unit Imperfections
Documentation This stock represents the total amount of once discovered imperfections that are embedded in the choice the individual has made.

This stock is increased by change in total amount of once discovered imperfections.

The initial value of total amount of once discovered imperfections is zero. At the outset (when one has just made his/her choice) it is assumed that no imperfections are discovered or fixed yet, and that all imperfections are still undiscovered.

This stock ranges from 0 discovered imperfections to the initial value of undiscovered imperfections.

Undiscovered Imperfections

Equation Undiscovered_Imperfections(t - dt) + (- Discovery_Rate) * dt
Properties INIT Undiscovered_Imperfections = Initial_Undiscovered_Imperfections
Unit Imperfections
Documentation This stock represents the undiscovered imperfections that are embedded in the choice the individual has made but that are yet to be discovered. These undiscovered imperfections can be regarded as some form of unknown unknowns (Dunning, 2011). In this case these unknown unknowns would be imperfections that are relevant to the choice but that the individual does not know exist.

It is assumed that all undiscovered imperfections that are relevant to the choice can be discovered by the individual working on the choice.

The stock is depleted by discovery rate.

The initial value of undiscovered imperfections is equal to the variable initial undiscovered imperfections. At the outset (when one has just made his/her choice) it is assumed that no imperfections are discovered or fixed yet, and thus that all imperfections are still undiscovered.

This stock ranges from 0 undiscovered imperfections to the initial value of undiscovered imperfections. With regard to this latter value, different contexts would provide a different amount of imperfections embedded in a choice. Furthermore, it is impossible to give a value to something that you don't know, you don't know. Nevertheless, the variable initial undiscovered imperfections is given a value of 100 imperfections.

MEANINGFUL INTERACTIONS SECTOR

Adjustment Of Meaningful Interactions

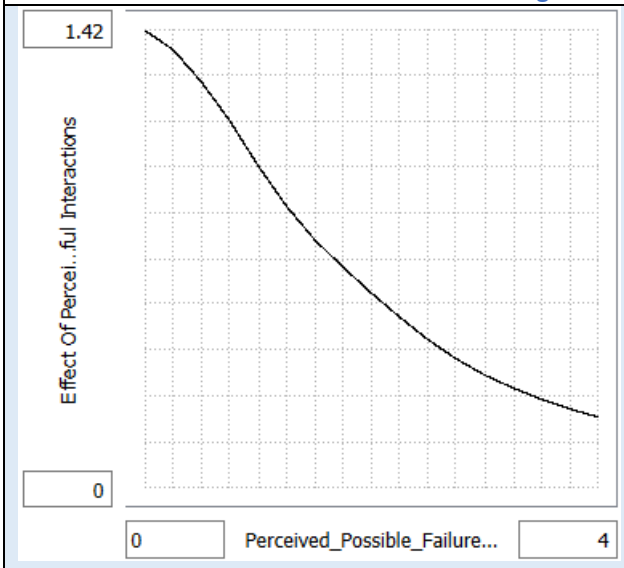
Equation (Indicated_Meaningful_Interactions_Per_Day-Meaningful_Interactions_Per_Day)/Time_To_Adjust_Meaningful_Interactions
Unit Interactions / day / weeks

Documentation This flow represents the adjustment of meaningful interactions per day. It is the rate at which meaningful interactions per day are increased or depleted per week.

The equation for this flow is the division of the gap between the indicated meaningful interactions per day and the stock meaningful interactions per day, by the time it takes to adjust meaningful interactions.

If the variable indicated meaningful interactions per day is higher than the stock, the flow adjustment of meaningful interactions will be positive and cause the stock to increase. If the variable indicated meaningful interactions per day is lower than the stock, the flow adjustment of meaningful interactions will be negative and cause the stock to decrease. If the variable indicated meaningful interactions per day is equal to the stock, this flow will equal 0 and not cause a change in the stock.

Effect Of Perceived Possible Failure On Meaningful Interactions



Equation GRAPH(Perceived_Possible_Failure_Relative_To_Normal) Points: (0.000, 1.420), (0.250, 1.360), (0.500, 1.260), (0.750, 1.140), (1.000, 1.000), (1.250, 0.875), (1.500, 0.770), (1.750, 0.685), (2.000, 0.605), (2.250, 0.530), (2.500, 0.460), (2.750, 0.400), (3.000, 0.350), (3.250, 0.310), (3.500, 0.275), (3.750, 0.245), (4.000, 0.220)**Unit** Dimensionless

Documentation This variable represents the effect of perceived possible failure on meaningful interactions. The meaningful interactions an individual has per day are partly dependent on an individual's perceived possible failure relative to one's normal perceived possible failure. Perfectionists are often convinced that other people will regard them negatively when they fail, and are afraid they thus will be rejected by others when they perceive possible failure (Burns, 1980). This sensitivity to real or imagined disapproval inhibits their communication in such a way that they resist sharing inner thoughts and feelings. This influences the quality or meaningfulness of the interactions per day.

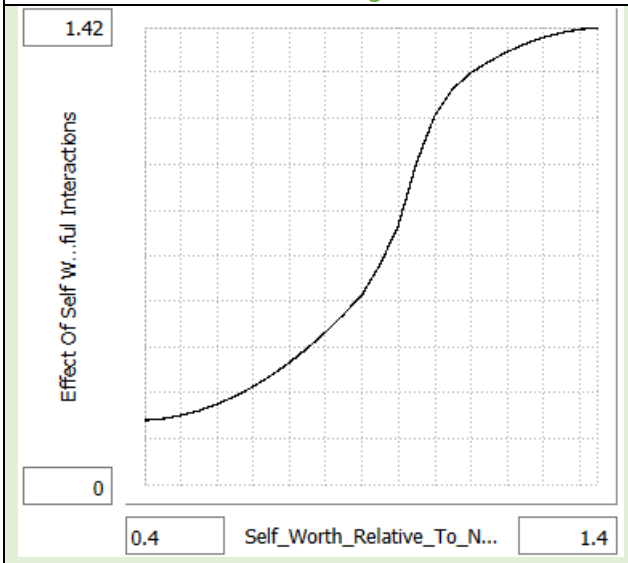
When an individual's perceived possible failure is equal relative to one's normal perceived possible failure (and the normalized value is 1), the effect of perceived possible failure on meaningful interactions is also equal to 1 and the meaningful interactions an individual has per day will not deviate from the normal meaningful interactions he/she has per day based on perceived possible failure.

When an individual's perceived possible failure is higher relative to one's normal perceived possible failure (and the normalized value is higher than 1), the effect of perceived possible failure on meaningful interactions decreases decreasingly towards 0.22 (as perceived possible failure relative to normal increases from 1 to 4). This represents the inhibited communication quality as mentioned above. At first it is assumed that the effect will decrease faster, but the higher the perceived possible failure relative to normal becomes (where small changes will make less of a difference), the slower the effect will decrease.

When an individual's perceived possible failure is lower relative to one's normal perceived possible failure (and the normalized value is lower than 1), the effect of perceived possible failure on meaningful interactions is assumed to increase decreasingly towards 1.42 (as perceived possible failure relative to normal decreases from 1 to 0). This represents that instead of one's communication being inhibited, a lower perceived possible failure relative to normal might open up a perfectionist since he/she might be less afraid that other people will regard

him/her negatively. This is assumed to increase the quality or meaningfulness of the interactions per day. At first it is assumed that the effect will increase faster, but the lower the perceived possible failure relative to normal becomes (where small changes will make less of a difference), the slower the effect will increase.

Effect Of Self Worth On Meaningful Interactions



Equation GRAPH(Self_Worth_Relative_To_Normal) Points: (0.4000, 0.200), (0.4400, 0.205), (0.4800, 0.215), (0.5200, 0.230), (0.5600, 0.250), (0.6000, 0.275), (0.6400, 0.305), (0.6800, 0.340), (0.7200, 0.380), (0.7600, 0.425), (0.8000, 0.475), (0.8400, 0.530), (0.8800, 0.590), (0.9200, 0.685), (0.9600, 0.805), (1.0000, 1.000), (1.0400, 1.145), (1.0800, 1.230), (1.1200, 1.280), (1.1600, 1.315), (1.2000, 1.345), (1.2400, 1.370), (1.2800, 1.390), (1.3200, 1.405), (1.3600, 1.415), (1.4000, 1.420)
Unit Dimensionless
Documentation This variable represents the effect of self-worth on meaningful interactions. The meaningful interactions an individual has per day are partly dependent on an individual's self-worth relative to one's normal self-worth. It is assumed that when one believes he/she is a worthwhile person, that he/she will pursue more meaningful interactions (both in quantity and quality) with other people as the individual believes that he/she is worthy of those meaningful interactions. However, when one believes that he/she is less of a worthwhile person, he/she might pursue less meaningful interactions (both in quantity and quality) with other people as the individual believes that he/she is less worthy of those meaningful interactions.

When an individual's self-worth is equal relative to one's normal self-worth (and the normalized value is 1), the effect of self-worth on meaningful interactions is also equal to 1 and the meaningful interactions an individual has per day will not deviate from the normal meaningful interactions he/she has per day based on self-worth.

When an individual's self-worth is higher relative to one's normal self-worth (and the normalized value is higher than 1), the effect of self-worth on meaningful interactions increases decreasingly towards 1.42 (as self-worth relative to normal self-worth increases from 1 to 1.3333333333). This represents the assumption that an individual will pursue more meaningful interactions when he/she believes that he/she is worthy of those meaningful interactions. At first it is assumed that the effect will increase faster, but the higher one's self-worth relative to normal becomes (where small changes will make less of a difference), the slower the effect will increase.

When an individual's self-worth is lower relative to one's normal self-worth (and the normalized value is lower than 1), the effect of self-worth on meaningful interactions decreases decreasingly towards 0.2 (as self-worth relative to normal self worth decreases from 1 to 0.4). This represents the assumption that an individual will pursue less meaningful interactions when he/she believes that he/she is less worthy of those meaningful interactions. At first it is assumed that the effect will decrease faster, but the lower one's self-worth relative to normal becomes (where small changes will make less of a difference), the slower the effect will decrease.

Indicated Meaningful Interactions Per Day

Equation Normal_Meaningful_Interactions_Per_Day* Effect_Of_Perceived_Possible_Failure_On_Meaningful_Interactions*Effect_Of_Self_Worth_On_Meaningful_Interactions*Hours_Per_Week_Spend_On_Leisure_Relative_To_Normal
Unit Interactions / day

Documentation This variable represents the indicated meaningful interactions an individual has per day. Indicated interactions are regarded to be meaningful when an interaction with someone else has some emotional impact on the individual and his/her relationships (Litt, et al., 2020).

Indicated meaningful interactions per day are influenced in three ways. First, through the hours per week spend on leisure relative to normal. This influences the quantity of meaningful interactions per day. Second, through an effect of perceived possible failure. This influences the quality of meaningful interactions per day. And third, through an effect of self-worth. This is assumed to influence both the quantity and/or the quality of meaningful interactions per day.

The equation for indicated meaningful interactions per day is the product of normal meaningful interactions per day, by the hours per week spend on leisure relative to normal, by the effect of perceived possible failure on meaningful interactions, by the effect of self-worth on meaningful interactions. A multiplicative formulation is chosen since an extreme value of one input can dominate all other effects (Sterman, 2000). For example, if one spends 0 hours per week on leisure (with the assumption that meaningful interactions happen during one's leisure time), one will not experience meaningful interactions as the individual doesn't have time for that, regardless of one's self worth or perceived possible failure.

Meaningful Interactions Per Day

Equation Meaningful_Interactions_Per_Day(t - dt) + (Adjustment_Of_Meaningful_Interactions) * dt
Properties INIT Meaningful_Interactions_Per_Day = Indicated_Meaningful_Interactions_Per_Day
Unit Interactions / day
Documentation This stock represents the meaningful interactions with other people per day an individual has. It is important to note that not all interactions are meaningful. This project regards interactions to be meaningful when an interaction with someone else has some emotional impact on the individual and his/her relationships (Litt, Zhao, Kraut & Burke, 2020). Meaningful interactions are the type of interactions that people pursue and they serve as a foundation for strong relationships (Barnes & Duck, 1994; Baumeister & Leary, 1995)

This stock is adjusted (both increased and depleted) by the flow adjustment of meaningful interactions.

The initial value of meaningful interactions per day is equal to the variable indicated meaningful interactions per day. The value of this variable should be equal to an individual's normal meaningful interactions per day at the outset of the simulation since at the outset (when one has just made his/her choice) one would not interact more or less meaningful based on perceived possible failure or self-worth as they are both at their normal values at the outset of the simulation as well.

This stock ranges from 0.011 (which equals approximately 1 meaningful interaction per three months) to 3 meaningful interactions per day.

Meaningful Interactions Relative To Normal

Equation Meaningful_Interactions_Per_Day//Normal_Meaningful_Interactions_Per_Day
Unit Dimensionless
Documentation This variable represents the meaningful interactions an individual has per day relative to the normal meaningful interactions an individual has per day. It is the normalized value for meaningful interactions per day.

The equation for meaningful interactions relative to normal is the division of meaningful interactions per day by the normal meaningful interactions per day.

If meaningful interactions relative to normal is equal to 1, then the meaningful interactions an individual has per day are equal to the normal meaningful interactions one has per day. If meaningful interactions relative to normal is higher than 1, then the meaningful interactions an individual has per day are higher than the normal meaningful interactions one has per day. If meaningful interactions relative to normal is lower than 1, then the meaningful interactions an individual has per day are lower than the normal meaningful interactions one has per day.

Normal Meaningful Interactions Per Day

Equation 1.5
Unit Interactions / day
Documentation This parameter represents the normal meaningful interactions an individual has per day. The value for this parameter is set at 1.5 meaningful interactions per day based on interviews (N=7) held with both

perfectionists (n=4) and non-perfectionists (n=3). The average values for both groups did not differ significantly from each other, thus one value is chosen to represent the normal meaningful interactions an individual has per day for both perfectionists and non-perfectionists.

Time To Adjust Meaningful Interactions Per Day

Equation 2
Unit Weeks
Documentation This parameter represents the time to adjust the meaningful interactions an individual has per day. It is assumed that one adjusts his/her meaningful interactions per day moderately quick. As meaningful interactions are the type of interactions that people pursue (Baumeister & Leary, 1995) one might be somewhat reluctant in decreasing one's meaningful interactions per day and thus take some time to adjust them. Therefore, it is assumed that the time to adjust meaningful interactions is 2 weeks.

PERCEIVED POSSIBLE FAILURE SECTOR

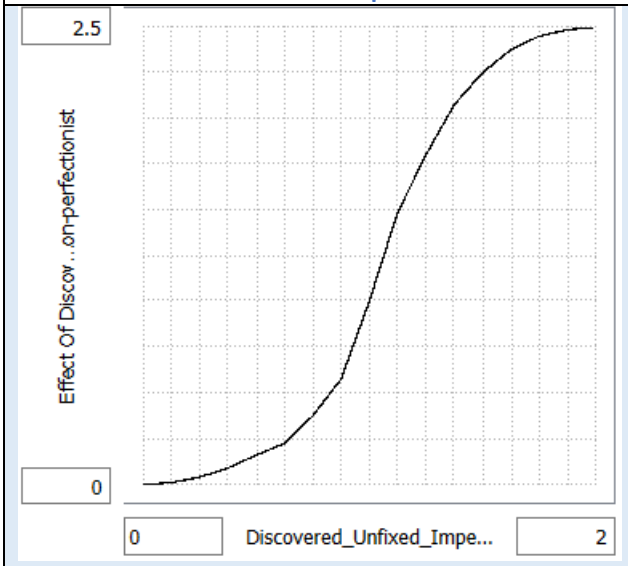
Adjustment Of Perceived Possible Failure

Equation (Indicated_Perceived_Possible_Failure-Perceived_Possible_Failure)/Time_To_Adjust_Perceived_Possible_Failure
Unit Dimensionless / week
Documentation This flow represents the adjustment of perceived possible failure of the choice. It is the rate at which the perceived possible failure of the choice made is increased or depleted per week.

The equation for this flow is the division of the gap between the indicated perceived possible failure and the stock perceived possible failure, by the time it takes to adjust the perceived possible failure.

If the indicated perceived possible failure is higher than the stock, the flow adjustment of perceived possible failure will be positive and cause the stock to increase. If the indicated perceived possible failure is lower than the stock, the flow adjustment of perceived possible failure will be negative and cause the stock to decrease. If the indicated perceived possible failure is equal to the stock, this flow will equal 0 and not cause a change in the stock.

