Psikohumaniora: Jurnal Penelitian Psikologi, Vol 6, No 1 (2021): 13–32
DOI: https://doi.org/10.21580/pjpp.v6i1.6520

Couple resilience predicted marital satisfaction but not well-being and health for married couples in Bali, Indonesia

Edwin Adrianta Surijah,[1]* Gaura Hari Prasad,[2] Made Rinda Ayu Saraswati[2]

[1] Faculty of Health, School of Psychology and Counselling, Queensland University of Technology (QUT), Brisbane, QLD – Australia; [2] School of Psychology, Universitas Dhyana Pura, Badung, Bali – Indonesia

Abstract: Married couples face various challenges in their married life, with divorce being one of the threats to their relationship. Spouse resilience is the process by which couples manage marital challenges through positive relationship behavior. This study examines the resilience of partners by including negative behavior in the relationships and examines the effects of interactions between partners. Three hundred couples living in Bali, Indonesia (length of marriage of between 1-10 years) participated by reporting positive and negative behaviors, and the outcomes of their relationship (marital satisfaction, emotional well-being, and general health status). The measurement instruments employed were the Couple Resilience Inventory, Satisfaction with Married Life Scale, and the 36-item Short-Form Health Survey. Model fit analysis showed that behavior in relationships did not predict the outcomes referred to above, and that there was no interaction effect between partners. However, positive behavior showed a higher probability of predicting marital satisfaction, especially for wives ($\beta = .271$; $\beta = .403$; $p < .001$). The implications of these findings provide practical suggestions for future partner resilience research to apply a longitudinal approach that repeatedly measures the outcomes of resilience.

Keywords: couple resilience; marriage; resilience

Abstrak: Pasangan yang telah menikah menemui berbagai tantangan dalam kehidupan pernikahan, dan perceraian menjadi salah satu ancaman jalan akhir suatu relasi. Resiliensi pasangan adalah proses pasangan mengelola tantangan pernikahan melalui perilaku positif dalam relasi (*positive relationship behavior*). Studi ini meneliti resiliensi pasangan dengan menyertakan perilaku negatif dalam relasi serta melakukan kajian terhadap efek interaksi di antara pasangan. Tiga ratus pasangan yang tinggal di Bali, Indonesia (usia pernikahan antara 1-10 tahun) menjadi partisipan dengan melaporkan perilaku positif dan negatif, dan luaran dari relasi pasangan (kepuasan pernikahan, kesejahteraan emosi, dan status kesehatan secara umum). Alat ukur dalam penelitian ini adalah *Couple Resilience Inventory, Satisfaction with Married Life Scale*, dan 36-item *Short-Form Health Survey*. Analisis kesesuaian model menunjukkan bahwa perilaku dalam relasi tidak memprediksi luaran tersebut, dan tidak ada efek interaksi antar pasangan. Akan tetapi, perilaku positif menunjukkan tingkat probabilitas yang lebih tinggi dalam memprediksikan kepuasan pernikahan khususnya pada istri ($\beta = 0{,}271$; $\beta = 0{,}403$; $p < 0{,}001$). Implikasi temuan ini adalah saran praktis bagi penelitian resiliensi pasangan di masa mendatang untuk menerapkan pendekatan longitudinal yang mengukur luaran dari resiliensi secara berulang.

Kata Kunci: pernikahan; resiliensi; resiliensi pasangan

*__Corresponding Author:__ Edwin Adrianta Surijah (edwin@adrianta.com), Faculty of Health, School of Psychology and Counselling, Queensland University of Technology (QUT), Brisbane, QLD 4000 – Australia.

ISSN 2502-9363 (print); ISSN 2527-7456 (online)
http://journal.walisongo.ac.id/index.php/Psikohumaniora/
Submitted: 1-10-2020; Received in revised form: 6-3-2021; Accepted: 21-3-2021; Published: 30-5-2021

Introduction

One of the endpoints of a failed marriage is marital dissolution. In the United States, the percentage of currently separated/divorced women has increased over the years and reached 21% in 2018 (Schweizer, 2020). In Indonesia, there were 408,202 divorce cases in 2018 alone, with 44.85% of the cases due to ongoing disputes among couples (Jayani, 2020). Unfortunately, there is a lack of data availability regarding the marital situation and divorce rate in Indonesia. For example, *Badan Pusat Statistik* (BPS-Statistics Indonesia) does not have data on the marriage and divorce rates in the Bali region. However, local news indicates that there is a growing trend in the divorce rate in the region, primarily due to the COVID-19 pandemic (Mustofa, 2020). In Buleleng district in Bali, there were around 50 to 80 divorce cases each month during the COVID-19 pandemic (Mustofa, 2020). This situation is of concern and studies in the field of the family and marriage are much needed.

Recent evidence suggests that soft reasons are the main driving factors of divorce. Non-abusive (e.g., physical attacks) and non-adultery (e.g., extramarital affairs) reasons, such as '*growing apart*' and '*not able to talk together*' are becoming the common reasons for divorce (Hawkins et al., 2012). While abuse or adultery are not associated with the intention to reconcile, these soft reasons are negatively associated with the interest to resolve the marriage (Hawkins et al., 2012). This interest is an open opportunity in family and marriage studies to help couples deal with adversities in their marriage; resilience may hold the key for couples to deal with their challenges.

In the field of relationships, couple resilience is a recently developed concept in understanding how couples adapt to adversities. It is a process whereby a couple initiates relationship behaviors which will help them to adapt and maintain wellbeing in adverse life situations (Sanford, et al., 2016). Similarly, another study described relational resilience as couples' ability to recover after encountering adverse life events (Aydogan & Kizildag, 2017). In the face of adversity, couples will engage in a particular behavior as a response to the stressor (adversity). Sanford et al. (2016) explains that couple resilience consists of two components: positive and negative resilience. Positive resilience represents the couple's positive behavior when they experience adversity, such as helping each other to remain calm or to maintain a positive attitude (Sanford et al., 2016). In contrast, negative resilience is related to their negative behaviors in the face of adversity, such as withdrawing from communication and becoming hostile (Sanford et al., 2016). During or after adverse life events, couples may engage in positive or negative behaviors as their response to the stressor.

The global definition of resilience underlines the capacity of a system to adapt successfully to adverse life events that threaten the function of the system (Masten, 2014). Marriage or the relationship between couples is a system, and resilience helps them to thrive in the face of adversity. This proposition is different to other concepts, such as coping strategy. Coping strategies can be divided into categories, such as positive, emotional, evasive, and negative (Peláez-Ballestas, et al., 2015; Rafnsson et al., 2006). Negative coping strategies are associated with depressive symptoms and poorer emotional regulations (Heffer & Willoughby, 2017).

Contrary to coping strategy, resilience leads to positive adaptation or outcomes. We believe that couple resilience would be a useful concept for couples to deal with adversities. This study aims to examine the idea of positive and negative resilience within the concept of couple resilience.

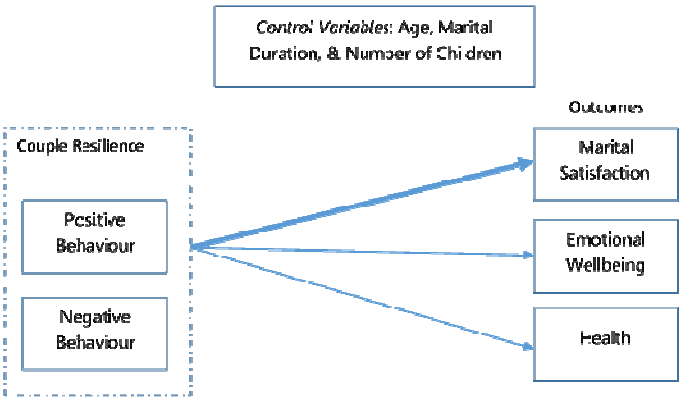
In addition to the concept of couple resilience, a previous study developed a measurement tool to estimate couple resilience. The Couple Resilience Inventory (CRI) is an eighteen-item self-administered survey that measures couples' positive and negative resilience (Sanford et al., 2016). A more detailed description of the inventory is given in the Methods section. Resilience studies have underlined that there are two diverging approaches to understanding resilience. The first approach views resilience as a trait or something possessed by an individual (Britt, et al., 2016), while the second approach sees resilience as a dynamic process of how a system deals with adversity (Becker & Ferry, 2016). Viewing resilience as trait has helped researchers to develop inventories, such as the Connor Davidson Resilience Scale (Connor & Davidson, 2003). Resilience as a trait also allows researchers to measure the characteristics of resilient individuals; in addition, resilience as a process helps observe the trajectory of healthy functioning over time (Bonanno et al., 2011). Sanford et al. (2016) defined couple resilience as a process of couples engaging in relationship behaviors and constructed a Couple Resilience Inventory (CRI). This study examines the concept of couple resilience, and also investigates the association between the CRI and couple's healthy functioning or positive outcomes.

The key components of resilience are risks (adversities) and positive adaptation (positive outcomes). As such, resilience can be understood as a positive adaptation despite adversity (Fleming & Ledogar, 2008). A previous study highlighted that the positive outcome of couple resilience is wellbeing or quality of life (Sanford et al., 2016). On the other hand, the outcome of similar concepts (e.g., dyadic coping) is relationship quality (Bodenmann et al., 2006). This study aims to examine couple resilience, with the inclusion of diverse domains of positive or multiple outcomes (Luthar, Cicchetti, & Becker, 2000) being essential to the research. Marital satisfaction or relationship quality are indispensable outcome indicators in the field of couples' relationships and is closely related to wellbeing (Schmitt, Kliegel, & Shapiro, 2007). In addition to wellbeing, resilience is also closely associated with health status (Bottolfs, et al., 2020; Zautra et al., 2010). This study focuses on the three indicators of marital satisfaction, wellbeing, and health status.

Figure 1 shows the hypothesized working model of the study. We reviewed previous studies that have investigated the association between various relationship-related variables (e.g., dyadic coping), resilience, and outcomes. Studies have found that resilience was positively correlated (r = .52) with relationship satisfaction (Bradley & Hojjat, 2017), and that dyadic coping was positively correlated (r = .68) with relationship satisfaction (Breitenstein et al., 2018). A previous study on couple resilience (Sanford et al., 2016) also found relationships between positive resilience and marital satisfaction (r = .35), and negative resilience and marital satisfaction (r = -.24). In addition, relationship status has been shown to be positively correlated (r = .23) with happiness (Lucas & Dyrenforth, 2006). It has also been found that couples' positive resilience was positively correlated (r = .13) with wellbeing, and

Figure 1

Working model of the study illustrating couple resilience as a set of positive and negative behaviors



that negative resilience was negatively correlated (r = -.10) with wellbeing (Sanford, Backer-Fulghum, & Carson, 2016). In a study investigating the relationship between marital satisfaction and various health indicators, the correlations between the variables ranged between .15 and .26 (Rostami et al., 2013). Based on this information, this study expects: 1) an effect size r > .50 for the association between positive behaviors and marital satisfaction; 2) that negative behaviors and marital satisfaction will a have similar level of effect in the opposite direction (r > -.50); and 3) that positive and negative behaviors will have less effect on their relationship with wellbeing and health status.

The study highlights the potential role of couple resilience in helping couples to manage adversities in their lives. We observed a theoretical gap between couple resilience and the general view of resilience as a process. Resilience is also tied to positive adaptation, while couple resilience and the Couple Resilience Inventory introduced a dimension called 'negative resilience.' To conform with the idea that resilience is a positive adaptation despite adversity (Fleming & Ledogar, 2008), we operationalized positive and negative resilience as positive and negative relationship behaviors. The theoretical gap allowed this to become an exploratory study. An overarching research question or hypothesis in this study is that the positive and negative behaviors of couple resilience predict marital satisfaction, wellbeing, and health status, with consideration of the participants' age, marital duration, and number of children. This broad hypothesis examines the working model and determines which variables are significant for the model. This step helped the researchers to narrow down the effective variables for the following hypothesis testing. The first set of hypotheses is:

1. The model fit shows that positive and negative behaviors are associated with marital satisfaction, wellbeing, and health, considering the participants' age, marital duration, and number of children.
2. Positive behaviors predict marital satisfaction with an effect size of r > .50, and predict wellbeing and health status with an effect size of r > .25.
3. Negative behaviors predict the outcome with a similar effect size but in the opposite or negative direction.

One previous study did not work with couples (dyads) as participants and instead used a Mechanical Turk sample (Sanford, Backer-Fulghum, & Carson, 2016). This study addresses this gap by using married couples in Bali as participants. It explores the dyadic nature of couple resilience toward the outcomes given the control variables and the interdependent relationship between the husband and wife. In this step, we only select the significant variables based on the previous hypothesis testing.

Another study investigated the relationship between marital adjustment, conflict resolution styles, and marital satisfaction (Ünal & Akgün, 2020). Husbands' marital adjustment predicted their own marital satisfaction (β = .79) and that of their wives predicted theirs (β = .83). However, only wives' marital satisfaction experienced an indirect effect from their partners perceived problem-solving style; the average effect sizes explaining the marital satisfaction was R^2 > .60 (Ünal & Akgün, 2020). Another study (Conradi, et al., 2017) found that husbands' avoidance attachment could predict their own marital satisfaction (β = -.66, p = -.62), but that of their wives did not have an effect on their husbands' satisfaction (β = .09, p = .63). On the contrary, wives' avoidance attachment (β = -.35, p = -.67) and that of their partners (β = -.37, p = -.32) predicted wives' own marital satisfaction (Conradi, et al., 2017). Although we have attempted to find previous studies to help estimate our hypotheses, we could not confidently predict the effect size due to the differing evidence in these. Therefore, we loosely articulated the second set of hypotheses as follows:

1. The husband's/wife's couple resilience predicts their own marital satisfaction with an effect size of r > .30.
2. The actor's effect toward the actor's wellbeing and health have a smaller effect size of .20 < r < .30.
3. There is a partner's effect on the relationship between the partner's couple resilience and the husband's/wife's outcome variables.
4. The partner's effects have a smaller effect size than the actor's effects.