Effect Of Discovered Unfixed Imperfections On Perceived Possible Failure – Non-perfectionist



Equation GRAPH(Discovered_Unfixed_Imperfections_Relative_To_Allowed) Points: (0.000, 0.000), (0.125, 0.010), (0.250, 0.040), (0.375, 0.090), (0.500, 0.160), (0.625, 0.225), (0.750, 0.375), (0.875, 0.575), (1.000, 1.000), (1.125, 1.485), (1.250, 1.800), (1.375, 2.075), (1.500, 2.250), (1.625, 2.375), (1.750, 2.450), (1.875, 2.485), (2.000, 2.500)
Unit Dimensionless
Documentation This variable represents the effect of discovered unfixed imperfections on perceived possible failure for non-perfectionists. Perceived possible failure is dependent on the discovered unfixed imperfections relative to the allowed unfixed imperfections. Non-perfectionists want to perform excellent but don't strain compulsively and unremittingly towards high standards. As such, they don't fear failure and don't overreact to mistakes or imperfections (Burns, 1980; Gluschkoff, et al., 2017). In this case a non-perfectionist might think when he/she perceives more discovered unfixed imperfections relative to allowed unfixed imperfections that the choice he/she has made could use some more work, otherwise it might lead to failure (but they don't

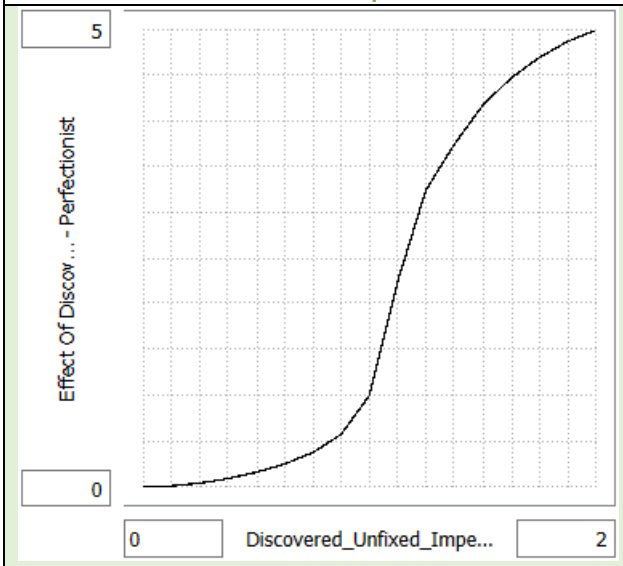
consider the choice to be doomed and don't anticipate impeding tragedy). Nevertheless, their perceived possible failure would also build which adds some pressure as they also want to perform really well.

When the discovered unfixed imperfections are equal relative to the allowed unfixed imperfections (and the normalized value is 1), the effect of discovered unfixed imperfections on perceived possible failure for non-perfectionists also equals 1 and a non-perfectionist's perceived possible failure will not deviate from his/her normal perceived possible failure.

When the discovered unfixed imperfections are higher relative to the allowed unfixed imperfections (and the normalized value is higher than 1), the effect of discovered unfixed imperfections on perceived possible failure for non-perfectionists increases decreasingly towards 2.5 (as discovered unfixed imperfections relative to allowed unfixed imperfections increases from 1 to 2). This represents the building pressure – but not overreaction – as non-perfectionists want to perform excellent and don't desire to fail – but don't fear failure either. At first it is assumed that the effect will increase faster, but the higher the discovered unfixed imperfections relative to the allowed unfixed imperfections becomes (where small changes will make less of a difference), the slower the effect will increase. Perceived possible failure for non-perfectionists can increase to a maximum of 2.5 times its normal value.

When the discovered unfixed imperfections are lower relative to the allowed unfixed imperfections (and the normalized value is lower than 1), the effect of discovered unfixed imperfections on perceived possible failure for non-perfectionists decreases decreasingly towards 0 (as discovered unfixed imperfections relative to allowed unfixed imperfections decreases from 1 to 0). This represents comfortable working conditions for non-perfectionists. At first it is assumed that the effect will decrease faster, but the lower the discovered unfixed imperfections relative to the allowed unfixed imperfections becomes (where small changes will make less of a difference), the slower the effect will decrease. Perceived possible failure for non-perfectionists can decrease to a minimum value of zero times its normal value.

Effect Of Discovered Unfixed Imperfections On Perceived Possible Failure - Perfectionist



Equation GRAPH(Discovered_Unfixed_Imperfections_Relative_To_Allowed) Points: (0.000, 0.000), (0.125, 0.010), (0.250, 0.040), (0.375, 0.090), (0.500, 0.160), (0.625, 0.250), (0.750, 0.375), (0.875, 0.575), (1.000, 1.000), (1.125, 2.250), (1.250, 3.250), (1.375, 3.750), (1.500, 4.175), (1.625, 4.475), (1.750, 4.700), (1.875, 4.875), (2.000, 5.000)

Unit Dimensionless

Documentation This variable represents the effect of discovered unfixed imperfections on perceived possible failure for perfectionists. Perceived possible failure is dependent on the discovered unfixed imperfections relative to the allowed unfixed imperfections. Perfectionists who strain compulsively and unremittingly towards high standards often fear failure and overreact to mistakes or imperfections (Burns, 1980; Gluschkoff, Elovainio, Hintsanen, Mullola, Pulkki-Råback, Keltikangas-Järvinen & Hintsa, 2017). In this case a perfectionist might think when he/she perceives more discovered unfixed imperfections relative to allowed unfixed imperfections that the choice he/she has made is doomed to fail and that tragedy will follow this failure (Burns, 1980).

When the discovered unfixed imperfections are equal relative to the allowed unfixed imperfections (and the normalized value is 1), the effect of discovered unfixed imperfections on perceived possible failure for perfectionists also equals 1 and a perfectionist's perceived possible failure will not deviate from his/her normal perceived possible failure.

When the discovered unfixed imperfections are higher relative to the allowed unfixed imperfections (and the normalized value is higher than 1), the effect of discovered unfixed imperfections on perceived possible failure for perfectionists shoots up and increases decreasingly towards 5 (as discovered unfixed imperfections relative to allowed unfixed imperfections increases from 1 to 2). This represents the overreaction to imperfections. At first it is assumed that the effect will increase faster, but the higher the discovered unfixed imperfections relative to the allowed unfixed imperfections becomes (where small changes will make less of a difference), the slower the effect will increase. Perceived possible failure for perfectionists can increase to a maximum of 5 times its normal value.

When the discovered unfixed imperfections are lower relative to the allowed unfixed imperfections (and the normalized value is lower than 1), the effect of discovered unfixed imperfections on perceived possible failure for perfectionists decreases decreasingly towards 0 (as discovered unfixed imperfections relative to allowed unfixed imperfections decreases from 1 to 0). This represents some breathing room for perfectionists. They don't need to stress that much in anticipation of failure and can relax a little. At first it is assumed that the effect will decrease faster, but the lower the discovered unfixed imperfections relative to the allowed unfixed imperfections becomes (where small changes will make less of a difference), the slower the effect will decrease. Perceived possible failure for perfectionists can decrease to a minimum value of zero times its normal value.

Indicated Perceived Possible Failure

Equation
Normal_Perceived_Possible_Failure*"Effect_Of_Discovered_Unfixed_Imperfections_On_Perceived_Possible_Failure_-_Perfectionist"*(1-"SWITCH_Non-perfectionist") +
Normal_Perceived_Possible_Failure*"Effect_Of_Discovered_Unfixed_Imperfections_On_Perceived_Possible_Failure_-_Non-perfectionist"*"SWITCH_Non-perfectionist"
Unit Dimensionless
Documentation This variable represents the indicated perceived possible failure an individual feels with regard to the choice made. Failure in this case means that the choice the individual has made doesn't live up to the individual's expectation of the choice and thereby the standards the individual has set for the choice to comply with (in what measure is the choice perceived to fail to accomplish what it is expected to accomplish?). As perfectionists strain compulsively and unremittingly towards high standards, discovered unfixed imperfections can cause perfectionists to perceive that their high standards can't be met and thus that the choice made fails in accomplishing what is expected. For a perfectionist, possible failure of the choice that he/she made means that the perfectionist him-/herself will fail as they measure their own self-worth primarily in terms of accomplishments (Burns, 1980).

As the normal values of perceived possible failure for perfectionists and non-perfectionist differ, the effect discovered unfixed imperfections has on one's perceived possible failure will differ as well for perfectionists in comparison with non-perfectionists (since for both groups the perceived possible failure ranges from 0 to 1). As such, a SWITCH function has been implemented in the equation for indicated perceived possible failure. The equation for indicated perceived possible failure is the product of the normal perceived possible failure by the effect of discovered unfixed imperfections on perceived possible failure for perfectionists, by 1 minus the SWITCH non-perfectionist (1 minus SWITCH non-perfectionist is written in between brackets so that the SWITCH is subtracted from the value 1), to which the product of the normal perceived possible failure by the effect of discovered unfixed imperfections on perceived possible failure for non-perfectionists, by the SWITCH non-perfectionist is added.

Normal Perceived Possible Failure

Equation "Normal_Perceived_Possible_Failure_-_Perfectionist"*(1-"SWITCH_Non-perfectionist") +
"Normal_Perceived_Possible_Failure_-_Non-perfectionist"*"SWITCH_Non-perfectionist"
Unit Dimensionless
Documentation This variable represents the normal perceived possible failure an individual has with regard to a choice he/she makes. Based on interviews (N=7) the average values of normal perceived possible failure differ significantly between perfectionists (n=4) and non-perfectionists (n=3). A reason for this could be that perfectionists have usually been excellent performers in the past and believe that their high standards are the cause for them achieving excellence (Burns, 1980). Because of this, perfectionist might normally perceive less

possible failure as they are not experienced with failure and thus don't expect it (which the interview results would support). Furthermore, as perfectionists have usually been excellent performers their baseline for possible failure and ability to cope with failure might be lower compared to non-perfectionists who have performed more average in the past (Burns, 1980). As non-perfectionists have usually performed more average in the past, they might normally perceive more possible failure. Their baseline for possible failure and ability to cope with failure might be higher compared to perfectionists as they have learned how to cope with less than excellent performance (Burns, 1980).

As the normal values of perceived possible failure for perfectionists and non-perfectionists differ, a SWITCH function has been implemented in the equation for normal perceived possible failure. The equation for normal perceived possible failure is the product of the normal perceived possible failure for a perfectionist, by 1 minus the SWITCH non-perfectionist (1 minus SWITCH non-perfectionist is written in between brackets so that the SWITCH is subtracted from the value 1), to which the product of the normal perceived possible failure for a non-perfectionist by the SWITCH non-perfectionist is added.

Normal Perceived Possible Failure – Non-perfectionist

Equation 0.4
Unit Dimensionless
Documentation This parameter represents the normal perceived possible failure for non-perfectionists. Based on interviews (N=7) the average values of normal perceived possible failure differ significantly between perfectionists (n=4) and non-perfectionists (n=3). A reason for this could be that perfectionists have usually been excellent performers in the past and believe that their high standards are the cause for them achieving excellence (Burns, 1980). Because of this, perfectionist might normally perceive less possible failure as they are not experienced with failure and thus don't expect it (which the interview results would support). Furthermore, as perfectionists have usually been excellent performers their baseline for possible failure and ability to cope with failure might be lower compared to non-perfectionists who have performed more average in the past (Burns, 1980). As non-perfectionists have usually performed more average in the past, they might normally perceive more possible failure. Their baseline for possible failure and ability to cope with failure might be higher compared to perfectionists as they have learned how to cope with less than excellent performance (Burns, 1980). Therefore, the dimensionless value for this parameter for non-perfectionists is set at 0.4 based on interviews (n=3) held with non-perfectionists, whereas the dimensionless value for this parameter for perfectionists is set at 0.2 based on interviews (n=4) held with perfectionists.

Normal Perceived Possible Failure - Perfectionist

Equation 0.2
Unit Dimensionless
Documentation This parameter represents the normal perceived possible failure for perfectionists. Based on interviews (N=7) the average values of normal perceived possible failure differ significantly between perfectionists (n=4) and non-perfectionists (n=3). A reason for this could be that perfectionists have usually been excellent performers in the past and believe that their high standards are the cause for them achieving excellence (Burns, 1980). Because of this, perfectionist might normally perceive less possible failure as they are not experienced with failure and thus don't expect it (which the interview results would support). Furthermore, as perfectionists have usually been excellent performers their baseline for possible failure and ability to cope with failure might be lower compared to non-perfectionists who have performed more average in the past (Burns, 1980). As non-perfectionists have usually performed more average in the past, they might normally perceive more possible failure. Their baseline for possible failure and ability to cope with failure might be higher compared to perfectionists as they have learned how to cope with less than excellent performance (Burns, 1980). Therefore, the dimensionless value for this parameter for perfectionists is set at 0.2 based on interviews (n=4) held with perfectionists, whereas the dimensionless value for this parameter for non-perfectionists is set at 0.4 based on interviews (n=3) held with non-perfectionists.

Perceived Possible Failure

Equation Perceived_Possible_Failure(t - dt) + (Adjustment_Of_Perceived_Possible_Failure) * dt
Properties INIT Perceived_Possible_Failure = Normal_Perceived_Possible_Failure
Unit Dimensionless
Documentation This stock represents an individual's perception of possible failure of the choice made. Failure in this case means that the choice the individual has made doesn't live up to the individual's expectation of the choice and thereby the standards the individual has set for the choice to comply with (in what measure is the choice perceived to fail to accomplish what it is expected to accomplish?). As De Wit (1988) states that the most appropriate criteria for success are the objectives (in this case the standards for the choice) and the degree to which these objectives have been met, I make the assumption that the opposite is true for failure. In that case,

the most appropriate criteria for failure are the objectives (in this case the standards for the choice) and the degree to which these objectives will not be met. As perfectionists strain compulsively and unremittingly towards high standards, discovered unfixed imperfections can cause perfectionists to perceive that their high standards can't be met and thus that the choice made fails in accomplishing what is expected. For a perfectionist, possible failure of the choice that he/she made means that the perfectionist him-/herself will fail as they measure their own self-worth primarily in terms of accomplishments (Burns, 1980).

The stock is adjusted (both increased and depleted) by the flow adjustment of perceived possible failure.

The initial value of perceived possible failure is equal to the variable normal perceived possible failure. At the outset (when one has just made his/her choice) it is assumed that one would perceive a normal possible failure – one does not perceive that the choice made has 0% possible failure (even perfectionists are not that unrealistic). Likewise one does not perceive that the choice made has more possible failure than what one would normally perceive, otherwise the perfectionist would not have settled on this choice (a perfectionist doesn't settle for less).

This stock ranges from a dimensionless value of 0 to 1. A dimensionless value of 0 means that an individual perceives no possible failure at all (0%) for the choice that he/she has made. A dimensionless value of 1 means that an individual perceives that possible failure of the choice is practically certain (100%). The choice made completely fails to live up to the individual's expectations and standards.

A dimensionless value equal to the normal perceived possible failure would mean that the individual perceives the exact possible failure of the choice that he/she expected of it, in that case the choice would still meet one's expectations/standards.

Perceived Possible Failure Relative To Normal

Equation Perceived_Possible_Failure//Normal_Perceived_Possible_Failure
Unit Dimensionless
Documentation This variable represents the perceived possible failure of the choice relative to the normal perceived possible failure of a choice. It is the normalized value for perceived possible failure.

The equation for perceived possible failure relative to the normal perceived possible failure is the division of the perceived possible failure by the normal perceived possible failure.

If the perceived possible failure relative to normal is equal to 1, then the perceived possible failure of the choice is equal to one's normal perceived possible failure of a choice. If the perceived possible failure relative to normal is higher than 1, then the perceived possible failure of the choice is higher than the normal perceived possible failure an individual has of a choice. If the perceived possible failure relative to normal is lower than 1, then the perceived possible failure of the choice is lower than the normal perceived possible failure an individual has of a choice.

Time To Adjust Perceived Possible Failure

Equation 1
Unit Week
Documentation This parameter represents the time to adjust the perceived possible failure an individual has of the choice that he/she has made. It is reasonable to assume that an individual can adjust his/her perception of possible failure in the same amount of time that one can adjust his/her perceived possible success. Therefore, the value of this parameter is set at 1 week. This value is equal to the value that Homer (1985) uses for time to perceive accomplishments in his worker burnout model.

PERCEIVED POSSIBLE SUCCESS SECTOR

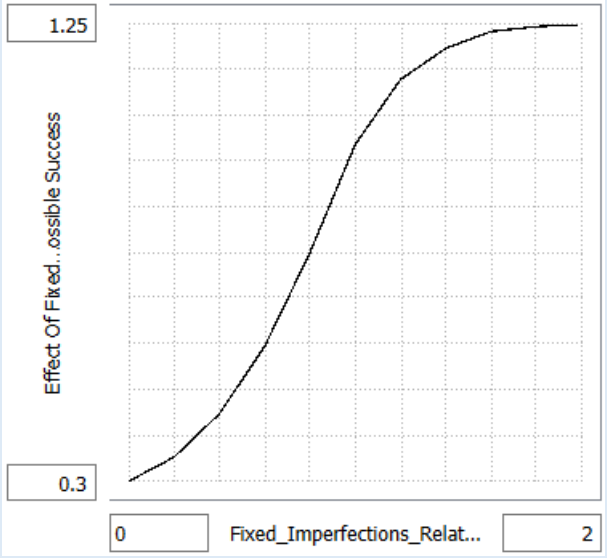
Adjustment Of Perceived Possible Success

Equation (Indicated_Perceived_Possible_Success-Perceived_Possible_Success)/Time_To_Adjust_Perceived_Possible_Success
Unit Dimensionless / week
Documentation This flow represents the adjustment of perceived possible success of the choice. It is the rate at which the perceived possible success of the choice made is increased or depleted per week.

The equation for this flow is the division of the gap between the indicated perceived possible success and the stock perceived possible success, by the time it takes to adjust the perceived possible success.

If the indicated perceived possible success is higher than the stock, the flow adjustment of perceived possible success will be positive and cause the stock to increase. If the indicated perceived possible success is lower than the stock, the flow adjustment of perceived possible success will be negative and cause the stock to decrease. If the indicated perceived possible success is equal to the stock, this flow will equal 0 and not cause a change in the stock.

Effect Of Fixed Imperfections On Perceived Possible Success



Equation GRAPH(Fixed_Imperfections_Relative_To_Discovered_Unfixed_Imperfections) Points: (0.000, 0.3000), (0.200, 0.3500), (0.400, 0.4400), (0.600, 0.5800), (0.800, 0.7750), (1.000, 1.0000), (1.200, 1.1350), (1.400, 1.2000), (1.600, 1.2350), (1.800, 1.2450), (2.000, 1.2500)
Unit Dimensionless
Documentation This variable represents the effect of fixed imperfections on perceived possible success. The perceived possible success is dependent on the fixed imperfections relative to the discovered unfixed imperfections.

When fixed imperfections are equal relative to the discovered unfixed imperfections (and the normalized value is equal to 1), the effect of fixed imperfections on perceived possible success is also equal to 1 and one's indicated perceived possible success will not deviate from the normal perceived possible success (unless the just got started buffer is bigger than a dimensionless value of 0).

When an individual has fixed more imperfections than there are discovered unfixed imperfections at that moment in time (and the normalized value is higher than 1), the effect of fixed imperfections on perceived possible success increases decreasingly towards 1.25 (as the fixed imperfections relative to discovered unfixed imperfections increases from 1 to 2). When an individual has fixed more imperfections than he/she has discovered imperfections left that are yet unfixed, he/she can feel that the work on the choice he/she has done is actually going in a good direction and that he/she can actually accomplish what he/she had set out to do with regard to the choice made. At first the effect will increase faster, but the higher the fixed imperfections relative to the discovered unfixed imperfections becomes (where small changes will make less of a difference), the slower the effect will increase. Perceived possible success can increase to a maximum of 1.25 times its normal value.

However, when an individual has fixed less imperfections than there are discovered unfixed imperfections at that moment in time (and the normalized value is lower than 1), the effect of fixed imperfections on perceived possible success decreases decreasingly towards 0.3 (as the fixed imperfections relative to discovered unfixed imperfections decreases from 1 to 0). When an individual has fixed less imperfections than he/she has discovered imperfections left that are yet unfixed, he/she can feel that the work on the choice he/she has done is not going so well and one can feel overwhelmed by the work on the choice that he/she still needs to do in order to accomplish what he/she had set out to do with regard to the choice made. At first the effect will decrease faster, but the lower the fixed imperfections relative to the discovered unfixed imperfections becomes (where small changes will make less of a difference), the slower the effect will decrease. Perceived possible success will decrease to a minimum of 0.3 times its normal value.

The effect will only go as low as a dimensionless value of 0.3 in this model, since perceived possible success does not only come from fixed imperfections (other things can increase the perceived possible success as well, but they are outside this model boundary). Therefore, it seems more realistic to let this effect range from 0.3 to 1.25 and not from 0 to 1.25.

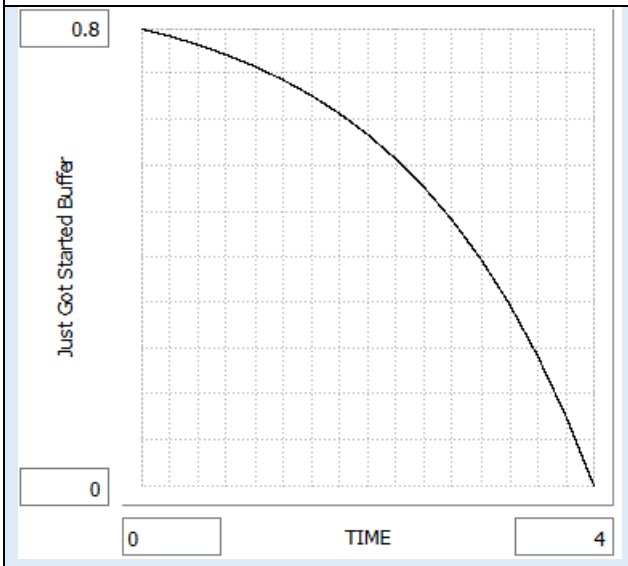
Indicated Perceived Possible Failure

Equation IF Discovered_Unfixed_Imperfections>0 THEN MIN(Maximum_Perceived_Possible_Success, Normal_Perceived_Possible_Success*Effect_Of_Fixed_Imperfections_On_Perceived_Possible_Success+Just_Got_Started_Buffer) ELSE Normal_Perceived_Possible_Success
Unit Dimensionless
Documentation This variable represents the indicated perceived possible success an individual feels with regard to the choice made. Success in this case means that the choice the individual has made, lives up to the individual's expectation of the choice and thereby the standards the individual has set for the choice to comply with (in what measure is the choice perceived to accomplish what it is expected to accomplish?).

The equation for indicated perceived possible success is an IF, THEN, ELSE functions in combination with a MIN function. IF there are more than zero discovered unfixed imperfections, the indicated perceived possible success is equal to 1) the maximum perceived possible success, or to 2) the product of the normal perceived possible success by the effect of fixed imperfections on perceived possible success, to which the effect of the just got started buffer is added. ELSE - meaning if there are zero discovered unfixed imperfections - perceived possible success would equal one's normal perceived possible success. This equation makes sense with regard to an extreme conditions test.

The MIN function will ensure that the perceived possible success will not exceed its maximum value of 1 due to the addition of the effect of the just got started buffer in the equation of the indicated perceived possible success.

Just Got Started Buffer



Equation GRAPH(TIME) Points: (0.000, 0.8000), (0.250, 0.787083197056), (0.500, 0.772076013089), (0.750, 0.754640152869), (1.000, 0.734382573414), (1.250, 0.710846623929), (1.500, 0.683501751882), (1.750, 0.651731543174), (2.000, 0.614819826799), (2.250, 0.571934530757), (2.500, 0.522108925305), (2.750, 0.464219830727), (3.000, 0.396962298366), (3.250, 0.318820194187), (3.500, 0.228032021752), (3.750, 0.122551214184), (4.000, 0.0000)
Unit Dimensionless
Documentation This variable represents a possible success buffer that an individual has when he/she starts working on a choice. The buffer has two functions. Firstly, when an individual has just made a choice and starts working on it, it can be expected that one first comes across some imperfections which can't immediately be fixed. As this can be expected, the effect of fixed imperfections relative to discovered unfixed imperfections won't be perceived as intense by the individual as it otherwise would because the buffer "covers the blow".

Secondly, when an individual has just made a choice and starts working on it, he/she is assumed to be excited and pumped about working on the choice. This excitement can increase the indicated perceived possible success as it can give a feeling such as "I can do this, let's get started!".

The effect of the buffer will however wane and vanish over time. First this will go slowly, but as time passes the buffer will decrease faster. Here it is assumed that the buffer will equal one's normal perceived possible success when one starts working on the choice made, and it will decrease increasingly towards a dimensionless value of 0 in the first 4 weeks of working on the choice made.

Maximum Perceived Possible Success

Equation 1
Unit Dimensionless
Documentation This parameter represents the maximum perceived possible success an individual can have with regard to the choice that he/she has made. This maximum value is equal to the dimensionless value of 1 which represents 100% perceived possible success.

Normal Perceived Possible Success

Equation 0.8
Unit Dimensionless
Documentation This parameter represents the normal perceived possible success an individual has with regard to a choice he/she makes. The dimensionless value for this parameter is set at 0.8 based on interviews (N=7) held with both perfectionists (n=4) and non-perfectionists (n=3). The average values for both groups did not differ significantly from each other, thus one value is chosen to represent the normal perceived possible success an individual has with regard to a choice made for both perfectionists and non-perfectionists.

Perceived Possible Success

Equation Perceived_Possible_Success(t - dt) + (Adjustment_Of_Perceived_Possible_Success) * dt
Properties INIT Perceived_Possible_Success = Normal_Perceived_Possible_Success
Unit Dimensionless
Documentation This stock represents an individual's perception of possible success of the choice made. Success in this case means that the choice the individual has made lives up to the individual's expectation of the choice and thereby the standards the individual has set for the choice to comply with (in what measure is the choice perceived to accomplish what it is expected to accomplish?). De Wit (1988) states that the most appropriate criteria for success are the objectives (in this case the standards for the choice) and the degree to which these objectives have been met.

The stock is adjusted (both increased and depleted) by the flow adjustment of perceived possible success.

The initial value of perceived possible success is equal to the variable normal perceived possible success. At the outset (when one has just made his/her choice) it is assumed that one would perceive a normal possible success – one does not perceive that the choice made has 100% possible success, therefore one has to first work on the choice and experience actual successes (in this model represented by fixed imperfections). Likewise one does not perceive that the choice made has less possible success than what one would normally perceive, otherwise the perfectionist would not have settled on this choice (a perfectionist doesn't settle for less).

This stock can theoretically range from a dimensionless value of 0 to 1. A dimensionless value of 0 means that an individual perceives no possible success at all (0%) for the choice that he/she has made. In this model the perceived possible success will not decrease to a value of 0 but to a minimum dimensionless value of 0.24 since perceived possible success does not only come from fixed imperfections (other things can increase the perceived possible success as well, but they are outside this model boundary). Furthermore, this stock does not need to decrease all the way to 0 before it will affect other variables (such as the stock self-worth). For these reasons, a range from 0.24 to 1 seems more realistic.

A dimensionless value of 1 means that an individual perceives that possible success of the choice is practically certain (100%). The choice made not only lives up to the individual's expectations and standards, it exceeds in accomplishing the set expectations/standards of the individual.

A dimensionless value equal to the normal perceived possible success would mean that the individual perceives the exact possible success of the choice that he/she expected of it, and that the choice made has met (but not exceeded) the expectations.

Perceived Possible Success Relative To Normal

Equation Perceived_Possible_Success//Normal_Perceived_Possible_Success
Unit Dimensionless
Documentation This variable represents the perceived possible success of the choice relative to the normal perceived possible success of a choice. It is the normalized value for perceived possible success.

The equation for perceived possible success relative to the normal perceived possible success is the division of the perceived possible success by the normal perceived possible success.

If the perceived possible success relative to normal is equal to 1, then the perceived possible success of the choice is equal to one's normal perceived possible success of a choice. If the perceived possible success relative to normal is higher than 1, then the perceived possible success of the choice is higher than the normal perceived possible success an individual has of a choice. If the perceived possible success relative to normal is lower than 1, then the perceived possible success of the choice is lower than the normal perceived possible success an individual has of a choice.

Time To Adjust Perceived Possible Success

Equation 1
Unit Week
Documentation This parameter represents the time to adjust the perceived possible success an individual has of the choice that he/she has made. It is assumed that an individual can adjust his/her perception of possible success in 1 week time. This value is equal to the value that Homer (1985) uses for time to perceive accomplishments in his worker burnout model.

SELF-WORTH SECTOR

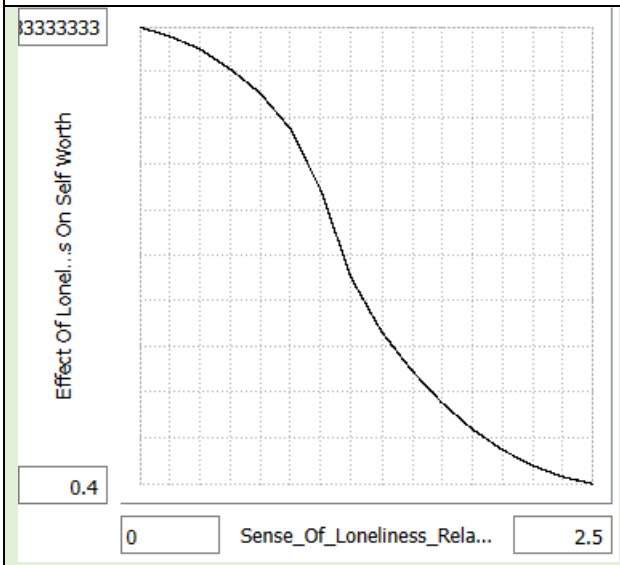
Adjustment Of Self Worth

Equation (Indicated_Self_Worth-Self_Worth)/Time_To_Adjust_Self_Worth
Unit Dimensionless / week
Documentation This flow represents the adjustment of self-worth. It is the rate at which self-worth is increased or depleted per week.

The equation for this flow is the division of the gap between the indicated self-worth and the stock self-worth, by the time it takes to adjust self-worth.

If the indicated self-worth is higher than the stock, the flow adjustment of self-worth will be positive and cause the stock to increase. If the indicated self-worth is lower than the stock, the flow adjustment of self-worth will be negative and cause the stock to decrease. If the indicated self-worth is equal to the stock, this flow will equal 0 and not cause a change in the stock.

Effect Of Loneliness On Self Worth



Equation GRAPH(Sense_Of_Loneliness_Relative_To_Normal) Points: (0.000, 1.3333333333), (0.166666666667, 1.3145), (0.333333333333, 1.2885), (0.500, 1.2475), (0.666666666667, 1.1980), (0.833333333333, 1.1245), (1.000, 1.0000), (1.16666666667, 0.8215), (1.33333333333, 0.7120), (1.500, 0.6325), (1.66666666667, 0.5665), (1.83333333333, 0.5125), (2.000, 0.4700), (2.16666666667, 0.4375), (2.33333333333, 0.4145), (2.500, 0.4000)
Unit Dimensionless
Documentation This variable represents the effect of sense of loneliness on self-worth. Self-worth is partly dependent on an individual's sense of loneliness relative to one's normal sense of loneliness. According to sociometer theory one's self-worth evaluations operate automatically and are elicited by one's relational value. Relational devaluation can occur when an individual experiences real or imagined rejection from others and one feels a greater sense of loneliness. This produces emotional distress and negatively affects one's self worth.

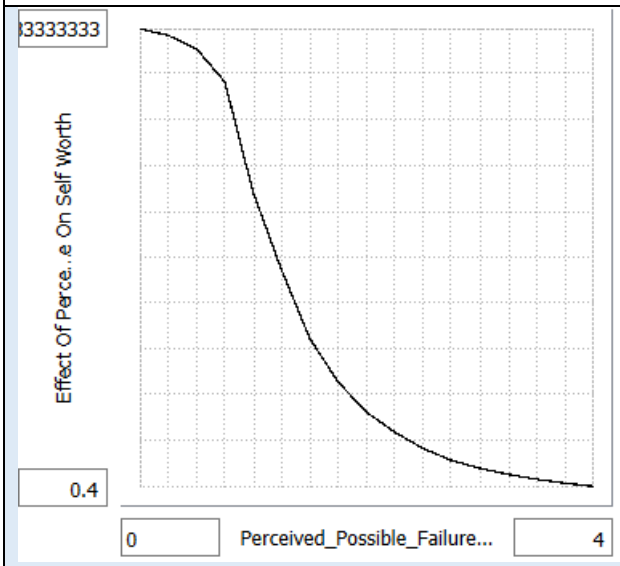
Relational appreciation can also occur when an individual experiences real or imagined acceptance from others and one feels a lesser sense of loneliness. This positively affects one's self-worth (Leary, 2005; Leary & Baumeister, 2000; Leary & Downs, 1995; Sinclair & Lentz, 2010).

When an individual's sense of loneliness is equal relative to one's normal sense of loneliness (and the normalized value is 1), the effect of sense of loneliness on self-worth is also equal to 1 and one's self-worth will not deviate from his/her normal self-worth based on sense of loneliness.

When an individual's sense of loneliness is higher relative to one's normal sense of loneliness (and the normalized value is higher than 1), the effect of sense of loneliness on self-worth decreases decreasingly towards 0.4 (as sense of loneliness relative to normal increases from 1 to 2.5). This represents the above mentioned relational devaluation. At first the effect will decrease faster, but the higher the sense of loneliness relative to normal becomes (where small changes will make less of a difference), the slower the effect will decrease.

When an individual's sense of loneliness is lower relative to one's normal sense of loneliness (and the normalized value is lower than 1), the effect of sense of loneliness on self-worth increases decreasingly towards 1.3333333333 (as sense of loneliness relative to normal decreases from 1 to 0). This represents the above mentioned relational appreciation. At first the effect will increase faster, but the lower the sense of loneliness relative to normal becomes (where small changes will make less of a difference), the slower the effect will increase.