Methods

Procedure & Participants

The participants in this study were married couples. The inclusion criteria were that they were couples living with their spouse, with or without children, currently residing in Bali, and having been married for one to ten years. The study consisted of scales translation, a pilot trial, and the main data collection. The Couple Resilience Inventory (CRI) was translated by a professional translator and by a researcher fluent in English and Bahasa Indonesia. Both versions of the translation were compiled into a single file. A committee consisting of a psychologist, a lecturer in psychology, and a psychology researcher made

comments on the translated scale. We finalized the translation by accommodating all the input from the committee. A pilot trial was conducted to calculate the CRI reliability and to obtain feedback on the participants' comprehension of the CRI and health outcome measures. Fifty couples participated in the pilot trial, with similar inclusion criteria. The trial also informed us that those who had been married longer were more reluctant to join the study. This finding was the reason why we limited marital duration to ten years as one of the inclusion criteria.

The main study data collection involved 300 couples, as we had set quota sampling for the participants. The survey questionnaire was printed and contained the informed consent, information sheet, and all of the proposed inventories. In the overall the collection, three couples gave incomplete data. These were dropped and we looked for substitutes to maintain the 300 participant couples. The study went through a faculty examination to ensure the study design adhered to the *Pedoman Nasional Etik Penelitian Kesehatan 2011* National Statement.

Instrument

Couple resilience was measured by the Couple Resilience Inventory (Sanford et al., 2016). In this inventory, it comprised positive and negative resilience scales. Each aspect had nine items; for example, for positive behavior '*you and your partner work together like a team*,' and for negative behavior '*either you or your partner denied, ignored, or downplayed the seriousness of a problem.*' Participants were asked to recall positive and negative behavior examples with the question '*Are you able to think of a specific example of this behavior occurring in your relationship*?' For positive behavior, participants were given memory prompts to recall stressful events in order to avoid the ceiling effect on the positive resilience scale. The negative resilience scale did not include memory prompts. Participants were then given a 6-point rating scale: 1 = *No, this behavior did NOT happen*; 2 = *No, although this behavior might have happened, I could not think of an example*; 3 = *No, although this behavior certainly happened, I could not think of an example*; 4 = *Yes, I was able to think of a specific example*; 5 = *Yes, I was able to think of a specific example, and I can easily think of one or two more*; and 6 = *Yes, I was able to think of a specific example, and I can easily think of several more*. The scale was reliable, with $\alpha = .89$ for positive resilience, and $\alpha = .93$ for negative resilience (Sanford et al., 2016).

At the top of the questionnaire, we asked the participants to 1) think about their marital relationship and the problems they have faced as a couple; 2) recall how they behaved during difficult times and how the problems affected their relationship; and 3) rate their specific example of behavior occurring in their relationship. Following the translation process, we conducted a pilot trial to examine the scale reliability and to obtaining participants' feedback on it. The pilot trial suggested that positive behavior ($\alpha = .895$) and negative behavior ($\alpha = .828$) were reliable. Cronbach's α was above .70, so also considered to be reliable.

After the data collection for the main study, we conducted another reliability and internal consistency analysis. In this case, positive behaviors ($\alpha = .925$) and negative behaviors ($\alpha = .869$) of the CRI were also reliable. The confirmatory factor analysis (CFA) indicated that the CRI was not orthogonal. The cutoff scores for the indices were RMSEA close to .06, and CFI and TLI close to .95 (Hu & Bentler, 1999). The Chi-

square test result was $\chi 2$ = 1489.520; df = 134; and p = .000, with the other indices RMSEA = .130; CFI = .808; and TLI = .781. These results did not support the two-factor structure of the construct. We conducted a separate CFA for each aspect of the scale. For positive behaviors, the Chi-square test result was $\chi 2$ = 10.787; df = 4; and p = .029, while for other indices RMSEA = .053; CFI = .998; and TLI = .984. The negative behaviors Chi-squared test result was $\chi 2$ = 29.227; df = 9; and p = .001, and for the other indices RMSEA = .061; CFI = .993; and TLI = .971. We concluded that in this study, the CRI was composed of two independent sets of positive and negative relationship behaviors.

Marital satisfaction was measured with the Satisfaction with Married Life Scale (SWML), which is a modification of the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). SWML has five items, with each item scored on a 7-point Likert scale from 1 (Strongly Disagree) to 7 (Strongly Agree). An item example is '*I am satisfied with my married life*.' A previous study showed that the scale was reliable with α = .92 (Johnson, Zabriskie, & Hill, 2006). The scale was previously translated, and the Bahasa Indonesia version was reliable with α = .82 (Surijah & Prakasa, 2020). In this particular study, we retested the reliability and factor structure of the scale. Satisfaction with married life was reliable (α = .870). The CFA also indicated the unidimensionality of the scale, with Chi-squared test result being $\chi 2$ = 22.440; df = 5; and p = .000. The other indices were RMSEA = .076; CFI = .989; and TLI = .978.

A full mental health framework comprised of emotional wellbeing, social wellbeing, and psychological wellbeing (Keyes, 2002). The emotional aspect, such as positive affect, has often been used to estimate individuals' wellbeing (Salsman et al., 2013; Medvedev & Landhuis, 2018). A previous study utilized a multidimensional health questionnaire to measure wellbeing (Nath & Pradhan, 2012), while this study used the 36-item Short-Form Health Survey (SF-36) to measure perceived health status and emotional wellbeing (Ware & Sherbourne, 1992). SF-36 includes several aspects, such as physical functioning, role limitations, pain, and health change. In this study, we utilized the five items of the Emotional Wellbeing (EWB) aspect to measure emotional wellbeing, and the five General Health (GH) items to measure participants' perceived health condition. An example of an EWB item was '*Have you been a happy person?*' and the participants had to respond from 1 (all of the time) to 6 (none of the time). A GH item example was '*I am as healthy as anybody I know*', with the responses ranging from 1 (definitely true) to 5 (definitely false). As SF-36 is a widely popular (Lins & Carvalho, 2016) and established health measurement survey, including a Bahasa Indonesia version, we did not reevaluate it in our pilot trial, as it was previously validated in Bahasa Indonesia (Novitasari, Perwitasari, & Khoirunisa, 2016), The EWB and GH aspects were reliable (α > .70) in the Bahasa Indonesia version (Novitasari et al., 2016).

Data Analysis

This is an exploratory study which influenced the flow of the data analysis. The descriptive statistics were obtained with the basic feature of Microsoft Excel, and we used R (version 4.0.2) to create box plots and scatterplots using the 'ggplot2' package. The scatterplots, along with the effect size (bivariate correlation, intercepts, or R^2) and p-value, helped the authors to make a precise decision on hypothesis testing.

To test the model fit, a Structural Equation Model with IBM SPSS 26 AMOS as the statistical tool was employed. The general model is shown in Figure 1. This initial model fit would determine the components of the dyadic model, and the dyadic analysis would then examine the actor partner interdependence model of couple resilience. A robust estimation with maximum likelihood (Phillips, 2015) in R was also conducted as a comparison to support our findings and to anticipate highly skewed data distribution. We explain the analysis further in the Results section.