Effect Of Perceived Possible Failure On Self Worth



Equation GRAPH(Perceived_Possible_Failure_Relative_To_Normal) Points: (0.000, 1.3333333333), (0.250, 1.3200), (0.500, 1.2925), (0.750, 1.2250), (1.000, 1.0000), (1.250, 0.8420), (1.500, 0.7015), (1.750, 0.6130), (2.000, 0.5515), (2.250, 0.5105), (2.500, 0.4775), (2.750, 0.4530), (3.000, 0.4370), (3.250, 0.4245), (3.500, 0.4145), (3.750, 0.4065), (4.000, 0.4000)
Unit Dimensionless
Documentation This variable represents the effect of perceived possible failure on self-worth. Self-worth is partly dependent on an individual's perceived possible failure relative to one's normal perceived possible failure. Perceived possible failure influences self-worth through automatic thought processes (Burns, 1980). These automatic thought processes are often experienced by perfectionists in a dichotomous manner (something is either right or wrong, there is little room for a middle ground). This dichotomous rationale causes perfectionists to overreact to perceived possible failure. As they overreact to perceived possible failure, perfectionists overgeneralize and tend to jump to conclusions such as "I'll never be able to do this". These sort of conclusions involuntarily flood the mind of the perfectionist, and even though these conclusions might seem strange and irrational to others, for the perfectionist they are highly plausible (Burns, 1980). Furthermore, perfectionists often react to perceived possible failure with little compassion towards themselves. They tend to think in "should-statements" such as "I should have done better". These nonproductive, self-critical evaluations cause a negative overreaction in one's feeling of self-worth (Burns, 1980; Ramsey & Ramsey, 2002).

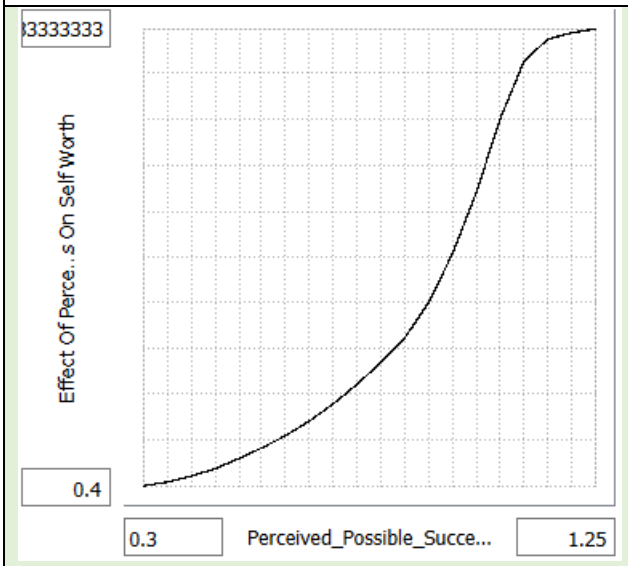
When an individual's perceived possible failure is equal relative to one's normal perceived possible failure (and

the normalized value is 1), the effect of perceived possible failure on self-worth is also equal to 1 and one's self-worth will not deviate from his/her normal self-worth based on perceived possible failure.

When an individual's perceived possible failure is higher relative to one's normal perceived possible failure (and the normalized value is higher than 1), the effect of perceived possible failure on self-worth decreases decreasingly towards 0.4 (as perceived possible failure relative to normal increases from 1 to 4). This represents the above mentioned nonproductive, self-critical evaluations. At first the effect will decrease faster, but the higher the perceived possible failure relative to normal becomes (where small changes will make less of a difference), the slower the effect will decrease.

When an individual's perceived possible failure is lower relative to one's normal perceived possible failure (and the normalized value is lower than 1), the effect of perceived possible failure on self-worth increases decreasingly towards 1.3333333333 (as perceived possible failure relative to normal decreases from 1 to 0). Instead of getting trapped with negative automatic thoughts that perceived possible failure can bring, the lower presence of perceived possible failure is assumed to relax perfectionists so that they will be less critical towards themselves and more compassionate. Self-compassion can cause reduced self judgement and less focus on negative thoughts and feelings (Bosacki, Moreira, Sitnik, Andrews & Talwar, 2020; Neff, 2003). Therefore, it is assumed that this would cause a positive reaction in one's feeling of self-worth. At first the effect will increase faster, but the lower the perceived possible failure relative to normal becomes (where small changes will make less of a difference), the slower the effect will increase.

Effect Of Perceived Possible Success On Self Worth



Equation GRAPH(Perceived_Possible_Success_Relative_To_Normal) Points: (0.3000, 0.4000), (0.3500, 0.4080), (0.4000, 0.4200), (0.4500, 0.4345), (0.5000, 0.4555), (0.5500, 0.4780), (0.6000, 0.5030), (0.6500, 0.5330), (0.7000, 0.5680), (0.7500, 0.6080), (0.8000, 0.6530), (0.8500, 0.7030), (0.9000, 0.7750), (0.9500, 0.8750), (1.0000, 1.0000), (1.0500, 1.1500), (1.1000, 1.2675), (1.1500, 1.3125), (1.2000, 1.3250), (1.2500, 1.3333333333)
Unit Dimensionless
Documentation This variable represents the effect of perceived possible success on self-worth. Self-worth is partly dependent on an individual's perceived possible success relative to one's normal perceived possible success. Perceived possible success influences self-worth through validation. An individual adopts self-validation goals to prove and confirm that he/she possesses qualities on which his/her self-worth is staked (Crocker & Park, 2004; Park, Crocker & Vohs, 2006). Perfectionists base their self-worth primarily on accomplishments (Burns, 1980; Pyszczynski & Cox, 2004), therefore perfectionists may adopt the goal of proving that he/she is successful in accomplishing his/her high standards. Consequently, self-worth can increase in response to perceived possible success as it gives validation, and decrease in response to lack of perceived possible success (Crocker, 2002).

When an individual's perceived possible success is equal relative to one's normal perceived possible success (and the normalized value is 1), the effect of perceived possible success on self-worth is also equal to 1 and one's self-worth will not deviate from his/her normal self-worth based on perceived possible success.

When an individual's perceived possible success is higher relative to one's normal perceived possible success (and the normalized value is higher than 1), the effect of perceived possible success on self-worth increases

decreasingly towards 1.3333333333 (as perceived possible success relative to normal increases from 1 to 1.25). This represents the above mentioned validation. At first the effect will increase faster, but the higher the perceived possible success relative to normal becomes (where small changes will make less of a difference), the slower the effect will increase.

When an individual's perceived possible success is lower relative to one's normal perceived possible success (and the normalized value is lower than 1), the effect of perceived possible success on self-worth decreases decreasingly towards 0.4 (as perceived possible success relative to normal decreases from 1 to 0.3). This represents the effects of a lack of validation. It is assumed that at first the effect will decrease faster, but the lower the perceived possible success relative to normal becomes (where small changes will make less of a difference), the slower the effect will decrease.

Indicated Self Worth

Equation
Self_Worth_From_Perceived_Possible_Failure+Self_Worth_From_Perceived_Possible_Success+Self_Worth_From_Sense_Of_Loneliness
Unit Dimensionless
Documentation This variable represents the indicated self-worth; the indicated perception of oneself as a worthy person. Perfectionists strain compulsively and unremittingly towards high standards, and at the root of their achievement oriented behavior lies a need for self-worth as perfectionists measure their self-worth primarily in terms of accomplishment (Burns, 1980; Pyszczynski & Cox, 2004). As perfectionists measure their self-worth primarily in terms of accomplishment, perfectionists can experience short-term fluctuations in self-worth stability due to self-evaluative emotional reactions to events of accomplishment (Kernis, 2005).

Self-worth is influenced by events of accomplishment in two ways, through perceived possible success and through perceived possible failure. Besides accomplishments, self-worth is influenced by social relations with others and one's sense of loneliness based on these (disrupted) interpersonal relationships (Burns, 1980; Pyszczynski & Cox, 2004).

The equation for indicated self-worth is the addition of self-worth from perceived possible failure, with self-worth from perceived possible success, with self-worth from sense of loneliness. An additive formulation is chosen since an extreme value of one input does not dominate all other effects, instead the effects of the three inputs are separable (Sterman, 2000).

Normal Self Worth

Equation 0.75
Unit Dimensionless
Documentation This parameter represents an individual's normal self-worth. The dimensionless value for this parameter is set at 0.75 based on interviews (N=7) held with both perfectionists (n=4) and non-perfectionists (n=3). The average values for both groups did not differ significantly from each other, thus one value is chosen to represent an individual's normal self-worth for both perfectionists and non-perfectionists

Residual Weight Distribution – Fraction Of Weight Of Perceived Possible Failure

Equation 0.5
Unit Dimensionless
Documentation This parameter represents what fraction of the residual weight (total weight minus the weight that sense of loneliness has for an individual's self-worth) is allocated to perceived possible failure. The value of this fraction is set at a dimensionless value of 0.5 as it is assumed that perceived possible failure and perceived possible success equally contribute to an individual's self-worth.

Self Worth

Equation Self_Worth(t - dt) + (Adjustment_Of_Self_Worth) * dt
Properties INIT Self_Worth = Normal_Self_Worth
Unit Dimensionless
Documentation This stock represents an individual's self-worth; the perception of oneself as a worthy person. It is an aggregate of numerous "self-feelings" an individual can feel such as self-acceptance, self-respect, self-image, self-confidence, and self-esteem. Thus, more specifically, this stock encompasses self-evaluative emotional reactions to events as feelings of self-worth (Brown, 2006).

Perfectionists strain compulsively and unremittingly towards high standards, and at the root of their achievement oriented behavior lies a need for self-worth as perfectionists measure their self-worth primarily in terms of accomplishment (Burns, 1980; Pyszczynski & Cox, 2004). As perfectionists measure their self-worth

primarily in terms of accomplishment, perfectionists can experience short-term fluctuations in self-worth stability due to self-evaluative emotional reactions to events of accomplishment (Kernis, 2005). It is the short-term fluctuations in self-worth that motivate behavior (Crocker, 2002).

Self-worth is influenced by events of accomplishment in two ways, through perceived possible success and through perceived possible failure. Besides accomplishments, self-worth is influenced by social relations with others and one's sense of loneliness based on these (disrupted) interpersonal relationships (Burns, 1980; Pyszczynski & Cox, 2004).

The stock is adjusted (both increased and depleted) by the flow adjustment of self-worth.

The initial value of self-worth is equal to the variable normal self-worth. At the outset of the simulation (when one has just made his/her choice) it is assumed that one would feel a normal self-worth – one has not yet worked on the choice made that could give a sense of accomplishment or failure by which a perfectionists adjusts his/her self-worth.
This stock is also initialized with the variable normal self-worth to solve the model's initial circularity error that it gives when the stock is initialized with the variable indicated self-worth.

This stock can theoretically range from a dimensionless value of 0 to 1. A dimensionless value of 0 means that an individual feels no self-worth at all (0%) and a dimensionless value of 1 means that an individual feels that he/she is a worthy person (100%). In this model self-worth will not decrease to a value of 0 but to a minimum dimensionless value of 0.3 since this model is applicable to decision making of a moderate level (not life changing choices). Therefore, I assume that even though choices made at this level can make one feel super awesome in a positive way and super blegh in a negative way, these choices will not make one feel completely worthless in their self-evaluative emotional reactions.

Self Worth From Perceived Possible Failure

Equation
Normal_Self_Worth*Effect_Of_Perceived_Possible_Failure_On_Self_Worth*Weight_Of_Perceived_Possible_Failure_For_Self_Worth
Unit Dimensionless
Documentation This variable represents the input of perceived possible failure on an individual's self-worth. The equation for self-worth from perceived possible failure is the product of one's normal self-worth by the effect of perceived possible failure on self-worth, by the weight perceived possible failure has on that individual's self-worth.

Self Worth From Perceived Possible Success

Equation
Normal_Self_Worth*Effect_Of_Perceived_Possible_Success_On_Self_Worth*Weight_Of_Perceived_Possible_Success_For_Self_Worth
Unit Dimensionless
Documentation This variable represents the input of perceived possible success on an individual's self-worth. The equation for self-worth from perceived possible success is the product of one's normal self-worth by the effect of perceived possible success on self-worth, by the weight perceived possible success has on that individual's self-worth.

Self Worth From Loneliness

Equation Normal_Self_Worth*Effect_Of_Loneliness_On_Self_Worth*Weight_Of_Loneliness_For_Self_Worth
Unit Dimensionless
Documentation This variable represents the input of sense of loneliness on an individual's self-worth. The equation for self-worth from sense of loneliness is the product of one's normal self-worth by the effect of loneliness on self-worth, by the weight loneliness has on that individual's self-worth.

Self Worth Relative To Normal

Equation Self_Worth//Normal_Self_Worth
Unit Dimensionless
Documentation This variable represents an individual's feeling of self-worth relative to one's normal self-worth. It is the normalized value for self-worth.

The equation for self-worth relative to normal is the division of self-worth by the normal self-worth.

If self-worth relative to normal is equal to 1, then an individual's feeling of self-worth is equal to one's normal

self-worth. If self-worth relative to normal is higher than 1, then an individual's feeling of self-worth is higher than one's normal self-worth. If self-worth relative to normal is lower than 1, then an individual's feeling of self-worth is lower than one's normal self-worth.

Time To Adjust Self Worth

Equation 10
Unit Weeks
Documentation This parameter represents the time to adjust an individual's self-worth. As perfectionists measure their self-worth primarily in terms of accomplishment, perfectionists can experience short-term fluctuations in self-worth stability due to self-evaluative emotional reactions to events of accomplishment (Burns, 1980; Kernis, 2005). As these fluctuations in self-worth are experienced in short-term, the time to adjust self-worth is assumed to be fairly quick with a value of 10 weeks.

Weight Of Loneliness For Self Worth

Equation "Weight_Of_Loneliness_For_Self_Worth_-_Perfectionist"*(1-"SWITCH_Non-perfectionist") + "Weight_Of_Loneliness_For_Self_Worth_-_Non-perfectionist"*"SWITCH_Non-perfectionist"
Unit Dimensionless
Documentation This variable represents the weight sense of loneliness has on an individual's self-worth.

The equation for weight of loneliness for self-worth is the product of the weight of loneliness for self-worth for perfectionists by 1 minus SWITCH non-perfectionist (1 minus SWITCH non-perfectionist is written in between brackets so that the SWITCH is subtracted from the value 1), to which the product of the weight of loneliness for self-worth for non-perfectionists by the SWITCH non-perfectionist is added.

If the SWITCH non-perfectionist is off and equals 0, the part of the equation that is active (the part of the equation that doesn't equal 0 due to the product of the weight by the SWITCH), is the first part that captures the weight of loneliness for self-worth for perfectionists. If the SWITCH non-perfectionist is on and equals 1, the part of the equation that is active, is the second part that captures the weight of loneliness for self-worth for non-perfectionists.

Weight Of Loneliness For Self Worth – Non-perfectionist

Equation 0.5
Unit Dimensionless
Documentation This parameter represents the fractional weight that the effect of sense of loneliness has on a non-perfectionist's self-worth. In other words, it is the part of a non-perfectionist's self-worth that is determined by his/her sense of loneliness.

It is assumed that half of a non-perfectionist's self-worth is determined by that individual's sense of loneliness, therefore weight of loneliness for self-worth for non-perfectionist is set at a dimensionless value of 0.5.

Weight Of Loneliness For Self Worth - Perfectionist

Equation 0.25
Unit Dimensionless
Documentation This parameter represents the fractional weight that the effect of sense of loneliness has on a perfectionist's self-worth. In other words, it is the part of a perfectionist's self-worth that is determined by his/her sense of loneliness.

It is assumed that a quarter of a perfectionist's self-worth is determined by that individual's sense of loneliness, therefore weight of loneliness for self-worth for perfectionist is set at a dimensionless value of 0.25.

Weight Of Perceived Possible Failure For Self Worth

Equation "Weight_Of_Perceived_Possible_Failure_For_Self_Worth_-_Perfectionist"*(1-"SWITCH_Non-perfectionist") + "Weight_Of_Perceived_Possible_Failure_For_Self_Worth_-_Non-perfectionist"*"SWITCH_Non-perfectionist"
Unit Dimensionless
Documentation This variable represents the weight perceived possible failure has on an individual's self-worth.

The equation for weight of perceived possible failure for self-worth is the product of the weight of perceived possible failure for self-worth for perfectionists by 1 minus SWITCH non-perfectionist (1 minus SWITCH non-perfectionist is written in between brackets so that the SWITCH is subtracted from the value 1), to which the product of the weight of perceived possible failure for self-worth for non-perfectionists by the SWITCH non-perfectionist is added.