Results

Table 2 and Figure 2 outline the descriptive characteristics of the participants and the raw data distribution of the study. The majority of the participants were newlyweds (n = 141 couples, 47%), while 67 couples had been married for 4-6 years and 92 couples for more than seven years. More than half of the couples (73%) had one or two offspring, while 47 couples did not have any children, and 35 had three or four children.

Based on Figure 2, it can be observed that the participants' positive behavior was mostly distributed within the range of 40 to 50 and did not reach the ceiling, as also demonstrated in the previous study (Sanford et al., 2016). It can also be seen that the data distribution for each variable is skewed.

The next part of the visual-based analysis comprised the scatterplots, as shown in Figure 3, which give a visualization of the relationship between the variables. The slope and the confidence interval support the statistical analysis given the *p*-value and effect size. The scatterplots give initial evidence that positive behaviors would have the strongest association with marital satisfaction.

Prior to the model examination, we conducted a bivariate correlation. This correlation matrix intended to inform the authors on selecting the control variables (e.g., age, marital duration), and supporting the inferences from the hypothesis testing.

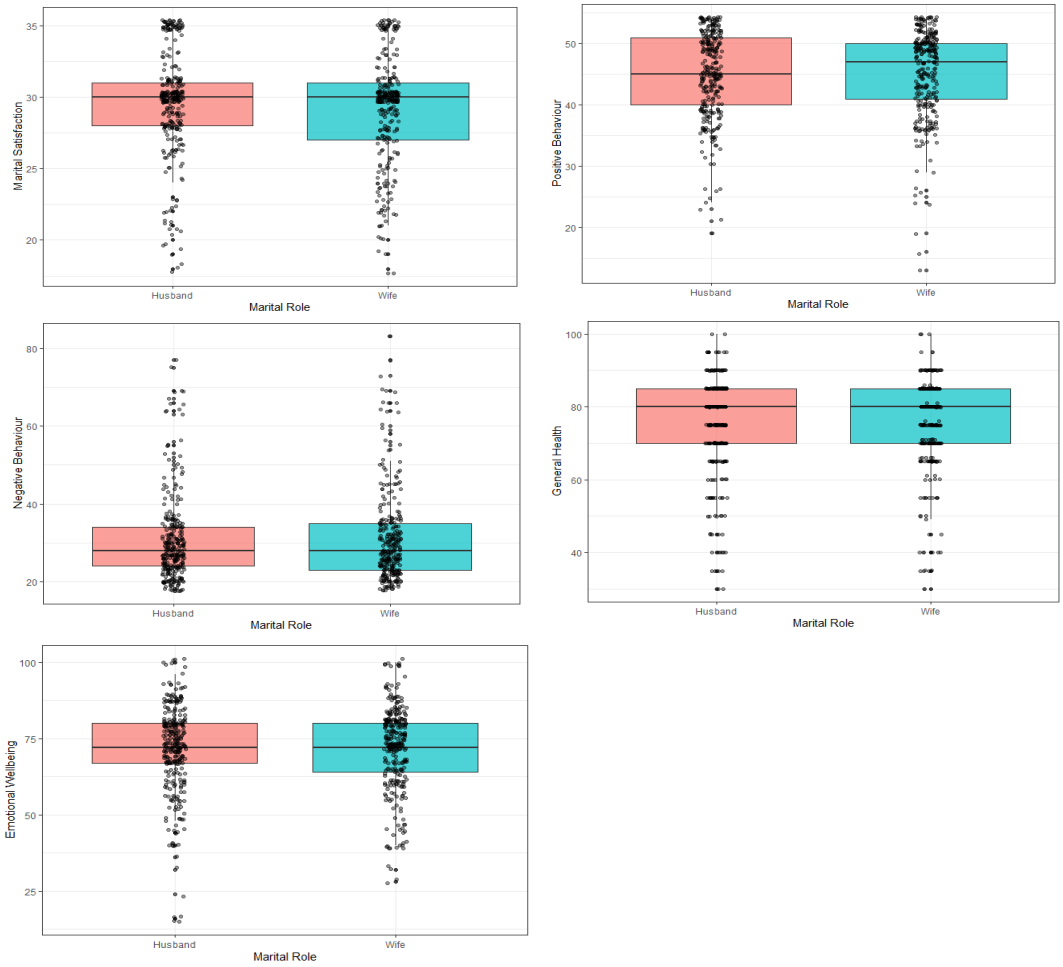
In addition, we also added a bivariate correlation for the separate husband and wife data (Table 2).

Previously, we stated that the overarching hypothesis in the study was that the positive and negative behaviors of couple resilience predict marital satisfaction, general health, and emotional wellbeing, considering the participants' age, marital duration, and number of children. We conducted a structural equation model analysis to test the model fit of the proposed hypothesis. The data analysis showed that it was not supported. The Chi-square test result was $\chi 2 = 108.065$; df = 3; and p = .000, with other indices being RMSEA = .242; CFI = .895; and TLI = .020.

Upon closer examination, the regression estimate rejected the null-hypothesis of the coefficients of positive behavior towards marital satisfaction ($\beta = .385$, $p < .001$, $r = .368$), the coefficients of positive behavior towards emotional wellbeing ($\beta = .170$, $p < .001$, $r = .180$), and the coefficients of positive behavior towards general health ($\beta = .112$; $p < .01$; $r = .160$). The regression estimates also rejected the coefficients of the number of children as a control variable towards general health ($\beta = .224$; $p < .001$; $r = .650$). This finding shows that the general model of couple resilience and the underlying hypothesis were not supported. Positive behavior may have a significant relationship with the outcomes; however, the scatterplots and the rather low effect size prompted us to investigate further the relationship between the variables.

Figure 2

Univariate Box Plots of Each Variable



Note: The raw data distributions overlaid on the box plots give a visual cue; for example, the data distribution between husband and wife differs little for each variable.

Table 1

Simple Correlation between Variables

	1	2	3	4	5	6	7	8	9
1. SWML	1	.368**	-.093*	.083*	.121**	.021	-.048	-.148**	-.081*
2. PR		1	-.362**	.160**	.180**	.127**	.004	-.037	.102*
3. NR			1	-.127*	-.090*	-.153*	-.024	.019	-.090*
4. GenHealth				1	.413**	.135*	-.033	-.030	.110**
5. EWB					1	.378**	.037	.005	.023
6. SocFunc						1	.011	.007	.020
7. Age							1	.647**	.448**
8. Duration								1	.650**
9. Child									1

Note: SWML (Satisfaction with Married Life); PR and NR (Positive and Negative Behavior aspects of Couple Resilience); GenHealth (General Health); EWB (Emotional Wellbeing); SocFunc (Social Functioning); Duration (Marital Duration); and Child (Number of Children); ** Correlation is significant at the 0.01 level (2-tailed), and *Correlation is significant at the 0.05 level (2-tailed).

Table 2

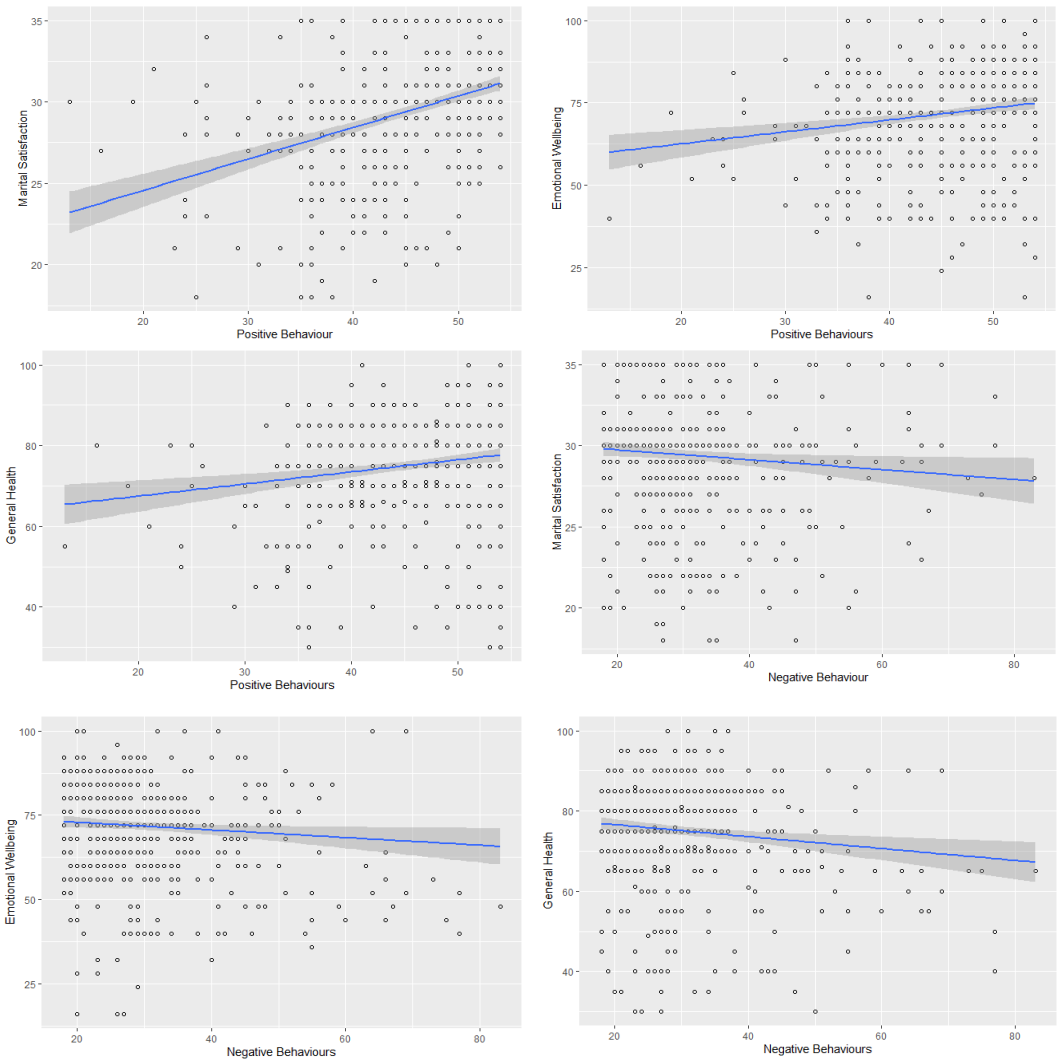
Simple Correlation between Variables among Husbands and Wives

	M (SD)	1	2	3	4	5	6	7	8
1. SWML Husband	29.64 (3.66)	1	.345**	.095	.481**	.292**	.062	-.060	-.128*
2. PR Husband	44.83 (7.02)		1	.207**	.235**	.585**	.071	.103	-.052
3. EWB Husband	94.16 (18.03)			1	.035	.124*	.280**	.053	-.005
4. SWML Wife	29.16 (3.73)				1	.396**	.150**	-.098	-.168**
5. PR Wife	45.19 (7.09)					1	.151**	.104	-.021
6. EWB Wife	93.50 (19.59)						1	.005	.017
7. Children								1	.646**
8. Duration									1

Note: SWML (Satisfaction with Married Life); PR and NR (Positive and Negative Behavior aspects of Couple Resilience); EWB (Emotional Wellbeing); Duration (Marital Duration); and Child (Number of Children); ** Correlation is significant at the 0.01 level (2-tailed), and * Correlation is significant at the 0.05 level (2-tailed).

Figure 3

Scatterplots



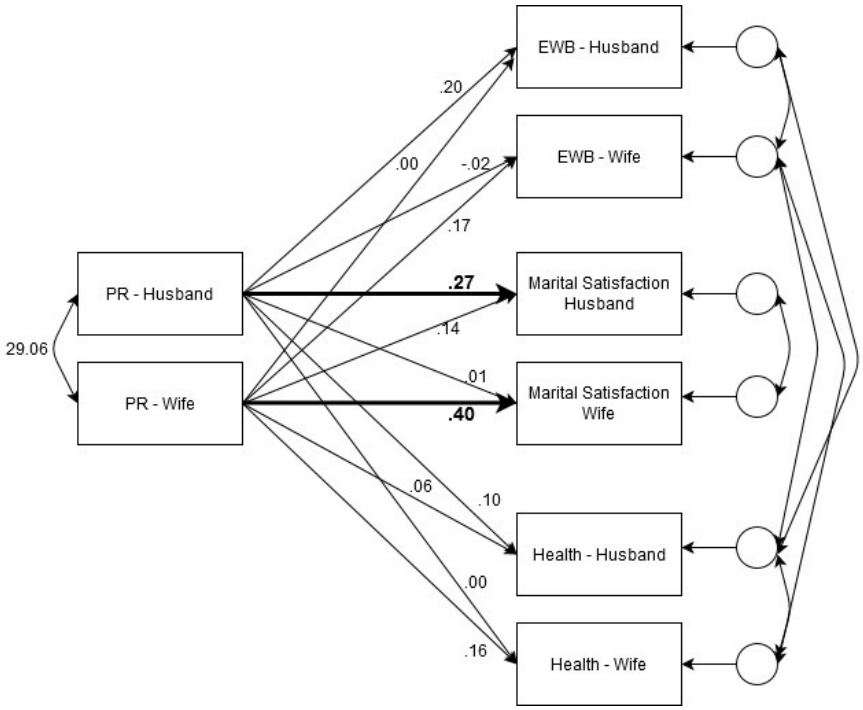
Note: Scatterplots showing that positive behaviors and marital satisfaction have the strongest association. The data analysis show that these two variables would have the highest correlation coefficient when compared to other pairings.