If the SWITCH non-perfectionist is off and equals 0, the part of the equation that is active (the part of the equation that doesn't equal 0 due to the product of the weight by the SWITCH), is the first part that captures the weight of perceived possible failure for self-worth for perfectionists. If the SWITCH non-perfectionist is on and equals 1, the part of the equation that is active, is the second part that captures the weight of perceived possible failure for self-worth for non-perfectionists.

Weight Of Perceived Possible Failure For Self Worth – Non-perfectionist

Equation (1-"Weight_Of_Loneliness_For_Self_Worth_-_Non-perfectionist")*"Residual_Weight_Distribution_-_Fraction_Of_Weight_Of_Perceived_Possible_Failure"
Unit Dimensionless
Documentation This variable represents the weight perceived possible failure has on a non-perfectionist's self-worth.

The equation for weight of perceived possible failure for self-worth for non-perfectionists is the product of 1 minus the weight of loneliness for self-worth for non-perfectionists (1 minus the weight of loneliness for self-worth for non-perfectionists is written in between brackets so that this weight is subtracted from the value 1), by the residual weight distribution and which fraction of that residual weight is allocated to perceived possible failure.

Weight Of Perceived Possible Failure For Self Worth - Perfectionist

Equation (1-"Weight_Of_Loneliness_For_Self_Worth_-_Perfectionist")*"Residual_Weight_Distribution_-_Fraction_Of_Weight_Of_Perceived_Possible_Failure"
Unit Dimensionless
Documentation This variable represents the weight perceived possible failure has on a perfectionist's self-worth.

The equation for weight of perceived possible failure for self-worth for perfectionists is the product of 1 minus the weight of loneliness for self-worth for perfectionists (1 minus the weight of loneliness for self-worth for perfectionists is written in between brackets so that this weight is subtracted from the value 1), by the residual weight distribution and which fraction of that residual weight is allocated to perceived possible failure.

Weight Of Perceived Possible Success For Self Worth

Equation "Weight_Of_Perceived_Possible_Success_For_Self_Worth_-_Perfectionist"*(1-"SWITCH_Non-perfectionist") + "Weight_Of_Perceived_Possible_Success_For_Self_Worth_-_Non-perfectionist"*"SWITCH_Non-perfectionist"
Unit Dimensionless
Documentation This variable represents the weight perceived possible success has on an individual's self-worth.

The equation for weight of perceived possible success for self-worth is the product of the weight of perceived possible success for self-worth for perfectionists by 1 minus SWITCH non-perfectionist (1 minus SWITCH non-perfectionist is written in between brackets so that the SWITCH is subtracted from the value 1), to which the product of the weight of perceived possible success for self-worth for non-perfectionists by the SWITCH non-perfectionist is added.

If the SWITCH non-perfectionist is off and equals 0, the part of the equation that is active (the part of the equation that doesn't equal 0 due to the product of the weight by the SWITCH), is the first part that captures the weight of perceived possible success for self-worth for perfectionists. If the SWITCH non-perfectionist is on and equals 1, the part of the equation that is active, is the second part that captures the weight of perceived possible success for self-worth for non-perfectionists.

Weight Of Perceived Possible Success For Self Worth – Non-perfectionist

Equation (1-"Weight_Of_Loneliness_For_Self_Worth_-_Non-perfectionist")*(1-"Residual_Weight_Distribution_-_Fraction_Of_Weight_Of_Perceived_Possible_Failure")
Unit Dimensionless
Documentation This variable represents the weight perceived possible success has on a non-perfectionist's self-worth.

The equation for weight of perceived possible success for self-worth for non-perfectionists is the product of 1 minus the weight of loneliness for self-worth for non-perfectionists (1 minus the weight of loneliness for self-worth for non-perfectionists is written in between brackets so that this weight is subtracted from the value 1), by 1 minus the residual weight distribution and which fraction of that residual weight is allocated to perceived possible failure (again, 1 minus the residual weight distribution and which fraction of that residual weight is

allocated to perceived possible failure is written in between brackets so that this weight is subtracted from the value 1).

Weight Of Perceived Possible Success For Self Worth - Perfectionist

Equation (1-"Weight_Of_Loneliness_For_Self_Worth_-_Perfectionist")*(1-"Residual_Weight_Distribution_-_Fraction_Of_Weight_Of_Perceived_Possible_Failure")
Unit Dimensionless
Documentation This variable represents the weight perceived possible success has on a perfectionist's self-worth.

The equation for weight of perceived possible success for self-worth for perfectionists is the product of 1 minus the weight of loneliness for self-worth for perfectionists (1 minus the weight of loneliness for self-worth for perfectionists is written in between brackets so that this weight is subtracted from the value 1), by 1 minus the residual weight distribution and which fraction of that residual weight is allocated to perceived possible failure (again, 1 minus the residual weight distribution and which fraction of that residual weight is allocated to perceived possible failure is written in between brackets so that this weight is subtracted from the value 1).

SENSE OF LONELINESS SECTOR

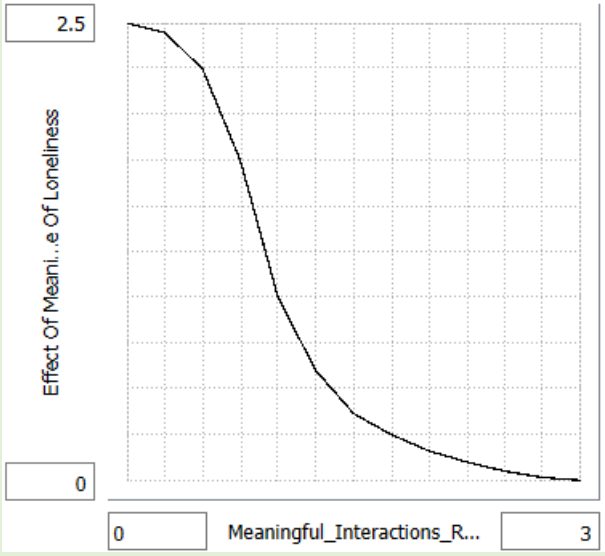
Adjustment Of Sense Of Loneliness

Equation (Indicated_Sense_Of_Loneliness-Sense_Of_Loneliness)/Time_To_Adjust_Sense_Of_Loneliness
Unit Dimensionless / week
Documentation This flow represents the adjustment of sense of loneliness. It is the rate at which sense of loneliness is increased or depleted per week.

The equation for this flow is the division of the gap between the indicated sense of loneliness and the stock sense of loneliness, by the time it takes to adjust sense of loneliness.

If the indicated sense of loneliness is higher than the stock, the flow adjustment of sense of loneliness will be positive and cause the stock to increase. If the indicated sense of loneliness is lower than the stock, the flow adjustment of sense of loneliness will be negative and cause the stock to decrease. If the indicated sense of loneliness is equal to the stock, this flow will equal 0 and not cause a change in the stock.

Effect Of Meaningful Interactions On Sense Of Loneliness



Equation GRAPH(Meaningful_Interactions_Relative_To_Normal) Points: (0.000, 2.500), (0.250, 2.450), (0.500, 2.250), (0.750, 1.750), (1.000, 1.000), (1.250, 0.600), (1.500, 0.365), (1.750, 0.250), (2.000, 0.160), (2.250, 0.100), (2.500, 0.050), (2.750, 0.015), (3.000, 0.000)
Unit Dimensionless
Documentation This variable represents the effect of meaningful interactions on sense of loneliness. Sense of loneliness is dependent on the meaningful interactions an individual has each day relative to the normal meaningful interactions he/she has each day. As sense of loneliness is a subjective phenomenon that results from deficiencies in an individual's social relations (Perlman & Peplau, 1981), it is assumed that less meaningful interactions per day can lead to these deficiencies and increase an individual's sense of loneliness. Sense of loneliness is affected by both the number of meaningful interactions and the quality or meaningfulness of these interactions (Levine, 2012). Deficiencies can be related to either or both the number of meaningful interactions,

and the quality or meaningfulness of the interactions an individual has. In contrast, it is assumed that abundance (both in quantity and/or quality) of meaningful interactions can lead to a decrease in an individual's sense of loneliness.

When the meaningful interactions an individual has each day is equal relative to one's normal meaningful interactions (and the normalized value is 1), the effect of meaningful interactions on sense of loneliness is also equal to 1 and one's sense of loneliness will not deviate from his/her normal sense of loneliness.

When the meaningful interactions an individual has each day is higher relative to one's normal meaningful interactions (and the normalized value is higher than 1), the effect of meaningful interactions on sense of loneliness decreases decreasingly towards 0 (as meaningful interactions relative to normal increases from 1 to 3). This represents the effect abundance (both in quantity and/or quality) of meaningful interactions has on sense of loneliness. At first the effect will decrease faster, but the higher meaningful interactions relative to normal becomes (where small changes will make less of a difference), the slower the effect will decrease. Sense of loneliness can decrease to a minimum of zero times its normal value.

When the meaningful interactions an individual has each day is lower relative to one's normal meaningful interactions (and the normalized value is lower than 1), the effect of meaningful interactions on sense of loneliness increases decreasingly towards 2.5 (as meaningful interactions relative to normal decreases from 1 to 0). This represents the effect deficiency (both in quantity and/or quality) of meaningful interactions has on sense of loneliness. At first the effect will increase faster, but the lower meaningful interactions relative to normal becomes (where small changes will make less of a difference), the slower the effect will increase. Sense of loneliness can increase to a maximum of 2.5 times its normal value.

Indicated Sense Of Loneliness

Equation Normal_Sense_Of_Loneliness*Effect_Of_Meaningful_Interactions_On_Sense_Of_Loneliness
Unit Dimensionless
Documentation This variable represents the indicated sense of loneliness. It is the indicated emotional loneliness an individual feels without necessarily being socially isolated.

The equation or indicated sense of loneliness is the product of one's normal sense of loneliness by the effect of meaningful interactions on sense of loneliness. If the effect of meaningful interactions on sense of loneliness is equal to 0, there will be no (0%) indicated sense of loneliness. If the effect of meaningful interactions on sense of loneliness is equal to 1, the indicated sense of loneliness will be equal to one's normal sense of loneliness. If the effect of meaningful interactions on sense of loneliness is higher than 1, the indicated sense of loneliness will be higher than one's normal sense of loneliness.

Normal Sense Of Loneliness

Equation 0.3
Unit Dimensionless
Documentation This parameter represents an individual's normal sense of loneliness. The dimensionless value for this parameter is set at 0.3 based on interviews (N=7) held with both perfectionists (n=4) and non-perfectionists (n=3). The average values for both groups did not differ significantly from each other, thus one value is chosen to represent an individual's normal sense of loneliness for both perfectionists and non-perfectionists.

Sense Of Loneliness

Equation Sense_Of_Loneliness(t - dt) + (Adjustment_Of_Sense_Of_Loneliness) * dt
Properties INIT Sense_Of_Loneliness = Indicated_Sense_Of_Loneliness
Unit Dimensionless
Documentation This stock represents an individual's sense of loneliness. It is important to note that the sense of loneliness meant in this project is emotional loneliness – the sense of feeling lonely but not necessarily being socially isolated. It is this emotional loneliness that influences self-worth (Qualter & Munn, 2002). Loneliness is a subjective phenomenon that results from deficiencies in an individual's social relations (Perlman & Peplau, 1981).

The stock is adjusted (both increased and depleted) by the flow adjustment in sense of loneliness.

The initial value of sense of loneliness is equal to the variable indicated sense of loneliness. The value of this variable should be equal to one's normal sense of loneliness at the outset of the simulation since at the outset

(when one has just made his/her choice) one would not experience more or less deficiencies than usual in social relations.

This stock can theoretically range from a dimensionless value of 0 to 1. A dimensionless value of 0 means that an individual feels no sense of loneliness at all (0%) and a dimensionless value of 1 means that an individual feels that he/she is completely emotionally lonely (100%). In this model sense of loneliness will not increase to a value of 1 but to a maximum of 0.75 since this model is applicable to decision making of a moderate level (not life changing choices). Therefore, I assume that even though choices made at this level can in extent make one feel not lonely at all or more lonely than normal, these choices will not make one feel completely emotionally lonely.

Sense Of Loneliness Relative To Normal

Equation Sense_Of_Loneliness//Normal_Sense_Of_Loneliness
Unit Dimensionless
Documentation This variable represents an individual's sense of loneliness relative to one's normal sense of loneliness. It is the normalize value for sense of loneliness.

The equation for sense of loneliness relative to normal is the division of sense of loneliness by the normal sense of loneliness.

If sense of loneliness relative to normal is equal to 1, then an individual's sense of loneliness is equal to one's normal sense of loneliness. If sense of loneliness relative to normal is higher than 1, then an individual's sense of loneliness is higher than one's normal sense of loneliness. If sense of loneliness relative to normal is lower than 1, then an individual's sense of loneliness is lower than one's normal sense of loneliness.

Time To Adjust Sense Of Loneliness

Equation 8
Unit Weeks
Documentation This parameter represents the time to adjust an individual's sense of loneliness. When an individual changes his/her meaningful interactions per day, it is assumed that the effect this has on the individual's sense of loneliness will not be experienced immediately. It takes some time before an individual will feel less or more lonely. Therefore it is assumed that the time to adjust sense of loneliness is 8 weeks.

TIME SECTOR

Adjustment Of Hours Per Week Searching For An Alternative Option

Equation (Indicated_Hours_Per_Week_Spend_Searching_For_An_Alternative_Option-Hours_Per_Week_Searching_For_An_Alternative_Option)/Time_To_Adjust_Hours_Per_Week_Working
Unit Hours / week
Documentation This flow represents the adjustment of hours per week spend searching for an alternative option to the choice an individual has made. It is the rate at which hours per week spend searching for an alternative option is increased or depleted per week.

The equation for this flow is the division of the gap between the indicated hours per week spend searching for an alternative option and the stock hours per week searching for an alternative option, by the time it takes to adjust the hours per week spend working (in this adjustment time no distinction is made between working on searching for an alternative option or working on the choice one has made).

If the indicated hours per week spend searching for an alternative option is higher than the stock, the flow adjustment of hours per week searching for an alternative option will be positive and cause the stock to increase. If the indicated hours per week spend searching for an alternative option is lower than the stock, the flow adjustment of hours per week searching for an alternative option will be negative and cause the stock to decrease. If the indicated hours per week spend searching for an alternative option is equal to the stock, this flow will equal 0 and not cause a change in the stock.

Adjustment Of Hours Per Week Working On Choice

Equation (Indicated_Hours_Per_Week_Working_On_Choice-Hours_Per_Week_Working_On_Choice)/Time_To_Adjust_Hours_Per_Week_Working
Unit Hours/ week
Documentation This flow represents the adjustment of hours per week spend working on the choice that an individual has made. It is the rate at which hours per week spend working on choice is increased or depleted per week.

The equation for this flow is the division of the gap between the indicated hours per week working on choice and

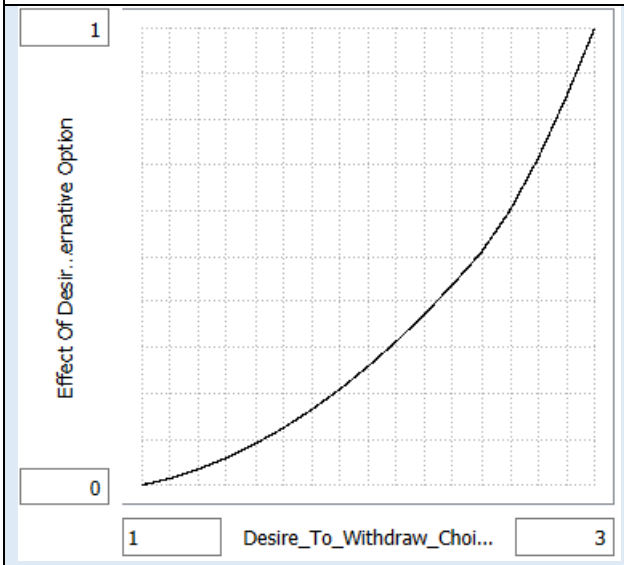
the stock hours per week working on choice, by the time it takes to adjust the hours per week spend working (in this adjustment time no distinction is made between working on searching for an alternative option or working on the choice one has made).

If the indicated hours per week spend working on the choice made is higher than the stock, the flow adjustment of hours per week working on choice will be positive and cause the stock to increase. If the indicated hours per week spend working on the choice made is lower than the stock, the flow adjustment of hours per week working on choice will be negative and cause the stock to decrease. If the indicated hours per week spend working on the choice made is equal to the stock, this flow will equal 0 and not cause a change in the stock.

Days Per Week

Equation 7
Unit Days / week
Documentation This parameter represents the days per week. Each week consists of 7 days.

Effect Of Desire To Withdraw Choice On Fraction Of Work Spend Searching For An Alternative Option



Equation GRAPH(Desire_To_Withdraw_Choice_Relative_To_Normal) Points: (1.000, 0.000), (1.125, 0.015), (1.250, 0.035), (1.375, 0.060), (1.500, 0.090), (1.625, 0.125), (1.750, 0.165), (1.875, 0.210), (2.000, 0.260), (2.125, 0.315), (2.250, 0.375), (2.375, 0.440), (2.500, 0.510), (2.625, 0.600), (2.750, 0.715), (2.875, 0.850), (3.000, 1.000)
Unit Dimensionless
Documentation This variable represents the effect the desire to withdraw the choice an individual has made has on the fraction of work spend on searching for an alternative option. The fraction of work an individual spends on searching for an alternative option is dependent on the desire to withdraw choice relative to one's normal desire to withdraw choice.

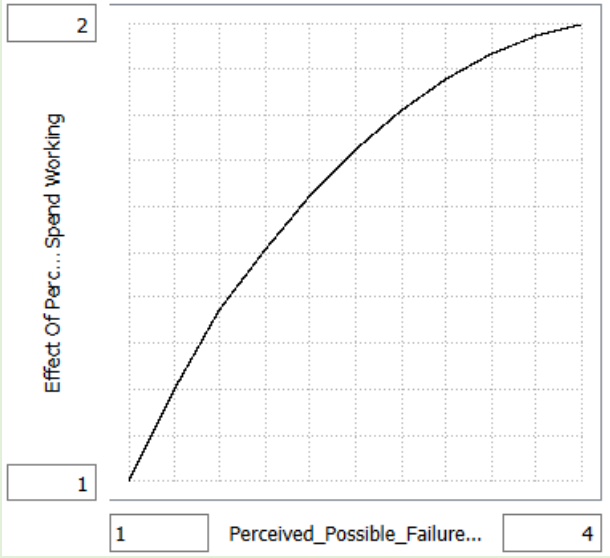
When one desires to withdraw the choice he/she has made is lower or equal to one's normal desire to withdraw a choice (and the normalized value is equal to or lower than 1), the fraction of work spend on searching for an alternative option is equal to 0, meaning that 0% of the hours per week spend working will be dedicated to searching for an alternative option and 100% of the hours per week spend working will be dedicated to working on the choice that the individual has made.

However, when the desire to withdraw the choice an individual has made is higher than one's normal desire to withdraw a choice (and the normalized value is higher than 1), the individual will spend a fraction of the work he/she does on searching for an alternative option. It is assumed that this effect increases increasingly. When the desire to withdraw the choice an individual has made is only slightly higher than one's normal desire to withdraw a choice, one might keep their eyes/ears open for an alternative option. But the higher the desire to withdraw the choice that the individual has made becomes, the more "desperate" that individual becomes for an alternative option believed to be better than the choice he/she has made. The more desperate the individual becomes, the more hours per week he/she will spend on searching for an alternative option. For perfectionists it is assumed that when their desire to withdraw the choice he/she has made is equal of higher than three times the normal desire to withdraw a choice, the individual will spend all their hours per week working (100%) on searching for an alternative option and no time on working on the choice made, as in the perfectionists' mind it

makes no sense to keep working on a choice if it does not meet their high standards since this would waste precious time that could be spend on a better option.

During interviews (n=4) perfectionists have mentioned that they recognize this behavior in themselves. As a perfectionist myself, I recognize this behavior as well.

Effect Of Perceived Possible Failure On Hours Per Week Spend Working



Equation GRAPH(Perceived_Possible_Failure_Relative_To_Normal) Points: (1.000, 1.000), (1.300, 1.200), (1.600, 1.375), (1.900, 1.505), (2.200, 1.625), (2.500, 1.725), (2.800, 1.810), (3.100, 1.880), (3.400, 1.935), (3.700, 1.975), (4.000, 2.000)
Unit Dimensionless
Documentation This variable represents the effect of perceived possible failure on hours per week spend working. The hours per week spend working is dependent on the perceived possible failure relative to one's normal perceived possible failure.

When one perceives possible failure lower or equal to one's normal perceived possible failure (and the normalized value is equal to or lower than 1), the hours per week spend working will not deviate from the hours per week one normally spends working, thus the effect will be equal to 1.

However when possible failure is perceived to be higher relative to one's normal perceived possible failure (and the normalized value is higher than 1), perfectionists are prepared to drive themselves through stressful conditions in order to ensure that their performance meets their standards and doesn't contain flaws. According to Ramsey and Ramsey (2002) one way to do this is to deny themselves leisure periods. When this effect is bigger than 1, the hours per week spend working increases (due to this effect) and cuts away time from hours per week spend on leisure. It is assumed that this effect increases decreasingly when the perceived possible failure relative to normal increases. When the perceived possible failure relative to normal is a little higher than 1, and a perfectionist feels that he/she needs to avoid the possible failure, he/she will work significantly more in order to meet their standard (and thereby avoid failure). But as there is a limit to how much hours per week spend working can be increased, the effect will increase less the bigger perceived possible failure relative to normal becomes.

Based on interviews (N=7), people who want to perform excellent but who are non-perfectionists (n=3) as they do not meet the definition of a perfectionist as identified by Burns (1980), are willing to spend a maximum of 65 to 70 hours per week working, where perfectionists (n=4) who do meet the definition of a perfectionist as identified by Burns (1980) – myself being one of them –, are willing to spend 80 hours or more per week working in order to pursue their standards and avoid possible failure.

Thus, the effect is given a value of 1.725 at perceived possible failure relative to normal of 2.5 (the maximum relative value for non-perfectionists who have a normal perceived possible failure of 0.4), so that their maximum hours per week spend working is set at 69 hours per week (with a normal value of 40 hours per week), and the effect is given a maximum value of 2 at perceived possible failure relative to normal of 4 so that perfectionists

spend a maximum of 80 hours per week working (even if their perceived possible failure relative to normal is higher than 4).

Note that exhaustion and burnout is not included in this model boundary. A high perceived possible failure relative to normal will cause people to work more hours per week without getting exhausted if the perceived possible failure remains unchanged. In real life, at some point people will get exhausted and won't be able to work that many hours per week anymore.

Fraction Of Work Spend Searching For An Alternative Option

Equation
Effect_Of_Desire_To_Withdraw_Choice_On_Fraction_Of_Work_Spend_On_Searching_For_An_Alternative_Option*(1-SWITCH_Stick_With_Choice)
Unit Dimensionless
Documentation This variable represents the fraction of work an individual spends on searching for an alternative option to the choice he/she has made. This fraction can range from 0 to 1, meaning 0% of the hours spend working will be spend on searching for an alternative option to 100% of the hours spend working will be spend on searching for an alternative option.

The equation for fraction of work spend on searching for an alternative option is the product of the effect of desire to withdraw choice on fraction of work spend on searching for an alternative option by 1 minus SWITCH stick with choice (1 minus SWITCH stick with choice is written in between brackets so that the SWITCH is subtracted from the value 1).

If the SWITCH stick with choice is off and equals 0, the fraction of work spend on searching for an alternative option will equal the effect of desire to withdraw choice on fraction of work spend on searching for an alternative option. If the SWITCH stick with choice is on and equals 1, the fraction of work spend on searching for an alternative option will equal 0, in that case no time is spend searching for an alternative option and 100% of the hours per week spend working will be spend on working on the choice the individual has made (the individual sticks with the choice he/she has made even though the desire to withdraw that choice might be higher than normal).

Hours Per Day

Equation 24
Unit Hours / day
Documentation This parameter represents the hours per day. Each day consists of 24 hours.

Hours Per Week Available

Equation Hours_Per_Day*Days_Per_Week
Unit Hours / week
Documentation This variable represents the total hours per week that are available to spend, being 168 hours per week.

The equation for hours per week available is the product of hours per day by days per week.

Hours Per Week Available For Work And Leisure

Equation Hours_Per_Week_Available-Hours_Per_Week_Required_For_Basic_Needs
Unit Hours / week
Documentation This variable represents the hours per week that are available for work and leisure.

The equation for hours per week available for work and leisure is the total hours per week available minus the hours per week required for basic needs.

Hours Per Week Required For Basic Needs

Equation 80
Unit Hours / week
Documentation This parameter represents the hours per week that are required for basic needs such as sleeping, cooking, buying groceries, cleaning (sigh..) and other basic needs.

It is assumed that one requires 80 hours per week for basic needs (approximately 56 hours per week for sleeping – being 8 hours each day – and 24 hours each week for cooking, buying groceries, cleaning and other basic needs).

Hours Per Week Searching For an Alternative Option

Equation Hours_Per_Week_Searching_For_An_Alternative_Option(t - dt) + (Adjustment_Of_Hours_Per_Week_Searching_For_An_Alternative_Option) * dt
Properties INIT Hours_Per_Week_Searching_For_An_Alternative_Option = Indicated_Hours_Per_Week_Spend_Searching_For_An_Alternative_Option
Unit Hours / week
Documentation This stock represents the amount of hours per week an individual will search for an alternative option to the choice that he/she has made. The alternative option is believed to be better than the current choice. An individual will not spend time searching for an alternative option when he/she doesn't desire to withdraw his/her choice (when this desire is equal or lower than one's normal desire) .

The stock is adjusted (both increased and depleted) by the flow adjustment of hours per week searching for an alternative option.

The initial value of hours per week searching for an alternative option is equal to the variable indicated hours per week spend searching for an alternative option. The value of this variable should be equal to 0 hours per week at the outset of the simulation since at the outset (when one has just made his/her choice) one does not immediately start searching for an alternative option. The individual will have to work on the choice made first, in order for desire to withdraw that choice to build (or not). Only when that desire builds, one might spend time searching for an alternative option.

This stock can range from 0 to 80 hours per week.

Hours Per Week Spend On Leisure

Equation Hours_Per_Week_Available_For_Work_And_Leisure-Hours_Per_Week_Spend_Working
Unit Hours / week
Documentation This variable represents the hours per week an individual spends on leisure (thus not spend on working or spend on basic needs – leisure time is free, happy time). Leisure time can, for example, be spend on socializing with other people.

The equation for hours per week spend on leisure is the hours per week available for work and leisure minus the hours per week spend working.

Hours Per Week Spend On Leisure Relative To Normal

Equation Hours_Per_Week_Spend_On_Leisure/Normal_Hours_Per_Week_Spend_On_Leisure
Unit Dimensionless
Documentation This variable represents the hours per week spend on leisure relative to the normal hours per week spend on leisure. It is the normalized value for the hours per week spend on leisure.

The equation for hours per week spend on leisure relative to the normal hours per week spend on leisure is the division of hours per week spend on leisure by the normal hours per week spend on leisure.

If the hours per week spend on leisure relative to normal is equal to 1, then the hours per week an individual spends on leisure is equal to the normal hours per week that individual would spend on leisure. If the hours per week spend on leisure relative to normal is higher than 1, then the hours per week an individual spends on leisure is higher than the normal hours per week that individual would spend on leisure. If the hours per week spend on leisure relative to normal is lower than 1, then the hours per week an individual spends on leisure is lower than the normal hours per week that individual would spend on leisure.

Hours Per Week Spend Working

Equation
MIN(Normal_Hours_Per_Week_Spend_Working*Effect_Of_Perceived_Possible_Failure_On_Hours_Per_Week_Spend_Working, Hours_Per_Week_Available-Hours_Per_Week_Required_For_Basic_Needs)
Unit Hours / week
Documentation This variable represents the hours per week spend working. It is the hours per week an individual spends either on working on the choice he/she has made or (partly) on searching for an alternative option to the choice he/she has made. The more hours per week an individual spends working, the less hours per week he/she can spend on leisure.

The equation for hours per week spend working is a MIN function. The hours per week spend working is equal to 1) the product of the normal hours per week spend working by the effect of perceived possible failure on hours

per week spend working. As the effect ranges from 1 to 2 and the normal hours per week spend working equals 40 hours per week, this variable ranges from 40 to 80 hours per week, or to 2) the hours per week available minus the hours per week required for basic needs. The MIN function makes sure the hours per week spend working makes sense in extreme conditions. If one's hours per week required for basic needs increases to over 128 hours per week, one could not work 40 hours per week (and definitely not more than 40 hours per week the effect might generate) as there are only 168 hours available each week. The MIN function will ensure that no more hours than actually available for work are spend working.

Hours Per Week Spend Working On Choice Relative To Normal

Equation Hours_Per_Week_Working_On_Choice/Normal_Hours_Per_Week_Spend_Working
Unit Dimensionless
Documentation This variable represents the hours per week spend working on choice relative to the normal hours per week spend working. It is the normalized value for the hours per week spend working, specifically the hours per week spend working on the choice that the individual has made.

The equation for hours per week spend working on choice relative to normal hours per week spend working is the division of hours per week working on choice by the normal hours per week spend working.

If the hours per week spend working on choice relative to normal is equal to 1, then the hours per week an individual spends working on the choice that he/she made is equal to the normal hours per week that individual would spend working. If the hours per week spend working on choice relative to normal is higher than 1, then the hours per week an individual spends working on the choice that he/she made is higher than the normal hours per week that individual would spend working. If the hours per week spend working on choice relative to normal is lower than 1, then the hours per week an individual spends working on the choice that he/she made is lower than the normal hours per week that individual would spend working.

Hours Per Week Working On Choice

Equation Hours_Per_Week_Working_On_Choice(t - dt) +
(Adjustment_Of_Hours_Per_Week_Working_On_Choice) * dt
Properties INIT Hours_Per_Week_Working_On_Choice = Indicated_Hours_Per_Week_Working_On_Choice
Unit Hours / week
Documentation This stock represents the amount of hours per week an individual will spend working on the choice that he/she has made.

The stock is adjusted (both increased and depleted) by the flow adjustment of hours per week working on choice.

The initial value of hours per week working on choice is equal to the variable indicated hours per week working on choice. The value of this variable should be equal to 40 hours per week at the outset of the simulation (the normal hours per week spend working) since at the outset (when one has just made his/her choice) one spends all the time he/she works on the choice that he/she has made. As at the outset someone will not perceive more possible failure than one normally would (since he/she has not yet worked on the choice, thus has not yet discovered imperfections which feed the perceived possible failure), the individual will feel no pressure to spend more hours working than he/she normally would.

This stock can range from 0 to 80 hours per week.

Indicated Hours Per Week Spend Searching For An Alternative Option

Equation
Hours_Per_Week_Spend_Working*Fraction_Of_Work_Spend_On_Searching_For_An_Alternative_Option
Unit Hours / week
Documentation This variable represents the indicated hours per week an individual spends searching for an alternative option to the choice that he/she has made. The alternative option is believed to be better than the current choice. An individual will not spend time searching for an alternative option when he/she doesn't desire to withdraw his/her choice (when this desire is equal or lower than one's normal desire).

The equation for indicated hours per week spend searching for an alternative option is the product of the hours per week spend working by the fraction of work spend on searching for an alternative option. If the fraction of work spend on searching for an alternative option is equal to 0, no time (0%) will be spend searching for an alternative option and all hours per week spend working will be dedicated to working on the choice the

individual has made. If this fraction is equal to 1, all hours per week working (100%) will be spend searching for an alternative option and no time will be dedicated to working on the choice the individual has made.

Indicated Hours Per Week Working On Choice

Equation Hours_Per_Week_Spend_Working*(1-Fraction_Of_Work_Spend_On_Searching_For_An_Alternative_Option)
Unit Hours / week
Documentation This variable represents the indicated hours per week an individual spends on working on the choice that he/she has made.

The equation for indicated hours per week working on choice is the product of the hours per week spend working by 1 minus the fraction of work spend on searching for an alternative option (1 minus the fraction is written in between brackets so that the fraction is subtracted from the value 1, where the value 1 represents 100% of the work). If the fraction of work spend on searching for an alternative option is equal to 0, all hours per week working (100%) will be spend working on the choice the individual has made and no time will be dedicated to searching for an alternative option. If this fraction is equal to 1, no time (0%) will be spend working on the choice the individual has made and all hours per week spend working will be dedicated to searching for an alternative option.

Normal Hours Per Week Spend On Leisure

Equation Hours_Per_Week_Available_For_Work_And_Leisure-Normal_Hours_Per_Week_Spend_Working
Unit Hours / week
Documentation This variable represents the normal hours per week an individual would spend on leisure. Leisure time can, for example, be spend on socializing with other people.

The equation for normal hours per week spend on leisure is the hours per week available for work and leisure minus the normal hours per week spend working.

Normal Hours Per Week Spend Working

Equation 40
Unit Hours / week
Documentation This parameter represents the normal hours per week spend working. The value for this parameter is set at 40 hours per week, a value equal to the value that Homer (1985) uses to initialize the stock hours worked per week in his worker burnout model. Based on interviews (N=7) both perfectionists and non-perfectionists recognized themselves in having a normal value of 40 hours per week spend working.

Time To Adjust Hours Per Week Working

Equation 1
Unit Week
Documentation This parameter represents the time to adjust the hours per week an individual spends working (in this adjustment time no distinction is made between working on searching for an alternative option or working on the choice one has made).

It is assumed that one can adjust the hours per week working in 1 week time. One might have plans/obligations during the week that he/she can't or doesn't want to cancel and therefore, on short notice, one might not be able to adjust the hours per week spend working, but cancellation is usually possible for plans/obligations that will happen later than 1 week ahead and thus it is assumed that one can adjust the hours per week spend working in 1 week time.