The data analysis was investigated further by computing the dyadic data on positive behavior and the outcomes based on the number of children, as shown in Figure 4. Based on the previous model fit analysis, positive behavior was the only significant predictor of the outcomes (marital satisfaction, emotional wellbeing, and general health). We computed the number of

children as a control variable as the previous analysis showed that this contributed significantly to the participants' general health. The dyadic model fit obtained a Chi-square test result of $\chi 2$ = 18.101; df = 9; and p = .034, and the other indices were RMSEA = .058; CFI = .982; and TLI = .928. The regression estimate shows that husbands' positive behavior increased their marital satisfaction (β = .271; p < .001; r = .345), and emotional wellbeing (β = .202; p < .01; r = .207). Similarly, wives' positive behavior leveraged their own marital satisfaction (β = .403; p < .001; r = .396). However, the data analysis also showed that there was no interaction effect between the dyads. The second hypothesis focuses on the dyadic relationship of the married couples. It predicts that the positive behavior of an actor will influence their own outcomes and those of their partner. The results suggest differing support for the second hypothesis, as there were small effect sizes on the actors' effects on marital satisfaction, and no interaction effect between the couples.

Figure 4

Relationship between Variables



Note: Positive relationship behaviors only predicted the actor effect given the number of children. The lines and numbers in bold show the significant effects. All the numbers show standardized regression weights except for the covariance between a husband's and wife's positive relationship behaviors. The number of children as a covariate is not shown to simplify the illustration.

The general conclusion from the data analysis is that positive behavior predicts marital satisfaction; however, the effect size was smaller than expected. This finding was supported by the scatterplots shown in Figure 3. Due to the non-normal data distribution shown in Figure 2, we compared the results of the simple linear regression and the linear regression with maximum likelihood fitting. The simple linear regression was calculated with function 'lm' in R. The analysis showed that positive behavior contributed to the marital satisfaction variability with an intercept coefficient = 20.70, $\beta = .19$, $p < .01$, and adjusted $R^2 = .134$. The maximum likelihood fitting was computed by minimizing the deviance and estimating the parameters, that would minimize the loss function (Phillips, 2015). We used the 'optim' function in R to calculate the parameters. The optimisation converged in a single value and the intercept coefficient = 20.69, $\beta = .19$, and error standard deviation = 3.44. The population value of slope β is within the range with 95% CI [.16, .22] This evidence shows that there were no significant differences between the two analyses. This study demonstrates that a single unit increase in positive behavior will increase marital satisfaction by .20.

Discussion

The first part of this study examined the general model of couple resilience, as the model fit analysis did not support the proposed working model. Positive behavior, despite significantly rejecting the null hypothesis, had smaller effect sizes than expected. However, its current size for marital satisfaction is similar to the previous study of Sanford et al. (2016). This finding shows that individuals who perceive themselves as having more positive behavior in their relationship will have a higher chance of being more satisfied with their marriage. The previous study by Willoughby et al. (2020) found that married couples and individuals who had a positive belief in their marriage would increase their commitment and this positive belief was indirectly related to a higher level of relationship satisfaction. Wives who had a positive body image were associated with a higher level of their own and their partner's marital satisfaction (Meltzer & McNulty, 2010). Developing self-esteem also contributed to a subsequent growth in marital satisfaction (Erol & Orth, 2014). This study has highlighted the potential of positive self-evaluation in contributing to a higher level of marital satisfaction.

The second part of the analysis also highlighted the importance of personal evaluation within marriage relationships. Although the expected interaction effect on the second hypothesis was not supported, the data analysis showed that wives' positive behavior positively predicted their own marital satisfaction, with a medium effect size. Gender difference studies indicate that there are differences in marital satisfaction between husbands and wives (Jackson et al., 2014; Rostami et al., 2013). Wives' marital satisfaction correlates more strongly between constructs (Beam et al., 2018). Wives also react to marriage differently than their partners, focusing more on the relationship attunement (Beam et al., 2018). The different responses between husbands and wives may explain the absence of interaction effects in this study. Wives' stronger relationship between positive relationship behaviors and marital satisfaction reflects their predisposition to work on relationship attunement.

Additionally, negative behavior did not predict all the outcomes. The confirmatory factor

analysis also showed that positive and negative behavior were not adjacent in constructing the CRI. This evidence supported our initial critics as we believed that resilience is tied to positive adaptation (Luthar & Cicchetti, 2000). The implication of the findings of our study indicates a new direction in understanding the construct. Couple resilience may not comprise positive and negative resilience. The positive adaptation of couples dealing with adversity will be achieved through positive relationship behaviors.

Another gap that this study aimed to address was related to the theoretical perspective of couple resilience. Measuring resilience with a single inventory (Maltby, Day, & Hall, 2015; Lock, Rees, & Heritage, 2020) reinforced the view that couple resilience is a trait. Resilient couples will exhibit positive behaviors in maintaining their relationship or resolving adversities. This notion reinforces the view of couple resilience being a set of positive behaviors and that married individuals engage to maintain or regain their relationship. Negative behaviors are not the other side of the coin, and engaging in them would be something out of character.

Couple resilience was initially defined as the process by which couples participate in relationship behaviors to handle adversity (Sanford, Backer-Fulghum, & Carson, 2016). This study's findings pose the question of whether couple resilience is a resource (trait) or a dynamic process in the face of stressful life events. Bonanno (2005) stated that there is no single resilient type, and people will behave in unforeseen ways in order to be resilient. Previous studies have shown that resilience as a process will allow individuals to learn and develop skills or capabilities to attain positive adaptation through the interaction with multiple systems (Foster et al., 2018; Foster, 2020; Masten & Barnes, 2018). Therefore, this study proposes the idea that couple resilience is a dynamic process through which couples achieve positive adaptation despite adversity.

The proposed idea of couple resilience as a process reveals a limitation of this study. We observed positive relationship behaviors in a single cross-sectional design, an approach which was not able to unfold the dynamic process of couple resilience. Future studies should not rely on a single inventory and a single cross-sectional research design. A longitudinal method is a suitable approach to operationalizing couple resilience. A systematic review (Cosco et al., 2015) found that longitudinal studies on resilience conducted repeated applications of psychometrically established resilience scales, repeated measures of the criteria, and calculation of the latent variables. In the context of couple resilience studies, a longitudinal study design would observe marital satisfaction, wellbeing, and the other resilience outcomes in a multiphase repeated measure design.

In relation to the measurement of the outcome criteria, the second limitation of this study is the measurement validity. The study used the SF-36 health survey to estimate the participants' wellbeing and health status. Future studies should employ a specific wellbeing measure to gauge this wellbeing accurately. The Mental Health Continuum-Short Form (Franken et al., 2018) or contextually appropriate wellbeing scales (Maulana et al., 2019) would be effective tools to measure wellbeing. The changes in the measurements may also strengthen the relationship between positive behaviors and wellbeing.

As the study was conducted in Bali, Indonesia, the researchers should have considered the cultural and contextual appropriateness. Ungar (2008) mentions that there are globally- and culturally specific aspects of people's lives that contribute to resilience. For example, in the context of African families, social justice is the prominent factor that should precede the efforts in promoting resilience (Anderson, 2019). Therefore, future studies should also pay attention to the cultural context of marital relationships and its related challenges in Bali, Indonesia.

Conclusion

The current study concluded that couple resilience refers to the positive relationship behaviors that help couples to obtain positive outcomes or adaptation. These behaviors specifically lead to a higher probability of couples reaching a higher level of marital satisfaction, especially in relation to wives or females. However, the crucial issue for the future development of couple resilience is to observe couples' dynamic over time.