This value is equal to the value that Homer (1985) uses in his worker burnout model.

SWITCHES

SWITCH Non-perfectionist

Equation o
Unit Dimensionless
Documentation If the SWITCH non-perfectionist is off and equals 0, perfectionistic values and effects are used as inputs to the model structure. This happens in three sectors, namely: perceived possible failure, imperfections, and self-worth.
For perceived possible failure a normal dimensionless value of 0.2 is used as input for normal perceived possible failure, and the perfectionistic effect of discovered unfixed imperfections on perceived possible failure which ranges from 0 to 5 is used as effect input for indicated perceived possible failure.
For imperfections a normal value of 2 imperfections/week is used as input for normal amount of imperfections fixed per week, a normal amount of 20 imperfections is used for normal allowed unfixed imperfections, and

relative self-worth has a restraining effect on the allowed unfixed imperfections when the relative value is lower than 1.
For self-worth a value of 0.25 is used as input to the weight of loneliness, a value of 0.375 is used as an input to the weight of perceived possible failure, and a value of 0.375 is used as an input to the weight of perceived possible success.
The behavior that results from the structure, is the behavior as it would unfold for perfectionists.

If the SWITCH non-perfectionist is on and equals 1, non-perfectionistic values and effects are used as inputs to the model structure. This happens in three sectors, namely: perceived possible failure, imperfections, and self-worth.
For perceived possible failure a normal dimensionless value of 0.4 is used as input for normal perceived possible failure, and the non-perfectionistic effect of discovered unfixed imperfections on perceived possible failure which ranges from 0 to 2.5 is used as effect input for indicated perceived possible failure.
For imperfections a normal value of 3 imperfections/week is used as input for normal amount of imperfections fixed per week, a normal amount of 30 imperfections is used for normal allowed unfixed imperfections, and relative self-worth doesn't have a restraining effect on the allowed unfixed imperfections when the relative value is lower than 1.
For self-worth a value of 0.5 is used as input to the weight of loneliness, a value of 0.25 is used as an input to the weight of perceived possible failure, and a value of 0.25 is used as an input to the weight of perceived possible success.
The behavior that results from the structure, is the behavior as it would unfold for non-perfectionists.

SWITCH Stick With Choice

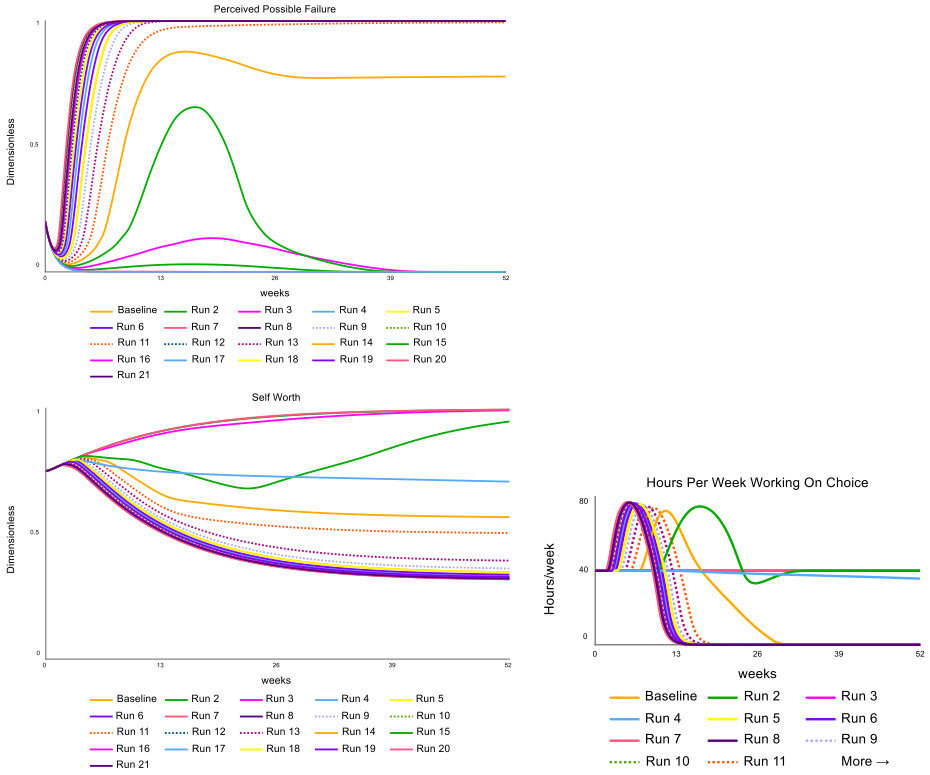
Equation 0
Unit Dimensionless
Documentation If the SWITCH stick with choice is off and equals 0, an individual will spend a certain fraction of his/her time working per week on searching for an alternative option depending on his/her desire to withdraw the choice that he/she has made.
It the SWITCH stick with choice is on and equals 1, an individual will not spend time searching for an alternative option to the choice that he/she has made. All of the hours per week spend working, will be spend on the choice he/she has made no matter how much one desires to withdraw the choice that he/she has made. The individual sticks with the choice that he/she has made.

Run Specs	
Start Time	0
Stop Time	40
DT	1/32
Fractional DT	True
Save Interval	0.03125
Sim Duration	8
Time Units	weeks
Pause Interval	0
Integration Method	Euler
Keep all variable results	True
Run By	Run
Calculate loop dominance information	True
Exhaustive Search Threshold	1000

Sensitivity testing

The model's sensitivity was tested to all parameters which don't have a factual defined value (such as 24 hours per day, 7 days per week) and all table functions. Sensitive (in terms of behavior mode) parameters or table functions are presented in this section of the supplementary materials.

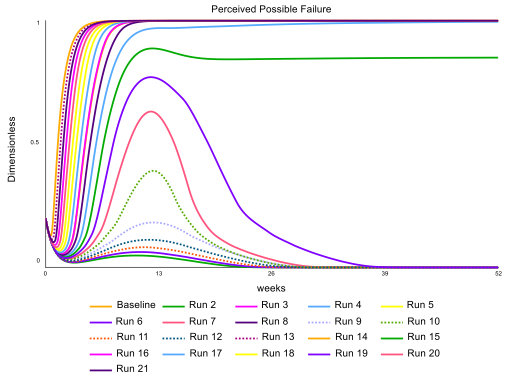
Parameter: Discovery Fraction
Number of runs: 20
Limited runs (Latin Hypercube sampling)
Distribution: Uniform
Model value: 0.1 dimensionless/week
Minimum and maximum values test: 0.01 – 0.2

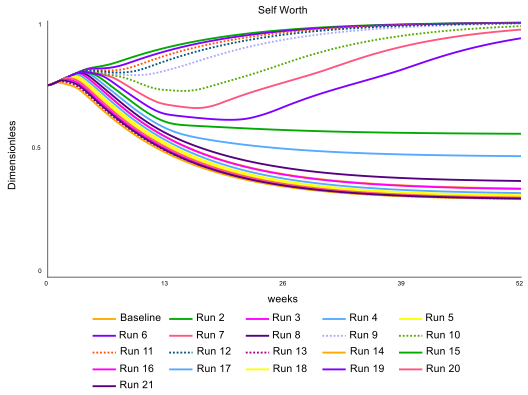


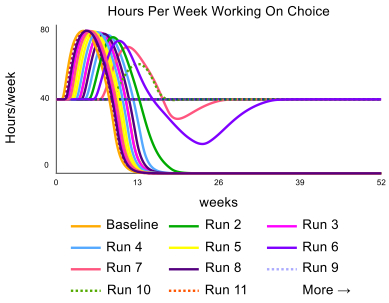
Discovery Fraction	
Run 2	0.03375
Run 3	0.04325
Run 4	0.11925
Run 5	0.13825
Run 6	0.10975
Run 7	0.02425
Run 8	0.18575
Run 9	0.09075
Run 10	0.17625
Run 11	0.07175
Run 12	0.14775
Run 13	0.08125
Run 14	0.06225
Run 15	0.05275
Run 16	0.15725
Run 17	0.01475
Run 18	0.10025
Run 19	0.12875
Run 20	0.19525
Run 21	0.16675

The model is sensitive to discovery fraction. This was expected as a very low discovery fraction would mean that there would be almost no imperfections to fix each weak and the perfectionist could easily keep up with what he discovers while maintaining his perfectionistic tendencies. Therefore the effects in other variables would not be as drastic nor undesired. On the other hand, if discovery fraction is insanely high, even non-perfectionists would succumb under the overwhelming force of discovered imperfections. As the value for discovery fraction in the model is speculative (but not unrealistic), this could be considered a limitation. However, as the discovery fraction is different for each and every context, one cannot be absolutely certain about this parameter value in most circumstances regarding discovering unknown unknowns.

Parameter: Normal Amount Of Imperfections Fixed Per Week - Perfectionist
Number of runs: 20
Limited runs (Latin Hypercube sampling)
Distribution: Uniform
Model value: 2 imperfections/week
Minimum and maximum values test: 0.5 – 4



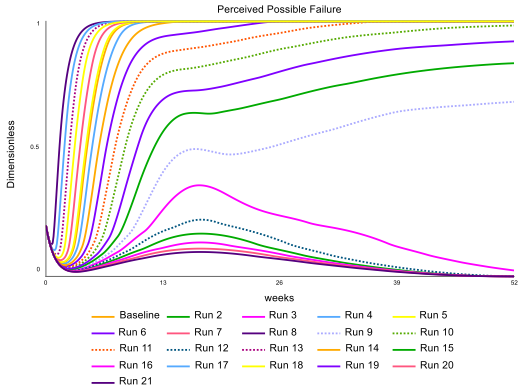


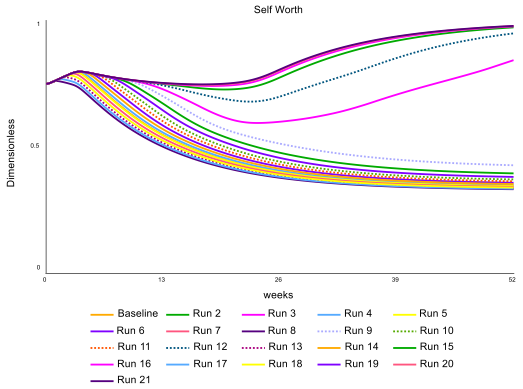


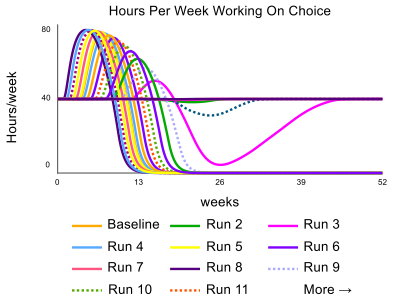
Normal Amount Of Imperfections Fixed Per Week - Perfectionist	
Run 2	3.9125
Run 3	1.9875
Run 4	2.3375
Run 5	1.6375
Run 6	3.7375
Run 7	2.8625
Run 8	2.1625
Run 9	3.2125
Run 10	3.0375
Run 11	3.5625
Run 12	3.3875
Run 13	0.7625
Run 14	0.5875
Run 15	2.5125
Run 16	1.1125
Run 17	1.8125
Run 18	1.4625
Run 19	2.6875
Run 20	1.2875
Run 21	0.9375

The model is sensitive to Normal Amount Of Imperfections Fixed Per Week - Perfectionist. This was expected as a the higher the amount of imperfections one can solve, the lower the mountain of discovered imperfections will become and as a consequence, people would perceive their failure and success very differently. This parameter encompasses the high standards perfectionists have. As they fix everything in accordance to their high standards it takes perfectionist more time to fix an imperfection, thus it is assumed they can't fix as many imperfections as non-perfectionists can (as described in the model documentation of the supplementary materials). This parameter is considered to be a possible leverage point, even though perfectionistic behaviors are very difficult to change.

Parameter: Allowed Weeks Worth Of Unfixed Imperfections In Backlog
Number of runs: 20
Limited runs (Latin Hypercube sampling)
Distribution: Uniform
Model value: 10 weeks
Minimum and maximum values test: 2 – 30



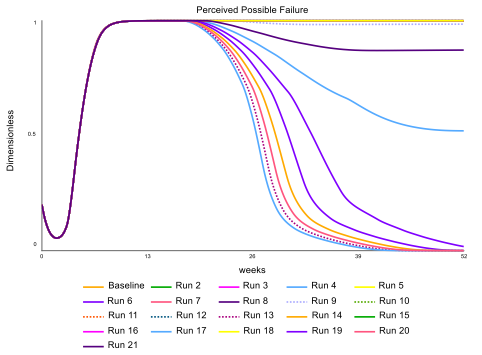


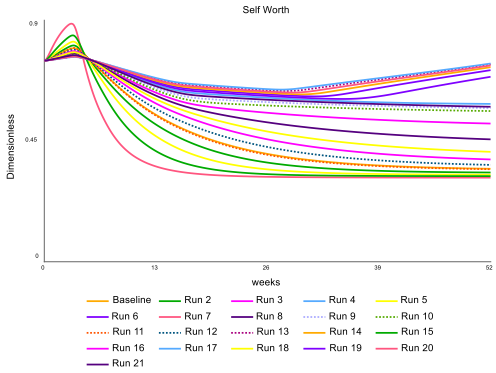


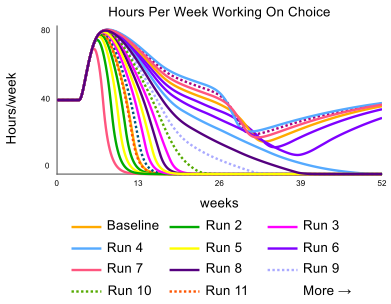
Allowed Weeks Worth Of Unfixed Imperfections In Backlog	
Run 2	25.1
Run 3	22.3
Run 4	11.1
Run 5	9.7
Run 6	13.9
Run 7	8.3
Run 8	2.7
Run 9	20.9
Run 10	16.7
Run 11	15.3
Run 12	23.7
Run 13	5.5
Run 14	12.5
Run 15	19.5
Run 16	26.5
Run 17	4.1
Run 18	6.9
Run 19	18.1
Run 20	27.9
Run 21	29.3

The model is sensitive to Allowed Weeks' Worth Of Unfixed Imperfections In Backlog. This was expected as the more weeks' worth of work one allows their backlog to be, the less a person's standards are and the more healthy they respond to imperfections. This parameter is considered to be a possible leverage point, even though perfectionistic behaviors are very difficult to change.

Parameter: Time To Adjust Self Worth
Number of runs: 20
Limited runs (Latin Hypercube sampling)
Distribution: Uniform
Model value: 10 weeks
Minimum and maximum values test: 1 – 40





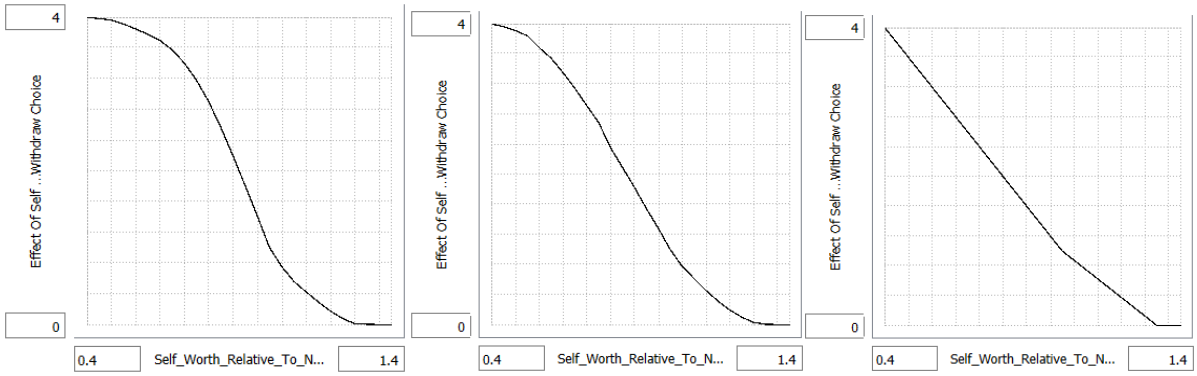


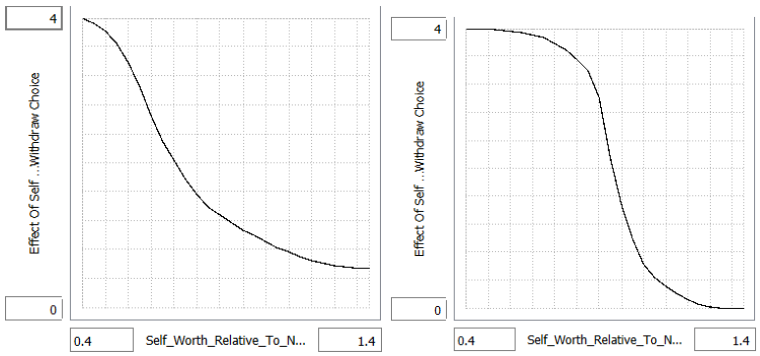
Time To Adjust Self Worth	
Run 2	7.825
Run 3	19.525
Run 4	27.325
Run 5	5.875
Run 6	31.225
Run 7	1.975
Run 8	17.575
Run 9	23.425
Run 10	21.475
Run 11	9.775
Run 12	11.725
Run 13	37.075
Run 14	33.175
Run 15	3.925
Run 16	13.675
Run 17	39.025
Run 18	15.625
Run 19	29.275
Run 20	35.125
Run 21	25.375

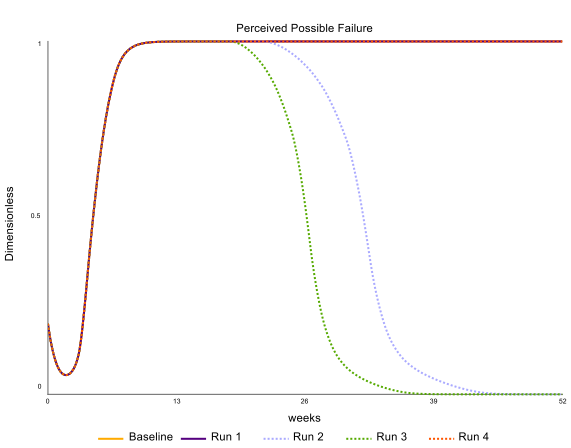
The model is sensitive to Time To Adjust Self Worth. This was expected as the more changeable (smaller AT) Self Worth is, the more susceptible one is to changes in domains on which their self-worth is staked, for perfectionists being accomplishments. If Self Worth is more rigid and won't change fast, then self-worth will be less susceptible to changes in the domain on which that persons' self-worth is staked. This parameter is considered to be a possible leverage point.

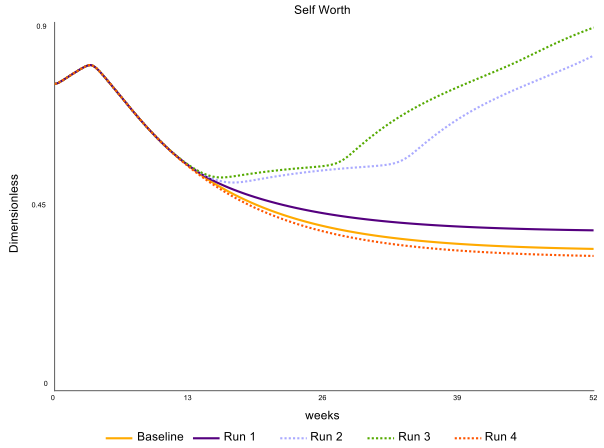
Parameter: Effect Of Desire To Withdraw Choice On Fraction Of Work Spend On Searching For An Alternative Option

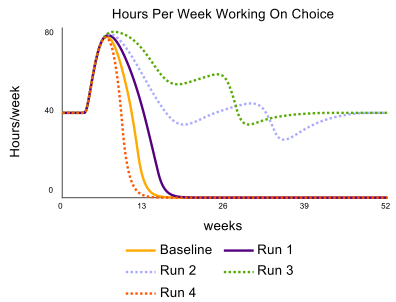
Manual distortion: 5





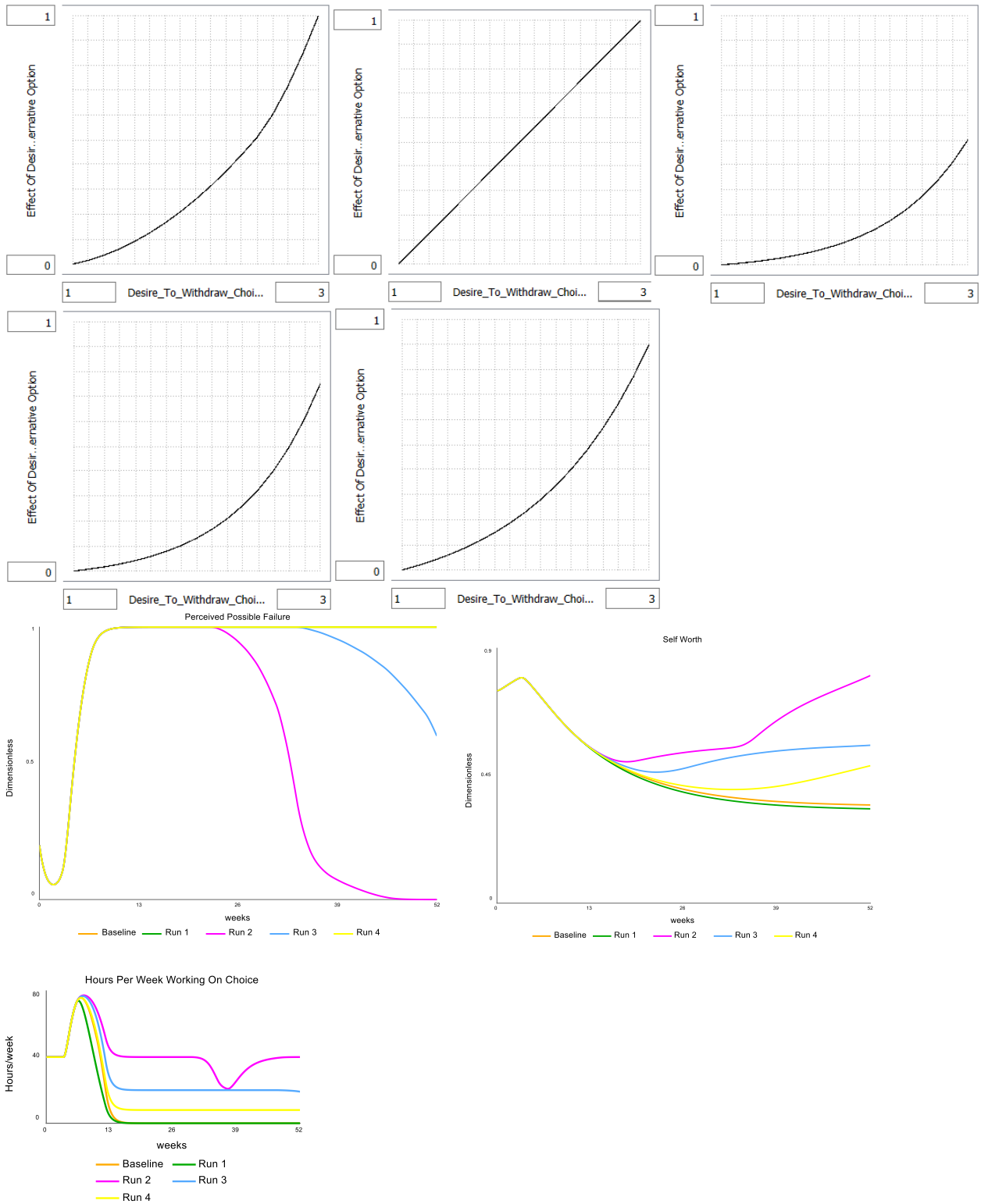






The model is sensitive to the Effect Of Desire To Withdraw Choice On Fraction Of Work Spend On Searching For An Alternative Option. This was expected as the less the fraction of work spend on searching for an alternative option is, the more one will keep working on the choice which eventually will work out all right (as shown by the stick with choice switch). This table functions is considered to be a possible leverage point.

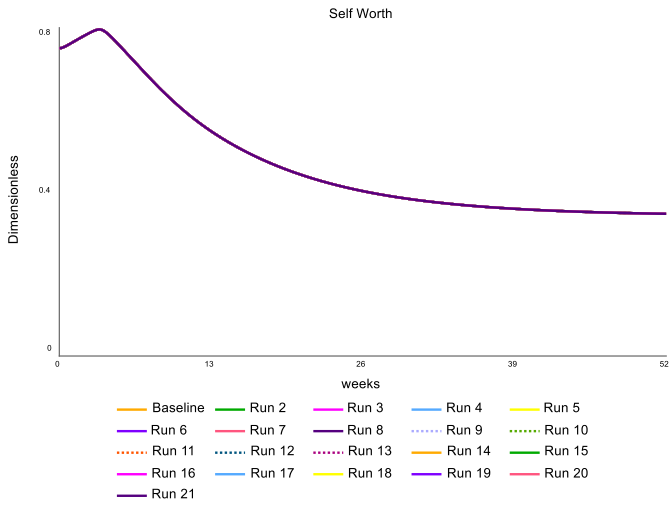
Parameter: Effect Of Self Worth On Desire To Withdraw Choice.
Manual distortion: 5

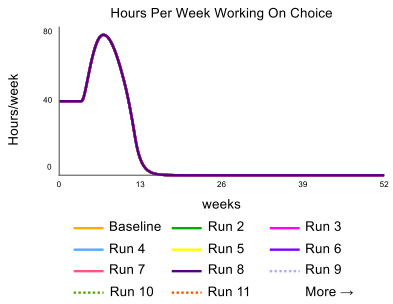


The model is sensitive to the Effect Of Self Worth On Desire To Withdraw Choice. This was expected as the smaller this effect, the less one would desire to withdraw his choice. And consequently, the less time one would spend on searching for an alternative option, and the more one will keep working on the choice which eventually will work out all right (as shown by the stick with choice switch). This table function is considered to be a possible leverage point.

Normal perceived possible failure - perfectionist

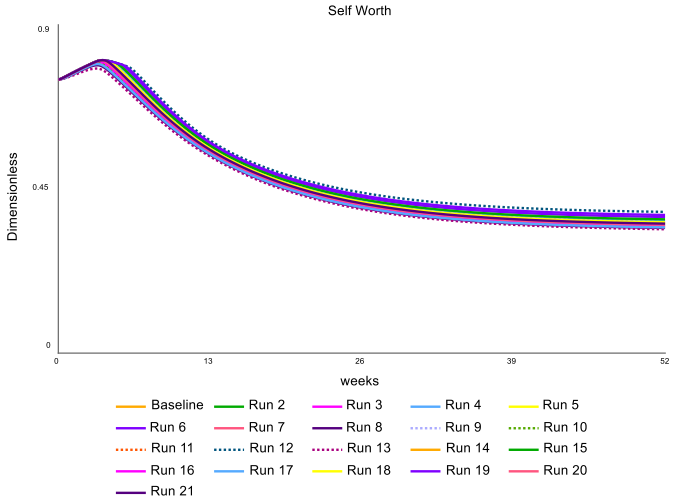
It was expected that Normal Perceived Possible Failure – perfectionists, would be sensitive too. However, it was not at all sensitive.

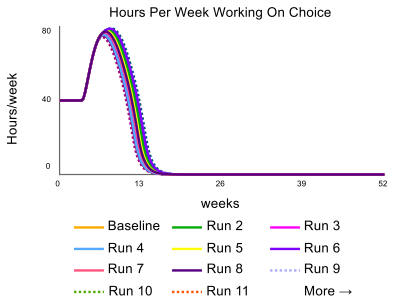




Normal Perceived Possible Failure - Perfectionist	
Run 2	0.22875
Run 3	0.44875
Run 4	0.28375
Run 5	0.47625
Run 6	0.14625
Run 7	0.11875
Run 8	0.31125
Run 9	0.58625
Run 10	0.25625
Run 11	0.50375
Run 12	0.53125
Run 13	0.39375
Run 14	0.42125
Run 15	0.36625
Run 16	0.20125
Run 17	0.17375
Run 18	0.55875
Run 19	0.06375
Run 20	0.33875
Run 21	0.09125

Initially it was thought this insensitivity might be due to perceived possible failure and perceived possible success working against each other and that could interfere with the sensitivity. But after testing both parameters together (see next page), and after nullifying perceived possible success (through the fraction of residual weight distribution), the conclusion had to be made that the parameter is just not really sensitive (only a little numerically). This might be an interesting insight, as it would suggest that fear of failure might not be the thing that freaks perfectionists out. Instead time, specifically the time you have to meet your own high standards, is possibly the biggest cause (in combination with the high standards of course).

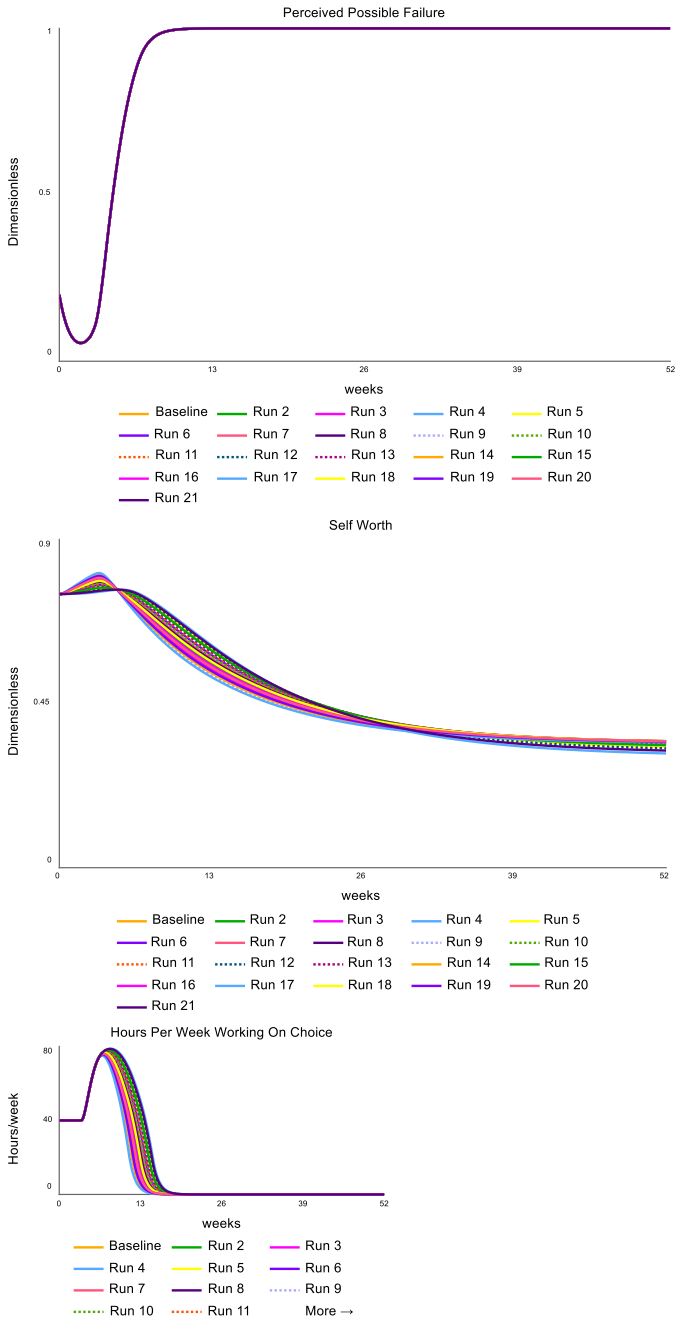




	Normal Perceived Possible Failure - Perfectionist	Normal Perceived Possible Success
Run 2	0.5	0.5
Run 3	0.25	0.75
Run 4	0.75	0.25
Run 5	0.375	0.625
Run 6	0.875	0.125
Run 7	0.125	0.375
Run 8	0.625	0.875
Run 9	0.3125	0.3125
Run 10	0.8125	0.8125
Run 11	0.0625	0.5625
Run 12	0.5625	0.0625
Run 13	0.1875	0.9375
Run 14	0.6875	0.4375
Run 15	0.4375	0.1875
Run 16	0.9375	0.6875
Run 17	0.46875	0.84375
Run 18	0.96875	0.34375
Run 19	0.21875	0.09375
Run 20	0.71875	0.59375
Run 21	0.09375	0.46875

Weight of loneliness for self worth – perfectionist

It was expected that Weight of loneliness for self-worth – perfectionists, would be sensitive too. However, it was only numerically sensitive.



Weight Of Loneliness For Self Worth - Perfectionist	
Run 2	0.375
Run 3	0.325
Run 4	0.975
Run 5	0.825
Run 6	0.625
Run 7	0.525
Run 8	0.475
Run 9	0.075
Run 10	0.575
Run 11	0.675
Run 12	0.875
Run 13	0.725
Run 14	0.125
Run 15	0.775
Run 16	0.225
Run 17	0.025
Run 18	0.425
Run 19	0.175
Run 20	0.275
Run 21	0.925

Scenario reporting

This section gives an overview of the values of the different SWITCHES for the three scenarios as described in the paper, being the baseline scenario, the non-perfectionist scenario, and the stick with choice scenario. For parameter values please refer to the model documentation in the supplementary materials.

Baseline scenario
SWITCH Non-perfectionist: 0
SWITCH Stick with choice: 0

Non-perfectionist scenario
SWITCH Non-perfectionist: 1
SWITCH Stick with choice: 0

Stick with choice scenario
SWITCH Non-perfectionist: 0
SWITCH Stick with choice: 1