Acknowledgment

We thank Kris Pradnya Swari and Meriska Lesmana for helping the authors to collect the data. We also thank Prof. Ian Shochet (Queensland University of Technology, Australia) and Dr. Kate Murray (Queensland University of Technology, Australia) for giving us valuable insights throughout the conceptual developments of this manuscript. We thank Listiyani Dewi Hartika, M. Psi., psikolog (Universitas Dhyana Pura), Agnes Utari Hanum Ayuningtyas, M. Psi., psikolog (Universitas Dhyana Pura), Rai Hardika, M. Psi., psikolog (Universitas Dhyana Pura) for the constructive feedbacks for the authors.[]

References

Anderson, L. (2019). Rethinking resilience theory in African American families: Fostering positive adaptations and transformative social justice. *Journal of Family and Theory Review, 11*, 385-397. https://doi.org/10.1111/jftr.12343

Aydogan, D., & Kizildag, S. (2017). Examination of relational resilience with couple burnout and spousal support in families with a disabled child. *The Family Journal, 25*(4), 407-413. https://doi.org/10.1177/1066480717731215

Beam, C. R., Marcus, K., Turkheimer, E., & Emery, R. E. (2018). Gender differences in the structure of marital quality. *Behavior Genetics, 48*(3), 209-223. https://doi.org/10.1007/s10519-018-9892-4

Becker, T. E., & Ferry, D. L. (2016). Profiles as a way of learning more about resilience. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 9*, 503-508. https://doi.org/10.1017/iop.2016.47

Bodenmann, G., Pihet, S., & Kayser, K. (2006). The relationship between dyadic coping and marital quality: A 2-year longitudinal study. *Journal of Family Psychology, 20*, 485-493. http://dx.doi.org/10.1037/0893-3200.20.3.485

Bonanno, G. A. (2005). Resilience in the face of potential trauma. *Current Directions in Psychological Science, 14*(3), 135-138. https://doi.org/10.1111/j.0963-7214.2005.00347.x

Bonanno, G. A., Westphal, M., & Mancini, A. D. (2011). Resilience to loss and potential trauma. *Annual Review of Clinical Psychology, 7*, 511-535. https://doi.org/10.1146/annurev-clinpsy-032210-104526

Bottolfs, M., Støa, E. M., Reinboth, M. S., Svendsen, M. V., Schmidt, S. K., Oellingrath, I. M., & Bratland-Sanda, S. (2020). Resilience and lifestyle-related factors as predictors for health-related quality of life among early adolescents: a cross-sectional study. *Journal of International Medical Research*. https://doi.org/10.1177/0300060520903656

Bradley, J. M., & Hojjat, M. (2017). A model of resilience and marital satisfaction. *The Journal of Social Psychology, 157*(5), 588-601. https://doi.org/10.1080/00224545.2016.1254592

Breitenstein, C. J., Milek, A., Nussbeck, F. W., Davila, J., & Bodenmann, G. (2018). Stress, dyadic coping, and relationship satisfaction in late adolescent couples. *Journal of Social and Personal Relationships, 35*(5), 770-790. https://doi.org/10.1177/0265407517698049

Britt, T. W., Shen, W., Sinclair, R. R., Grossman, M. R., & Klieger, D. M. (2016). How much do we really know about employee resilience? *Industrial and Organizational Psychology: Perspectives on Science and Practice, 9*(2), 378–404. https://doi.org/10.1017/iop.2015.107

Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety, 18*, 76-82. https://doi.org/ 10.1002/da.10113

Conradi, H. J., Noordhof, A., Dingemanse, P., Barelds, D. P., & Kamphuis, J. H. (2017). Actor and partner effects of attachment on relationship satisfaction and sexual satisfaction across the genders: An APIM approach. *Journal of Marital and Family Therapy, 43*, 700-716. https://doi.org/10.1111/jmft.12222

Cosco, T. D., Kaushal, A., Hardy, R., Richards, M., Kuh, D., & Stafford, M. (2015). Operationalising resilience in longitudinal studies: A systematic review of methodological approaches. *Journal of Epidemiology & Community Health, 71*, 98-104.

Dhana, K. (2018, January 20). *Identify, describe, plot, and remove the outliers from the dataset*. Retrieved September 14, 2020, from https://datascienceplus.com/identify-describe-plot-and-removing-the-outliers-from-the-dataset/

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessments, 49*(1), 71-75.

Erol, R. Y., & Orth, U. (2014). Development of self-esteem and relationship satisfaction in couples: Two longitudinal studies. *Developmental Psychology, 50*(9), 2291-2303. https://doi.org/10.1037/a0037370

Fleming, J., & Ledogar, R. J. (2008). Resilience, an evolving concept: A review of literature relevant to Aboriginal research. *Pimatisiwin, 6*(2), 7-23.

Foster, K. (2020). Resilience in the face of adversity: A shared responsibility. *International Journal of Mental Health Nursing, 29*, 3-4. https://doi.org/10.1111/inm.12688

Foster, K., Shochet, I., Wurfl, A., Roche, M., Maybery, D., Shakespeare-Finch, J., & Furness, T. (2018). On PAR: A feasibility study of the Promoting Adult Resilience programme with mental health nurses. *International Journal of Mental Health Nursing, 27*(5), 1470-1480. https://doi.org/10.1111/inm.12447

Franken, K., Lamers, S., Ten Klooster, P. M., Bohlmeijer, E. T., & Westerhof, G. J. (2018). Validation of the Mental Health Continuum-Short Form and the dual continua model of well-being and

psychopathology in an adult mental health setting. *Journal of Clinical Psychology, 74*(12), 2187-2202. https://dx.doi.org/10.1002%2Fjclp.22659

Hawkins, A. J., Wiloughby, B. J., & Doherty, W. J. (2012). Reasons for divorce and openness to marital reconciliation. *Journal of Divorce & Remarriage, 53*(6), 453-463. https://doi.org/10.1080/10502556.2012.682898

Heffer, T., & Willoughby, T. (2017). A count of coping strategies: A longitudinal study investigating an alternative method to understanding coping and adjustment. *PLOS ONE, 12*(10), e0186057. https://doi.org/10.1371/journal.pone.0186057

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55. https://doi.org/10.1080/10705519909540118

Jackson, J., Miller, R., Oka, M., & Henry, R. (2014). Gender differences in marital satisfaction: A meta-analysis. *Journal of Marriage and Family, 76*, 105-129. https://doi.org/10.1111/jomf.12077

Jayani, D. H. (2020, February 20). *Ramai RUU Ketahanan Keluarga, berapa angka perceraian di Indonesia?* Retrieved September 19, 2020, from https://databoks.katadata.co.id/datapublish/2020/02/20/ramai-ruu-ketahanan-keluarga-berapa-angka-perceraian-di-indonesia

Johnson, H. A., Zabriskie, R. B., & Hill, B. (2006). The contribution of couple leisure involvement, leisure time, and leisure satisfaction to marital satisfaction. *Marriage & Family Review, 40*(1), 69-91. https://doi.org/10.1300/J002v40n01_05

Keyes, C. L. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior, 43*(2), 207-222. https://doi.org/10.2307/3090197

Lins, L., & Carvalho, F. M. (2016). SF-36 total score as a single measure of health-related quality of life: Scoping review. *SAGE OPEN Medicine, 4*, 2050312116671725. https://doi.org/10.1177/2050312116671725

Lock, S., Rees, C., & Heritage, B. (2020). Development and validation of a brief measure of psychological resilience: The state–trait assessment of resilience scale. *Australian Psychologist, 55*, 10-25. https://doi.org/10.1111/ap.12434

Lucas, R. E., & Dyrenforth, P. S. (2006). Does the existence of social relationships matter for subjective well-being? . In R. E. Lucas, P. S. Dyrenforth, K. D. Vohs, & E. J. Finkle (Eds.), *Self and relationships: Connecting intrapersonal and interpersonal processes* (pp. 245-273). Guilford Press.

Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology, 12*(4), 857-885. https://doi.org/10.1017/s0954579400004156

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: a critical evaluation and guidelines for future work. *Child Development, 71*(3), 543-562. https://doi.org/10.1111/1467-8624.00164

Maltby, J., Day, L., & Hall, S. (2015). Refining trait resilience: Identifying engineering, ecological, and adaptive facets from extant measures of resilience. *PLOS ONE, 10*(7), e0131826. https://doi.org/10.1371/journal.pone.0131826

Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development, 85*(1), 6-20. https://doi.org/10.1111/cdev.12205

Masten, A. S., & Barnes, A. J. (2018). Resilience in children: Developmental perspectives. *Children (Basel, Switzerland), 5*(7), 98. https://doi.org/10.3390/children5070098

Maulana, H., Khawaja, N., & Obst, P. (2019). Development and validation of the Indonesian Well-being Scale. *Asian Journal of Social Psychology, 22*, 268-280. 10.1111/ajsp.12366

Medvedev, O. N., & Landhuis, C. E. (2018). Exploring constructs of well-being, happiness and quality of life. *PeerJ: Life & Environment, 6*, e4903. https://doi.org/10.7717/peerj.4903

Meltzer, A. L., & McNulty, J. K. (2010). Body image and marital satisfaction: evidence for the mediating role of sexual frequency and sexual satisfaction. *Journal of Family Psychology, 24*(2), 156-164. https://doi.org/10.1037/a0019063

Mustofa, A. (2020, August 6). *Aduh! Kasus perceraian di Buleleng meningkat saat wabah corona*. Retrieved September 19, 2020, from https://radarbali.jawapos.com/read/2020/08/05/207578/aduh-kasus-perceraian-di-buleleng-meningkat-saat-wabah-corona

Nath, P., & Pradhan, R. K. (2012). Influence of positive affect on physical health and psychological well-being: Examining the mediating role of psychological resilience. *Journal of Health Management, 14*(2), 161-174. https://doi.org/10.1177/097206341201400206

Novitasari, L., Perwitasari, D., & Khoirunisa, S. (2016). Validity of short form 36 (SF-36) Indonesian version on rheumatoid arthritis patients . *Jurnal Kedokteran dan Kesehatan Indonesia, 7*(3), 80-86. https://doi.org/10.20885/JKKI.Vol7.Iss3.art2

Peláez-Ballestas, I., Boonen, A., Vázquez-Mellado, J., Reyes-Lagunes, I., Hernández-Garduño, A., Goycochea, M. V., . . . Burgos-Vargas, R. (2015). Coping Strategies for Health and Daily-life stressors in patients with rheumatoid arthritis, ankylosing spondylitis, and gout. *Medicine, 94*(10), e600. https://doi.org/10.1097/MD.0000000000000600

Phillips, N. (2015, September 8). *Maximum-Likelihood Fitting in R*. Retrieved October 1, 2020, from http://rstudio-pubs-static.s3.amazonaws.com/107801_2785d7d7a49744539ef21eaaebe4fe5a.html

Rafnsson, F. D., Jonsson, F. H., & Windle, M. (2006). Coping strategies, stressful life events, problem behaviors, and depressed affect. *Anxiety, Stress & Coping, 19*(3), 241-257. https://doi.org/10.1080/10615800600679111

Rostami, A., Ghazinour, M., Nygren, L., Nojumi, M., & Richter, J. (2013). Health-related quality of life, marital satisfaction, and social support in medical staff in Iran. *Applied Research in Quality of Life, 8*, 385-402. https://doi.org/10.1007/s11482-012-9190-x

Salsman, J. M., Victorson, D., Choi, S. W., Peterman, A. H., Heinemann, A. W., Nowinski, C., & Cella, D. (2013). Development and validation of the positive affect and well-being scale for the neurology quality of life (Neuro-QOL) measurement system. *Quality of life research : an international journal of quality of life aspects of treatment, care and rehabilitation, 22*(9), 2569-2580. https://doi.org/10.1007/s11136-013-0382-0

Sanford, K., Backer-Fulghum, L. M., & Carson, C. (2016). Couple resilience inventory: two dimensions of naturally occurring relationship behavior during stressful life events. *Psychological Assessment, 28*(10), 1243-1254. https://doi.org/10.1037/pas0000256

Schmitt, M., Kliegel, M., & Shapiro, A. (2007). Marital interaction in middle and old age: A predictor of marital satisfaction? *International Journal of Aging & Human Development, 65*(4), 283-300. https://doi.org/10.2190/AG.65.4.a

Schweizer, V. J. (2020). Divorce: More than a century of change, 1900-2018. *Family Profiles*, FP-20-22. https://doi.org/10.25035/ncfmr/fp-20-22

Surijah, E. A., & Prakasa, D. Y. (2020). Kepuasan pernikahan dan bias harapan sosial. *Jurnal Ilmiah Psikologi MIND SET, 11*(01), 14-25. https://doi.org/10.35814/mindset.v11i01.1269

Ünal, Ö., & Akgün, S. (2020). Conflict resolution styles as predictors of marital adjustment and marital satisfaction: An actor–partner interdependence model. *Journal of Family Studies*. https://doi.org/10.1080/13229400.2020.1766542

Ungar, M. (2008). Resilience across cultures. *The British Journal of Social Work, 38*(2), 218-235. https://doi.org/10.1093/bjsw/bcl343

Ware, J. J., & Sherbourne, C. (1992). The MOS 36-Item Short-Form Health Survey (SF-36): I. Conceptual framework and item selection. *Medical Care, 30*, 473-483.

Willoughby, B. J., Yorgason, J., James, S., & Kramer Holmes, E. (2020). What does marriage mean to us? Marital centrality among newlywed couples. *Journal of Family Issues, 42*(7). https://doi.org/10.1177/0192513X20949905

Zautra, A., Hall, J., & Murray, K. (2010). Resilience: A new definition of health for people and communities. In A. Zautra, J. Hall, K. Murray, J. Reich, A. Zautra, & J. Hall (Eds.), *Handbook of Adult Resilience* (pp. 3-30). New York: Guilford.

This page has been intentionally left blank.